

SELF STUDY REPORT – 2017

Submitted to



National Assessment and Accreditation Council
(An Autonomous Institution of the University Grants Commission)



National Education Society®

Jawaharlal Nehru National College of Engineering (JNNCE)
Navule, Shivamogga-577204

May-2017

Index

Sl. No	Contents	Page No.
	Preface	1-2
	Executive Summary	3-8
	Profile of the Institution	9-23
CRITERIA-WISE REPORTS		
Criterion –I Curricular Aspects		24-36
1.1	Curriculum Design and Development	24
1.2	Academic Flexibility	29
1.3	Curriculum Enrichment	32
1.4	Feedback System	35
Criterion-II Teaching-Learning and Evaluation		37-66
2.1	Student Enrolment and Profile	37
2.2	Catering to Student Diversity	44
2.3	Teaching-Learning Process	46
2.4	Teacher Quality	51
2.5	Evaluation Process and Reforms	56
2.6	Student Performance and Learning Outcomes	59
Criterion-III Research, Consultancy and Extension		67-105
3.1	Promotion of Research	67
3.2	Resource Mobilization for Research	79
3.3	Research Facilities	83
3.4	Research Publications and Awards	85
3.5	Consultancy	92
3.6	Extension Activities and Institutional Social Responsibility (ISR)	94
3.7	Collaboration	101
Criterion-IV Infrastructure and Learning Resources		106-130
4.1	Physical Facilities	106
4.2	Library as a Learning Resource	110
4.3	IT Infrastructure	117
4.4	Maintenance of Campus Facilities	129
Criterion-V Student Support and Progression		131-162
5.1	Student Mentoring and Support	131
5.2	Student Progression	139
5.3	Student Participation and Activities	145
Criterion-VI Governance, Leadership and Management		163-182
6.1	Institutional Vision and Leadership	163
6.2	Strategy Development and Deployment	167

6.3	Faculty Empowerment Strategies	173
6.4	Financial Management and Resource Mobilization	176
Criterion-VII Innovations and Best Practices		183-189
7.1	Environment Consciousness	183
7.2	Innovations	185
7.3	Best Practices	186
Evaluative Reports of the Departments		190-357
1	Civil Engineering	190
2	Mechanical engineering	210
3	Electrical and Electronics Engineering	229
4	Electronics and Communication Engineering	247
5	Computer Science Engineering	263
6	Information Science and Engineering	280
7	Telecommunication Engineering	294
8	Master of Computer Application	308
9	Department of Management Studies (MBA)	320
10	Basic Sciences	338
JNNCE Photo Gallery		358-364



Jawaharlal Nehru National College of Engineering

(Approved by A.I.C.T.E., Affiliated to Visvesvaraya Technological University and Accredited by NBA)

Navule, SHIVAMOGGA-577 204, Karnataka

ಜವಹರಲಾಲ್ ನೆಹರು ರಾಷ್ಟ್ರೀಯ ತಾಂತ್ರಿಕ ಮಹಾವಿದ್ಯಾಲಯ, ಶಿವಮೊಗ್ಗ

(ಎ.ಐ.ಸಿ.ಟಿ.ಇಯಿಂದ ಅನುಮೋದನೆ ಪಡೆದಿದೆ. ವಿಶ್ವೇಶ್ವರಾಯ ತಾಂತ್ರಿಕ ಮಹಾವಿದ್ಯಾಲಯದ ಮಾನ್ಯತೆ ಪಡೆದಿದೆ ಮತ್ತು ರಾಷ್ಟ್ರೀಯ ಮಾನ್ಯತಾ ಅನುಮೋದನಾ ಮಂಡಳಿಯಿಂದ ಮಾನ್ಯತೆ ಪಡೆದಿದೆ)

Ref. No. : JNNCE/

Declaration by the Head of the Institution

I certify that the data included in this Self-study Report (SSR) are true to the best of my knowledge.

This SSR is prepared by the institution after internal discussions, and no part thereof has been outsourced.

I am aware that the Peer team will validate the information provided in this SSR during the peer team visit.

Place: Shivamogga

Date: 30-03-2017


(Dr. H.R. Mahadevaswamy)

Principal



Principal
Jawaharlal Nehru
National College of Engineering
SHIVMOGGA.



NATIONAL EDUCATION SOCIETY (R)

Jawaharlal Nehru National College of Engineering

(Approved by A.I.C.T.E., Affiliated to Visvesvaraya Technological University and Accredited by NBA)

Navule, SHIVAMOGGA-577 204, Karnataka

ಜವಾಹರ್‌ಲಾಲ್ ನೆಹರು ರಾಷ್ಟ್ರೀಯ ತಾಂತ್ರಿಕ ಮಹಾವಿದ್ಯಾಲಯ, ಶಿವಮೊಗ್ಗ

(ಎ.ಐ.ಸಿ.ಟಿ.ಇ.ಯಿಂದ ಅನುಮೋದನೆ ಪಡೆದಿದೆ. ವಿಶ್ವೇಶ್ವರಾಯ ತಾಂತ್ರಿಕ ಮಹಾವಿದ್ಯಾಲಯದ ಮಾನ್ಯತೆ ಪಡೆದಿದೆ ಮತ್ತು ರಾಷ್ಟ್ರೀಯ ಮಾನ್ಯತಾ ಅನುಮೋದನಾ ಮಂಡಳಿಯಿಂದ ಮಾನ್ಯತೆ ಪಡೆದಿದೆ)

Date: 06.05.2017

Ref. No. : JNNCE/

Certificate of Compliance

This is to certify that Jawaharlal Nehru National College of Engineering, Shivamogga fulfills all norms:


1. Stipulated by the affiliated university - Visvesvaraya Technological University, Belagavi.
2. Regulatory Council – All India Council for Technical Education (AICTE), New Delhi.
3. The affiliation and recognition is valid as on date.

In case the affiliation/ recognition is conditional, then a detailed enclosure with regards to compliance of condition by the institution will be sent.

It is noted that NAAC's accreditation, if granted shall stand cancelled automatically, once the institution loses its university affiliation or regulation by the regulatory council, as the case may be.

In case the undertaking submitted by the institution is found to be false then the accreditation given by NAAC is liable to be withdrawn. It is also agreed that the undertaking given by NAAC will be displayed on the college website.


(Dr. H. R. Mahadeyaswamy)


Principal,
Jawaharlal Nehru
National College of Engineering,
SHIMOGA.



All India Council for Technical Education

(A Statutory body under Ministry of HRD, Govt. of India)

Nelson Mandela MargVasant Kunj, New Delhi-110067

PHONE: 23724151/52/53/54/55/56/57 FAX: 011-23724183 www.aicte-india.org

F.No. South-West/1-3327268778/2017/EOA

Date: 30-Mar-2017

To,

The Principal Secretary (Hr. & Tech Education)
Govt. of Karnataka, K. G.S., 6th Floor,
M.S. Building, R. N. 645, Dr. B. R. Ambedkar Road,
Bangalore-560001

Sub: Extension of approval for the academic year 2017-18

Ref: Application of the Institution for Extension of approval for the academic year 2017-18

Sir/Madam,

In terms of the provisions under the All India Council for Technical Education (Grant of Approvals for Technical Institutions) Regulations 2016 notified by the Council vide notification number F.No.AB/AICTE/REG/2016 dated 30/11/2016 and norms standards, procedures and conditions prescribed by the Council from time to time, I am directed to convey the approval to

Permanent Id	1-8198061	Application Id	1-3327268778
Name of the Institute	JAWAHARLAL NEHRU NATIONAL COLLEGE OF ENGINEERING	Institute Address	P.B. NO. 128, NAVULE, SHIMOGA, SHIMOGA, SHIMOGA, Karnataka, 577204
Name of the Society/Trust	NATIONAL EDUCATION SOCIETY (R)	Society/Trust Address	BALARAJ URS ROAD, SHIMOGA, SHIMOGA, Karnataka, 577201
Institute Type	Unaided - Private	Region	South-West

Opted for change from Women to Co-ed and Vice versa	No	Opted for change of name	No	Opted for change of site	No
Change from Women to Co-ed approved and Vice versa	Not Applicable	Change of name Approved	Not Applicable	Change of site Approved	Not Applicable
Opted for Conversion from degree to diploma	No	Opted for Conversion from diploma to degree	No	Conversion (degree to diploma or vice-versa) Approved	Not Applicable

To conduct following courses with the intake indicated below for the academic year 2017-18

Application id: 1-3327268778			Course	Full/Part Time	Affiliating Body	Intake Approved for 2016-17	Intake Approved for 2017-18	NRI Approval status	PIO / FN / Gulf quota/ OCI/ Approval status	Foreign Collaboration/Twinning Program Approval status
Program	Shift	Level								
ENGINEERING AND TECHNOLOGY	1st Shift	POST GRADUATE	COMPUTER INTEGRATED MANUFACTURING	FULL TIME	Visvesvaraya Technological University, Belgaum	18	18	NA	NA	NA

Application Number: 1-3327268778

Note: This is a Computer generated Report.No signature is required.

Printed By : AE126481

Page 1 of 4
Letter Printed On: 17 April 2017

EST
HPM
10/4



All India Council for Technical Education

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Nelson Mandela Marg Vasant Kunj, New Delhi-110067

PHONE: 23724151/52/53/54/55/56/57 FAX: 011-23724183 www.aicte-India.org

ENGINEERING AND TECHNOLOGY	1st Shift	POST GRADUATE	COMPUTER SCIENCE AND ENGINEERING	FULL TIME	Visvesvaraya Technological University, Belgaum	25	25	NA	NA	NA
ENGINEERING AND TECHNOLOGY	1st Shift	POST GRADUATE	DESIGN ENGINEERING	FULL TIME	Visvesvaraya Technological University, Belgaum	18	18	NA	NA	NA
ENGINEERING AND TECHNOLOGY	1st Shift	POST GRADUATE	DIGITAL ELECTRONICS AND COMMUNICATION SYSTEMS	FULL TIME	Visvesvaraya Technological University, Belgaum	24	24	NA	NA	NA
ENGINEERING AND TECHNOLOGY	1st Shift	POST GRADUATE	NETWORKING AND INTERNET ENGINEERING	FULL TIME	Visvesvaraya Technological University, Belgaum	24	24	NA	NA	NA
ENGINEERING AND TECHNOLOGY	1st Shift	POST GRADUATE	POWER ELECTRONICS	FULL TIME	Visvesvaraya Technological University, Belgaum	18	18	NA	NA	NA
ENGINEERING AND TECHNOLOGY	1st Shift	POST GRADUATE	TRANSPORTATION ENGINEERING AND MANAGEMENT	FULL TIME	Visvesvaraya Technological University, Belgaum	18	18	NA	NA	NA
ENGINEERING AND TECHNOLOGY	1st Shift	UNDER GRADUATE	CIVIL ENGINEERING	FULL TIME	Visvesvaraya Technological University, Belgaum	120	120	NA	NA	NA
ENGINEERING AND TECHNOLOGY	1st Shift	UNDER GRADUATE	COMPUTER SCIENCE AND ENGINEERING	FULL TIME	Visvesvaraya Technological University, Belgaum	120	120	NA	NA	NA
ENGINEERING AND TECHNOLOGY	1st Shift	UNDER GRADUATE	ELECTRICAL AND ELECTRONICS ENGINEERING	FULL TIME	Visvesvaraya Technological University, Belgaum	60	60	NA	NA	NA
ENGINEERING AND TECHNOLOGY	1st Shift	UNDER GRADUATE	ELECTRONICS & COMMUNICATION ENGG	FULL TIME	Visvesvaraya Technological University, Belgaum	120	120	NA	NA	NA

Application Number: 1-3327268778

Note: This is a Computer generated Report.No signature is required.

Page 2 of 4
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Nelson Mandela Marg Vasant Kunj, New Delhi-110067

PHONE: 23724151/52/53/54/55/56/57 FAX: 011-23724183 www.aicte-india.org

ENGINEERING AND TECHNOLOGY	1st Shift	UNDERGRADUATE	INFORMATION SCIENCE AND ENGINEERING	FULL TIME	Visvesvaraya Technological University, Belgaum	120	120	NA	NA	NA
ENGINEERING AND TECHNOLOGY	1st Shift	UNDERGRADUATE	MECHANICAL ENGINEERING	FULL TIME	Visvesvaraya Technological University, Belgaum	120	120	NA	NA	NA
ENGINEERING AND TECHNOLOGY	1st Shift	UNDERGRADUATE	TELECOMMUNICATION ENGINEERING	FULL TIME	Visvesvaraya Technological University, Belgaum	60	60	NA	NA	NA

The above mentioned approval is subject to the condition that

JAWAHARLAL NEHRU NATIONAL COLLEGE OF ENGINEERING

shall follow and adhere to the Regulations, guidelines and directions issued by AICTE from time to time and the undertaking / affidavit given by the institution along with the application submitted by the institution on portal.

In case of any differences in content in this Computer generated Extension of Approval Letter, the content/information as approved by the Executive Council / General Council as available on the record of AICTE shall be final and binding.

Strict compliance of Anti-Ragging Regulation:- Approval is subject to strict compliance of provisions made in AICTE Regulation notified vide F. No. 37-3/Legal/AICTE/2009 dated July 1, 2009 for Prevention and Prohibition of Ragging in Technical Institutions. In case Institution fails to take adequate steps to Prevent Ragging or fails to act in accordance with AICTE Regulation or fails to punish perpetrators or incidents of Ragging, it will be liable to take any action as defined under clause 9(4) of the said Regulation.

Note: Validity of the course details may be verified at www.aicte-india.org

Prof. A.P Mittal
Member Secretary, AICTE

Copy to:

- The Regional Officer,**
All India Council for Technical Education
Health Centre Building
Bangalore University Campus
Bangalore - 560 009, Karnataka
- The Director Of Technical Education**,**
Karnataka
- The Registrar**,**
Visvesvaraya Technological University, Belgaum
- The Principal / Director,**
JAWAHARLAL NEHRU NATIONAL COLLEGE OF ENGINEERING
P.B. NO. 128,
NAVULE, SHIMOGA,

Application Number: 1-3327268778

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Nelson Mandela Marg Vasant Kunj, New Delhi-110067

PHONE: 23724151/52/53/54/55/56/57 FAX: 011-23724183 www.aicte-india.org

SHIMOGA, SHIMOGA,
Karnataka, 577204

5. **The Secretary / Chairman,**
NATIONAL EDUCATION SOCIETY (R)
BALARAJ URS ROAD,
SHIMOGA, SHIMOGA,
Karnataka, 577201

6. **Guard File (AICTE)**

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17/4/2017



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Nelson Mandela MargVasant Kunj, New Delhi-110067
PHONE: 23724151/52/53/54/55/56/57 FAX: 011-23724183 www.aicte-india.org

F.No. South-West/1-3327402368/2017/EOA

Date: 30-Mar-2017

To,

The Principal Secretary (Hr. & Tech Education)
Govt. of Karnataka, K. G.S., 6th Floor,
M.S. Building, R. N. 645, Dr. B. R. Ambedkar Road,
Bangalore-560001

Sub: Extension of approval for the academic year 2017-18

Ref: Application of the Institution for Extension of approval for the academic year 2017-18

Sir/Madam,

In terms of the provisions under the All India Council for Technical Education (Grant of Approvals for Technical Institutions) Regulations 2016 notified by the Council vide notification number F.No.AB/AICTE/REG/2016 dated 30/11/2016 and norms standards, procedures and conditions prescribed by the Council from time to time, I am directed to convey the approval to

Permanent Id	1-18240354	Application Id	1-3327402368
Name of the Institute	JAWAHARLAL NEHRU NATIONAL COLLEGE OF ENGINEERING-MBA	Institute Address	P.B. NO 128 SAVALANGA ROAD, NAVULE-SHIMOGA, SHIMOGA, Karnataka, 577204
Name of the Society/Trust	NATIONAL EDUCATION SOCIETY (REGD)	Society/Trust Address	BALARAJ URS ROAD, SHIMOGA, SHIMOGA, Karnataka, 577201
Institute Type	Unaided - Private	Region	South-West

Opted for change from Women to Co-ed and Vice versa	No	Opted for change of name	No	Opted for change of site	No
Change from Women to Co-ed approved and Vice versa	Not Applicable	Change of name Approved	Not Applicable	Change of site Approved	Not Applicable
Opted for Conversion from degree to diploma	No	Opted for Conversion from diploma to degree	No	Conversion (degree to diploma or vice-versa) Approved	Not Applicable

To conduct following courses with the intake indicated below for the academic year 2017-18

Application Id: 1-3327402368			Course	Full/Part Time	Affiliating Body	Intake Approved for 2016-17	Intake Approved for 2017-18	NRI Approval status	PIO / FN / Gulf quota/ OCI/ Approval status	Foreign Collaboration/Twinning Program Approval status
Program	Shift	Level								
MANAGEMENT	1st Shift	POST GRADUATE	MASTERS IN BUSINESS ADMINISTRATION	FULL TIME	Visvesvaraya Technological University, Belgaum	120	120	NA	NA	NA

Application Number: 1-3327402368

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Page 1 of 3
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Nelson Mandela Marg Vasant Kunj, New Delhi-110067
PHONE: 23724151/52/53/54/55/56/57 FAX: 011-23724183 www.aicte-india.org

The above mentioned approval is subject to the condition that JAWAHARLAL NEHRU NATIONAL COLLEGE OF ENGINEERING-MBA shall follow and adhere to the Regulations, guidelines and directions issued by AICTE from time to time and the undertaking / affidavit given by the institution along with the application submitted by the institution on portal.

In case of any differences in content in this Computer generated Extension of Approval Letter, the content/information as approved by the Executive Council / General Council as available on the record of AICTE shall be final and binding.

Strict compliance of Anti-Ragging Regulation:- Approval is subject to strict compliance of provisions made in AICTE Regulation notified vide F. No. 37-3/Legal/AICTE/2009 dated July 1, 2009 for Prevention and Prohibition of Ragging in Technical Institutions. In case Institution fails to take adequate steps to Prevent Ragging or fails to act in accordance with AICTE Regulation or fails to punish perpetrators or incidents of Ragging, it will be liable to take any action as defined under clause 9(4) of the said Regulation.

Note: Validity of the course details may be verified at www.aicte-india.org

Prof. A.P Mittal
Member Secretary, AICTE

Copy to:

1. **The Regional Officer,**
All India Council for Technical Education
Health Centre Building
Bangalore University Campus
Bangalore - 560 009, Karnataka
2. **The Director Of Technical Education**,**
Karnataka
3. **The Registrar**,**
Visvesvaraya Technological University, Belgaum
4. **The Principal / Director,**
JAWAHARLAL NEHRU NATIONAL COLLEGE OF ENGINEERING-MBA
P.B. NO 128
SAVALANGA ROAD,
NAVULE-SHIMOGA,
SHIMOGA, SHIMOGA,
Karnataka, 577204
5. **The Secretary / Chairman,**
NATIONAL EDUCATION SOCIETY (REGD)
BALARAJ URS ROAD,
SHIMOGA, SHIMOGA,
Karnataka, 577201
6. **Guard File(AICTE)**

Note: ** - Approval letter copy will not be communicated through post/email. However, provision is made in the portal for downloading Approval letter through Authorized login credentials allotted to concerned DTE/Registrar.



All India Council for Technical Education

(A Statutory body under Ministry of HRD, Govt. of India)

Nelson Mandela Marg Vasant Kunj, New Delhi-110067

PHONE: 23724151/52/53/54/55/56/57 FAX: 011-23724183 www.aicte-India.org

F.No. South-West/1-3327297228/2017/EOA

Date: 30-Mar-2017

To,

The Principal Secretary (Hr. & Tech Education)
Govt. of Karnataka, K. G.S., 6th Floor,
M.S. Building, R. N. 645, Dr. B. R. Ambedkar Road,
Bangalore-560001

Sub: Extension of approval for the academic year 2017-18

Ref: Application of the Institution for Extension of approval for the academic year 2017-18

Sir/Madam,

In terms of the provisions under the All India Council for Technical Education (Grant of Approvals for Technical Institutions) Regulations 2016 notified by the Council vide notification number F.No.AB/AICTE/REG/2016 dated 30/11/2016 and norms standards, procedures and conditions prescribed by the Council from time to time, I am directed to convey the approval to

Permanent Id	1-18149204	Application Id	1-3327297228
Name of the Institute	JAWAHARALAL NEHRU NATIONAL COLLEGE OF ENGINEERING-MCA	Institute Address	P.BOX. NO-128, NAVULE SAVALANGA ROAD SHIMOGA, SHIMOGA, SHIMOGA, Karnataka, 577204
Name of the Society/Trust	NATIONAL EDUCATION SOCIETY(R)	Society/Trust Address	BALARAJ URS ROAD, SHIMOGA, KARNATAKA, SHIMOGA, SHIMOGA, Karnataka, 577201
Institute Type	Unaided - Private	Region	South-West

Opted for change from Women to Co-ed and Vice versa	No	Opted for change of name	No	Opted for change of site	No
Change from Women to Co-ed approved and Vice versa	Not Applicable	Change of name Approved	Not Applicable	Change of site Approved	Not Applicable
Opted for Conversion from degree to diploma	No	Opted for Conversion from diploma to degree	No	Conversion (degree to diploma or vice-versa) Approved	Not Applicable

To conduct following courses with the intake indicated below for the academic year 2017-18

Application Id: 1-3327297228			Course	Affiliating Body	Intake 2016-17	Intake Approved for 2017-18	NRI Approval status	PIO / FN / Gulf quota / OCI / Approval status	Foreign Collaboration/Twinning Program Approval status
Program	Shift	Level							

Application Number: 1-3327297228

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Letter Printed On: 7 April 2017



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Nelson Mandela Marg Vasant Kunj, New Delhi-110067
PHONE: 23724151/52/53/54/55/56/57 FAX: 011-23724183 www.aicte-india.org

MCA	1st Shift	POST GRA DUATE	MASTERS IN COMPUTER APPLICATIONS	FULL TIME	Visvesvaraya Technological University, Belgaum	120	120	NA	NA	NA
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The above mentioned approval is subject to the condition that JAWAHARALAL NEHRU NATIONAL COLLEGE OF ENGINEERING-MCA shall follow and adhere to the Regulations, guidelines and directions issued by AICTE from time to time and the undertaking / affidavit given by the institution along with the application submitted by the institution on portal.

In case of any differences in content in this Computer generated Extension of Approval Letter, the content/information as approved by the Executive Council / General Council as available on the record of AICTE shall be final and binding.

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Note: Validity of the course details may be verified at www.aicte-india.org

Prof. A.P Mittal
Member Secretary, AICTE

Copy to:

- The Regional Officer,**
All India Council for Technical Education
Health Centre Building
Bangalore University Campus
Bangalore - 560 009, Karnataka
- The Director Of Technical Education**,**
Karnataka
- The Registrar**,**
Visvesvaraya Technological University, Belgaum
- The Principal / Director,**
JAWAHARALAL NEHRU NATIONAL COLLEGE OF ENGINEERING-MCA
P.BOX. NO-128, NAVULE
SAVALANGA ROAD
SHIMOGA,
SHIMOGA, SHIMOGA,
Karnataka, 577204
- The Secretary / Chairman,**
NATIONAL EDUCATION SOCIETY(R)
BALARAJ URS ROAD, SHIMOGA, KARNATAKA,
SHIMOGA, SHIMOGA,
Karnataka, 577201
- Guard File(AICTE)**

Note: ** - Approval letter copy will not be communicated through post/email. However, provision is made in the portal for downloading Approval letter through Authorized login credentials allotted to concerned DTE/Registrar.



VISVESVARAYA TECHNOLOGICAL UNIVERSITY

ವಿಶ್ವವಿದ್ಯಾಲಯ ತಾಂತ್ರಿಕ ವಿಶ್ವವಿದ್ಯಾಲಯ

"Jnana Sangama", Belagavi - 590 018, Karnataka State, INDIA

Phone : (0831) 2405468
Fax : (0831) 2405467
Email : registrar@vtu.ac.in
website : www.vtu.ac.in

Dr. H.N. Jagannatha Reddy B.E., M.E., Ph.D.
REGISTRAR

Ref: VTU/Aca/OS-Gen2/2016-17/ 10287

Date : 31 MAR 2017

To,
The Chairman,
University Grants Commission,
Bahadurshah Zafar Marg,
New Delhi -110 002

Sir,

Sub: Proposal for recognition 12(B) of UGC Act 1956 – reg...

Ref: Request letter received from the college dt: 27-03-2017

With reference to the above, this is to bring to your kind notice that the *Jawaharlal Nehru National College of Engineering, Shivamogga* has requested the University to forward their Proposal for recognition under 12 (B) under UGC Act 1956.

Hence, the duly counter signed proforma of *Jawaharlal Nehru National College of Engineering, Shivamogga* for recognition under 12 (B) of UGC Act is hereby forwarded for favourable consideration, as per UGC norms.

Thanking you,

Encl: As Above

Yours faithfully,

REGISTRAR

Copy to:
The Principal, *Jawaharlal Nehru National College of Engineering, Shivamogga*



VISVESVARAYA TECHNOLOGICAL UNIVERSITY

ವಿಶ್ವೇಶ್ವರಯ್ಯ ತಾಂತ್ರಿಕ ವಿಶ್ವವಿದ್ಯಾಲಯ

"Jnana Sangama", Belagavi - 590 018, Karnataka State, INDIA

Phone : (0831) 2405468
Fax : (0831) 2405467
Email : registrar@vtu.ac.in
website : www.vtu.ac.in

Dr. H. N. Jagannatha Reddy B.E., M.E., Ph.D.
Registrar

Ref: VTU/Aca/2016-2017/A-3/10286

Date: 31 MAR 2017

TO WHOMSOEVER IT MAY CONCERN

This is to certify that **Jawaharlal Nehru National College of Engineering, Navule, Shivamogga**, Karnataka is affiliated to the **Visvesvaraya Technological University, Belagavi**, since 1998 and the following Courses are being taught in the said college as per approval of the University;

Sl. No.	Name of the Course(s) and Duration	Affiliation		Period of Validity for the Year (s) (Upto)
		Permanent	Temporary	
Four years UG Courses				
1	B.E. in Electronics and Communication Engineering	Permanent		2013-2014 To 2018-2019
2	Telecommunication Engineering	Permanent		2013-2014 To 2018-2019
3	B.E. in Computer Science and Engineering	Permanent		2014-2015 To 2019-2020
4	B.E. in Civil Engineering	Permanent		2014-2015 To 2019-2020
5	B.E. in Mechanical Engineering	Permanent		2014-2015 To 2019-2020
6	B.E. in Electrical & Electronics Engineering	Permanent		2014-2015 To 2019-2020
7	B.E. in Information Science and Engineering	Temporary		2016-2017



VISVESVARAYA TECHNOLOGICAL UNIVERSITY

ವಿಶ್ವೇಶ್ವರಯ್ಯ ತಾಂತ್ರಿಕ ವಿಶ್ವವಿದ್ಯಾಲಯ

"Jnana Sangama", Belagavi - 590 018, Karnataka State, INDIA

Phone : (0831) 2405468
Fax : (0831) 2405467
Email : registrar@vtu.ac.in
website : www.vtu.ac.in

Dr. H. N. Jagannatha Reddy B.E., M.E., Ph.D.
Registrar

Two years PG Courses

1	M. Tech. in Computer Science & Engineering	Permanent	2013-2014 To 2018-2019
2	M. Tech. in Networking and Internet Engineering	Permanent	2013-2014 To 2018-2019
3	M. Tech. in Design Engineering	Permanent	2014-2015 To 2019-2020
4	M. Tech. in Transportation Engineering & Management	Temporary	2016-2017
5	M. Tech. in Computer Integrated Manufacturing	Temporary	2016-2017
6	M. Tech. in Power Electronics	Temporary	2016-2017
7	M. Tech. in Digital Electronics & Communication Systems	Temporary	2016-2017
8	MBA	Temporary	2016-2017
9	MCA (Three years PG Course)	Temporary	2016-2017

Research Centre

1	Civil Engineering	Continuation	2016-2017 To 2017-2018
2	Mechanical Engineering	Continuation	2016-2017 To 2017-2018
3	Electrical & Electronics Engineering	Continuation	2016-2017 To 2017-2018
4	Computer Science & Engineering	Continuation	2016-2017 To 2017-2018
5	Electronics & Communication Engineering	Continuation	2016-2017
6	MBA	Continuation	2016-2017
7	Chemistry	Continuation	2016-2017
8	Physics	Continuation	2016-2017

REGISTRAR
REGISTRAR

31-03-17
Visvesvaraya Technological University,
BELAGAVI - 590 018.



VISVESVARAYA TECHNOLOGICAL UNIVERSITY

ವಿಶ್ವೇಶ್ವರಯ್ಯ ತಾಂತ್ರಿಕ ವಿಶ್ವವಿದ್ಯಾಲಯ

"Jnana Sangama", Belagavi - 590 018, Karnataka State, INDIA

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Email : registrar@vtu.ac.in
website : www.vtu.ac.in

Dr. H.N. Jagannatha Reddy B.E., M.E., Ph.D.
REGISTRAR

Ref: VTU/Aca/OS-Gen2/2016-17/ 8112

Date : 20 JAN 2017

To,
The Chairman,
University Grants Commission,
Bahadurshah Zafar Marg,
New Delhi -110 002

Sir,

Sub: Proposal for recognition 2(f) of UGC Act 1956 – reg...

Ref: Request letter received from the college dt: 17-01-2017

With reference to the above, this is to bring to your kind notice that the *Jawaharlal Nehru National College of Engineering, Shivamogga* has requested the University to forward their Proposal for recognition under 2(f) under UGC Act 1956.

Hence, the duly counter signed proforma of *Jawaharlal Nehru National College of Engineering, Shivamogga* for recognition under 2(f) of UGC Act is hereby forwarded for favourable consideration, as per UGC norms.

Thanking you,

Encl: As Above

Yours faithfully,

REGISTRAR
REGISTRAR

Visvesvaraya Technological University,
BELAGAVI - 590 018.

Copy to:
The Principal, *Jawaharlal Nehru National College of Engineering, Shivamogga*

①



Visvesvaraya Technological University

"Jnana Sangama", Belgaum-590 018, Karnataka State

Registrar

Phone : (0831) 2498100

Fax : (0831) 2405467

Ref: VTU/Aca/2013-14/A1/ 11284

Date : 21 DEC 2013

To,

The Principal,
Jawaharlal Nehru National College of Engineering,
Shimoga

ERT / 100 EC /
JC / CSE

M 26/12

Sir,

Sub : Affiliation Notification for the academic year 2013-2014...reg.

Ref : Our letter to Gov. of Karnataka No.VTU/Academic/2013-14/2512,
dt.06-07-2013

With reference to the above, you are hereby informed that the following courses are recommended for Permanent Affiliation from the academic year 2013-2014 to 2017-2018 and recommendations of VTU are already sent to State Government through our letter dt. 06-07-2013.

UG :

1. Electronics & Communication Engineering
2. Telecommunication

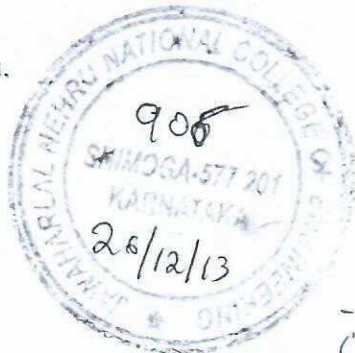
PG :

1. M.Tech in Computer Science & Engineering
2. M.Tech in Network & Internet Engineering

Further, after the receipt of the State Government order VTU Notification for the same will be issued.

Thanking you,

Yours faithfully,

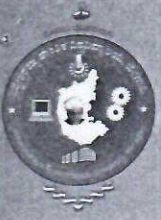


[Handwritten signature]

Registrar

Copy

[Handwritten signature]
Principal
Jawaharlal Nehru
National College of Engineering
SHIMOGA.



ವಿಶ್ವೇಶ್ವರಯ್ಯ ತಾಂತ್ರಿಕ ವಿಶ್ವವಿದ್ಯಾಲಯ

“ಜ್ಞಾನ ಸಂಗಮ”, ಬೆಳಗಾವಿ - 590 0118, ಕರ್ನಾಟಕ ರಾಜ್ಯ, ಭಾರತ

ದೂರವಾಣಿ : (0831) 2405468
ಫ್ಯಾಕ್ಸ್ : (0831) 2405467
ಇಮೇಲ್ : registrar@vtu.ac.in
ವೆಬ್‌ಸೈಟ್ : www.vtu.ac.in

2

ಡಾ. ಹೆಚ್.ಎನ್. ಜಗನ್ನಾಥ ರೆಡ್ಡಿ ಬಿ.ಇ., ಎಂ.ಇ., ಪಿಎಚ್.ಡಿ.
ಕುಲಸಚಿವರು

ದೂರವಾಣಿ: (0831) 2405468
ಫ್ಯಾಕ್ಸ್: (0831) 2405467

ಉಲ್ಲೇಖ ಸಂ:ವಿತಾವಿ/ಶೈಕ್ಷಣಿಕ / 2016-2017/ಎ-2/765 |

ದಿನಾಂಕ 11 2 JAN 2017

ಅಧಿಸೂಚನೆ

ವಿಷಯ : 2016-2017ನೇ ಸಾಲಿಗಾಗಿ ಮುಂದುವರಿಕೆ: ವಿಸ್ತರಣಾ ಸಂಯೋಜನೆ
ಮಂಜೂರಾತಿ ಕುರಿತು.

ಉಲ್ಲೇಖ : ೧) ಆರ್ಜಿ ದಿನಾಂಕ: ೦೪.೦೨.೨೦೧೬.

೨) ಅನುಸರಣಾ ವರದಿ ಸಮಿತಿ ಸಭೆ ದಿನಾಂಕ: ೧೮.೧೧.೨೦೧೬ & ೧೯.೧೧.೨೦೧೬.

೩) ಕುಲಪತಿಗಳ ಆದೇಶ ದಿನಾಂಕ : ೦೩.೧೨.೨೦೧೬.

ವಿಶ್ವೇಶ್ವರಯ್ಯ ತಾಂತ್ರಿಕ ವಿಶ್ವವಿದ್ಯಾಲಯದ ಅಧಿನಿಯಮ ೧೯೯೪ರ ೪೦೨ (೯)ನೇ ಪ್ರಕರಣದಡಿ ತಮ್ಮ ಮಹಾವಿದ್ಯಾಲಯದಲ್ಲಿರುವ ಪ್ರಸ್ತುತ ಈ ಕೆಳಗೆ ಕಾಣಿಸಿದ ಕೋರ್ಸುಗಳನ್ನು ಬೋಧಿಸಲು 2016-2017ನೇ ಶೈಕ್ಷಣಿಕ ಸಾಲಿಗಾಗಿ ಸಂಯೋಜನಾ ಮಂಜೂರಾತಿ ಅಧಿಸೂಚನೆಯನ್ನು ಅನುಸರಣಾ ವರದಿ ಸಮಿತಿ ಸಭೆಯು ವಿಧಿಸಿರುವ ಷರತ್ತುಗಳಿಗೆ ಒಳಪಟ್ಟು ಹಾಗೂ ವಿತಾವಿಯ ತನಿಖಾ ಸಮಿತಿಯು ಶೈಕ್ಷಣಿಕ ವರ್ಷ 2016-2017ನೇ ಸಾಲಿಗೆ ಭೇಟಿ ನೀಡುವ ಪೂರ್ವದಲ್ಲಿ ಪೂರ್ಣಗೊಳಿಸುವ ನಿರ್ಬಂಧನೆಗಳನ್ನು ನೀಡಲಾಗಿದೆ.

ನಿರ್ಬಂಧನೆಗಳು:

1. To appoint faculty as per the observations of the previous LIC and as per AICTE.
2. 2016ನೇ ಸಾಲಿನ ವಿ.ತಾ.ವಿ. ಇ-ಸಂಪನ್ಮೂಲ ಒಕ್ಕೂಟದ (VTU – Consortium) ದ ಕನಿಷ್ಠ ಚಂದಾ ಹಣವನ್ನು (ರೂ.೮,೫೨,೮೦೦/-) ಸಂದಾಯ ಮಾಡುವುದು.
3. ಎಎಸಿಟಿಯು ಕಡ್ಡಾಯ ಗೊಳಿಸಿರುವ ಎಲ್ಲಾ ತರಹದ ನಿಯತಕಾಲಿಕಗಳನ್ನು ಹೊಂದುವ ಷರತ್ತಿಗೆ ಒಳಪಟ್ಟು ನೀಡಲಾಗಿದೆ.

೧	೧ ರಿಂದ ೪ನೇ ವರ್ಷದ ಪದವಿ ಕೋರ್ಸುಗಳು	ಅನಂ	ಕೋರ್ಸುಗಳು
		1	Information Science & Engineering
೨	೧ ರಿಂದ ೩ನೇ ವರ್ಷದ ಸ್ನಾತಕೋತ್ತರ ಕೋರ್ಸು	1	MCA
೩	೧ ರಿಂದ ೨ನೇ ವರ್ಷದ ಸ್ನಾತಕೋತ್ತರ ಕೋರ್ಸುಗಳು	1	MBA
		2	M. Tech. in Transportation Engineering & Management

ಆಡಳಿತ: 2016-2017ನೇ ಸಾಲಿನ ಹೊಸ ವಿಷಯ / ವಿದ್ಯಾರ್ಥಿ ಪ್ರಮಾಣ ವ್ಯತ್ಯಯದ ಕುರಿತು ವಿ.ತಾ.ವಿಯ ಶಿಫಾರಸ್ಸಿನ ಪ್ರತಿಯನ್ನು ಲಗತ್ತಿಸಲಾಗಿದೆ.

* ತಮ್ಮ ಕಾಲೇಜಿನಲ್ಲಿ 2016-2017ನೇ ಸಾಲಿಗೆ ಎಂ.ಟೆಕ್. ಇನ್ ಡಿಜಿಟಲ್ ಎಲೆಕ್ಟ್ರಾನಿಕ್ಸ್ & ಕಮ್ಯೂನಿಕೇಶನ್ ಸಿಸ್ಟಮ್ಸ್ ಮತ್ತು 2016-2017ನೇ ಸಾಲಿಗೆ ಎಂ.ಟೆಕ್. ಇನ್ ಕಂಪ್ಯೂಟರ್ ಇಂಟಿಗ್ರೇಟೆಡ್ ಮ್ಯಾನುಯಾಲ್ ಪ್ರೋಗ್ರಾಂ ಹಾಗೂ 2016-2017ನೇ ಸಾಲಿಗೆ ಎಂ.ಟೆಕ್. ಇನ್ ಪಾವರ್ ಎಲೆಕ್ಟ್ರಾನಿಕ್ಸ್ ಹೀಗೆ ಒಟ್ಟು ಮೂರು ಸ್ನಾತಕೋತ್ತರ ಕೋರ್ಸುಗಳು ಹೊಸದಾಗಿ ಪ್ರಾರಂಭವಾಗಿದ್ದು ಸರಿಯಷ್ಟೆ, ಆದರೆ, ರಾಜ್ಯ ಸರ್ಕಾರದಿಂದ ಆದೇಶ ಈವರೆಗೂ ಬಂದಿರುವುದಿಲ್ಲ. ಆದುದರಿಂದ, ರಾಜ್ಯ ಸರ್ಕಾರದ ಆದೇಶ ಪಡೆದು ವಿತಾವಿಗೆ ಕಳುಹಿಸಿದ ನಂತರ ಮುಂದಿನ ಕ್ರಮ ಕೈಕೊಳ್ಳಲಾಗುವುದು.

Copy
H. N. S. R.
Principal
National College of Engineering

Judey
ಕುಲಸಚಿವರು 12.01.17



ವಿಶ್ವೇಶ್ವರಯ್ಯ ತಾಂತ್ರಿಕ ವಿಶ್ವವಿದ್ಯಾಲಯ

“ಜ್ಞಾನ ಸಂಗಮ”, ಬೆಳಗಾವಿ - 590 0118, ಕರ್ನಾಟಕ ರಾಜ್ಯ, ಭಾರತ

ದೂರವಾಣಿ : (0831) 2405468
ಫ್ಯಾಕ್ಸ್ : (0831) 2405467
ಇಮೇಲ್ : registrar@vtu.ac.in
ವೆಬ್‌ಸೈಟ್ : www.vtu.ac.in

3

ವಿಶೇಷ ಸೂಚನೆ : ಸದರಿ ವಿತಾವಿಯ ಶಿಫಾರಸ್ಸುಗಳು ಸರ್ಕಾರ / ಎಐಸಿಟಿಇಯಿಂದ ಅನುಮೋದಿತವಾದಲ್ಲಿ ಮಾತ್ರ ಅನ್ವಯಿಸುತ್ತವೆ. ಈ ವಿಷಯದಲ್ಲಿ ವಿತಾವಿಯ ಶಿಫಾರಸ್ಸುಗಳು ಯಾವುದೇ ಹಕ್ಕುಬಾಧ್ಯತೆಗೆ ಅನ್ವಯಿಸುವುದಿಲ್ಲವೆಂದೂ/ ಮಹಾವಿದ್ಯಾಲಯ ಯಾವುದೇ ಅಧಿಕಾರಿಗಳಿಗೆ ಈ ಶಿಫಾರಸ್ಸಿನ ಮೇರೆಗೆ ಅರ್ಜಿ ಸಲ್ಲಿಸಲು ಬಾಧ್ಯತೆ ಇಲ್ಲವೆಂದು ತಿಳಿಸಲಾಗಿದೆ.

ಇವರಿಗೆ,

ಪ್ರಾಂಶುಪಾಲರು,

ಜವಾಹರಲಾಲ್ ನೆಹರು ನ್ಯಾಷನಲ್ ಕಾಲೇಜ್ ಆಫ್ ಇಂಜಿನಿಯರಿಂಗ್,

ನವಲೆ,

ಶಿವಮೊಗ್ಗ - ೫೭೭ ೨೦೪.

ಪ್ರತಿ ಸಾದರಪೂರ್ವಕವಾಗಿ ಮಾಹಿತಿಗಾಗಿ ರವಾನಿಸಲಾಗಿದೆ:

೧) ನಿರ್ದೇಶಕರು ತಾಂತ್ರಿಕ ಶಿಕ್ಷಣ ಇಲಾಖೆ, ಬೆಂಗಳೂರು - ೧.

೨) ಕುಲಸಚಿವರು (ಮೌಲ್ಯಮಾಪನ), ವಿ.ತಾ.ವಿ. ಬೆಳಗಾವಿ,

೩) ವಿಶೇಷಾಧಿಕಾರಿಗಳು, ವಿ.ತಾ.ವಿ. ಪ್ರಾದೇಶಿಕ ಕಛೇರಿ, ಮೈಸೂರು.

ಪ್ರತಿ ಮಾಹಿತಿಗಾಗಿ:

ಕುಲಪತಿಗಳ ಕಾರ್ಯದರ್ಶಿಗಳು, ವಿ.ತಾ.ವಿ. ಬೆಳಗಾವಿ.

Copy

Handwritten signature
Principal
National College of Engineering
SHIMOGA.

Handwritten signature

ಕುಲಸಚಿವರು 12.01.17

Handwritten initials

1A



Visvesvaraya Technological University
"Jnana Sangama", Belagavi - 590 018 Karnataka State

Phone:(0831)2498100

Fax:(0831)2405467

Registrar

Ref: VTU/Aca/2014-2015/A-3/10806.

Date: 22 JAN 2015

To,
The Principal,
JNN College of Engineering,
Shivamogga - 577 204.

Sir,

Sub: Permanent Affiliation status for the academic year 2014-2015 - reg.
Ref: Your fax letter No: JNNCE/EST/1235/2014-15, dt: 22.01.2015.

With reference to the above, you are hereby informed that the following courses are recommended for Permanent Affiliation from the academic year 2014-2015 to 2019-2020 and the recommendations of VTU sent to State Government through our letter dt. 02.07.2014.

UG:

1. Computer Science & Engineering .
2. Civil Engineering
3. Mechanical Engineering
4. Electrical & Electronics Engineering

PG:


1. M. Tech. in Design Engineering

Further, after the receipt of the State Government order VTU Notification for the Permanent Affiliation will be issued.

Thanking you,

Yours faithfully,

Copy


Principal
JNN College of Engineering
Shivamogga.



Registrar





Visvesvaraya Technological University

"Jnana Sangama", Belagavi – 590 018, Karnataka State

Dr. H. N. Jagannath Reddy B.E., M.E., Ph. D.
Registrar

Phone: (0831) 2405468
Fax: (0831) 2405467

Ref: VTU/Aca-Res-Cen/2016-17/7894

Date: 16 JAN 2017

NOTIFICATION

Sub: Continuation/Extension of Research Centers for the academic year 2016-17 & 2017-18 reg...

Ref: Executive Council Resolution No. 2.3.2, dated 16-12-2016.

Pursuant to the Resolution of Executive Council referred to the above, under section (41) of the VTU act 1994, the recognition granted to the following Departments of J N N College of Engineering, Shivamogga as Research Centre is continued/extended for the academic years 2016-17 and 2017-18 to offer Ph.D/M.Sc. (Engg) by Research program in the faculty mentioned against them.

Sl. No.	Department	Faculty
1	Mechanical Engineering	Engineering
2	Civil Engineering	Engineering
3	Computer Science & Engineering	Engineering
4	Electrical & Electronics Engineering	Engineering

copy

REGISTRAR
VTU, Belagavi

8.11

PA

To,

The Principal,
J N N College of Engineering,
Shivamogga.

Principal
Jawahar Lal Nehru
National College of Engineering,
Shivamogga

Please Note: Though the Notification is issued for 2 academic years, the college has to pay the Continuation fee of Rs. 2,000/- per department annually.

Copy to:

1. The Secretary to VC, VTU, Belgaum for kind information.
2. The Registrar (Evaluation), VTU, Belgaum for kind information.
3. The Special Officers of all Regional offices of VTU for kind information.



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6



Visvesvaraya Technological University

"Jnana Sangama", Belagavi – 590 018, Karnataka State

Phone: (0831) 2405468
Fax: (0831) 2405467

Registrar

Ref: VTU/Aca-Res-Cen/2015-16/ 6726 (av)

Date: 2 - NOV 2015

NOTIFICATION

Sub: Continuation/Extension of Research Centers for the academic year 2015-16 & 2016-17 reg...

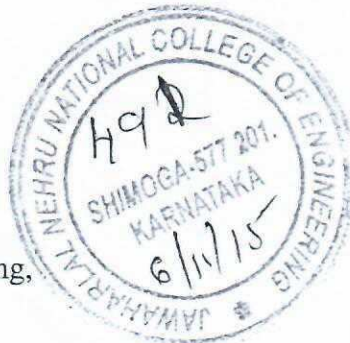
Ref: Executive Council Resolution no. 2.3.2, dated 29-09-2015

Pursuant to the resolution of Executive Council referred to the above, under section (41) of the VTU act 1994, the recognition granted to the following Departments of JNN College of Engineering, Shivamogga as Research Centre is continued/extended for the academic years 2015-16 and 2016-17 to offer Ph.D/M.Sc. (Engg) by research program in the faculty mentioned against them.

ESS
Cen for concern
delete

6/11/15

Sl. No.	Department	Faculty
1	Electronics & Communication Engineering	Engineering
2	MBA	Business Administration
3	Chemistry	General Science



Kepang
REGISTRAR
VTU, Belagavi
BL 19/10
VA

To,
The Principal,
JNN College of Engineering,
Shivamogga.

Please Note: Though the Notification is issued for 2 academic years, the college has to pay the Continuation fee of Rs. 2,000/- per department annually.

Copy to:

1. The Secretary to VC, VTU, Belgaum for kind information.
2. The Registrar (Evaluation), VTU, Belgaum for kind information.
3. The Special Officers of all Regional offices of VTU for kind information.

copy

Principal
Jawahar Lal Nehru
National College of Engineering



Visvesvaraya Technological University

"Jnana Sangama", Belagavi - 590 018, Karnataka State

Dr. H. N. Jagannath Reddy B.E., M.E., Ph. D.
Registrar

Phone: (0831) 2405468
Fax: (0831) 2405467

Ref: VTU/Aca-Res-Cen/2016-17/ 7972

Date: 17 JAN 2017

NOTIFICATION

Sub: Grant of Recognition to the Department of *Physics* of Jawaharlal Nehru National College of Engineering, Shivamogga to offer Ph.D/M.Sc. (Engg.) by research reg...

Ref: Executive Council Resolution No. 2.3.1, dated 16-12-2016.

Pursuant to the Resolution of Executive Council referred to the above, it is hereby notified that the Department of *Physics* of Jawaharlal Nehru National College of Engineering, Shivamogga is permitted under section (41) of the VTU act 1994, to offer Ph.D/M.Sc. (Engg) by Research programs in accordance with the Regulations and Guidelines in force (visit our VTU website www.vtu.ac.in for Regulations & Guidelines). This permission for Fresh Department is valid for *one academic year* starting from 2016-17.


REGISTRAR
VTU, Belagavi

To,

The Principal,
Jawaharlal Nehru National College of Engineering,
Shivamogga.

Copy to:

1. The Secretary to VC, VTU, Belagavi for kind information.
2. The Registrar (Evaluation), VTU, Belagavi for kind information.
3. The Special Officers of all Regional offices of VTU for kind information.

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Preface

PREFACE

National Education Society (NES) is a registered society established in the year 1946 by the freedom fighters and philanthropists of high repute. The selfless dedication of these personalities to the noble cause of education has not only earned name for NES in the field of education but also has made it cynosure in the whole Malnad region. After starting its activities by establishing a high school in the year 1946 the society is now managing 35 educational institutions of various levels such as Engineering, Science, Pharmacy, Commerce, Humanities, Education, Law, Business Administration, Physical Education, Computer Application, Applied Sciences, Polytechnic etc. The list of institutions managed by the National Education Society are as follows:

Table 1 Institutions Managed by NES

Sl. No.	Name of the School/ College	Year of EST.
1.	National Junior College (High School Section), Shivamogga.	1946
2.	Kasturba Girl's Junior College (High School Section), Shivamogga.	1954
3.	National Higher Primary School, Shivamogga.	1956
4.	National Junior College (High School Section), Konandur.	1960
5.	National Junior College (High School Section), B. R. Project.	1962
6.	Jayaprakash Narayan Junior College (High School Section), Shivamogga.	1963
7.	National College of Education, Shivamogga.	1963
8.	National High School, Chilur.	1963
9.	National High School, Kumsi.	1964
10.	Sri Thirthalingeshwara National High School, Belagutti.	1964
11.	Sri. Padmamba National High School, Humcha.	1964
12.	Kamala Nehru Memorial National College of Arts, Science and Commerce for Women, Shivamogga.	1965
13.	Acharya Tulsi National College of Commerce, Shivamogga.	1966
14.	C. Bhimasen Rao National College of Law, Shivamogga.	1966
15.	National College of Pharmacy (D.Pharm), Shivamogga.	1967
16.	Sharavathi National High School, Harige.	1969
17.	Sharadadevi Girls National High School, Shivamogga.	1970
18.	H. S. Rudrappa National Pre University College, Shivamogga.	1972
19.	Kasturba Girls Junior College (College Section), Shivamogga.	1972
20.	National Junior College (College Section), Konandur.	1972
21.	Jawaharlal Nehru National College of Engg., Shivamogga.	1980
22.	National Junior College (College Section), B.R. Project.	1983
23.	Sharavathi First Grade National College, Konandur.	1983

24.	National Lower Primary School, Shivamogga.	1983
25.	Indian High School, Shivamogga.	1983
26.	Jayaprakash Narayan Junior College (College Section), Shivamogga.	1984
27.	S.R.N. Memorial National College of Applied Sciences, Shivamogga	1991
28.	Sri Thirthalingeshwara National P.U.College, Belagutti.	1994
29.	National Independent Pre-University Science Residential College, Konandur	2000
30.	National Residential School, Konandur	2001
31.	General Cariyappa Rastriya Daihika Shikshana Mahavidyalaya, Shivamogga.	2007
32.	National Public School, Shivamogga	2008
33.	D S Dinakar National Polytechnic, Shivamogga	2008
34.	NES Institute of Advanced Studies, Shivamogga	2009
35.	Kadidal Manjappa National Institute of PG Studies Shivamogga.	2011

Jawaharlal Nehru National College of Engineering (JNNCE) is a flagship Institute of the National Education Society. JNNCE is one of the premier technical institutions of Karnataka imparting excellent technical education and training to students from all parts of India. Started in the year 1980, the institute has completed 36 years of its fruitful existence towards achieving perfection in all aspects of technical education and training and has emerged as one of the most sought-after destination for technical and management education by students and parents from all over India.



Executive Summary



EXECUTIVE SUMMARY-SWOC ANALYSIS

JNNCE is a flagship Institute of the National Education Society (NES), established by freedom fighters and philanthropists like Sri. H. S. Rudrappa, Sri. S. V. Krishna Murthy Rao, Sri.S. R. Nagappa Setty and Sri. D. S. Dinakar and groomed by Sri Girimaji N Rajagopal, Sri D.R.Ratnakar among others – has, during 70 years of its existence, spread its wings in several disciplines of education through establishment of 35 educational institutions in the Malnad region of Karnataka state. It comprises of institutions in a wide range of disciplines such as Engineering, Science, Pharmacy, Commerce, Humanities, Education, Law, Business Administration, Physical Education, Computer Application and Applied Sciences. The residential school at Konandur with ICSE syllabus and modern infrastructure is a testimony to the interest of the Society in developing educational infrastructure in rural areas. The latest ventures of the NES include Establishment of a Physical Education College, a Polytechnic College, Institute of Advanced Studies and CBSE High school with all modern infrastructure in Shivamogga. The management team of NES, comprising of highly respected persons from different profession and social service are committed to carry forward the enlightening vision and the illustrious legacy of its founders. NES was established with primary motto of giving emphasis on rural and women education. The Mission of NES is “To provide quality education at reasonable cost”

Jawaharlal Nehru National College of Engineering (JNNCE), is one of the technical institutions of Karnataka, providing excellent technical education and training to students from all parts of India. Started in the year 1980, the institution has completed 36 years of its fruitful existence towards achieving perfection in all aspects of technical education and training and has emerged as one of the most sought-after destination for technical and management education by students and parents from all over India.

JNNCE is affiliated to Visvesvaraya Technological University (VTU), Belagavi and recognized by the All India Council for Technical Education (AICTE). The college offers BE courses in 7 branches of engineering, namely, Civil, Mechanical, Electrical and Electronics, Electronics and Communication, Computer Science and Engineering, Information Science and Engineering and Telecommunication Engineering. As many as five disciplines, namely, Civil Engineering, Mechanical Engineering, Electrical & Electronics Engineering, Computer Science & Engineering and Electronics & Communication Engineering were accredited from the National Board of Accreditation, New Delhi till 2009 and the renewal process of accreditation as per Out Come Based Education has been initiated. The college also offers 9 PG courses, namely, MCA, MBA and M.Tech., in Computer Science and Engineering, Network and Internet Engineering, Design Engineering, Digital Electronics and Communication Systems, Power Electronics, Computer Integrated Manufacturing and Transportation Engineering and Management.

JNNCE is also a University recognized research centre in Civil Engineering, Mechanical Engineering, Computer Science and Engineering, Electrical and Electronics Engineering, Electronics and Communication Engineering , MBA, Physics and Chemistry leading to the award of M.Sc. (Engg.) and Ph.D. So for 21 candidates have been awarded Ph.D. from our research centres.

The lush green sprawling campus of about 49 acres caters to the needs of nearly 3750 students and 450 staff, with state-of-the-art technology back-up, well-equipped laboratories and workshops, library, hostels, playgrounds and other amenities. The dedicated faculty of the institute comprises of nearly 42 Ph.Ds, 154 with PG qualifications, 4 with M.Phil., amongst whom 50 are pursuing Ph.D. There are 27 Professors, 31 Associate Professors, 142 Assistant professors and 5 Lecturers. The technical and supporting staff of the institute work with lot of concern and commitment.

The faculty have presented and published more than 500 papers in national and international seminar, conferences and journals. AICTE-funded Research projects worth more than Rs. 50 lakhs have been carried out in the institute. The institution has so far organized two International Conference and ten National Conferences /Seminars on different academic and intellectual themes successfully, attracting resource persons, speakers and delegates from academics and institutions from all over India and even overseas, and has brought out proceedings containing valuable information and insights. The institution is a centre for EDUSAT programmes of VTU. To motivate innovation based research among faculty and students, a Research and Innovation Centre in JNNCE (JNNRIC) has been started.

Other salient features of the institute includes excellent infrastructure with spacious class rooms with modern teaching aids, state-of-the art laboratories and computers. There is a hostel for both boys and girls accommodating about 600 boys and 450 girls. Sports facilities abound with multi gym, Turf cricket pitch and a modern playground. The Turf cricket pitch and new pavilion is as per KSCA standards and hosted cricket matches like Ranji Trophy, South zone and other State level matches.

Institute has a ‘Student Amenity Centre’ with modern hygienic cafeteria, Co-operative society, Bank, Post-office, Guest-house and Medical Centre. Each department has its own department forum, promoting extra-curricular and co-curricular activities for students. Institute has IT incubation Centre for aspiring IT entrepreneurs, Biomass Gasifier unit, Science and Technology Entrepreneurship Park (STEP), Student Counseling Centre, Consumer Protection & Welfare cell.

Rainwater Harvesting and Sewage Treatment Plant has been implemented in the campus. This eco-friendly project is well appreciated for its conservation of water, recycling of water and pollution control.

The institute library has a collection of 1,08,088 books relating to all branches of Engineering and Management, digital library, subscribed to 170 National & International, e-journals through VTU Consortium. The Library has been computerized with e-Lib software.

Students are encouraged to participate in Technical and Management Fests, Student Seminars/Conferences and other co-curricular and extra-curricular activities held by different institutions and the University. JNNCE takes pride in noting that its students have been consistently winning laurels in all such inter-collegiate and inter-university contests and events. The institution conducts its own Technical Fest-“Techzone” every year, attracting student entries for paper presentation and other events from different states. “JANVEY”, the two-day annual Sports & Cultural Fest of the institute showcases students’ multi-faceted talents in different disciplines. Institute has student chapters of IEI, IETE, and SAE provide additional enrichment for students’ overall development.

Institution has so far secured over 100 ranks in university exams. The institution has introduced a system of rewarding excellent academic performance by the students, by awarding cash prizes, partial waiver of tuition fees and merit certificates.

The institution has good placement record, with companies like BEL, TCS, Evive Health, HP, Tech Mahindra, Wipro Technologies, etc visit the campus for recruitment of students. All the students will undergo the soft skill training program conducted by placement cell. Further students are exposed to the emerging technologies by way of technical talks by Industry experts. Students undertake their projects in emerging technical field and are involved in research projects. Students also participate in social cause, cultural and sports activities.

The college has implemented a pro-active student Mentor Scheme, under which each teacher is allotted a batch of students, not exceeding 20, for close interaction, guidance, and monitoring of the students’ academic performance and progress. Students’ academic performance and progress is regularly communicated to the parents. Parent-Teacher meets are also held periodically to discuss about all relevant student matters.

More than 15,000 students who have passed out of this institution have been making significant contributions in Industries, R&D organizations, Academic

Institutions and Govt. Organizations in India and abroad and serving their alma-mater.

The institute has Alumni Forum, which meets regularly and involves itself in the development of the institution by undertaking various activities.

JNNCE is identified as a centre for organizing INSPIRE-Internship Camp funded by DST, GOI for 12th standard students every year to create awareness in Basic Science. Every year about 150 academically top students of Shivamogga and nearby places attend five day camp. JNNCE is identified as a remote centre of IIT Bombay to conduct online Faculty Development Programs and technical workshops for faculty and students. It is also a nodal centre for the project E-Yantra, a Robot based project of IIT Bombay.

Department of IT BT of Government of Karnataka has setup a New Age incubation centre at JNNCE with an annual funding of Rs. 40 Lakhs. Each project is given Rs. 3 Lakh for making prototype of their idea and implementing the same.

As part of Industry-Institute collaboration, the institute has signed MoU with companies with Qualitas Technologies Bengaluru to work in the areas of Hyperspectral image processing and deep learning for machine vision system and with Laser Consult Kft, Hungary for R&D, Technology transfer and commercialization.

Convenient and affordable transportation facility is provided by a fleet of 35 buses, to students hailing from different parts of Shivamogga city and Bhadravathi town.

JNNCE is ranked 41st among top 50 engineering colleges of India and 27th in South Zone as per the survey of THE WEEK magazine in 2016 and among the top 75 Engineering Colleges of India successfully for the Sixth year by Outlook magazine survey with 47th rank in India and 7th position in Karnataka in 2016 survey.

JNNCE has thus emerged as one of the institutions espoused to the cause of professional education, training and research. JNNCE is wedded to a conviction of building engineers and managers of tomorrow competent to attune to the changing business dynamics with rewarding performance.

SWOC ANALYSIS

The SWOC analysis was conducted by having brainstorming sessions at the department level and institute level involving all stake holders. Following inputs have been considered.

- Faculty Interaction
- Students' feedback
- Feedback of Non teaching staff /Administrative staff.
- Alumni feedback
- Employers feedback
- Parents-Teachers meeting feedback.
- Feedback reports of the committees from University.

Strengths (S)

Sl. No.	Description
S1	Value based and philanthropic management
S2	Eco friendly, Noise & Pollution free green campus
S3	Competent and dedicated Faculty with 42+ PhD holders
S4	Good infrastructure for teaching, learning and research
S5	Spacious Library and information center with necessary volumes
S6	Good support from Alumni base
S7	Good placement track record
S8	Passionate researchers pursuing research
S9	Availability of Incubation Eco system
S10	Vibrant student chapters of the professional bodies IETE, IE(I) and IEEE

Weakness (W)


Sl. No.	Description
W1	Quality of student admission
W2	Higher slow learner rate
W3	Weak industry-institute interaction
W4	Poor need based training for students
W5	Lack of passion and enthusiasm with Faculty to pursue research in emerging areas

Opportunities (O)

Sl. No.	Description
O1	Industries looking for quality Engineers from colleges.
O2	Ample space for collaboration with R&D Labs, Public Sector companies, Industries
O3	Needy students who are looking for quality education
O4	Availability of Alumni support for moving up in value chain
O5	Availability of research fund/grant from Govt. of India, Foreign Countries

Challenges (C)

Sl. No.	Description
C1	Preparing our self for speed of technology development across globe
C2	Igniting & inspiring students and Faculty for continuous improvement in all areas
C3	Beating the stiff competition from Top National level Institutes and International Universities
C4	Change in government's policies regarding admissions and fee structure.



Profile of the
Institute



PROFILE OF THE INSTITUTE

1. Name and Address of the College:

Name :	Jawaharlal Nehru National College of Engineering	
Address :	Savalanga Road, Navule	
City : SHIVAMOGGA	Pin : 577204	State : Karnataka
Website :	www.jnnce.ac.in	

2. For Communication:

Designation	Name	Telephone with STD code	Mobile	Fax	Email
Principal	Dr. H.R. Mahadevaswamy	O:08182- 276707	7899478990	08182-222450	principal@jnnce.ac.in
Vice Principal	Not Applicable				
Steering Committee Co-ordinator	Prof. H. K. Harish	O: 08182- 276707	9886303385	08182-222450	naac@jnnce.ac.in

3. Status of the Institution:

- Affiliated College
- Constituent College
- Any other (specify)

4. Type of Institution:

a. By Gender

- i. For Men
- ii. For Women
- iii. Co-education

b. By Shift

- i. Regular
- ii. Day
- iii. Evening

5. It is a recognized minority institution?

Yes
 No

If yes specify the minority status (Religious/linguistic/ any other) and provide documentary evidence.

6. Sources of funding: Government

Grant-in-aid
 Self-financing
 Any other

7. a. Date of establishment of the college: 27/09/1980

b. University to which the college is affiliated /or which governs the college (If it is a constituent college)

Visvesvaraya Technological University, Belagavi, Karnataka

c. Details of UGC recognition:

Under Section	Date, Month & Year (dd-mm-yyyy)	Remarks (If any)
i. 2 (f)	Applied, under process	
ii. 12 (B)	Applied, under process	

(Enclose the Certificate of recognition u/s 2 (f) and 12 (B) of the UGC Act)

d. Details of recognition/approval by statutory/regulatory bodies other than UGC (AICTE, NCTE, MCI, DCI, PCI, RCI etc.)

Under Section/ clause	Recognition/ Approval details Institution/ Department Programme	Day, Month and Year (dd-mm-yyyy)	Validity	Remarks
	B.E. Civil B.E. Mechanical B.E. Electrical and Electronics B.E. Electronics and Communication B.E. Telecommunication B.E. Computer Science B.E. Information	AICTE approval letter No: SW/1-2812061291/2016, dt: 5 th April 2016	1 year	

	Science M.Tech. Computer Science and Engineering M.Tech. Networking and Internet Engineering M.Tech. Design Engineering M.Tech. Transportation Engineering and Management M.Tech. Digital Electronics and Communication systems M.Tech. Computer Integrated Manufacturing M.Tech. Power Electronics			
	M.B.A.	SW/1- 2812200884/ 2016, dt:05.04.2016	1 year	
	M.C.A.	SW/1- 2812144013/ 2016, dt:05.04.2016	1 year	

8. Does the affiliating university Act provide for conferment of autonomy (as recognized by the UGC), on its affiliated colleges?

Yes No

If yes, has the College applied for availing the autonomous status?

Yes No

9. Is the college recognized

a. by UGC as a College with Potential for Excellence (CPE)?

Yes No

If yes, date of recognition: (dd/mm/yyyy)

b. for its performance by any other governmental agency?

Yes No

If yes, Name of the agency and

Date of recognition: (dd/mm/yyyy)

10. Location of the campus and area in sq.mts:

Location *	Urban
Campus area in sq. mts.	210437.00
Built up area in sq. mts.	48564.87

(* Urban, Semi-urban, Rural, Tribal, Hilly Area, Any others specify)

11. Facilities available on the campus (Tick the available facility and provide numbers or other details at appropriate places) or in case the institute has an agreement with other agencies in using any of the listed facilities provide information on the facilities covered under the agreement.

➤ Auditorium/seminar complex with infrastructural facilities: Yes

Sl. No.	Name	Seating capacity	Infrastructural facilities
1.	MBA/ MCA Auditorium	220	Air conditioned Auditorium with Audio-Visual Facility
2.	Ad. Block Seminar Hall	160	Air conditioned Auditorium with Audio-Visual Facility
3.	Ananya Mantapa	1500	Open Air Auditorium with Audio Facility

➤ Sports facilities

• Play ground : Yes

a. Outdoor Games

Sl. No	Infrastructure	No of Grounds/ Courts
1.	Multipurpose playground used for Cricket, Football, Hockey, Field and Track events	01
2.	Handball court	01
3.	Volleyball Court	01
4.	Basket ball Court	01

b. Indoor Games

Sl. No	Infrastructure	No of Grounds/ Courts
1.	Shuttle badminton	01
2.	Table tennis	01

- Swimming pool: **No**
- Gymnasium : **Yes, 24 Station Multi Gym and Weight Lifting facility**

➤ Hostel

• Boys' hostel

Number of hostels	04
Number of inmates	581
Facilities (mention available facilities):	Mess, Wi-fi, Security, Mediclaim facility, RO Water, Transportation, Solar heater, Laundry Facility, TV and Newspaper. Single room facility for PG and final year students.

• Girls' hostel

Number of hostels	02
Number of inmates	423
Facilities (mention available facilities):	Mess, Wi-fi, Security, Mediclaim facility RO Water, Transportation, Solar heater, Laundry, TV and Newspaper.

• Working women's hostel

Number of hostels	----
Number of inmates	----
Facilities (mention available facilities):	----

➤ Residential facilities for teaching and non-teaching staff (give numbers available — cadre wise)

Non Teaching	08
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➤ Cafeteria : Yes

- Health centre: Yes
 - First aid: Yes
 - Outpatient: Yes
 - Emergency care facility: Local Nursing home
 - Ambulance: No.

Health centre staff –

Qualified doctor	Full time	<input type="checkbox"/>	Part-time	<input checked="" type="checkbox"/>
Qualified Nurse	Full time	<input type="checkbox"/>	Part-time	<input type="checkbox"/>

- Facilities like banking, post office, book shops:
 1. Bank: Yes, Canara Bank Branch
 2. Post Office: Yes
 3. Book Shop: Yes, Staff and Students Cooperative society
- Transport facilities to cater to the needs of students and staff: Yes
35 Buses to ferry student and faculty from different parts of Shivamogga and Bhadravathi
- Animal house: Not Applicable
- Biological waste disposal : Not Applicable
- Generator or other facility for management/regulation of electricity and voltage: **YES,**

Place	Generator Capacity
Campus	10 KVA, 140 KVA, 320 KVA
Ladies Hostel	25 KVA, 45 KVA

Substation: 2 x 250KVA, 11KV/ 433V Transformer is installed for H.T. purpose in campus.

- Solid waste management facility: YES
- Waste water management: YES
- Water harvesting: YES

12. Details of programmes offered by the college (Give data for current academic year)

Sl No.	Programme Level	Name of the Programme / Course	Duration	Entry Qualification	Medium of instruction	Sanctioned/ approved Students strength	No. of students admitted
1	Under Graduate						
1	Under Graduate	Civil Engineering	4 years	PUC/10+2	English	120+6*	121
2		Mechanical Engineering	4 years	PUC/10+2	English	120+6*	106
3		Electronics & Communication Engineering	4 years	PUC/10+2	English	120+6*	118
4		Telecommunication Engineering	4 years	PUC/10+2	English	60+3*	53
5		Electrical & Electronics Engineering	4 years	PUC/10+2	English	60+3	54
6		Computer Science & Engineering	4 years	PUC/10+2	English	120+6*	123
7		Information Science & Engineering	4 years	PUC/10+2	English	120+6*	118
* Supernumerary Quota							
2	Post Graduate						
1	Post Graduate	M.Tech-CSE	2 Years	BE/B.Tech	English	25	14
2		M.Tech-Design	2 Years	BE/B.Tech	English	18	03
3		M.Tech-DECS	2 Years	BE/B.Tech	English	24	09
4		M.Tech-NIE	2 Years	BE/B.Tech	English	24	02
5		M.Tech-Trans	2 Years	BE/B.Tech	English	18	18
6		M.Tech-CIM	2 Years	BE/B.Tech	English	18	02
7		M.Tech-PE	2 Years	BE/B.Tech	English	18	05
8		MBA	2 Years	BA/BCom/ BSc	English	120	119
9		MCA	3 Years	BSc/BCA	English	120	61
1	Research centres (Ph.D./ M.Sc.(Engg.))	Civil Engineering	3 years and above	Master's Degree with 55%	English	As per VTU Norms, 5 Per Guide	
2		Mechanical Engineering	3 years and above	Master's Degree with 55%	English		
3		Electronics & Communication	3 years and	Master's Degree	English		

	Engineering	above	with 55%		
4	Electrical & Electronics Engineering	3 years and above	Master's Degree with 55%	English	
5	Computer Science & Engineering	3 years and above	Master's Degree with 55%	English	
6	MBA	3 years and above	Master's Degree with 55%	English	
7	Physics	3 years and above	Master's Degree with 55%	English	
8	Chemistry	3 years and above	Master's Degree with 55%	English	

13. Does the college offer self-financed Programmes?

Yes No

If yes, how many?

14. New programmes introduced in the college during the last five years if any?

Yes No Number

M.Tech. Computer Integrated Manufacturing - 2012-13

M.Tech. Power Electronics - 2014-15

15. List the departments: (respond if applicable only and do not list facilities like Library, Physical Education as departments, unless they are also offering academic degree awarding programmes. Similarly, do not list the departments offering common compulsory subjects for all the programmes like English, regional languages etc.)

Departments	UG	PG	Research
Civil Engineering	✓	✓	✓
Mechanical Engineering	✓	✓	✓
Electronics & Communication Engineering	✓	✓	✓
Telecommunication Engineering	✓	---	---
Electrical & Electronics Engineering	✓	✓	✓
Computer Science & Engineering	✓	✓	✓
Information Science & Engineering	✓	---	---
MBA	---	✓	✓

MCA	---	✓	---
Physics	---	---	✓
Chemistry	---	---	✓

16. Number of Programmes offered under (Programme means a degree course like BA, B.Sc, MA, M.Com...)

- a. annual system
- b. semester system
- c. trimester system

17. Number of Programmes with

- a. Choice Based Credit System
- b. Inter/ Multidisciplinary Approach
- c. Any other (specify and provide details)

18. Does the college offer UG and/or PG programmes in Teacher Education?

- Yes No

If yes,

- a. Year of Introduction of the programme(s).....
(dd/mm/yyyy) and number of batches that completed the programme
- b. NCTE recognition details (if applicable) Notification No.:
..... Date:
(dd/mm/yyyy) Validity:.....
- c. Is the institution opting for assessment and accreditation of Teacher Education Programme separately?
Yes No

19. Does the college offer UG or PG programme in Physical Education?

- Yes No

If yes,

- a. Year of Introduction of the programme(s).....
(dd/mm/yyyy) and number of batches that completed the programme
- b. NCTE recognition details (if applicable) Notification No.:
..... Date:
(dd/mm/yyyy) Validity:.....
- c. Is the institution opting for assessment and accreditation of Physical Education Programme separately?
Yes No

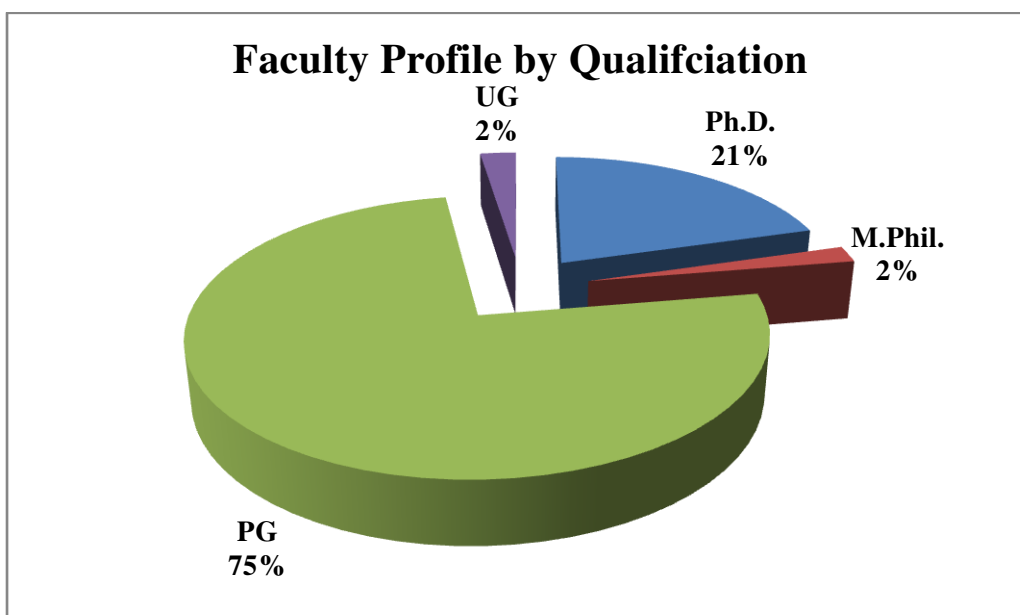
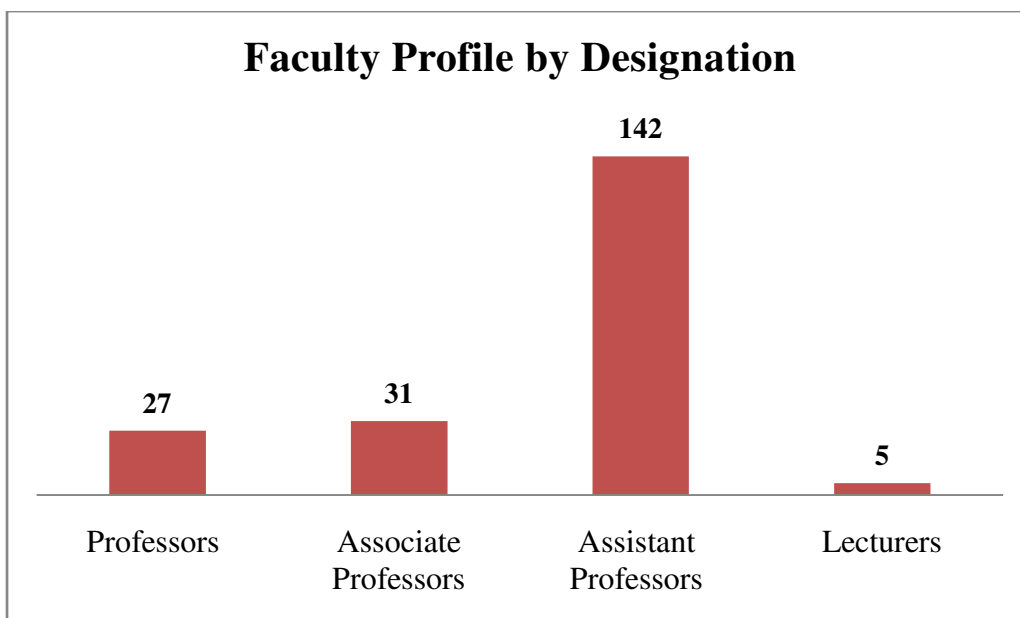
20. Number of teaching and non-teaching positions in the Institution

Positions	Teaching faculty						Non-teaching staff		Technical staff	
	Professor		Associate Professor		Assistant Professor		*M	*F	*M	*F
	*M	*F	*M	*F	*M	*F				
Sanctioned by the UGC / University / State Government										
<i>Recruited</i>										
<i>Yet to recruit</i>										
Sanctioned by the Management/ society or other authorized bodies	16	11	25	7	96	50	71	23	77	6
<i>Recruited</i>										
<i>Yet to recruit</i>										

*M-Male *F-Female

21. Qualifications of the teaching staff:

Highest Qualification	Professor		Associate Professor		Assistant Professor		Lecturer		Total	
	M	F	M	F	M	F	M	F	M	F
Permanent Teacher										
D.Sc./D.Litt.	--	--	--	--	--	--	--	--	--	--
Ph.D.	23	4	3	2	9	1	--	--	35	7
M.Phil.	---	--	--	1	3		--	--	3	1
PG	--	--	20	5	83	46	--	--	103	51
UG	--	--	--	--	--	--	3	2	3	2
Temporary Teachers: --- NIL ---										
Part -Time Teachers: --- NIL ---										



22. Number of Visiting Faculty /Guest Faculty engaged with the College.

Nil

23. Furnish the number of the students admitted to the college during the last four academic years.

Under Graduate

Categories	Year 1 (2013-14)		Year 2 (2014-15)		Year 3 (2015-16)		Year 4 (2016-17)		Total
	Male	Female	Male	Female	Male	Female	Male	Female	
SC	26	27	20	26	21	24	20	19	183
ST	6	6	2	9	2	8	6	3	42
OBC	78	77	80	78	78	88	60	63	602
General	237	212	222	226	206	209	256	230	1798
Others	21	16	21	18	20	20	23	13	152
Total	368	338	345	357	327	349	365	328	2777

Furnish the number of the students admitted to the college during the last four academic years (PG-MTech)

Categories	Year 1 (2013-14)		Year 2 (2014-15)		Year 3 (2015-16)		Year 4 (2016-17)		Total
	Male	Female	Male	Female	Male	Female	Male	Female	
SC	9	3	5	7	3	1	1	1	30
ST	2	-	-	1	-	-	-	-	3
OBC	14	8	11	11	3	1	3	4	55
General	40	35	45	45	27	40	20	22	274
Others	1	1	-	-	-	-	3	-	5
Total	66	47	61	64	33	42	27	27	367

Furnish the number of the students admitted to the college during the last four academic years (PG-MBA)

Categories	Year 1 (2013-14)		Year 2 (2014-15)		Year 3 (2015-16)		Year 4 (2016-17)		Total
	Male	Female	Male	Female	Male	Female	Male	Female	
SC	3	-	5	4	6	2	5	4	29
ST	-	2	2	1	2	-	1	1	09
OBC	11	6	20	10	12	8	16	12	95
General	47	47	28	31	52	38	47	33	323
Others	-	-	-	-	-	-	-	-	-
Total	61	55	55	46	72	48	69	50	456

Furnish the number of the students admitted to the college during the last four academic years (PG-MCA)

Categories	Year 1 (2013-14)		Year 2 (2014-15)		Year 3 (2015-16)		Year 4 (2016-17)		Total
	Male	Female	Male	Female	Male	Female	Male	Female	
SC	-	-	-	2	1	-	-	-	3
ST	-	-	-	1	-	-	-	-	1
OBC	1	-	11	19	-	2	3	6	42
General	25	28	17	29	9	26	20	32	186

Others	-	-	-	-	-	-	-	-	-
Total	26	28	28	51	10	28	23	38	232

24. Details on students enrollment in the college during the current academic year:

Type of students	UG	PG	M.Phil	Ph.D	Total
Students from the same state where the college is located	688	258	-	-	946
Students from other states of India	03	-	-	-	03
NRI Students	1	-	-	-	1
Foreign Students	1	-	-	-	1
Total	693	258	-	-	951

25. Dropout rate in UG and PG (average of the last two batches)

Sl.No	Year	UG	PG
1	2013-14	1.41%	0.35%
2	2014-15	2.42	0.65%

26. Unit Cost of Education

(Unit cost = total annual recurring expenditure (actual) divided by total number of students enrolled)

(a) including the salary component Rs.	74,600.00
(b) excluding the salary component Rs.	21,700.00

27. Does the college offer any programme/s in distance education mode (DEP)?

Yes No

If yes,

a) is it a registered centre for offering distance education programmes of

another University

Yes No

b) Name of the University which has granted such registration.

c) Number of programmes offered

d) Programmes carry the recognition of the Distance Education Council.

Yes No

28. Provide Teacher-student ratio for each of the programme/course offered

Programme/course	Teacher-Student ratio
Civil Engineering	1:17
Mechanical Engineering	1:21
Electronics & Communication Engineering	1:19
Telecommunication Engineering	1:15
Electrical & Electronics Engineering	1:20
Computer Science & Engineering	1:16
Information Science & Engineering	1:17

Programme/course	Teacher-Student Ratio
M.Tech- Computer Science & Engg.	1:12
M.Tech-Design Engg.	1:12
M.Tech-DECS	1:12
M.Tech-NIE	1:12
M.Tech-Transportation	1:12
M.Tech-CIM	1:12
M.Tech-Power Electronics	1:12
MBA	1:17
MCA	1:18

29. Is the college applying for

Accreditation : Cycle 1 Cycle 2 Cycle 3 Cycle 4

Re-Assessment:

(Cycle 1 refers to first accreditation and Cycle 2, Cycle 3 and Cycle 4 refers to re- accreditation)

30. Date of accreditation* (applicable for Cycle 2, Cycle 3, Cycle 4 and re-assessment only)

Cycle 1: (dd/mm/yyyy) Accreditation Outcome/Result.....
 Cycle 2: (dd/mm/yyyy) Accreditation Outcome/Result.....
 Cycle 3: (dd/mm/yyyy) Accreditation Outcome/Result.....

** Kindly enclose copy of accreditation certificate(s) and peer team report(s) as an annexure.*

31. Number of working days during the last academic year.

290

32. Number of teaching days during the last academic year
(Teaching days means days on which lectures were engaged excluding the examination days)

190

33. Date of establishment of Internal Quality Assurance Cell (IQAC) IQAC
8/09/2016

Sl. No.	Name	Designation	Dept.	Remarks
1.	Dr. H. R. Mahadevaswamy	Principal	E&C	Chairman
2.	Dr. M. G. Krishnamurthy	Professor	MBA	Coordinator
3.	Dr. R. Srinivasa Rao Kunte	Professor	E&C	Member
4.	Prof. J. Ashok	Assoc. Prof.	Mech	Member
5.	Prof. Sandhya R.	Assoc. Prof.	MCA	Member
6.	Dr. Kiran M.	Asst. Professor	ISE	Member
7.	Dr. Manjula G. R.	Assoc. Prof.	CSE	Member
8.	Dr. Karthik B. S.	Asst. Professor	Civil	Member
9.	Dr. H. B. Suresh	Professor	E&E	Member
10.	Mr. S. Shashikiran	Asst. Professor	TCE	Member
11.	Dr. H. B. Rajaprakash	Asst. Professor	Physics	Member

34. Details regarding submission of Annual Quality Assurance Reports (AQAR) to NAAC.

--- Not Applicable ---

35. Any other relevant data (not covered above) the college would like to include. (Do not include explanatory/descriptive information)

- District bio fuel information and demonstration center, JNNCE, promote & demonstrate all aspects of the bio-fuel business.
- The department of ITBT of Govt. of Karnataka has setup New Age Incubation network centre at JNNCE Shivamogga.
- The institute is identified as Remote Centre of IIT, Bombay



Criterion – I
Curriculum Aspect



CRITERION I: CURRICULAR ASPECTS

1.1 Curricular Planning and Implementation

1.1.1 State the vision, mission and objectives of the institution, and describe how these are communicated to the students, teachers, staff and other stakeholders.

The Vision & Mission of Jawaharlal Nehru National College of Engineering (JNNCE) are:

Vision

To be a pacesetter institute in technical & management education and research for producing highly competent engineers, managers & entrepreneurs to meet the needs of industry and society.

Mission

- Impart quality education through flexible and innovative teaching learning process.
- Enable and Ignite young minds to excel in their career and life with entrepreneurial spirit, professional ethics and human values.
- Facilitate invention based research and collaborate with industries to address societal needs.

Quality Policy

- Providing state-of-the-art technology support and best possible educational infrastructure.
- Development of faculty through supporting policies and procedures towards achieving higher qualifications, short-term courses, participation and presentation in seminars and conferences.
- Encourage R&D, consultancy and improve teaching-learning process by introducing innovative pedagogical and student interaction mechanism.

Institute is determined to achieve its vision through:

- Providing quality education in engineering and management.
- By inculcating invention based research environment in academic environment.
- Imparting excellent quality education in adherence to specified requirements of the university.
- Determined to provide technically equipped and employable students with required skill sets to the industry to manage rapidly changing environment.
- Commitment to impart ethical values in the minds of students to inculcate values in their professional, personal and societal life.

- Organizing a range of co-curricular, extra-curricular and training activities that help the students to equip themselves with leadership qualities, teamwork, professional and soft skills.
- Involving industry experts in curriculum delivery to bridge the gap between the industry and academia.
- Involving all stakeholders in different levels of institutional activities to accomplish the vision of the institute.
- Developing entrepreneurial mind set among students resulting in employment generation in the society.

Communicating vision and mission to different stakeholder is important to achieve the institutional strategic intent. The Institution's vision, mission are communicated to students, faculty, staff and other stakeholders through the following ways:

- Uploading vision and mission statements in the Institution website: www.jnnce.ac.in.
- Printing vision and mission statements in College magazines, College Handbook, Admission brochures, Prospectus, Admission banners, College videos and Placement brochures.
- Creating awareness among students and their parents about the institutional vision and mission during first year student's orientation program.

1.1.2 How does the institution develop and deploy action plans for effective implementation of the curriculum? Give details of the process and substantiate through specific example(s).

Curriculum delivery is important in the success of any institution. To develop and deploy the effective implementation of the curriculum, institution has undertaken following action plans:

- Since the institution is affiliated to VTU, Institution follows the curriculum prescribed by the VTU. Institution puts sincere efforts to deploy different action plans to implement the VTU curriculum.
- At the departmental level, the Coordinator in consultation with Head of the Department, Principal, and faculty allocates subjects to individual faculty members based on their functional expertise.
- At the institutional level, class time table is prepared by the Time table committee and same time table is followed by each department.
- Individual faculty member will prepare detailed lesson plan, and will be given to students.
- Each faculty will maintain Lesson plans, course files and teachers dairy in their respective subjects and are reviewed on a continuous basis by the HOD, and the Principal.
- As part of continuous evaluation, institution conducts three internal tests and evaluated.

- Regular departmental meetings (monthly) are conducted to discuss the proper implementation and monitoring of the university curriculum.
- Detailed syllabus, question papers of previous semesters, model question papers, notes, lecture PPTs, lab manuals and subject related videos for each subject are provided by the faculty to the students.
- At end of the each semester Student feedback is taken to review the performance of the faculty members, and based on this corrective measures are implemented by the HOD and Principal.

1.1.3 What type of support (procedural and practical) do the teachers receive? (From the University and/or institution) for effectively translating the curriculum and improving teaching practices?

- Board of Studies (BoS) of VTU develops the curriculum and syllabus. Once in four years, syllabus will be revised and updated by BoS based on the industry requirements and current technologies. VTU also organizes workshops and faculty developments programs on newly introduced subjects.
- Institution has plenty of course resource materials. Also it facilitates course reference materials such as magazines, journals and books in the library.
- Institution updates library by adding new books, magazines and journal based on new course, students and faculty requirements.
- To provide online resource materials, institution has subscriptions to e-journals (through VTU consortium), e-magazines and e-books. All students and faculty have free access to these online resources.
- Institution provides high-speed internet connectivity in browsing center and Wi-Fi facility in the campus to enable students to use internet technology in the learning process.
- Institution provides faculty cabins, LCD projectors, internet facility and Wi-Fi facility for faculty to ensure efficient and effective delivery of the university curriculum.
- Faculty members prepare course materials on each subject, which are distributed among the students.
- Institute arranges short-term training programs to teaching and non-teaching staffs during vacation to ensure the effective delivery of course contents.

1.1.4 Specify the initiatives taken up or contribution made by the institution for effective curriculum delivery and transaction on the curriculum provided by the affiliating University or other statutory agency.

- In the beginning of the odd semesters, the Institution prepares academic calendar and the Handbook containing the academic calendar is distributed to all students and faculty. Academic calendar includes

detailed information about the institutional academic activities, internal tests dates, schedule of extra and co-curricular activities etc.

- Faculty are using modern teaching methods by using laptops, LCD projectors, power point presentation, simulated videos etc., to make class room teaching more interesting and effective.
- Detailed course material, lesson plans, class notes, question banks, laboratory manuals, and model question papers are prepared by the faculty and made available to the students.
- Mentoring, coaching classes and tutorial classes are conducted for slow learners. Fast learners are motivated through counseling, project based learning and subject quizzes.
- The attendance registers are examined by the Heads of Departments once a week and the Principal once in a month to monitor the students' attendance and to take corrective action.
- The Library maintains previous university exam question papers and university syllabus which are used by the faculty and students to become familiar with the pattern of examination.
- In addition to regular subject classes, the college also organizes special lectures by inviting experts from various fields to share their knowledge and experiences with the students in their field for expertise.
- Project based learning process has become part of the curriculum. Students are supported by faculties to take up innovation based project work.
- At the institute level, technical activities and Project Exhibitions are organized for students to enhance the subject interest under the auspices of department forums.

1.1.5 How does the institution network and interact with beneficiaries such as Industry, research bodies and the university in effective operationalisation of the curriculum?

- The institution has a network with industries that play an important role in effective implementation of the curriculum. Through network of alumni, the institute has developed network with industries. Since Shivamogga is a hub for Foundry, JNNCE has a network with the local foundry i.
- Regular interaction of the institution with industries, research bodies and the university has resulted in effective implementation of the curriculum.
- The College conducts regular interaction with industry experts to know the industry trends, skills, by organizing special guest lectures and seminars.

- Placement cell collects the feedback from executives of companies visiting the institute for placement to know what the company expects from the students in terms of the skill sets and competence.
- Organization of Conferences in association with industry and research consultancy and inviting functional experts from scientific research and industry experts.
- Institute is also planning to have MoU's with foreign universities especially in faculty exchange and student exchange programmes.
- Institute has eight research centers recognized by VTU, wherein faculty can work on innovation based research projects.
- The institution has active and vibrant student's forum of the Institution of Electronics and Telecommunication Engineers New Delhi (IETE), Institution of Engineers Calcutta (IEI). Also IETE Shivamogga Centre is functioning at JNNCE. Through these professional bodies effective network with the industries and research organizations like ISRO, NAL and DRDO has been established.

1.1.6 What are the contributions of the institution and/or its staff members to the development of the curriculum by the University? (Number of staff members/ departments represented on the Board of Studies, student, feedback, teacher feedback, stakeholder feedback provided specific suggestions etc.)

About 100 faculty members of the institute are having more than 10 years of experience in teaching. Senior faculty involve in curriculum revision for VTU. Many of our faculties have served/serving as members of the Board of Studies and Board of Examiners of VTU. The following faculty members of the Institution have been involved in the various VTU academic bodies:

Table 1.1 Faculty Members in VTU Academic Bodies

Sl. No.	Name of the Faculty Member	Department	Nature of Work	Year
1	Dr. M.G. Krishnamurthy	MBA	Member BoS-VTU	2010-13 2013-16
2	Dr. R. Srinivasa Rao Kunte	EC /TC	Chairman BoS-VTU, Member Academic Senate -VTU	2016-19
3	Dr. S.V Sathyanarayana	EC/TC	Special Invitee, BoS-VTU	2016-19
4	Dr. Ajit Danti	MCA	Chairman, BoS-VTU	2013-15
5	Dr. Prabhudeva S	CS/IS	Member, BoS- VTU	2016-19

Members of the different academic bodies collect curriculum feedback from the students, alumni, faculty and industry experts and consolidated suggestions are communicated to the BoS of the VTU.

1.1.7 Does the institution develop curriculum for any of the courses offered (other than those under the purview of the affiliating University) by it? If 'yes', give details on the process ('Needs Assessment', Design, Development and Planning) and the courses for which the curriculum has been developed.-

No

1.1.8 How does the institution analyze/ensure that the stated objectives of the curriculum are achieved in the course of implementation?

Departmental HODs ensure the successful completion of the VTU curriculum as per calendar of events. Syllabus coverage by faculty is monitored by the HOD by reviewing the teacher's diary. For some of the difficult and important subjects, additional classes are allotted to complete the syllabus. A well designed feedback system is implemented to monitor the coverage of syllabus. In addition to the examinations conducted by the University, continuous evaluation of the students is adopted by the institute to ensure that the objectives of the curriculum are achieved.

The process involves:

- Three Internal assessment tests are conducted during the semester.
- Assignments are given to improve their analytical and problem solving skills.
- Quiz based on the topics of the course is conducted.
- Subject proficiency test (Objective type questions) is conducted to evaluate the level of proficiency attained by the students in a given course.
- Seminars are conducted for every subject where the students have to effectively present on the given topic and submit the seminar report.

1.2 Academic Flexibility

1.2.1 Specifying the goals and objectives give details of the certificate/diploma/ skill development courses etc. offered by the institution.

Apart from the university prescribed syllabus, institution offers many short-term courses to provide additional knowledge on different subjects. These short-term courses offered by the Institution are of different levels to cater to the needs of the students as proposed by industry experts. Following are the major certification courses offered by the institute.

1) Short-term Certification Courses:

- The main objectives of these short-term courses are to impart the necessary skills to a fresh entrant in the industry environment.
- Short-term course on MS-Excel
- Short-term course on Quantitative Aptitude

2) Skills Development Programs:

Placement Cell conducts Skill Development Programs to train students in aptitude, logical reasoning, communication, group discussion and HR skills. These skills are required by students to face interviews and help them to develop their personality.

1.2.2 Does the institution offer programs that facilitate twinning/dual degree? If 'yes', give details.

No.

1.2.3 Give details on the various institutional provisions with reference to academic flexibility and how it has been helpful to students in terms of skills development, academic mobility, progression to higher studies and improved potential for employability. Issues may cover the following and beyond:

VTU has incorporated some sort of academic flexibility in its curriculum. As per the guidelines of the VTU, students have flexibility to make a choice among the electives in curriculum.

1) Range of Core Subjects offered by University:

As per the VTU Curriculum, in UG course from I to VIII semester there are about 90% core subjects and in case of PG about 50 % are core subjects.

2) Range of Electives Subjects offered by University:

As per the VTU Curriculum, in case of UG Course about 10% of the subjects are offered as Electives from VI to VIII semester and in PG course about 50 % of the subjects are offered as Electives from I to IV semesters. Based on their interest students can select electives from list of electives offered by the VTU.

3) Choice Based Credit System and range of subject options

VTU has introduced the Choice Based Credit System (CBCS) from the academic year 2015-16. Presently first year students in CBCS have common subjects. In case of second year students, subjects are branch wise without elective.

4) Credit transfer and accumulation facility

- This facility Applicable for first year students who are under CBCS system only.
- Not applicable for second to final year students.

5) Enrichment Course

All departments conduct seminars, workshop, FDPs and technical symposiums which are delivered by the experts to enhance the knowledge of students and faculty.

6) Lateral and vertical mobility within and across programs and courses

VTU allows the flexibility for change of college in the third and fifth semesters of B.E and change of branch in the third semester (provided all subjects are cleared in the first year).

- Diploma Students are directly admitted to third semester of BE under lateral entry scheme.

- BCA students are directly admitted to third semester of MCA under lateral entry scheme.

1.2.4 Does the institution offer self-financed programmes? If ‘yes’, list them and Indicate how they differ from other programmes, with reference to admission, Curriculum, fee structure, teacher qualification, salary etc.

Yes, All the programs offered by the Institution are self-financing.

The list of programs offered by the Institution is listed in Table 1.2.

Table 1.2 Programs offered by the Institution

Programs	Sl. No	Program Offered
UG Programs 4 Years Course	1.	Civil Engineering
	2.	Mechanical Engineering
	3.	Electrical & Electronics Engineering
	4.	Electronics and Communication Engineering
	5.	Computer Science and Engineering
	6.	Information Science and Engineering
	7.	Telecommunication Engineering
PG Programs M. Tech. 2 Year Course	1.	Computer Science & Engineering
	2.	Networking & Internet Engineering
	3.	Design Engineering
	4.	Transportation Engineering & Management
	5.	Digital Electronics & Communication Systems
	6.	Computer Integrated Manufacturing
	7.	Power Electronics
MBA 2 Year Course	1.	Master of Business Administration (MBA)
MCA 3 Year Course	1.	Master of Computer Applications (MCA)
Research Centres	1.	Civil Engineering
	2.	Mechanical Engineering
	3.	Electrical & Electronics Engineering
	4.	Computer Science and Engineering
	5.	Electronics and Communication Engineering
	6.	Master of Business Administration (MBA)
	7.	Physics
	8.	Chemistry

Admissions are as per the regulations of the State Government of Karnataka through CET, PG CET, K-MAT, COMED-K and Management quota.

As all the courses offered by the institution are self-financing comparison with the aided courses is not possible. The fee structure is as per the government norms.

Faculty qualifications and pay scales are as per AICTE norms.

1.2.5 Does the college provide additional skill oriented programs, relevant to regional and global employment markets? If 'yes' provide details of such programs and the beneficiaries.

Yes,

The Institute provides additional skill oriented programs to help students in global employment markets. Different departments conduct programs relevant to their branch of engineering to help students gain additional knowledge/skill to improve their employability. To name a few:

- Trainings are conducted regularly for Mechanical Engineering students, viz., Using Design Analysis Softwares like ANSYS, HYPERMESH, Drafting packages like CATIA, ProE and Vibration Analysis.
- Three day workshop on “Internet of Things-A practical perspective” on 5-7, February 2016 to students of Electrical Sciences Branches.
- Two day workshop on “Project Building & Automation” for E&E students on 13-14, April 2016 by Electrical Engineering department.
- MBA department conducted two short-term certification courses on i) MS Excel and ii) Quantitative aptitude and Soft skill development.
- The departments of CS & E and IS & E organized One week training programs on Android based Application Development and Embedded Android during 14-23, Feb, 2015.
- Placement Training Cell conducts Soft-skill, Technical & General Aptitude training for all the students as per the knowledge requirement of placement progressively.

1.2.6 Does the University provide for the flexibility of combining the conventional face-to-face and Distance Mode of Education for students to choose the courses/combination of their choice? If 'yes', how does the institution take advantage of such provisions for the benefit of the students?

No

1.3 Curriculum Enrichment

1.3.1 Describe the efforts made by the institution to supplement the University's Curriculum to ensure that the academic programs and the Institution's goals and objectives are integrated?

- To supplement the University's curriculum, at the departmental level the Institution encourages to conduct personality development programs, workshops, guest lectures from industry experts, short-term certification programs, seminars and industrial visits.

- Invention based learning has been given importance and this has been supported by the college by funding such projects.
- Industrial visits are arranged for the students to understand the theory that they have studied and the actual practices in the Industries.
- Guest lectures are also arranged. Eminent persons from industries and reputed institutions are invited for updating the current happening to the students. This will ensure the fulfillment of our institutional academic and employability objectives.
- Students, faculty members and technical staff are encouraged to attend refresher course, seminars, and workshops etc., which help them to enrich their knowledge.

1.3.2 What are the efforts made by the institution to enrich and organize the curriculum to enhance the experiences of the students so as to cope with the needs of the dynamic employment market?

- At the departmental level, the institution provides additional training on emerging topics that are required for the ever-changing employment market.
- Institution encourages the guest lecture from the industry experts to fill the gap between industry and academia.
- Industrial visits are arranged to enrich students with technical knowledge.
- At the departmental level, the institute organizes seminars, workshops, symposia etc., to know the recent trends in the industrial and business environment.

1.3.3 Enumerate the efforts made by the institution to integrate cross cutting issues such as Gender, Climate Change, Environmental Education, Human Rights, ICT etc., into the curriculum?

Developing healthy and harmonious environment is very important for smooth functioning of academic activities. Since there is an existence of co-education, the institute has taken all necessary initiatives to provide healthy study environments for students.

- Environmental Studies, Constitution and Professional Ethics are included in the curriculum of first year students.
- Computer fundamentals and programming concepts are taught as a part of the curriculum.

1.3.4 What are the various value-added courses/enrichment programs offered to ensure holistic development of students?

The Institute has initiated the following value-added courses/enrichment programs to ensure holistic development of students:

- To inculcate a sense of social responsibility & contributory participation among students, Institute implemented social responsibility programs to contribute to the needy people.
- Institute initiated various social related activities through its NSS wing. On weekly basis institute conducts the Swachha Bharath Abhiyan in the campus in association with National Education Society (NES).
- Placement cell conducts Pre-placement training programs on various aspects such as group discussion, interview, personality development and quantitative aptitude.
- The Institution has established an Innovation and Entrepreneur Development Cell supported by institute, government and different industries to facilitate the innovative ideas, projects and startup companies in the campus.
- Through JNNCE Research and Innovation Centre (JNNRIC), the institute promotes research activity among student and faculty members on innovation and invention based projects.

1.3.5 Citing a few examples enumerate the extent of use of the feedback from stakeholders in enriching the curriculum?

- Placements Cell collects the feedback from executives of companies visiting for placement to understand the company expectations from students.
- Feedback is also obtained from the alumni and industry experts to know about the industry expectation and ever-changing environment of the industry.
- Feedback is taken from students regarding the courses offered, their effectiveness and usefulness, faculty performance to initiate corrective actions.
- Institute also collects feedback from Head of the Departments about the departmental facility, faculty performance, student grievance etc.

1.3.6 How does the institution monitor and evaluate the quality of its enrichment programs?

- The Institution has a mechanism to obtain feedback from the participants of the enrichment programs.
- Placement cell evaluates the effectiveness of the program based on the feedback obtained.
- Industry requirement is analyzed and the enrichment programs are administered based on the previous feedback from the alumni and industry experts.

1.4 Feedback System

1.4.1 What are the contributions of the institution in the design and development of the curriculum prepared by the University?

Faculty of the institution have served/ serving as Chairman and members of the Board of Studies (BoS) of VTU. The faculty members of the Institution involved in the VTU various academic bodies is shown in Table 1.1.

Members of the different academic bodies collect curriculum feedback from the students, alumni, faculty and industry experts and the consolidated suggestions are communicated to the BoS of the VTU.

All eligible faculty members are involved in university question paper setting and in the evaluation process (both theory and practical).

Institute encourages all the faculty members to participate in syllabus revision workshops organized by the university.

1.4.2 Is there a formal mechanism to obtain feedback from students and stakeholders on Curriculum? If 'yes', how is it communicated to the University and made use internally for curriculum enrichment and introducing changes/new programs?

Yes.

The Institution has implemented a formal mechanism to obtain feedback from students and different stakeholders.

1) Staff Feedback:

Staff feedback is obtained in departmental meetings and faculties meeting with principal.

2) Students Feedback:

Normally feedback from the students are taken by the faculty members on subjects taught by them at the end of the semester. Faculty analyses and takes appropriate measures. Any serious grievances will be communicated to the University through proper channel.

3) Parent Feedback:

The teacher-parent meeting is organized by every department regularly. This enables parents to interact with the faculty and give suggestions regarding the academic performance and other issues relating to the overall development of their wards.

4) Industry Feedback:

Feedback from recruiters during the placement drive will be collected. Institute also collects Industry feedback during student's project exhibition, industry visits, guest lecturers / workshops and seminars.

5) Alumni Feedback:

Once in a year institute organizes the alumni meeting in the campus or in Bengaluru. During the alumni meeting, institute collects their feedback about the curriculum and industry. The same will be communicated to the University through the BoS members or through the Head of the Institution.

1.4.3 How many new programs/courses were introduced by the institution during the last four years? What was the rationale for introducing new courses/programs?

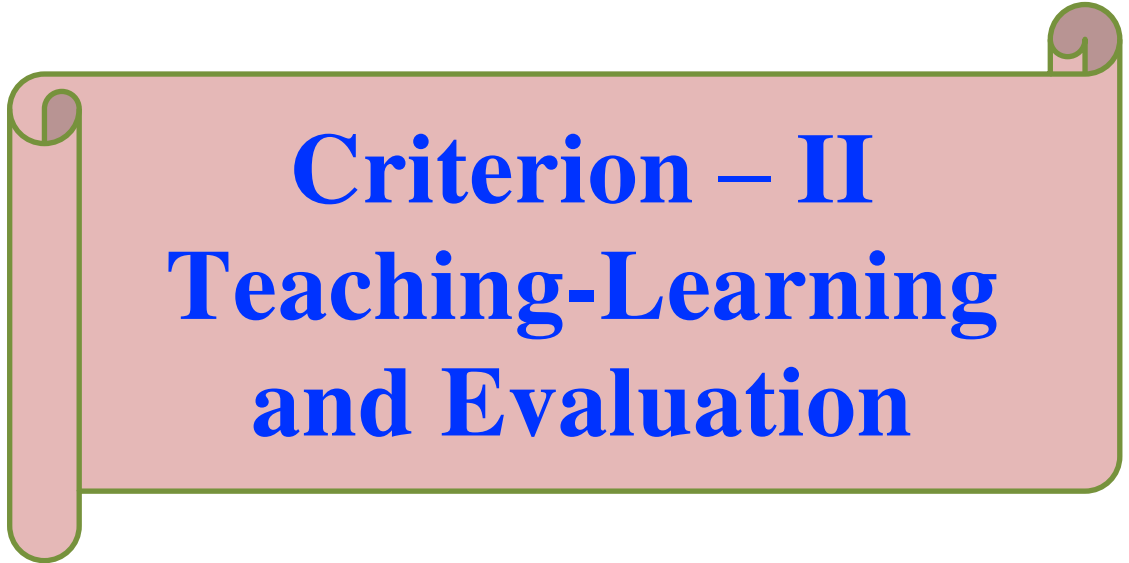

Depending upon the increase in demand for the particular programs/course of the relevant technical field, institute has selected different programs/courses. Following are the courses which were introduced by the institution during last four years:

Table 1.3 New PG Programs Introduced During Last Four Years


Sl. No.	Degree	Name of the Courses	Year
1	M.Tech	Computer Integrated Manufacturing	2012
2	M.Tech	Power Electronics	2014

Table 1.4 New Research Centers Introduced During Last Four Years

Sl. No.	Level	Degree	Name of the Course	Year
1	Research Center	Ph. D	Chemistry	2013
2	Research Center	Ph. D	Physics	2016



Criterion – II
Teaching-Learning
and Evaluation



CRITERION II: TEACHING-LEARNING AND EVALUATION

2.1 Student Enrollment and Profile

2.1.1 How does the college ensure publicity and transparency in the admission process?

Jawaharlal Nehru National College of Engineering established in the year 1980 is popular among the students and the parents as one of the most reputed institutes in Karnataka, especially in the Malnad region of the state. It is one of the most sought after institute in the region and the interaction among the stakeholders gives enough publicity.

Apart from this, publicity is given through:

- 1) **Advertisement in Newspapers:** Admission notification and the details of the courses available in the institute is published in all leading regional daily newspapers in English and Kannada language.
- 2) **Prospectus:** The prospectus gives the information on the courses and the facilities available in the institute. The achievements of the institute in the recent past are also reflected in the Prospectus. It also covers the co-curricular and the extracurricular activities organized by the institute.
- 3) **Institution Website:** The details provided in the prospectus and admission details are given on the Website <http://www.jnnce.ac.in>. The website is updated regularly
- 4) In addition to above the following steps are taken to ensure publicity in admission process:
 - Parents & Students Interaction programme on Admissions: Every year an interaction programme for the aspiring students and parents is organized to share about admission process of institute through CET, COMEDK and management quota.
 - Participating in Education Fair.
 - Participating in COMEDK Admission Process.
 - Participate in evaluation process by leading evaluators like Outlook magazine, India today (college is ranked 47th among top 50 engineering college in India & 7th in Karnataka as per Outlook-MDRA ranking 2016 for sixth consecutive year)
 - Distribute handouts containing details of the institution to the candidates at various CET/ COMEDK examination centres.

Transparency

Admission process is totally transparent as per AICTE/ VTU/ State Govt. policies. The management quota seats are filled on merit basis for those students who possess a rank of any one entrance exam approved by Govt. All the admissions made since inception of the college are approved by competent authorities without any legal hazards.

2.1.2 Explain in detail the criteria adopted and process of admission (Ex.(i)merit (ii) common admission test conducted by state agencies and national agencies (iii) combination of merit and entrance test or merit, entrance test and interview (iv) any other) to various programs of the Institution.

1. Under Graduate

- Admission made as per Govt. of Karnataka Seat matrix through CET/ COMEDK/ MQ for II PUC or 10+2 Higher Secondary qualified students
 - 55 % Seats through CET
 - 25% Seats through COMEDK test
 - 20% Seats through Management Quota (MQ)
- Prescribed qualification for admission is 40% in qualifying exam for SC/ST, Cat – I & OBC, 45% in case of others -which is strictly followed during admission.
- The admission to Govt. quota is based on CET rank; admission to COMEDK quota is based on COMEDK rank and for MQ the candidates must take any of Govt. approved entrance exams as per Karnataka Examination Authority (KEA) guidelines.

2. PG Admission

- For M.Tech. courses, the candidates need to qualify in GATE or PG CET exam of KEA. The candidate must obtain 50% marks taken together in all subjects in B.E./ B.Tech, 45% marks in case of SC/ST and CAT-1 candidates.
- In case of MBA, the candidates should qualify in PG CET /CAT/ KMAT exam conducted by KEA. The candidates should have min aggregate of 50% of marks taken together in all 3 years of degree including language. For SC, ST & Cat-I candidates 45% marks in qualifying exam.
- For admission to Ph.D./ M.Sc.(Engg) by research programmes of Visvesvaraya Technological University recognized research centres, Candidates have to qualify in the Entrance Test conducted by VTU. After qualifying in the entrance test, he/she has to complete the prescribed course work to confirm Ph.D. registration.

2.1.3 Give the minimum and maximum percentage of marks for admission at entry level for each of the programmes offered by the college and provide a comparison with other colleges of the affiliating university within the city/district.

The admission process is based on Common Entrance Test (CET) ranking and following tables gives the cutoff ranks of the Institution for the last four academic years and .

Table 2.1 Cutoff ranks of the Institution for the last four years

Branch	Cut of Ranks for CET 2016		Cut of Ranks for CET 2015		Cut of Ranks for CET 2014		Cut of Ranks for CET 2013	
	First Rank	Last rank	First Rank	Last rank	First Rank	Last rank	First Rank	Last rank
Civil Engg.	10598	26045	10627	24497	11832	21367	8545	19613
Mechanical Engg.	17354	29433	7905	24475	6138	16843	3191	14825
Electronics and Communication Engg.	4405	16695	3587	13825	1278	9998	468	6846
Electrical and Electronics Engg.	12909	28031	14259	26399	12190	20383	8890	17499
Telecommunication Engg.	27815	37741	24393	39582	14949	28526	17200	24732
Computer Science and Engg.	4715	11288	5187	13836	2997	13397	6110	9366
Information Science and Engg.	16110	20788	11684	25284	8508	20645	9251	17420

Following tables gives the cutoff ranks of 2016-17 in comparison with the other institute within the city.

Table 2.2 Civil Engineering

College	1G	2AG	2BG	3AG	3BG	GM	SCG	STG
JNNCE Shivamogga	42997	32864	35964	28631	29955	27321	36994	33868
PESIT&M Shivamogga	79835	61076	50268	52562	54608	48504	68348	---

Table 2.3 Mechanical Engineering

College	1G	2AG	2BG	3AG	3BG	GM	SCG	STG
JNNCE Shivamogga	38028	36102	28347	27376	29727	26992	53413	32012
PESIT&M Shivamogga	66404	75699	64134	56684	67887	55208	99836	80390

Table 2.4 Electrical and Electronics Engineering

College	1G	2AG	2BG	3AG	3BG	GM	SCG	STG
JNNCE Shivamogga	33781	33540	32464	29661	29587	29270	52989	44422
PESIT&M Shivamogga	66509	80421	79637	96778	63713	61562	87737	---

Table 2.5 Electronics and Communication Engineering

College	1G	2AG	2BG	3AG	3BG	GM	SCG	STG
JNNCE Shivamogga	18154	20888	17390	26562	17858	15046	61519	34755
PESIT&M Shivamogga	49080	66320	81714	59102	51202	48298	77851	59141

Table 2.6 Telecommunication Engineering

College	1G	2AG	2BG	3AG	3BG	GM	SCG	STG
JNNCE Shivamogga	79234	60761	60566	90454	51423	51342	93488	---
Telecommunication Course not offered in PESIT&M, Shivamogga								

Table 2.7 Computer Science and Engineering

College	1G	2AG	2BG	3AG	3BG	GM	SCG	STG
JNNCE Shivamogga	23162	20913	27478	17944	20629	15603	55397	25560
PESIT&M Shivamogga	57747	52874	45395	46237	49604	43067	74014	44412

Table 2.8 Information Science and Engineering

College	1G	2AG	2BG	3AG	3BG	GM	SCG	STG
JNNCE Shivamogga	39174	29944	28437	29524	27174	26966	72989	45285
PESIT&M Shivamogga	59831	78272	59200	60185	55665	54581	112211	---

2.1.4 Is there a mechanism in the institution to review the admission process and student profiles annually? If 'yes' what is the outcome of such an effort and how has it contributed to the improvement of the process?

Yes, the mechanism to review the admission process and student profiles is as follows:

- An admission committee under the chairmanship of principal is constituted to oversee the admission process.
- The rules of admission given by Govt./KEA/COMEDK every year is discussed and followed.
- Planning is made to attract higher ranking student under CET/COMEDK / MQ by announcing merit scholarship scheme.
- Under MQ, the admission policy is made based on percentage of marks/pass percentage in state in PUC, branch-wise demand for seats; also the student must have taken any of the entrance exams like CET/COMEDK and others.

The above mechanism has contributed to improvement as follows:

- Slight improvement in COMEDK admissions.
- Better rank students opt our institute on comparison with neighbouring institute.
- The total admission has remained at a constant number as seen in demand ratio.

2.1.5 Reflecting on the strategies adopted to increase/improve access for following categories of students, enumerate on how the admission policy of the institution and its student profiles demonstrate/reflect the National commitment to diversity and inclusion

- **SC/ST**
- **OBC**
- **Women**
- **Differently-abled**
- **Economically weaker sections**
- **Minority community**
- **Any other**

The admission to UG/ PG course is made in case of SC/ST/OBC categories strictly as per Govt. reservation guidelines; these students are provided with financial assistance like scholarship, fee reimbursement and other benefits. The following table provides the student diversity.

Table 2.9 Diversity of Students: UG (No. of students admitted)

Programme	2013-14			2014-15			2015-16			2016-17		
	SK	SOS	SA	SSS	SOS	SA	SSS	SOS	SA	SSS	SOS	SA
CE	120	1	--	120	1	--	115	1	--	120	--	1
ME	112	9	--	112	1	--	111	--	--	105	1	--
ECE	112	8	--	115	--	--	99	--	--	117	1	--
TCE	56	--	--	51	--	--	51	--	--	53	--	--
EEE	55	2	--	58	--	--	55	--	--	54	--	--
CSE	106	8	--	122	2	--	123	1	--	123	--	--
ISE	116	1	--	120	--	--	119	1	--	117	1	--

SK – Students from Karnataka, SOS – Students from Other States, SA.- Students from Abroad

Table 2.10 Diversity of Students: PG (No. of students admitted)

Programme	2013-14			2014-15			2015-16			2016-17		
	SK	SOS	SA	SSS	SOS	SA	SSS	SOS	SA	SSS	SOS	SA
M.Tech. CSE	25	--	--	25	--	--	13	1	--	14	--	--
M.Tech. NIE	24	--	--	21	--	--	4	--	--	2	--	--
M.Tech. Design	14	--	--	17	--	--	8	--	--	3	--	--

M.Tech. Trans	18	--	--	18	--	--	18	--	--	18	--	--
M.Tech. DECS	18	--	--	23	--	--	22	--	--	9	--	--
M.Tech. CIM	13	--	--	8	--	--	2	--	--	2	--	--
M.Tech. PE	--	--	--	13	--	--	7	--	--	5	--	--
MBA	114	2	--	101	--	--	119	1	--	119	--	--
MCA	54	--	--	79	--	--	38	--	--	61	--	--
MCA Lateral	--	--	--	--	--	--	24	--	--	24	--	--

SK – Students from Karnataka, SOS – Students from Other States, SA- Students from Abroad

In case of girls the admission rate has increased year by year & they are provided with the required facilities like transportation/ hostel / waiting room with required facilities. Grievance cell to address the problems of girls has also been constituted.

In case of economically poor students, 5% of intake in each branch is reserved under Super Numerary Quota (SNQ) and the seats are allotted by KEA. The student whose parental income is less than Rs. 4.5 lakh/per annum is eligible for such seats and tuition fee is waived off. Students who have CET ranks less than 1000 are given scholarships every year throughout their course duration. Scholarships are available for all categories & also for candidates with disabilities and for minority communities' candidates as per government norms.

2.1.6 Provide the following details for various programmes offered by the institution during the last four years and comment on the trends. i.e. reasons for increase/decrease and actions initiated for improvement.

Table 2.11 UG Programmes

Program me	2013-14			2014-15			2015-16			2016-17		
	SSS	SA	DR	SSS	SA	DR	SSS	SA	DR	SSS	SA	DR
CE	126	121	96.03	126	121	96.03	126	116	92.06	126	121	96.03
ME	126	121	96.03	126	113	89.68	126	111	88.09	126	106	84.12
ECE	126	120	95.23	126	115	91.26	126	99	78.57	126	118	93.65
TCE	63	56	88.88	63	51	80.95	63	51	80.95	63	53	84.12
EEE	63	57	90.47	63	58	92.06	63	55	87.30	63	54	85.71
CSE	126	114	90.47	126	124	98.41	126	124	98.41	126	123	97.61
ISE	126	117	92.85	126	120	95.23	126	120	95.23	126	118	93.65

SSS - Sanctioned Students strength, SA - Students Admitted, DR - Demand Ratio in %

Table 2.12 PG Programmes

Program me	2013-14			2014-15			2015-16			2016-17		
	SSS	SA	DR	SSS	SA	DR	SSS	SA	DR	SSS	SA	DR
M.Tech. CSE	25	25	100.0	25	25	100.0	25	14	56.00	25	14	56.00
M.Tech. NIE	24	24	100.0	24	21	87.50	24	4	16.60	24	2	08.33
M.Tech. Design	18	14	77.77	18	17	94.44	18	8	44.44	18	3	16.66
M.Tech. Trans	18	18	100.0	18	18	100.0	18	18	100.0	18	18	100.0
M.Tech. DECS	18	18	100.0	24	23	95.83	24	22	91.66	24	9	37.50
M.Tech. CIM	18	13	72.22	18	8	44.44	18	2	11.11	18	2	11.11
M.Tech. PE	---	---	---	18	13	72.22	18	7	38.88	18	5	27.77
MBA	120	106	88.33	120	101	84.16	120	120	100.0	120	119	99.16
MCA	120	54	45.00	120	79	65.83	120	38	31.66	120	61	50.83
MCA Lateral	---	---	---	---	---	---	24	24	100.0	24	24	100.0

SSS - Sanctioned Students strength, SA - Students Admitted, DR - Demand Ratio in %

Comments on trends:

- For UG course like Civil, E&C, TCE, CSE and ISE there is no much variation in Demand Ratio.
- For UG courses like EE and Mech there is decrease in Demand ratio which may be due to lack of employability.
- In case of M.Tech. & MCA the Demand Ratio is low for the reason that B.E/ B.Sc./ BCA students are more inclined towards job than higher studies. But for lateral entry seats of BE/ MCA the Demand Ratio is high. The same is observed in case of MBA and Demand Ratio is showing increase trend.

Remedial measures:

- The UG students (BE) are explained about benefit of PG course.
- Proper advertisement through Newspaper & Brochure
- As a part of the admission drive, MBA/ MCA faculty visit all neighboring first grade colleges offering B.Sc., BBM, BCA courses to enlighten the students about scope of MBA/ MCA. This has been a success for the past two years and helped in admission improvement.

2.2. Catering to Student Diversity

2.2.1 How does the institution cater to the needs of differently-abled students and ensure adherence to government policies in this regard?

- The institute caters to the need of differently-abled students by adopting the Govt. policy and Ramp facility is provided at required places.
- During exams/ tests such candidates are provided seating arrangements in the ground floor.
- The library also lends the help to search necessary books and issue on one-time basis without insisting on renewal periodically.
- Provision of scribe facility to write the exams, subject to University's prior approval is also arranged for differently-abled students.

2.2.2 Does the institution assess the students' needs in terms of knowledge and skills before the commencement of the programme? If 'yes', give details on the process.

Yes,

- I year students have subjects like Physics, Chemistry, Mathematics and Interdisciplinary subjects from all branches. The performance of the students is analyzed during the middle of the semester and tutorial classes are conducted for slow learners. Remedial classes are conducted for the students failed in the university examinations.
- Diploma students are admitted to 3rd semester through lateral entry. As their Mathematical background is limited, they have to take additional course in Mathematics. Tutorial classes are arranged for 3rd and 4th semester lateral entry students as well as slow learners in the subjects in which the students face difficulty.
- To improve the communication skills and aptitude training courses on personality development are conducted exclusively for 1st year students and final year students.
- For 2nd and 3rd year students one afternoon session per week is exclusively allotted for the soft skill classes. The activities would be conducted by the in-house faculty and outside agency.
- Each branch conduct technical activities like workshops, lectures, technical competitions to enhance the technical knowledge.
- In case of MBA, bridge course of one week duration is arranged in which eminent faculty members from various fields like economics, commerce, management, basic mathematics etc. are invited to deliver lectures.

The above steps instill confidence in students and help to change over from +2 levels to engineering course smoothly, and, at higher semester level it helps the students to change over to respective branch from first year basic engineering.

2.2.3 What are the strategies adopted by the institution to bridge the knowledge gap of the enrolled students (Bridge/Remedial/Add-on/Enrichment Courses, etc.) to enable them to cope with the programme of their choice?

- Mentors for every 20 students are assigned.
- Mentors monitor the test performances, identify slow learners. Counsel them and arrange for remedial/ tutorial classes in free time during the week.
- Additional/ remedial classes are held for some analytical subjects like Maths/ Electrical/ Electronic subjects.
- Repetition classes are provided in labs. Lab tests are held at par with exam pattern at the end of semester, which will boost the confidence level of candidates to face the exam.

2.2.4 How does the college sensitize its staff and students on issues such as gender, inclusion, environment etc.?

The institute does not discriminate the students and staff on the basis of their gender and religious issues. Equal opportunities are given to both the genders. However, the institution has taken the cases of gender inclusion, environment, sexual harassment and ragging with top priority in day to day working of institute. The following committees are formed.

- Women grievance cell
- Anti sexual harassment cell.
- Anti ragging committee.
- N.S.S. Group
- Squad formation to curb social menace.
- Chiranthana Club

2.2.5 How does the institution identify and respond to special educational/ learning needs of advanced learners?

Advanced learners are identified from their performances at various levels like university exams/ tests/ seminars and are encouraged as follows.

- Cash awards are provided to students admitted to college to those having CET ranking of less than 1000 every year.
- Incentive in the form of providing extra books from library for class toppers.
- Motivate them to appear for PG CET/ GATE/ CAT exams to pursue higher studies and give them additional inputs.
- Motivate the students to use NPTEL materials, open source courseware materials and online self learning courses.
- Motivate them to participate in co-curricular activities like seminars/ project work at institutions & inter collegiate levels.
- Projects of social importance are exhibited to public & other students to encourage them also to do same.

- Provide access to refer Online and Offline journals.
- Encourage to be active members of technical club like IEEE/Departmental Club.
- Arrange technical visit to industries and centres of higher education.

2.2.6 How does the institute collect, analyze and use the data and information on the academic performance (through the programme duration) of the students at risk of dropout (students from the disadvantaged sections of society, physically challenged, slow learners, economically weaker sections etc. who may discontinue their studies if some sort of support is not provided)?

- Mentors for every 20 students.
- Counseling system
- Periodic parent- teacher meeting
- Identify academically weak students and arrange remedial / tutorial classes.
- Give assignment and conduct unit test periodically.
- Economically weaker students are provided with scholarship instituted by faculty; books are provided from department library or faculty complimentary copies.
- Arrange for scholarship from philanthropists wherever possible apart from government scholarships.

2.3 Teaching-Learning Process

2.3.1 How does the college plan and organize the teaching, learning and evaluation schedules? (Academic calendar, teaching plan, evaluation blueprint etc.)

- The academic calendar of the institute is based on the VTU academic calendar is prepared every semester which gives information about the academic and other activities during the semester.
- As per these academic calendars the academic and non academic activities are planned and executed.
- Periodic tests are held as per the academic calendar and is monitored by Academic Monitoring Committee.

Table 2.13 Academic Monitoring Committee

Sl. No.	Name of faculty	Designation	Dept.	Role
1.	Dr. S. V. Sathyanarayana	Professor	ECE	Chairman
2.	Dr. H. B. Suresh	Professor	EEE	Convener
3.	Dr. R. Sanjeev Kunte	Professor	CSE	Member
4.	Mr. M. Ramesh	Associate Professor	Mech	Member

5.	Prof. Sreedhar Adiga	Associate Professor	Basic Sciences	Member
6.	Mr. S. B. Harish	Asst. Professor	TCE	Member
7.	Mr. Shashikumar Hiremath	Asst. Professor	CE	Member
8.	Dr. K. S. H. Rehman	Associate Professor	MBA	Member
9.	Mr. Sudheep Manohar	Asst. Professor	MCA	Member
10.	Mr. Mahesha Pandit	Manager	Aris Global	Special Invitee
11.	The Secretary, NES	Secretary	NES	Management Invitee

- The subject allotment meeting is separately held in every department at the end of each semester so as to enable the faculty members to know the subject they are supposed to handle during next semester and prepare for the lectures in advance.
- Each faculty prepares the lesson plans as per calendar of events and ensures completion of syllabus on time.
- Three tests are conducted as per the academic calendar. Tests are evaluated with the scheme of valuation and test performance made known to students. Average of the best two tests is taken as the final internal assessment marks.
- Seminars/ assignments are given as part of internal assessment for CBCS scheme students.

2.3.2 How does IQAC contribute to improve the teaching –learning process? The Primary aim of the IQAC (Internal Quality Assurance Cell) is to develop a system for conscious, consistent and catalytic action to improve the academic performance of the institution.

The IQAC of the institute is chaired by the Principal. One of the senior professor is the coordinator. Each department is represented by a senior faculty as member in IQAC. Meeting is conducted regularly to plan the academic activities. Inspections are conducted to review the progress and implementation of the IQAC activities. The developmental activities of college and department are monitored by the cell time to time.

2.3.3 How is learning made more student-centric? Give details on the support structures and systems available for teachers to develop skills like interactive learning, collaborative learning and independent learning among the students?

The academic aspect is made student centric by

- Out-come based education is initiated in the institution which involves active participation of faculty and students. Programme Education Objectives and Programme Out-comes are clearly indicated to students.

- Faculty members are motivated to develop skills by using NPTEL course materials.
- JNNCE is recognized as a Remote centre to conduct faculty development programme under NMEICT programmes of IIT Bombay and IIT Khargpur .Under this need-based online FDPs are conducted every year in which faulty members participate.
- Motivating all the students to actively involved in both academic, co-curricular and extra-curricular activities
- In the lower semesters students are encouraged to do mini projects and at the higher semesters industry oriented or social relevance projects which enhances the analytical skill of the students.
- The institute provides financial assistance for all activities such as innovation and research projects through funding agencies like KSCST/ ITBT centre and every year a project exhibition of all departments is arranged for students, staff and the public which will encourage the students to do more such projects.

2.3.4 How does the institution nurture critical thinking, creativity and scientific temper among the students to transform them in to life-long learners and innovators?

Institution arranges events like HACKATHON, workshops, and project exhibitions to encourage creativity and innovation. The Entrepreneur Development Cell (EDC) of the college arrange for lectures/ training programmes to encourage the students to become an Entrepreneur. The New Age Incubation Cell of ITBT sponsors projects to the students which will create innovative ideas in the minds of the students. Activities are focused with a goal to obtain patent.

2.3.5 What are the technologies and facilities available and used by the faculty for effective teaching? Eg: Virtual laboratories, e-learning-resources from National Programme on Technology Enhanced Learning(NPTEL) and National Mission on Education through Information and Communication Technology (NME-ICT), open educational resources, mobile education, etc.

- The institute has the facility of internet connectivity to all laboratories.
- Faculty members utilize e-journals available for effective teaching.
- Training on Flip class method of teaching has been given to some of the faculty members and many of them are practicing the same.
- EDUSAT programme of VTU is being used extensively.
- JNNCE is recognized as a Remote centre to conduct faculty development programme under NMEICT programmes of IIT Bombay and IIT Khargpur. Under this online FDPs are conducted every year for faulty members.

2.3.6 How are the students and faculty exposed to advanced level of knowledge and skills (blended learning, expert lectures, seminars, workshops etc.)?

- The institute is identified as a Remote Centre of IIT, Bombay under NMEICT to conduct on-line technical workshops for faculty and students.
- The institute has also a Nodal centre for the project E-Yantra lab setup project initiated by IIT, Bombay
- Technical paper presentation competition / HACKATHON is arranged at inter collegiate level so that our students get exposed to the recent technical know-how followed by interaction with students of other institutions.
- The department of ITBT of Govt. of Karnataka has setup New Age Incubation network centre at JNNCE, which sponsor projects to the students.

2.3.7 Detail (process and the number of students benefitted) on the academic, personal and psycho-social support and guidance services (professional counseling/ mentoring/ academic advise) provided to students?

- The institute has mentoring scheme in which a faculty mentor is given the responsibility of 20 students. The mentor takes care of the student in both academic and non-academic matters.
- Counseling cell is constituted which is headed by a qualified counselor to take care of students for personal and psycho social support and guidance.
- Teacher- Parents Meet are arranged periodically to discuss student centric problems.

2.3.8 Provide details of innovative teaching approaches/ methods adopted by the faculty during the last four years? What are the efforts made by the institution to encourage the faculty to adopt new and innovative approaches and the impact of such innovative practices on student learning?

The following innovative teaching methods are adopted by the faculty:

- Adoption of Flip class method by some faculty members.
- Encouraging participation in the FDPs conducted by NMEICT
- Utilization of E-journals and other journals subscribed to library through VTU Consortium by faculty for their teaching and research work.
- Participation by some faculty members in Massive Open Online Courses (MOOCs) and NPTEL resources.

2.3.9 How are library resources used to augment the teaching- learning process?

- The institute central library resource comprises of sufficient number of books, titles, print journal and e-journals.
- The library is a member of VTU Consortium for accessing e-journals.
- UG and PG students utilize e-journals and print journals for preparing their seminars, project works and dissertation. This facility is also extensively used by faculty members pursuing research.

2.3.10 Does the institution face any challenges in completing the curriculum within the planned time frame and calendar? If 'yes', elaborate on the challenges encountered and the institutional approaches to overcome these.

Presently the institution does not face any challenge in completion of curriculum because of proper plan and execution of calendar of events of each semester.

But for any reason if classes are lost because of unexpected holidays, teaching plans are made accordingly in order to complete the curriculum within the schedule time frame and special classes are held after the class hours and weekends. Faculty members have to make alternate arrangements to take class whenever a faculty proceeds on leave.

2.3.11 How does the institute monitor and evaluate the quality of teaching learning?

a) Faculty assessment

- The teaching learning process involves preparation of lesson plan, delivery of lectures, use of e-resources, preparation of lab manuals, conduct of lab classes, tests, and evaluation. Maintenance of academic records like attendance, blue books, course file etc.
- The academic activities are as per Out-come Based Education norms. The practice of course out-come-programme out-come is followed. Test question papers are set so as to satisfy these requirements. This gives the students the idea about OBE/ NBA/ NAAC.
- Monitoring is done by review of test question papers, blue books, lab records by Principal/ HODs and IQAC.
- Assessment of class room teaching by HODs/ Sr. faculty members. Verification of course materials, course files by Principal/ HODs.
- Video recording of class room teaching to be implemented. This would be assessed and feedback to be given to faculty for corrective measures.
- Result analysis and performance analysis

b) Student assessment

- Academically weaker students are identified and remedial measures like tutorial class arranged.
- The irregular students are mentored and their parents meet is arranged.
- The department meeting is arranged every month to audit the student performance, faculty work completion of both theory and lab.
- Assignments are given to students regularly.

2.4 Teacher Quality

2.4.1 Provide the following details and elaborate on the strategies adopted by the college in planning and management (recruitment and retention) of its human resource (qualified and competent teachers) to meet the changing requirements of the curriculum.

Human resource requirement, if any, is given by the HOD of the concerned department to the management through the Principal. The recruitment process involves advertisement for faculty position in leading newspapers & website of institute. The received applications are scrutinized to verify the fulfillment of AICTE norms for the post. Interview is held by a committee comprising of management representatives, Principal, HOD and external subject expert. The selected candidates are appointed.

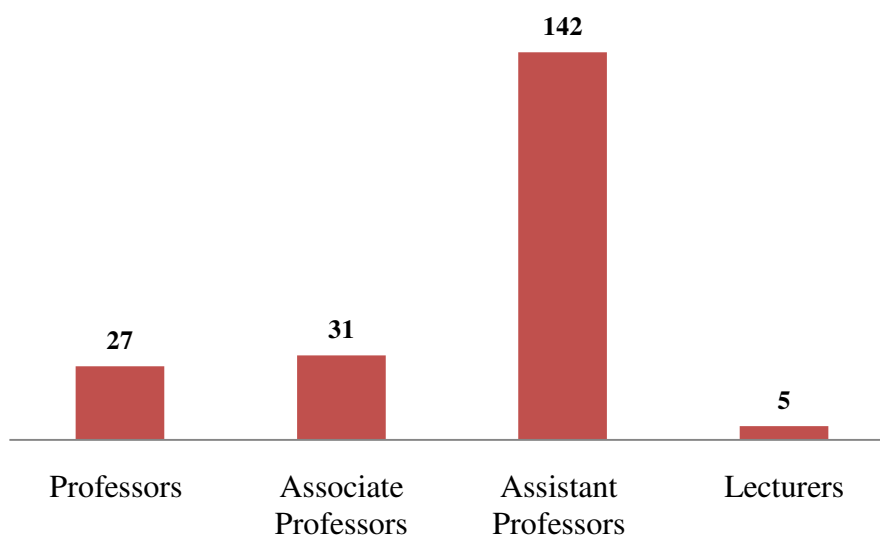
For retention:

- The faculty is paid AICTE pay scales with permissible allowances
- The faculty is deputed for higher studies with study leave and pay.
- Infrastructure facility is provided for all departments for developing research and innovation centres.
- The faculty is encouraged and permitted to attend conferences, workshops and seminars in the field of their interest by providing financial support and leave.

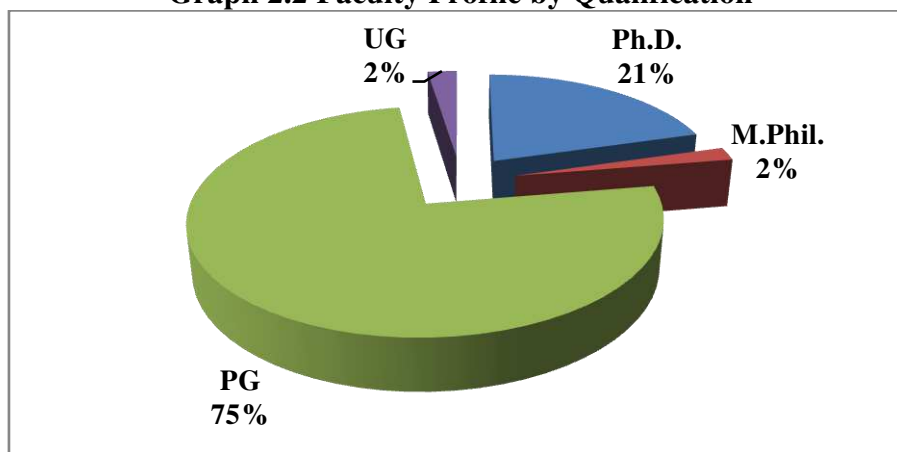
Table 2.14 Faculty Profile

Highest Qualification	Professor		Associate Professor		Assistant Professor		Lecturer		Total	
	M	F	M	F	M	F	M	F	M	F
Permanent Teacher										
D.Sc./D.Litt.	--	--	--	--	--	--	--	--	--	--
Ph.D.	23	4	3	2	9	1	--	--	35	7
M.Phil.	---	--	--	1	3		--	--	3	1
PG	--	--	20	5	83	46	--	--	103	51
UG	--	--	--	--	--	--	3	2	3	2
Temporary Teachers: --- NIL ---										
Part –Time Teachers: --- NIL ---										

Graph 2.1 Faculty Profile by Designation



Graph 2.2 Faculty Profile by Qualification



2.4.2 How does the institution cope with the growing demand/ scarcity of qualified senior faculty to teach new programmes/ modern areas (emerging areas) of study being introduced (Biotechnology, IT, Bioinformatics etc.)? Provide details on the efforts made by the institution in this direction and the outcome during the last three years.

The Institution established since 35 years has necessary qualified senior faculty members having M.Tech. and Ph.D. qualification to teach new programs. The institute can now manage with the existing qualified manpower.

2.4.3 Providing details on staff development programmes during the last four years elaborate on the strategies adopted by the institution in enhancing the teacher quality.

a) Nomination to staff development programmes

Table 2.15 Nomination to Staff Development Programmes

Academic Staff Development Programmes	Number of faculty
Refresher courses	10
HRD programmes	10
Orientation programmes	15
Staff training conducted by the university	12
Staff training conducted by other institutions	54
Summer/winter schools, workshops etc.	240

b) Faculty Training programs organized by the Institution to empower and enable the use of various tools and technology for improved teaching-learning.

Institute has organized in-house Faculty Training programmes to empower and enable the use of various tools and technology for improved teaching-learning methods/ approaches. Following Faculty development programmes are organized by the institute in specified areas.

- Teaching learning methods/approaches -Yes
- Handling new curriculum - Yes
- Content/knowledge management - Yes
- Selection, development and use of enrichment materials - Yes
- Assessment - Yes
- Cross-cutting issues - Yes
- Audio Visual Aids/multimedia - No
- OERs - No
- Teaching, learning material development, selection and use -Yes

Table 2.16 Insights on FDP Organized by the Institute

Sl. No.	FDP	Duration	No. of Participants
1.	2-week ISTE workshop on Database Management System (DBMS) at JNNCE Remote Center by IIT Bombay under NMEICT.	21-05-2013 to 31-05-2013	34
2.	2-week ISTE workshop on Engineering Mechanics at JNNCE Remote Center by IIT Bombay.	26-11-2013 to 06-12-2013	35
3.	2-week ISTE workshop on Signals and Systems at JNNCE Remote Center by IIT Kharagpur.	02-01-2014 to 12-01-2014	55
4.	2-week ISTE workshop on Fluid Mechanics at JNNCE Remote Center by IIT Kharagpur.	20-05-2014 to 30-05-2014	36
5.	1-week ISTE workshop on Computer Networking at JNNCE Remote Center by IIT Bombay.	30-06-2014 to 05-07-2014	24
6.	1-week ISTE workshop on Cyber Security at JNNCE Remote Center by IIT Bombay.	10-07-2014 to 20-07-2014	40
7.	2-week ISTE workshop on Control System at JNNCE Remote Center by IIT Kharagpur.	02-12-2014 to 12-12-2014	62
8.	1-week ISTE workshop Pedagogy for Information and Communication Technology at JNNCE Remote Center by IIT Bombay.	5-7 Jan 2015 and 19-21 Jan 2015	18
9.	2-week ISTE workshop on Environmental Studies at JNNCE Remote Center by IIT Bombay.	02-06-2015 to 12-06-2015	26
10.	1-week ISTE workshop on Technical Communication at JNNCE Remote Center by IIT Bombay.	30-11-2015 to 05-12-2015	06
11.	NBHM, DRDO Sponsored National Workshop on Cryptology (NWC 2016) in association with Cryptology Research Society of India, Kolkata	August 11-13, 2016	100

c) Percentage of faculty

- Invited as resource persons in Workshops/Seminars/ Conferences organized by external professional agencies 15%
- participated in external Workshops/Seminars/ Conferences recognized by national/ international professional bodies 20%
- Presented papers in Workshops/Seminars/Conferences conducted or recognized by professional agencies 25%

2.4.4 What policies/ systems are in place to recharge teachers? (eg: providing research grants, study leave, support for research and academic publications teaching experience in other national institutions and specialized programmes industrial engagement etc.)

- The management has a policy to depute faculty to higher studies (M.Tech./ Ph.D.) study leave.
- All the departments have M.Tech. & recognized research centres. This encourages in house faculty to pursue higher studies on part-time basis.
- The Institution encourages the faculty members to participate in national /international conferences.
- recognizing outstanding performers in teaching, research and innovation.

2.4.5 Give the number of faculty who received awards/ recognition at the state, national and international level for excellence in teaching during the last four years. Enunciate how the institutional culture and environment contributed to such performance/ achievement of the faculty.

Table 2.17 Faculty Awards/ Achievement

Year	Faculty Awards/ Achievement
2011	Dr. L. K. Sreepathi, is awarded with Surya-Mitra Award by Selco Solar Lights Pvt. Ltd. Bangalore
2012	Dr. D. S. Ramakrishna received Amulya award from Karnataka Sate innovation council for the project Power Operated Sugar Cane Bud Scooping Machine
2014	Dr. K. M. Basappaji was certified by BOSCH as Soft Skill Trainer.
2015	Discovery, National Geographic, NDTV, DD Chandana, and other TV channels have beamed a documentary programme on Dr. L. K. Sreepathi's home, which is eco-friendly house and green technology at Shivamogga
2017	Dr. K. M. Basappaji received Best Paper award National Conference on advances in civil and mechanical engineering GSIT, Karwar

- The management and institute encourages such activities by sponsorship, financial assistance and leave facility.
- Provisions are made to apply for funds from various central and state government funding agencies.

2.4.6 Has the institution introduced evaluation of teachers by the students and external Peers? If yes, how is the evaluation used for improving the quality of the teaching-learning process?

Yes.

- Evaluation of teachers by the students is done through online Students Feedback system in each semester. The feedback from the students is received for each individual faculty member.
- Student feedback is discussed with faculty member and counseling is done by HOD for corrective measures.
- Academic Performance Index and Annual Appraisal of the faculty member are evaluated. The faculty members are suggested to improve upon the critical areas and are encouraged to attend faculty development programmes.
- Individual faculty appraisal is finally evaluated by HOD and Principal based on student and self-appraisal.

2.5 Evaluation Process and Reforms

2.5.1 How does the institution ensure that the stake holders of the institution especially students and faculty are aware of the evaluation processes?

At the commencement of I semester on the Orientation day each student is given the **College Hand book** which gives exhaustive information about the evaluation process (both internal assessment and university examination) to the student as well as the parents.

The rules and regulations governing undergraduate/postgraduate courses are detailed in the ‘Scheme and Syllabus’ book supplied by VTU. The book contains information on attendance requirement, internal assessment marks, eligibility for passing, maximum duration for course completion, promotion and eligibility to appear for examinations, electives, seminars and projects, award of class at semester level, award of class at degree level, award of medals and ranks and at present about grade points for CBCS Scheme.

2.5.2 What are the major evaluation reforms of the university that the institution has adopted and what are the reforms initiated by the institution on its own?

- All the reforms of the University like Online resume entry, Online entry of internal assessment marks, Online uploading of examination/revaluation application forms, Question Paper Delivery System are adopted and implemented as per the rules of the University.

- At the institution level the test dates for all the three tests are announced in the beginning of the semester. Tests are conducted similar to the university examination; In addition to room invigilators, a flying squad comprising of senior faculty members monitors the conduct of each test. The seating arrangement, question paper pattern etc are as per university norms.
- Out-come based education is initiated in the institution.

2.5.3 How does the institution ensure effective implementation of the evaluation reforms of the university and those initiated by the institution on its own?

The evaluation reforms specified by the affiliating university VTU are being followed by the institution. The HODs of each department monitor the entry of online uploading of examination forms and Final IA marks. The final IA marks are displayed on the department notice boards for the reference of students. Discrepancies, if any, are sorted out immediately.

The reforms of the University are discussed in the HODs meeting. These discussions and the outcomes are communicated to the faculty members in the department staff meetings. The same are informed to the students through notice/ circular put up on Notice Boards or through electronic media.

2.5.4 Provide details on the formative and summative assessment approaches adopted to measure student achievement. Cite a few examples which have positively impacted the system.

As the institute is affiliated to VTU there is no much scope in this system for formative assessment of the students. However, each semester comprises of 15 week duration in which three tests are conducted in each subject at the end of 6th, 10th and 14th week covering the entire syllabus. The average marks of the best two tests are taken for awarding Internal Assessment Marks.

At the end of the semester the university conducts examination of three hours duration in each subject covering the entire syllabus.

The university announces results taking in to consideration both the IA marks and the marks scored in the semester exams.

2.5.5 Detail on the significant improvements made in ensuring rigor and transparency in the internal assessment during the last four years and weightages assigned for the overall development of students (weightage for behavioral aspects, independent learning, communication skills etc.)

As per VTU norms, two internal assessment tests are conducted in a semester; the third may be given as an improvement test.

Under the Choice Based Credit System (CBCS) implemented from the academic year 2015-16, out of 20 IA marks 15 marks is for test performance in each subject & 5 marks is for assignment. Under the assignment component students may be asked to give seminars on the state of the art topics which helps in independent learning, improves communication skills which would be

evaluated suitably.

The overall development of students with weightage for behavioral aspects, independent learning, and proficiency in communication are also assessed when allotting marks in Seminar and Project Work. The assessment of the seminar and project work is done using RUBRICS.

2.5.6 What are the graduates attributes specified by the college/affiliating university? How does the college ensure the attainment of these by the students?

The following graduate attributes are specified:

- Engineering knowledge (application of Mathematics, , Science and Engineering fundamentals to complex engineering problems)
- Problem analysis
- Design and development of solutions
- Investigation of complex problems
- Modern tool usage
- Engineer and society
- Environment and sustainability
- Ethics
- Individual and team work
- Communication
- Project management and finance
- Life-long learning

These attributes are attained through effective delivery of pedagogy, assignments, hands-on labs, project-based learning, social-innovation labs, research, add-on courses and all-round development of students is attained by encouraging student participation in sports, cultural, and entrepreneurship activities.

2.5.7 What are the mechanisms for redressal of grievances with reference to evaluation both at the college and University level?

At the institute level, the department takes care to redress the grievance of the students with reference to evaluation. The concerned faculty will discuss the problem with the student and convince him of valuation based on scheme of valuation. Test question papers mention course out-comes and scheme of valuation for the benefit of students.

At the university level, there is a system comprising of

- Providing photocopy of answer book through email on application from the student.
- Providing the facility of re-totaling of marks.
- Providing the facility of Revaluation, if the student is not convinced with the first valuation.
- If the difference in marks is more than 12 after revaluation, the student is refunded a part of revaluation fee by the university.

2.6 Student performance and Learning Outcomes

2.6.1 Does the college have clearly stated learning outcomes? If 'yes' give details on how the students and staff are made aware of these?

Yes, the institute does have clearly stated learning outcomes.

The learning outcomes are:

- Subject knowledge
- Employability skills
- Professionalism
- Values and Character building.
- Social responsibilities

The learning outcomes are clearly reflected in the Institution vision and mission statement. The learning outcomes are clearly made aware to the faculty members during the induction and through staff meeting. The learning outcomes are made aware to the students during the orientation programme, throughout the duration of the course by the faculty members and conducting events which focus on these learning outcomes. Some of these are the pre-placement training which deals with analytical and communication skills, Blood donation camps, NSS activities etc.,

2.6.2 Enumerate on how the institution monitors and communicates the progress and performance of students through the duration of the course/ programme? Provide an analysis of the students results/ achievements (Programme/ course wise for last four years) and explain the differences if any and patterns of achievement across the programmes/ courses offered.

- **Internal Assessment** – The College conducts three internal tests in a semester. The evaluated blue books are given to the students to check their performance. Any query by the student is addressed by the respective faculty member. The performance of the students is discussed in the staff meeting at the department and also in the HOD meeting. The progress of the students is sent to the respective parents by post / SMS. A parent-teacher meeting is called once in a semester where the parents can discuss the performance of their ward with the faculty member.
- **Classroom monitoring** - There is a continuous evaluation system through classroom assignments, quiz, presentations, course projects etc. The concerned subject faculty individually assesses the students on the basis of their subject understanding, communication skill, analytical skills

The following tables provide programme wise pass percentage and completion rate:

Table 2.18 Civil Engineering

Batch	Student Admitted	Semester								Completion rate	Pass Percentage
		1	2	3	4	5	6	7	8		
2009-13	60	50	53	45	44	39	49	53	55	55/60	91.66
2010-14	60	44	48	31	44	50	56	47	55	55/60	91.66
2011-15	121	86	98	105	96	94	90	103	99	99/121	81.81
2012-16	125	79	75	80	78	100	94	103	104	104/125	83.20

Table 2.19 Mechanical Engineering

Batch	Student Admitted	Semester								Completion rate	Pass Percentage
		1	2	3	4	5	6	7	8		
2009-13	120	96	97	89	87	94	93	103	101	101/120	84.16
2010-14	120	103	94	76	91	76	90	101	108	108/120	90
2011-15	121	97	96	88	102	92	92	93	117	117/121	96.69
2012-16	120	93	80	87	97	74	71	90	95	95/120	79.16

Table 2.20 Electrical and Electronics Engineering

Batch	Student Admitted	Semester								Completion rate	Pass Percentage
		1	2	3	4	5	6	7	8		
2009-13	60	51	57	44	46	50	52	51	57	57/60	95
2010-14	60	43	53	42	42	47	47	52	53	53/60	88.33
2011-15	61	52	56	46	46	52	50	48	59	59/61	96.72
2012-16	64	52	39	39	28	40	43	48	48	48/64	75

Table 2.21 Electronics and Communication Engineering

Batch	Student Admitted	Semester								Completion rate	Pass Percentage
		1	2	3	4	5	6	7	8		
2009-13	57	49	55	55	48	50	54	53	54	54/57	94.73
2010-14	60	53	54	51	35	48	44	47	51	51/60	85
2011-15	64	53	61	51	41	49	42	52	59	59/64	92.18
2012-16	105	96	92	91	98	100	82	96	100	100/105	95.23

Table 2.22 Telecommunication Engineering

Batch	Student Admitted	Semester								Completion rate	Pass Percentage
		1	2	3	4	5	6	7	8		
2009-13	60	42	49	38	34	41	44	43	48	48/60	80
2010-14	51	42	37	35	28	31	36	38	37	37/51	72.54
2011-15	55	53	52	43	39	44	37	47	53	53/55	96.36
2012-16	60	52	44	32	34	37	39	44	42	42/60	70

Table 2.23 Computer Science and Engineering

Batch	Student Admitted	Semester								Completion rate	Pass Percentage
		1	2	3	4	5	6	7	8		
2009-13	121	105	101	81	99	98	111	105	112	112/121	92.56
2010-14	119	97	93	82	85	95	97	98	100	100/119	84.03
2011-15	124	113	99	108	92	113	117	95	102	102/124	82.25
2012-16	118	96	80	82	85	90	103	93	101	101/118	85.59

Table 2.24 Information Science and Engineering

Batch	Student Admitted	Semester								Completion rate	Pass Percentage
		1	2	3	4	5	6	7	8		
2009-13	104	70	71	63	76	60	74	82	93	93/104	89.42
2010-14	94	63	76	59	61	69	68	68	79	79/94	84.04
2011-15	115	98	105	81	75	89	96	98	103	103/115	89.56
2012-16	122	108	98	78	83	82	93	95	105	105/122	86.06

(UG) Lateral Entry

Table 2.25 Civil Engineering

Batch	Student Admitted	Semester						Completion rate	Pass Percentage
		3	4	5	6	7	8		
2010-13	6	5	6	6	6	6	6	6/6	100
2011-14	26	19	21	24	24	20	24	24/26	92.30
2012-15	29	29	27	25	30	32	32	32/29	103
2013-16	34	24	23	27	29	28	31	31/34	91.17

Table 2.26 Mechanical Engineering

Batch	Student Admitted	Semester						Completion rate	Pass Percentage
		3	4	5	6	7	8		
2010-13	12	5	9	11	7	10	10	10/12	83.33
2011-14	24	18	18	11	18	20	20	20/24	83.33
2012-15	24	15	20	15	18	16	24	24/24	100
2013-16	26	18	17	15	15	23	24	24/26	92.30

Table 2.27 Electrical and Electronics Engineering

Batch	Student Admitted	Semester						Completion rate	Pass Percentage
		3	4	5	6	7	8		
2010-13	6	4	2	3	5	5	5	5/6	83.33
2011-14	13	6	3	6	10	8	8	8/13	61.53
2012-15	16	4	9	7	13	11	12	12/16	75
2013-16	14	7	9	8	7	9	10	10/14	71.42

Table 2.28 Electronics and Communication Engineering

Batch	Student Admitted	Semester						Completion rate	Pass Percentage
		3	4	5	6	7	8		
2010-13	6	3	5	5	3	5	6	6/6	100
2011-14	12	7	8	7	8	10	12	12/12	100
2012-15	12	5	7	9	10	12	12	12/12	100
2013-16	34	13	17	20	12	23	29	29/34	85.29

Table 2.29 Telecommunication Engineering

Batch	Student Admitted	Semester						Completion rate	Pass Percentage
		3	4	5	6	7	8		
2010-13	9	6	5	7	5	6	7	7/9	77.77
2011-14	25	2	6	8	14	17	19	19/25	76
2012-15	26	0	7	9	8	13	15	15/26	57.69
2013-16	13	4	0	4	6	6	6	6/13	46.15

Table 2.30 Computer Science and Engineering

Batch	Student Admitted	Semester						Completion rate	Pass Percentage
		3	4	5	6	7	8		
2010-13	12	6	9	11	10	9	10	10/12	83.33
2011-14	25	7	12	19	17	20	20	20/25	80
2012-15	24	6	9	13	17	14	20	20/24	83.33
2013-16	27	16	16	9	17	15	22	22/27	81.48

Table 2.31 Information Science and Engineering

Batch	Student Admitted	Semester						Completion rate	Pass Percentage
		3	4	5	6	7	8		
2010-13	21	6	10	9	9	3	13	13/21	61.90
2011-14	47	1	8	19	25	22	23	23/47	48.93
2012-15	24	1	3	11	11	6	14	14/24	58.33
2013-16	17	0	1	0	1	3	6	6/17	35.29

PG Courses

Table 2.32 Master of Business Administration (MBA)

Batch	Student Admitted	Semester wise no. of student passed in first attempt				Completion rate	Pass Percentage
		1	2	3	4		
2011-13	116	59	60	53	82	82/116	70.68
2012-14	113	69	73	70	66	66/113	58.40
2013-15	116	35	59	72	80	80/116	68.96
2014-16	100	58	79	64	80	80/100	80

Table 2.33 Master of Computer Applications (MCA)

Batch	Student Admitted	Semester wise no. of student passed in first attempt						Completion rate	Pass Percentage
		1	2	3	4	5	6		
2010-13	59	56	58	58	52	59	59	59/59	100
2011-14	119	96	87	97	92	101	107	107/119	89.91
2012-15	63	49	40	55	49	54	57	57/63	90.47
2013-16	54	28	37	31	42	42	50	50/54	92.59

Table 2.34 M.Tech. in Computer Science and Engg.

Batch	Student Admitted	Semester wise no. of student passed in first attempt				Completion rate	Pass Percentage
		1	2	3	4		
2011-13	25	19	25	25	25	25/25	100
2012-14	25	24	24	24	24	24/25	96
2013-15	26	26	26	25	25	25/26	96.15
2014-16	25	23	20	20		20/25	80

Table 2.35 M.Tech. in Network and Internet Engg.

Batch	Student Admitted	Semester wise no. of student passed in first attempt				Completion rate	Pass Percentage
		1	2	3	4		
2011-13	17	17	17	16	16	16/17	94.11
2012-14	24	22	23	24	24	24/24	100
2013-15	24	23	22	24	24	24/24	100
2014-16	20	14	20	20		20/20	100

Table 2.36 M.Tech. in Design Engg.

Batch	Student Admitted	Semester wise no. of student passed in first attempt				Completion rate	Pass Percentage
		1	2	3	4		
2011-13	15	13	15	15	15	15/15	100
2012-14	18	18	16	18	18	18/18	100
2013-15	14	12	14	14	14	14/14	100
2014-16	16	8	11	11		11/16	68.75

Table 2.37 M.Tech. in Transportation Engineering and Management

Batch	Student Admitted	Semester wise no. of student passed in first attempt				Completion rate	Pass Percentage
		1	2	3	4		
2011-13	18	16	10	15	15	15/18	83.33
2012-14	17	15	15	16	16	16/17	94.11
2013-15	18	14	18	18	18	18/18	100
2014-16	18	17	18	18		18/18	100

Table 2.38 M.Tech. in Digital Electronics and Communication Systems

Batch	Student Admitted	Semester wise no. of student passed in first attempt				Completion rate	Pass Percentage
		1	2	3	4		
2011-13	18	13	16	16	16	16/18	88.88
2012-14	18	17	18	18	18	18/18	100
2013-15	17	14	16	17	17	17/17	100
2014-16	23	20	21	21		21/23	91.30

Table 2.39 M.Tech. in Computer Integrated Manufacturing

Batch	Student Admitted	Semester wise no. of student passed in first attempt				Completion rate	Pass Percentage
		1	2	3	4		
2012-14	18	12	18	18	18	18/18	100
2013-15	12	11	11	12	12	12/12	100
2014-16	8	8	8	8		8/8	100

Table 2.40 M.Tech. in Power Electronics

Batch	Student Admitted	Semester wise no. of student passed in first attempt				Completion rate	Pass Percentage
		1	2	3	4		
2014-16	13	13	13	13		13/13	100

From the above analysis it is observed

- There is consistency in results.
- There is decrease in results in 3rd and 4th semester due to the transition of the students from basic science subjects to core technical subjects. From 5th semester onwards there is increase in success rate.

2.6.3 How are the teaching, learning and assessment strategies of the institution structured to facilitate the achievement of the intended learning outcomes?

The faculty member plans for the coverage of the entire syllabus by preparing the lesson plan. Apart from the blackboard teaching, Power-point presentations and videos are shown so that the students can come to know about the application of the knowledge in real world. Course seminars and course projects make the students to learn beyond the syllabus. The internal assessment test paper contains both the descriptive type and analytical type questions.

Final year project work is one of the aspects where the students exhibit professionalism. Each project batch comprises of three/four students. A faculty is identified as guide.

The students have to coordinate amongst themselves for the successful completion of the project and get approval from guide. The activities include

project presentation, report writing and exhibiting the project. Project seminar is also to be given in presence of guide & team of faculty as a part of internal assessment. University also conducts viva voce at the end of the semester as part of external evaluation.

2.6.4 What are the measures/ initiatives taken up by the institution to enhance the social and economic relevance (student placements, entrepreneurship, innovation and research aptitude developed among students etc.) of the courses offered?

- Encourage the students to take up industry sponsored projects and projects having social relevance.
- Many students are provided jobs through campus placements in reputed companies. The placement cell extends its support for students in Off-campus recruitment. This academic year about 375 students have been placed in 25 reputed companies.
- Top 10 innovative ideas/ projects have been funded to a maximum of Rs. 3.00 lakh per project for the year 2015-16 by the New Age Incubation Centre (NAIN).
- Establishment of Rain Water Harvesting, Waste Water Recycle plant, Bio-fuel plant trains the students in environment awareness, conservation of water and social responsibility.
- Blood donation camps every year conducted by JNNCE NSS unit.
- IETE Shivamogga centre arrange Internet Awareness and Online Digital Transaction programs for Women and Senior Citizens.

2.6.5 How does the institution collect and analyze data on student performance and learning outcomes and use it for planning and overcoming barriers of learning?

Two types of result analysis are generally done by the Institution:

- After an IA test, the results are analyzed to categorize the students in a class as slow, normal and fast learners. The mentors counsel the slow learners, try to identify their problems and take remedial actions. The normal learners are encouraged to improve their performance.
- VTU results are analyzed every semester and the outcome is used for refining teaching-learning methods.

2.6.6 How does the institution monitor and ensure the achievement of learning outcomes?

Meetings are conducted on a regular basis involving, Principal and Heads of Departments formulate strategies for achievement of learning outcomes by the students. HODs in turn have meetings with their faculty regularly to evaluate the performance of students after each internals.

The capability level of a student is generally assessed based on the following parameters:

- Marks scored by him/her in internal as well as external examinations.
- Performance in aptitude tests, mock interviews and group discussions are analyzed and the assessment outcomes are used to give additional training to students who are lagging behind. The Institution is trying its best to see that the students attain all graduate attributes.
- Special attention is given to the subjects in which the majority of the students find difficult and the pass percentage is less in the university examinations - by arranging tutorial classes.

2.6.7 Does the institution and individual teachers use assessment/evaluation outcomes as an indicator for evaluating student performance, achievement of learning objectives and planning? If 'yes' provide details on the process and cite a few examples.

Yes. The Principal and HODs review student result analysis and the feedback to give proper directions with respect to teaching-learning process, mentoring process and other activities related to learning outcomes.

Examples:

- Planning the calendar of events for each semester.
- The student feedback report is given to the faculty members. The faculty member having poor feedback is called for discussion by the HOD and is counseled. The HOD monitors the performance of such faculty members.
- The faculty members are informed to discuss the real life problems in the class through presentations or videos.
- Suggesting the faculty members to conduct extra classes for the academically weaker students.
- Mentoring system: The faculty members engaging first year are the mentors for the first year students. The performance of these students is continuously monitored and is reported to the parents. Mentoring for the higher semester students is done at the department level.
- Arranging invited talks by eminent personalities from industries and other organizations to motivate the students.



Criterion – III
Research, Consultancy
and Extension

CRITERION III: RESEARCH, CONSULTANCY AND EXTENSION

3.1 Promotion of Research

The Institution has a Research & Innovation Center with specific vision and mission.

Vision

To promote invention based research and innovation culture among faculty and students to develop solutions and technologies addressing societal problems.

Mission

- Guide research scholars in the advanced research areas catering to societal needs.
- Undertake research & innovation projects in collaboration with industry.
- Inspire students to take up research oriented projects.

3.1.1 Does the institution have recognized research center/s of the affiliating University or any other agency/organization?

Yes, the institution has research centers in every departments recognized by Visvesvaraya Technological University, Belagavi. They are:

1. Eight VTU recognized research centers:
 - Department of Mechanical Engineering.
 - Department of Civil Engineering.
 - Department of Computer Science and Engineering
 - Department of Electronics & Communication Engineering
 - Department of Electrical Engineering
 - Department of Engineering Physics
 - Department of Engineering Chemistry
 - Department of Master in Business Administration
2. NES, Research Foundation affiliated to Kuvempu University.

3.1.2 Does the Institution have a research committee to monitor and address the issues of research? If so, what is its composition? Mention a few recommendations made by the committee for implementation and their impact.

Yes, Institution has constituted research committee to monitor the research activity. It comprises of:

Table 3.1 Research Committee

Sl. No.	Name	Designation	Department	Role
1	Dr. L. K. Sreepathi	Professor	Mech. Engg.	Chairman
2	Dr. Poornima K M	Professor	CS & E	Member
3	Dr.P Manjunatha	Professor & HOD	E&C Engg.	Member
3	Dr. Prabhu Deva S	Professor	IS & E	Member
4	Dr. Tejaswi A H	Professor	E& E	Member

5	Dr. GurupadavvaIngalahalli	Asst. Professor	Mathematics	Member
6	Dr. Rajaprakash H G	Asst. Professor	Physics	Member
7	Dr.P.Nagabhushan	Professor	University of Mysore	Special Invitee
8	Sri S N Nagaraj	Secretary	NES, Shivamogga	Management representative
9	Dr.H.R. Mahadevaswamy	Principal	Principal	JNNCE Representative

Recommendations Made by Committee for Implementation

- To organize conferences/workshops in specific areas of research.
- To guide more internal and external candidates.
- To take up R & D Projects
- To guide research oriented PG Projects

Impact of the Research committee:

- Various departments organized National/International Conferences/workshops and received funds from many funding agencies (Details are given in respective evaluative reports of the department).
- Many PG projects are the experimental validations of the research results reported in reputed International Journals.
- Department of Mechanical Engineering undertakes R & D project titled “Reliability based maintenance of Machine Tools using Vibration Signals” funded by VTU, Belagavi.
- Department of Mechanical Engineering manages Bio-Fuel Information & Demonstration Center and Research Laboratory funded by Karnataka State Bio Fuel Development Board with annual funding of Rs. 8.2 Lakhs.
- Department of Telecommunication Engineering manages Remote Centre for IIT, Bombay, which organizes FDPs for faculty and staff.
- Department of Physics received a grant of Rs. 40 lakhs from VGST, Bengaluru to setup Radioactivity Measurements Lab.
- Students won awards during last three years in National Level Robotics competition E- Yantra conducted every year.
- Robotics Lab has been installed in the institution which was funded by IIT, Bombay.
- “Alumni Support for Innovative Research in Engineering-ASPIRE” sponsors student projects to encourage and support creative ideas and innovations in the field of Engineering for the usage of common man. THREE projects of Mechanical & Information science Engineering have been sponsored in the year 2014-15 and 2015-16.
- Final year UG students take up projects funded by KSCST, Bengaluru.

3.1.3 What are the measures taken by the institution to facilitate smooth progress and implementation of research schemes/ projects?

Measures taken up for implementation of research schemes:

- Undertaking innovative research in collaboration with industry to create an opportunity for good industry-institute interaction.

- Interacting with scientists of National/International Laboratories to promote students to take up Internships/research projects.
- Organizing Workshops and Conferences to have exposure on recent scientific advancements.

Monitoring smooth progress and implementation of research policies of the college.

The following are the details of the process that are followed for smooth progress and implementation of research projects:

(i) Before submission of the proposal

- Identification of the domain and expertise.
- Identification of funding agencies and preparation of proposals as per their format.
- Review of the proposals by the Research Committee and recommend the changes.
- Changes recommended by the Research committee are incorporated.
- Final proposal is submitted to the identified funding agencies.

(ii) After sanction of funding

- Forwarding sanction letter from Principal's office to the Principal Investigator.
- Principal Investigator convenes the meeting with the research committee and gives the details of the fund sanctioned.
- Research committee reviews the details of the project and nominates an external member to endorse the objectives and requirement of the project.
- Separate account is opened to perform the financial transactions related to the project.
- Purchase of the equipments & components is carried out with usual procedures and action plan with deadlines are chalked out.
- Principal Investigator - PI is given the complete freedom to manage the project as per the guidelines and action plan.
- Research committee (RC) reviews the progress of the project every three months.
- Annual progress report and financial statement is prepared by the Principal Investigator and reviewed by the RC with recommendations for auditing.
- Annual Progress report is submitted to funding agency.

(iii) After completion of the research project

- Completion report and financial statement is prepared by PI.
- Financial Statement with utilization certificate is sent for audit.
- Major outcomes of the project such as papers published, patents if any are properly documented and attempts are made to commercialize the project.
- Detailed project report is prepared and reviewed by RC.
- Detailed project report, completion certificate and financial statement with utilization certificate is submitted to funding agency.
- Feedback from the funding agency with acknowledgment for the receipt of the report is awaited.
- Research Project completion is updated in the JNNCE website.

Autonomy to the Principal Investigator

Yes, the Principal Investigator (PI) has been given complete freedom to decide the budget requirements in consultation with concerned HOD and the RC.

Timely availability or release of resources

- The Research Committee (RC) approves the statement of Expenditure and Utilization Certificate prepared by the accounts department and PI as per the deadline thereby ensuring timely release of the next installment from the funding agencies.
- RC ensures that funds are released within a stipulated timeframe, to acquire the resources required for timely fulfillment of project goals.

Adequate infrastructure and human resources

- Every department has earmarked a separate space for research centre with computers having state-of-the-art configuration, LCD projectors, and internet facility for conducting research activities.
- Research Co-ordinators, Research Guides and HODs monitor the progress and activities by conducting periodical project review meetings.

Time-off, reduced teaching load, special leave etc. to teachers

- Faculty members pursuing research are given special leave to attend to Conferences, Experimental work at Industries and other research related discussions with experts in their domain.
- The teaching load for faculty members pursuing research is reduced without effecting the academic requirements.

Support in terms of technology and information needs

- Proposed to set up Centers of excellence to facilitate research.
- Internet facility with 16 Mbps bandwidth is provided. Installation of Wi-Fi facility is under process.

Facilitate timely auditing and submission of utilization certificate to the funding authorities

RC conducts periodical project review meetings and verifies the detailed report prepared by the PI. Accounts section assists PI to prepare and compile the expenditure statements, audited reports and utilization certificates to be submitted to funding agencies.

Any other

Institution provides the financial assistance to attend the conference as per the policy formed by the college governing council.

3.1.4 What are the efforts made by the institution in developing scientific temper and research culture and aptitude among students?

The Institution encourages faculty and student to engage in research activities thereby promoting research culture. The following facilities are extended by the institution:

- Institution has setup New Age Incubation Network Centre-NAIN sponsored by Department of ITBT, Govt. of Karnataka to encourage students, research scholars and alumni to share their ideas to solve problems which are local centric and to validate, refine and nurture the ideas with ICT solutions. In this connection, Rs. 3 Lakhs will be granted for each innovative idea for top 10 student batches.
- The faculty members are encouraged to involve UG/PG students in the sanctioned research projects at the research center.

- To develop scientific temper and aptitude each department organizes guest lectures, symposia and conferences periodically.
- Students will be given an opportunity to work with the ongoing funded projects in the departments and are encouraged to take up in-house projects in final semester.
- Timely up-gradation of Laboratory equipments are carried out in the institution to maintain scientific temperament.
- To provide a platform for the students/faculty in developing the scientific writing skill, departments have department Newsletter/College Newsletter and College Magazine. The students are encouraged to publish articles in them.
- Institution has earmarked a separate project lab as a common facility to encourage the students to undertake study projects.
- The Institution supports students to participate in workshops/seminars and in technical project competitions such as KSCST, e-yantra IIT Bombay, TCS, Bengaluru
- Alumni Support for Innovative Research in Engineering – ASPIRE sponsors student projects to encourage and support creative ideas and innovations in the field of Engineering for the usage of common man. Three projects of Mechanical and Information Science & Engineering have been sponsored in the year 2014-15 and 2015-16.
- NAIN organizes Hackathon Competitions periodically to trigger the young minds to showcase their technical competency. On 17th April 2016, a National level Hackathon-Smart-a-Thon, 24 Hour Project competition was organized at JNNCE Campus. JNNCE students won First Place for a project addressing the concept “Smart City”.
- Institution organizes an annual technical national level symposium-Techzone which comprises of technical competitions like Paper presentation, Circuit Debugging, Technical treasure Hunt etc.

3.1.5 Give details of the faculty involvement in active research (Guiding student research, leading Research Projects, engaged in individual/collaborative research activity, etc.

The following are the details of faculty involvement in research activities

Table 3.2 Funded Programs/Projects Carried Out

Name of the Faculty	Name of the Agency	Title	Period	Amount Lakhs Rs.
Dr. L. K. Sreepathi, Professor, Mechanical Engg.	KSBDB	District Bio-fuel Demonstration and Information Center	2011 onwards	11.00
	DST	Work shop on bio fuel conversion	2012	0.60
	KSBDB	Annual grant for bio fuel center @Rs. 8.0 lakhs per year	2011-16	40.00

	KSBDB	Revolving fund for seed purchase	---	3.50
	KSBDB	Development of oil cake biogas plant	2012	0.50
	KSBDB	Development of decarticator (on-going)	2012	0.75
	KSCST	Around 15 B.E Projects funded by KSCST		1.00
	MAMCOS	Extraction of Tannin from Areca Husk	2015	
	KSCST	Testing of SVO on diesel engines	2016	1.00
Dr. K Sabeel Ahmed & Amith Kumar J Mechanical Engg.	VTU	Strength, wear, and machining characteristics of biofibre based PMC's	2011	5.00
Dr. H. N. Suresh & Dr. K. M. Basappaji Mechanical Engg.	VTU	Reliability based maintenance of machine tools using vibration signals	2011	8.00
Mr. Chethan K. R., CS Engg.	Department of IT, BT, Government of Karnataka	I-Machine Diagnostic System	2015	3.00
Mr. Neeraj S.N. Assistant Professor, Civil Engg.	Department of IT, BT, Government of Karnataka	Pervious Concrete for Paver Blocks	2015	3.00

Table 3.3 Faculty Members Guided/Guiding Ph.Ds

Sl. No.	Name of the Faculty	Research Centre	No. of Ph.Ds Guided	No. of Ph.Ds Guiding
1.	Dr. A. V. Pradeep Kumar	Civil Engineering	4	6
2.	Dr. Rajendra Katawkar	Civil Engineering	---	7
3.	Dr. B. M. Gangadarappa	Civil Engineering	0	4
4.	Dr. D. S. Ramakrishna	Mechanical Engineering	2	5
5.	Dr. Y. J. Suresh	Mechanical Engineering	1	--
6.	Dr. L. K. Sreepathi	Mechanical Engineering	4	4
7.	Dr. K. Sabeel Ahmed	Mechanical Engineering	---	2

8.	Dr. E. Basavaraj	Mechanical Engineering	---	1
9.	Dr. H. Raghavendra	Mechanical Engineering	---	2
10.	Dr. M. M. Rajath Hegde	Mechanical Engineering	---	2
11.	Dr. S. Surendra	Electrical Engineering	---	2
12.	Dr. A. H. Tejaswi	Electrical Engineering	---	1
13.	Dr. H. B. Suresh	Electrical Engineering	---	1
14.	Dr. Srinivasa Rao Kunte	E& C Engg.	2	---
15.	Dr. S. V. Sathyanarayana	E& C Engg.	---	6
16.	Dr. P. Manjunatha	E& C Engg.	---	6
17.	Dr. Nirmala Shivanand	CS & E	---	2
18.	Dr. Sanjeev Kunte. R.	CS & E	---	3
19.	Dr. Poornima K .M.	CS & E	---	3
20.	Dr. Prabhudeva S.	CS & E	---	7
21.	Dr. Jyothi K.	CS & E	---	2
22.	Dr. Kiran M.	CS & E	----	5
23.	Dr. Ushadevi M. B.	E&C Engg.	---	3
24.	Dr. Ajith Danti	RRC, Belagavi NES, KU	4	6
25.	Dr. M.G. Krishnamurthy	MBA	4	5
26.	Dr. C. Srikath	MBA	---	3
27.	Dr. K. S. H. Rahman	MBA	---	3
28.	Dr. Anand Ram B. N.	Physics, RRC, Belagavi	---	3
29.	Dr. Rajprakash H. G.	Physics, RRC, Belagavi	---	5
30.	Dr. M. H. Mohinuddin Khan	Chemistry	---	4
31.	Dr. Sachin H. P.	Chemistry	---	3

3.1.6 Give details of workshops/ training programmes/ sensitization programmes conducted/organized by the institution with focus on capacity building in terms of research and imbining research culture among the staff and students.

Various workshops/conferences/Sensitization programs are organized by the institute to build a research culture among students and faculty members. The details are as given below:

Table 3.4 workshops/ conferences/ Sensitization programs

Sl. No.	Name of the Department	Programme	Date
1.	Department of Mechanical Engineering	National Conference on Advance in Mechanical Engineering - 2010	12-13, Nov.2010
2.	Department of ECE, TCE, CSE, ISE and Mechanical Engineering	International Joint Colloquium on Computer, Electrical and Mechanical – CEM 2011 in association with ACEEE, Trivendrum	27-28, December 2011
3.	Department of E & C & TCE	VTU-VGST sponsored STTP on Secure Communication and Image Processing	14-18, March, 2012
4.	Department of ECE, TCE, CSE and ISE	International Conference on “Multimedia Processing, Communications and Information Technology – MPCIT 2013 sponsored by DRDO, New Delhi.	19-21, Dec. 2013
5.	Department of ECE and TCE	National Workshop on Cryptology – NWC2016 in association with Cryptology Research Society of India, Kolkata	11-13, August, 2016

- Institution has JNNCE Remote Centre for IIT Bombay, which organizes STTP for faculty members in all Engineering disciplines.
- Workshop is conducted for staff to educate and encourage them to take up invention based research.

3.1.7 Provide details of prioritized research areas and the expertise available with the institution.

Table 3.5 Research Areas and Expertise

Sl. No.	Name of the Faculty Member	Department	Area of Expertise
1.	Dr. H. R. Mahadevaswamy	Electronics & Communication Engineering	3D Point Cloud Processing, Virtual Reality (VR)
2.	Dr. A. V. Pradeep Kumar	Civil Engineering	Highway Engineering
3.	Dr. Rajendra Katawkar	Civil Engineering	Transportation & Management
4.	Dr. B. M. Gangadarappa	Civil Engineering	Structural Engg.
5.	Dr. Karthik B S	Civil Engineering	Remote sensing and GIS

6.	Dr. D. S. Ramakrishna	Mechanical Engineering	Stress Analysis
7.	Dr. Y. J. Suresh	Mechanical Engineering	Finite Element Analysis
8.	Dr. L. K. Sreepathi	Mechanical Engineering	Heat Transfer
9.	Dr. K. Sabeel Ahmed	Mechanical Engineering	Composite Materials
10.	Dr. E. Basavaraj	Mechanical Engineering	Polymer Engineering
11.	Dr. H. Raghavendra	Mechanical Engineering	Manufacturing & Materials Engineering
12.	Dr. M. M. Rajath Hegde	Mechanical Engineering	Nano materials
13.	Dr. K. M. Basappaji	Mechanical Engineering	Cleaner Production, Condition Monitoring
14.	Dr. S. Surendra	Electrical Engineering	Power System
15.	Dr. Tejaswi A H	Electrical Engineering	Power Quality
16.	Dr. H B Suresh	Electrical Engineering	Energy Systems
17.	Dr. Srinivasa Rao Kunte	Electronics & Communication Engineering	Character Recognition, Image Processing
18.	Dr. S. V. Sathyanarayana	Electronics & Communication Engineering	Cryptography & Network Security, Natural Language Processing
19.	Dr. P. Manjunatha	Electronics & Communication Engineering	Wireless Sensor Networks
20.	Dr. Nirmala Shivanand	Computer Science & Engineering	Vision system and Genomics
21.	Dr. Sanjeev Kunte R	Computer Science & Engineering	Image Processing and pattern recognition
22.	Dr. Poornima K M	Computer Science & Engineering	Machine Vision System
23.	Dr. Manjula G R	Computer Science & Engineering	Steganography
24.	Dr. Prabhudeva S	Information Science & Engineering	Software Reliability

25.	Dr. Jyothi K	Information Science & Engineering	Image Processing
26.	Dr. Kiran M	Information Science & Engineering	Wireless Sensor Networks
27.	Dr. Ushadevi M B	Telecommunication Engineering	Computer Networks
28.	Dr. Ajith Danti	MCA	Image Processing
29.	Dr. M.G. Krishnamurthy	MBA	Finance
30.	Dr. C. Srikath	MBA	Human Resource and Marketing
31.	Dr. K. S. H. Rahman	MBA	Marketing
32.	Dr. Srikanth G Sugur	MBA	Finance
33.	Dr. Santhosha	MBA	Marketing
34.	Dr. Ravish N S	MBA	Finance & Statistics
35.	Dr. Anand Ram B N	Physics	Radiation Physics, Environmental Radioactivity
36.	Dr. Rajprakash H G	Physics	Nuclear Physics, Radiation Physics
37.	Dr. M. H. Mohinuddin Khan	Chemistry	Industrial Chemistry
38.	Dr. Sachin H P	Chemistry	Electro Chemistry
39.	Dr. Nirmala T	Maths	Fluid Mechanics
40.	Dr. Gurupadavva Ingalahalli	Maths	Differential Geometry/ Contact Manifolds

3.1.8 Enumerate the efforts of the institution in attracting researchers of eminence to visit the campus and interact with teachers and students?

- The institution regularly organizes technical talks/interactions with the scientists/researchers from both industry and academia. The details are available with the respective department profile.
- Many eminent scientists are invited during INSPIRE-Internship camp every year sponsored by DST.
- Eminent academicians and researchers give lectures in the online technical workshops for faculty and students under the Remote Centre of IIT Bombay.
- The important programs are enlisted as below:

Table 3.6 Visit of Eminent Researchers

Sl.No.	Name	Topic / Event	Date
1.	Dr. N. R. Naryanamurthy, Chief Mentor Infosys	Interaction Session with Students & faculty members	09.06.2011
2.	Dr. C. N. R. Rao, Honorary President JNCASR, Bengaluru	Interaction Session with Students & faculty members	30.07.2011
3.	Sri. Madhavan Nair, Former Chairman, ISRO	Interaction Session with Students & faculty members	23.09.2011
4.	Dr. Karunakar A K, Professor, MCA & Deputy Director (International Collaborations), Manipal University	Introduction to Multimedia Communication and H.264/AVC Scalable Video Coding	09.07.2012
5.	Dr. K. Chidananda Gowda, Former Vice Chancellor, Kuvempu University	A Grand Convergence Beyond Information, Communication Technology - ICT	10.10.2013
6.	Dr. Ramakanth Kumar P Professor & HOD Department of IS & E, RVCE, Bengaluru	PoS Tagging and Morphological Analyzers	10.10.2013
7.	Dr. Devendra Jalihal, Professor, IIT Chennai	Why do research and aspects of MIMO communication - International Conference on Multimedia Processing, Communication, Information Technology – MPCIT, 2013	19.12.2013
8.	Dr. D. Manjunath, Professor, IIT, Bombay	Network Tomography: Estimating Link Delays from Path Delays International Conference on Multimedia Processing, Communication, Information Technology – MPCIT, 2013	20.12.2013
9.	Dr. A. G. Ramakrishna, Professor, IISc, Bengaluru	Machine listening - Dealing with real challenges in Speech Recognition - International	21.12.2013

		Conference on Multimedia Processing, Communication, Information Technology – MPCIT, 2013	
10.	Prof. Smriti Dagur, President IETE, New Delhi	Inauguration and up gradation of IETE Shivamogga Centre at JNNCE Campus	01.03.2015
11.	Sri. B. R. Guruprasad ISRO, Bengaluru	ISRO, Outreach Programme, Exhibition cum Demo	08.09.2015
12.	Dr. K. N. Ganesh, IISER, Pune	INSPIRE Internship Camp	25.12.2015
13.	Dr. C. E. Venimadhavan Professor Emeritus, IISc, Bengaluru	Integer Factoring - Computational Challenges – National Workshop on Cryptology - 2016	11.08.2016
14.	Dr. P. K. Saxena Former Director, SAG, DRDO, New Delhi	Global Connectivity: Security Issues and Solutions - National Workshop on Cryptology - 2016	11.08.2016
15.	Dr.K N Subramanya, Principal, RVCE, Bengaluru	Research Opportunities	30.09.2016
16.	Dr. Ashok Rao, Former Head, Network Project, CEDT, IISc, Bengaluru. Currently: Guest Professor, IIM Bengaluru	3R of Research: Research, Researchers and Researching	22.10.2016
17.	Padmabhushan Prof. U.R. Rao Chairman Karnataka Science and Technology Academy and Former Chairman ISRO	India's Role in Space	10.11.2016
18.	Dr. K. P. J. Reddy, Professor, IISc, Bengaluru	Magical World of Shock Waves	18.02.2017
19.	Mr. Prakash Krishnaswamy, CEO, Xitadel Group, Bengaluru	“The evolving Global Automobile Industry and its impacts on Careers and Entrepreneurs”	03.03.2017

3.1.9 What percentage of the faculty has utilized Sabbatical Leave for research activities? How has the provision contributed to improve the quality of research and imbibe research culture on the campus?

15% of faculty members utilized Sabbatical Leave for research activities in all departments.

- This facility extended by the institution and management has motivated the faculty members to pursue research and many of the faculty members

obtained doctoral degree through this scheme.

- This has improved the research culture in the institute as the research guides of the institute, guided in-house faculty members under the research centres affiliated to VTU, Belagavi.

3.1.10 Provide details of the initiatives taken up by the institution in creating awareness/advocating/transfer of relative findings of research of the institution and elsewhere to students and community (lab to land)

- The faculty members publish the papers generated out of research findings in reputed National and International Journals/Conferences.
- The faculty members with Ph.D. convene National and International Conferences in the institution in collaboration with research organizations and funding agencies.
- Contributions of the faculty and students in completing research projects; major achievements and publication details are showcased in library and department notice boards.
- The Institution protects of inventions by way of applying for patent. Workshop is conducted by Principal, JNNCE for staff of all departments to educate and encourage them to take up invention based research & innovation.

3.2 Resource Mobilization for Research

3.2.1 What percentage of the total budget is earmarked for research? Give details of major heads of expenditure, financial allocation and actual utilization.

5% to 10% of the total budget is allocated for Research and development activities.

3.2.2 Is there a provision in the institution to provide seed money to the faculty for research? If so, specify the amount disbursed and the percentage of the faculty that has availed the facility in the last four years?

Proposal for starting Research and Innovation Center at JNNCE (JNNRIC) is submitted to NES management for approval. JNNRIC will assist students Faculty and staff to boost the research and Innovation by way of Funding to a certain extent (seed money) every year as follows:

Table 3.7 Proposed Projects Funding from JNNRIC

Sl. No.	Project type	Funding/project (Rs)	No. of projects
1	Innovative Project	Up to Rs 25,000/-	10
2	Research & Innovation Project	Up to Rs 50,000/-	07
3	Research Project	Up to Rs 1,00,000/-	09

3.2.3 What are the financial provisions made available to support student research projects by students?

- Institution has New Age Incubation Network Centre-NAIN sponsored by Department of ITBT, Government of Karnataka to encourage students to

undertake research work and are provided Rs 3 Lakhs per project.

- JNNRIC will assist students Faculty and staff to boost the research and Innovation by way of Funding to a certain extent.

3.2.4 How does the various departments/units/staff of the institute interact in undertaking inter-disciplinary research? Cite examples of successful endeavors and challenges faced in organizing interdisciplinary research.

The faculty and students of various departments collaborated and carried out many interdisciplinary research oriented projects under the banner of e-yantra, IIT Bombay, NAIN, JNNCE, Shivamogga and ASPIRE scheme. Some of the examples are cited here:

- Faculty Members comprising of Prof. S. Amarappa, TCE Dept., Veena K N, TCE Dept., Harish S B, TCE Dept., Jayavardhana Acharya, Mech. Dept., have won third prize in All India Teachers Robotics Competition of e-yantra, held at IIT Bombay, 10th-11th April, 2014.
- “Alumni Support for Innovative Research in Engineering-ASPIRE” sponsors student projects to encourage and support creative ideas and innovations in the field of Engineering Science for the usage of common man. The proposals are called from 5th semester engineering students of any discipline.
 - Five Projects from Mechanical Engineering & Information Science Engineering & TCE have been sponsored in 2013-14
 - Three Projects from Mechanical Engineering & Information Science Engineering have been sponsored in 2014-15.
 - Four projects from Mechanical, Electronics & Communication Engineering have been sponsored in the year 2015-16.

Details of interdisciplinary projects undertaken by NAIN, JNNCE, Shivamogga for the year 2015 -16 and 2016-17:

Table 3.8 Interdisciplinary Projects Undertaken by NAIN

Sl. No.	Project Title	Departments	Mentors
1.	Cell phone Network Device	ECE & TCE	Harish S B, TCE Dept
2.	Raitha Mithra: Remote Automation & Data Monitoring for Irrigation System	ECE	Dr. P. Manjunatha, ECE, Dept
3.	Dathu – A Disruptive innovation platform for easy & effective creations	Mech & EE	Shanthikiran, Mech. Dept
4.	Card Board Labs: Labs in a Card Board box delivered into the door steps	Mech, TCE & ISE	Shanthikiran Mech. Dept
5.	Any Time Medicine	Mech. & ECE	Dr. P. Manjunatha, ECE, Dept.
6.	Smart Automobile transformation for safer life	CSE & ECE	Pradeep S C, ECE Dept.
7.	Areca Drone	Mech & CSE	H K Pradeep ISE Dept. & Sharath Kumar R S, ISE Dept.,
8.	Smart Targeting System & Smart Spotter	Mech & TCE	C. Manjunath, & Jayavardhan Acharya, Mech. Dept

9.	I – Machine Diagnostic System	Mech, CSE & ECE	Dr. K. M. Basappaji, Mech. Dept., & H K Pradeep, ISE Dept.,
10.	A Smart Helmet for Two Wheelers: An Intelligent Safety Helmet for Motor Cyclists	ECE, ISE, TCE, CSE	H K Pradeep, ISE Dept., & Jayavardhan Acharya, Mech. Dept.,
11.	Smart Traffic Police	Mech& ECE	Mr. Pradeep S C, Asst. Prof, Dept. of ECE
12.	Multipurpose Wheel Chair & Tricycle for Disabled	Mech& Civil	Mr. M K Srinivasmurthy, Asst. Prof, Dept. of ME
13.	Lake Cleaning Machine	Mech	Mr. Jayavardhana Acharya N, Lecturer, Dept. of ME
14.	Intelligent Insect Identifier	TCE& ECE	Mr. Benak Patel M P, Asst. Prof, Dept. of TCE
15.	Pervious Concrete for Power Blocks	Civil	Mr. Neeraj S N, Asst. Prof, Dept. of Civil
16.	Arogya Mitra	ISE	Dr. Prabhudeva S, Professor, Dept. of ISE
17.	Waste Plastic to Petrol	Mech	Dr. L. K. Sreepathi, Professor, Dept. of ME
18.	Arduino Target Eliminator	MCA	Mr. Shoiab Ahmed, Asst. Prof, Dept. of MCA
19.	Smart Plant Manager	ECE	Mr. Pradeep H K, Asst. Prof, Dept. of ISE
20.	High Transmission Line Fault Identification System	EEE	Dr. H B Suresh, Professor, Dept. of EEE

3.2.5 How does the institution ensure optimal use of various equipment and research facilities of the institution by its staff and students?

- Every Research Centre of the department has a research lab with state-of-the-art facility and internet connection earmarked for research activities of the faculty and students.
- The facilities are made available to all the research scholars and student. The utilization is monitored by the concerned research guide and research lab in-charge by maintaining a log book.

3.2.6 Has the institution received any special grants or finances from the industry or other beneficiary agency for developing research facility? If 'yes' give details.

Yes, the following are the details of various funds received for developing research facility:

Table 3.9 (a) Mechanical Engineering

Funding Agency	Year of Sanction	Grant amount	Title of Research/ Project	Faculty Name
KSBDB	2011	10.5 Lakhs	District biofuel demonstration and information center	Dr. L. K. Sreepathi
VTU	2011	9 Lakhs	“Reliability based maintenance of machine tools using vibration signals”	Dr. H. N. Suresh & Dr. K. M. Basappaji
VTU	2011	5 Lakhs	“Strength, wear, and machining characteristics of biofibre based PMC’s”	Dr. K. Sabeel Ahmed & Mr. Amith Kumar
KSBDB	2012	30,000.0	Development of oil cake biogas plant	Dr. L. K. Sreepathi
BIOFUEL	Every year	8 Lakhs	Biofuel development Research centre	Dr. L. K. Sreepathi

Table 3.9 (b) Civil Engineering

Sl. No.	Title of Ongoing Project	Principal Investigator	Amount Sanctioned (Rs.)	Agency Sanctioned
01.	Pervious Concrete for Paver Blocks	Mr. Neeraj S.N. Asst. Professor	3,00,000.00	Karnataka New Age Incubation Centre, Bengaluru.

Table 3.9 (c) Computer Science & Engineering

Sl. No.	Title of the Project	National / International	Funding Agency	Principal Investigator	Year	Amount Sanctioned (Rs)
1.	I – Machine Diagnostic System	National	Department of IT, BT, Government of Karnataka	Mr. Chetan K R	2015	3.00 Lakhs
2.	DST - FIST	National	DST	Dr. S.N. Jagadeesha	2013 -14	11.12 Lakhs

Table 3.9 (d) Department of Physics

Sl. No.	Title of the Project	National / International	Funding Agency	Principal Investigator	Year	Amount Sanctioned (Rs)
1.	Establishment of Environmental Radio Activity Measurements Lab.	National	VGST- K FIST, Govt of Karnataka	Dr. B.N. Anandram	2013-2015	40 Lakhs

3.2.7 Enumerate the support provided to the faculty in securing research funds from various funding agencies, industry and other organizations. Provide details of ongoing and completed projects and grants received during the last four years.

- The Institution encourages applying for funding both from government agencies and industries.
- Faculty members are encouraged to visit research organizations and interact with eminent scientists to understand the trends in research and encouraged to participate in international conferences conducted by leading organizations in India.
- Based on the feedback from faculty members and the project relevance to the institution proposals are prepared, reviewed and submitted.

The details of ongoing and completed projects and grants received during the last four year are given in Table 3.8 (a) to Table 3.8(d)

3.3 Research Facilities

3.3.1 What are the research facilities available to the students and research scholars within the campus?

- The institution has VTU recognized Research Centres in Eight departments. Every Research Centre has a research lab with state-of-art facility with internet connection earmarked for research activities of the faculty and students.
- Institution has setup New Age Incubation Network Centre – NAIN sponsored by Department of ITBT, Govt. of Karnataka to encourage faculty members to submit their research ideas and undertake research work funded by NAIN.
- Proposal for starting Research and Innovation Center at JNNCE (JNNRIC) is submitted to NES management for approval. As part of this, Lecture Series is arranged for Faculty by eminent personalities.

Additional Facilities

- Access to E-journals and E-books.
- Computing and simulation facility.
- Internet facility with 16 Mbps leased line & Wi-Fi Facility is under process.
- On campus basic amenities along with accommodation for students and research scholars.

3.3.2 What are the institutional strategies for planning, upgrading and creating infrastructural facilities to meet the needs of researchers especially in the new and emerging areas of research?

Proposal is submitted for instituting incubation centre under the following thrust areas:

- Agricultural Technology.
- Renewable Energy and Energy Conservation System.
- Additive Manufacturing system with focus on 3D printing

This incubation centre facilitates inter-disciplinary research with research infrastructural facilities. and provides incubation facilities to start ups and budding entrepreneurs.

- Proposal is submitted for funding for U.S.-India Joint Clean Energy

Research and Development Center. This is a Consortium between India and USA wherein there are about 14 Institutions, one company from India and 5 from USA have joined together. From India, IITs, NITS, and premier institutions are participating and JNNCE is the only college among private engineering colleges from entire India. Project is from Electric Engineering department for Solar Smart Grid management and grant requested is Rs.1.57 Crores for five years.

- Few discussions were initiated for Industry collaboration to set up competence center, Center of Excellence. Among these three are in final stages of signing MoUs and they are :
 - NVIDIA Graphics (Multinational Company headquartered at USA).
 - Infineon (German based Semiconductor Company).
- The process of identifying collaboration with Foreign Universities has been initiated and one such activity with METU University Turkey is in the final stage. In this connection two rounds of discussion over video conference have been carried out and the MoU to be signed soon.

3.3.3 Has the institution received any special grants or finances from the industry or other beneficiary agency for developing research facilities?? If ‘yes’, what are the instruments / facilities created during the last four years.

Table 3. 10 Research Facilities/Instruments

Sl. No.	Equipment	Cost	User Department	Funding Agency
1.	YASKAVA – Industrial Robot	Rs. 25 Lakhs	Mechanical	AICTE, MODROBS & JNNCE
2.	Gamma Radiation Survey Meter	1.627 Lakhs	Physics	VGST-KFIST
3.	Low Background Alpha Counting Systems	1.6 Lakhs		
4.	Sodium iodide Gamma Spectrometer	4.38 Lakhs		
5.	CZT gamma Spectrometer	9.0 Lakhs		
6.	Alpha-Beta Sample Counter	3.46 Lakhs		
7.	On Line Radon Monitoring System	4.63 Lakhs		

3.3.4 What are the research facilities made available to the students and research scholars outside the campus / other research laboratories?

- Few discussions were initiated for Industry collaboration and there by their facility can be utilized for research by students
 - NVIDIA Graphics (Multinational Company headquartered at USA).
 - Infineon (German based Semiconductor Company).
- Students carry out Internships and project works at research organizations like Qualitas Technologies, Bengaluru, NAL, DRDO, CSIR-4G, BEL, CMTI etc.

3.3.5 Provide details on the library/information resource center or any other facilities available specifically for the researchers?

- Access to E-journals under VTU Consortium.
- Subscription to International journals like IEEE, ACM, ASME etc.
- Internet facility with 16 Mbps leased line & Wi-Fi Facility is under process.

3.3.6 What are the collaborative research facilities developed/ created by the research institutes in the college. For ex. Laboratories, library, instruments, computers, new technology etc.

- District bio-fuel demonstration and information center.
- E- yantra Robotics Lab in collaboration with IIT, Bombay .
- Condition Monitoring Lab set up with financial support of VTU, Research Promotion Scheme.

3.4 Research Publications and Awards

3.4.1 Highlight the major research achievements of the staff and students in terms of Patents obtained and filed (process and product)

Table 3.11 Patents Obtained and Filed

Sl. No.	Patent/ Copyright	Applicant	Year of Application	Status
1	Power Operated Sugarcane Seed Scooping Machine	Dr. D S Ramakrishna, Professor & HOD, Mechanical Engg.,	2012	In Process
2	Device Measuring Load on a Crane Hook	Dr. D S Ramakrishna, Professor & HOD, Mechanical Engg.,	2013	In Process

- Original research contributing to product improvement

Research work being carried out by Dr. L. K. Sreepathi, Professor, Mechanical Engineering.

Biomass gasification: Study on performance of biomass gasifier for power generation using wood and wood agro residue mixtures was carried out. The Project was funded by All India Council for Technical Education, Govt. of

India. The gasifier system with gas engine for power generation was installed and the electric power was being supplied to college grid.

Solar energy: Design and development of solar pump, design of solar evacuated cooker, and work reduction of heat loss from solar flat plate collectors using special techniques were carried out. Currently, design and fabrication of Solar assisted night cooking is being carried out. Many projects on solar energy were funded by Karnataka State Council for Science and Technology (KSCST).

- A project on scaling of solar water heaters and correlation development relating life of collector and water quality was carried out as a part of Ph.D. research work.
- Studies on solar passive cooling techniques was carried out as part of Ph.D. research work.

Currently, a project on solar energy assisted biodiesel production is being carried out with the financial assistance from KSCST.

Fuel pellets: Various agro residues like corn, arecanut husk etc. were used to prepare fuel pellets and the burning efficiency of the same were tested. The project was funded by KSCST.

Fluidization of agro residues and chicken litter: Studies on fluidisation of arecanut husk and chicken litter are being carried out as a part of Ph.D research work.

Bio Diesel: Research work on multi seed decarticator, Pongamia cake biogas plant are being carried out, ethanol from glycerin, rain tree pods were successfully carried out. A project on conversion of biogas to methanol is being carried out with the assistance from KSCST.

Kitchen waste gas plant: Performance studies on kitchen waste biogas plant was carried out and modified design was developed.

Rain water harvesting: Studies on various types of rain water filters was carried out with funding from KSCST. A sloping mesh rain water filter was designed and installed at various places for public.

Energy Management: A study on selection of sustainable technologies based on energy consumption and energy availability for specific region of Karnataka state has been carried out.

Waste plastic to oil unit: A simple domestic scale waste plastic to petro unit has been designed and developed. Performance tests were carried out successfully.

Ethanol from Rain tree seed pulp: Rain tree seed pulp has been extracted and yeast fermentation has been carried out to produce ethanol. The fuel has been tested in engines.

- Research studies or surveys benefiting the community or improving the services & Research inputs contributing to new initiatives and social development.

Kitchen waste gas plant: Performance studies on kitchen waste biogas plant was carried out and modified design was developed.

Rain water harvesting: Studies on various types of rain water filters was carried out with funding from KSCST. A sloping mesh rain water filter was designed and installed at various places for public.

Energy Management: A study on selection of sustainable technologies based on energy consumption and energy availability for specific region of Karnataka state has been carried out.

Waste plastic to oil unit: A simple domestic scale waste plastic to petro unit has been designed and developed. Performance tests were carried out successfully.

Photos of few devices developed by Dr. L. K. Sreepathi and his students



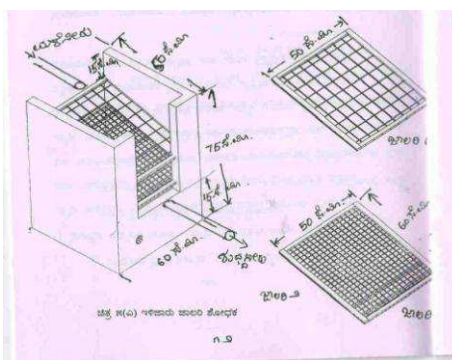
Waste plastic to oil unit



Solar drier for arecanut drying



Evacuated tube solar cooker



Sloping mesh rain water filter

Research studies or surveys benefitting the community or improving the services

Dr. H B Suresh Professor, Electrical and Electronics Engineering has conducted a survey on “Selection of sustainable energy technique based on energy availability-consumption pattern of Shivamogga region.

Research inputs contributing to new initiatives and social contributions

Nil

3.4.2 Does the Institute publish or partner in publication of research journal(s)? If ‘yes’, indicate the composition of the editorial board, publication policies and whether such publication is listed in any international database?

Yes. The Institution has plans to publish a journal titled ‘JNNCE Journal of Research’ with ISSN. The journal will have two issues per year. The Editorial Board consists of Chief Editor-Dr. H. R. Mahadevaswamy, Principal, Editor-Dr. M. G. Krishnamurthy and other Members.

3.4.3 Give details of publications by the faculty and students:

- Publication per faculty - Number of papers published by faculty and students in peer reviewed journals (national / international)

Table 3.12: Journal Publications by Faculty and Students

Department	2013	2014	2015	2016	Total
Civil Engg.,	01	02	02	01	06
Mechanical Engg.,	03	06	06	02	17
Electrical Engg.,	02	02	01	02	07
ECE	02	04	04	01	11
CS & E	01	03	22	19	45
IS & E	04	05	05	02	16
TCE	04	06	04	01	15
Basic Science	03	16	09	14	42
MCA	09	14	11	01	35
MBA	30	18	23	15	86
Total	59	76	87	58	280

- Number of publications listed in International Database (for Eg: Web of Science, Scopus, Humanities International Complete, Dare Database - International Social Sciences Directory, EBSCO host, etc.)
- Monographs: 51
- Chapter in Books: Nil
- Books Edited: 03
- Citation Index:1701
- SNIP: Nil
- SJR: Nil
- Impact factor: 4.095
- h-index:3.133

Table 3.13: Books Edited

Sl. No.	Title	Author	Dept	Publisher
1	Introduction to Computer Security ISBN 81-7758-425-1	Matt Bishop Dr. S. V. Sathyanarayana	ECE	Pearson Education
2	Sustaining share holders value: Role of Investors and Regulators	Dr. M G Krishnamurthy	MBA	Excel books, New Delhi
3	Emerging issues and challenges in banking ISBN 978-93-5354-233.83	Dr. M G Krishnamurthy	MBA	MSNB, Beseant Institute, Mangalore

Table 3.14 Books with ISBN/ISSN numbers with details of publishers

Sl. No.	Title	Author	Dept	Publisher
1.	Estimation of Evapotranspiration and Water Productivity ISBN-13:- 978-3- 8465-4053-4	Dr. Karthika B.S.	Civil	Lambert Academic publishing
2.	Proceedings of National Conference on Advances in Mechanical Engineering NAME-2010 ISBN: 978-81-8424-623-0	Dr. D.S. Ramakrishna, Dr. K. Sabeel Ahmed, C.D. Ashok Kumar	Mechanical	Allied Publisher Pvt. Ltd, New Delhi
3.	A Text Book of Cost Management: ISSN/ISBN: 9789382163336	Dr. M.G. Krishnamurthy	MBA	Paramount Publishing House, New Delhi
4.	Accounting for Managers ISSN/ISBN: 9789351429788	Dr. M.G Krishnamurthy	MBA	Himalaya Publishing House, Bengaluru
5.	Accounting for Managers ISSN/ISBN: 9789351429788	Dr. M.G Krishnamurthy	MBA	Himalaya Publishing House, Bengaluru
6.	Marketing Management ISSN/ISBN: 9789350975213	Dr. C. Srikant	MBA	Himalaya Publishing House, Bengaluru
7.	Recruitment and Selection ISSN/ISBN: 9789383130962+	Dr. C. Srikant	MBA	Takur Publications Bengaluru
8.	Rural Marketing ISSN/ISBN: 9788178667645	Dr. K. S. Habeebur Ur Rahman	MBA	Himalaya Publishing House, Bengaluru
9.	Banking in Malnad Region ISSN/ISBN: 9788191023041	Dr. Ravish N.S.	MBA	Rural org for Appropriate Development Trust
10.	Managerial Communication ISSN/ISBN: 978935429692	Aishwarya Hittanagi	MBA	Himalaya Publishing House, Bengaluru
11.	Strategic Brand Management ISSN/ISBN: 9789351630937	Dr. Santhosha	MBA	Takur Publications Bengaluru

12.	Energy Auditing & Demand Side Management ISBN: 9789350671719 2013, Reprint: 2015	N. G. Ajjanna	EE	Gauthami Publication Bengaluru
13.	Engineering Chemistry ISBN: 978-93-80408	Dr. M.H. Moinuddin Khan	Chemistry	Acme Learning Private limited, 2010, New Delhi,
14.	Studies on Substituted Iminophthalocyanines ISBN: 978-3-659-44733-4	Dr. M.H. Moinuddin Khan	Chemistry	LAMBERT Academic Publishing, Germany, 2014
15.	Electroorganic Synthesis and its Applications ISBN: 978-3-659-92914-4	Dr. H.P. Sachin	Chemistry	LAMBERT Academic Publishing, Germany, 2016
16.	Photofission of Some actinide targets ISBN: 978-3-8433-9465-9.	Dr. Rajprakash H. G.	Physics	Lambert Academy of Publications, 2011
17.	“Mobile Ad Hoc Networks” Bio Inspired QoS aware Routing protocols 9781498746854 - CAT# K27017	Dr. Kiran M.	ISE	CRC Press, Taylor and French Group
18.	Face detection & recognition ISBN 978-3-8484-0492-6	Dr. Ajit Danti	MCA	Lambert Academic Publishing, GmbH & Co. KG Germany.
19.	Face recognition ISBN 978-3-902613-03-5	Dr. Ajit Danti	MCA	International Journal of Advanced Robotic Systems.
20.	Emerging Research in Electronics, Computer Science and Technology for a chapter entitled Identification of Common Indian Leafy Vegetables Based on Statistical Measures on Combined Color and Texture Features ISBN: 978-81-322-1156-3	Dr. Ajit Danti	MCA	Springer

3.4.4 Provide details (if any) of Research awards received by the faculty

- Dr. L. K. Sreepathi has been awarded with “SURYA MITHRA AWARD” by SELCO INDIA for his remarkable contribution on Solar Energy utilization for the year 2011.
- Karnataka State Innovation Council has awarded AMULYA 2012 award for the project “Power Operated Sugarcane Bud Scooping Machine” under patent category to:
 - Dr. R. Srinivasa Rao Kunte, Principal (during 2012), Dr. D.S. Ramakrishna, HOD, Mechanical Engg., Mr. Santhosh S R., student, Dept., of Mechanical Engg.
- Faculty Members comprising of Prof. S. Amarappa, TCE Dept., Veena K N, TCE Dept., Harish S B, TCE Dept., Jayavardhana Acharya, Mech. Dept., have won third prize in All India Teachers Robotics Competition of e-yantra, held at IIT Bombay, 10-11, April, 2014.

Recognition received by the faculty from reputed professional bodies and agencies, nationally and internationally

- Dr. L. K. Sreepathi, Professor, Mechanical Engineering:
 - Appointed as Chairman for pollution monitoring committee of Bhadravathi Industrial Cluster by Central Pollution Control Board, Govt. of India.
 - He has organizer of workshop on “Renewable Energy sources” at IIT, BHU, Varanasi
 - Participated in Astronomy Olympiad at Homi Bhabha Centre for Science Education (HBCSE), TIFFR, Mumbai.
 - He has conducted two day workshop on “Bio fuels” at DBACE, Nagpur.
 - He was observer in National science teachers congress
 - Member of “Green campus committee” for Central University Gulbarga.
- Dr. D.S. Ramakrishna, Professor Mechanical Engineering, presented a paper titled “The measurement of ploughing load using load bearing member as the load sensor” in world Congress on Agriculturemechanization, an International Conference held at Beijing, China, during Sept. 16-19,2014.
- Dr. Karthik B S, Asst. Professor, Civil Engineering dept., presented a paper titled “Prediction of temperature by conjunctive method (Wavelet-ANFIS) using subseries of wavelength data” in 4th International Engineering Symposium-IES 2015 at Kumaoto University, Japan, during 4-6, March 2015.

Incentives given to faculty for receiving state, national and international recognitions for research contributions.

- Incentives given to faculty for receiving state, national and international recognitions for research contributions during JANVEY annual college day celebrations.
- Faculty members who attend Faculty Development Programmes such as workshop/conference/seminar and symposium are being paid the actual expenditure if there is no financial support from the organizers of the programme.

3.5 Consultancy

3.5.1 Give details of the systems and strategies for establishing institute-industry interface?

Our Institution has Industry Institute Interaction Cell, JNNCE Entrepreneurship Development Cell-a member of National Entrepreneurial Network and New Age Incubation Network-NAIN Centre to fulfill the following:

Scope, Range and Objectives:

- To develop linkages with industries and initiate placement.
- Continuous training for skill enhancement programs.
- To provide information about higher studies and career opportunities.
- To organize industrial visits and to arrange guest lectures by corporate heads.
- To bridge the gap between the academic output and socio-economic expectations.
- To organize specific entrepreneurship development programs to equip the students for self employment.
- To arrange alumni interaction programs.
- To blend the technical skills of students with entrepreneurial skill and hence to convert innovative ideas of students into enterprise.
- To form a strong platform wherein students, faculty, industry personnel and the alumni coordinate each other to start campus ventures.

Important Activities Undertaken

- Career Counselling test, awareness and individual guidance.
- Special guest lectures on different career options (Professional Course).
- Competitive exams related lectures, trainings etc. especially on GATE.
- Business Plans, B-Quiz, Product Management Completion, current affairs in Trade and Commerce, Hackathons and Project Exhibitions.
- Mr. Chandrashekar, Managing Director, M/s. Shanthala Spherocast Pvt. Ltd. delivered a talk on Qualities of Entrepreneur on 23 Oct. 2014.
- Mr. Damodar Baliga, Director, M/s. Vasavi Technocrate delivered a talk on challenges for Entrepreneur in 14th May 2015.
- NAIN Centre organized SMART-A-THON, a 24 hour National Level Hackathon Competition during 16-17, April 2016.

3.5.2 What is the stated policy of the institution to promote consultancy? How is the available expertise advocated and publicized?

The institution strongly encourages structured consultancy. A policy decision is taken by the institution to share the revenue generated by doing consultancy among the faculty members and institution. Along with it, there are several other monetary and non-monetary benefits provided to the faculty members. Out of the income received from outside sources under consultancy, 50% will be provided to the faculty members (both teaching & non-teaching staff) and

remaining 50% will be utilized for the research work facilities like software, hardware, Consumable and non consumable items.

- Department of Civil Engineering undertakes the following consultancy work:
 - Construction material testing such as brick, steel, cement, soil and aggregates etc.
 - Caters the need for designing of Civil Engg. Structures, hydraulic structures etc.
 - Involved in providing mix design details, Soil investigation, Surveying etc.
 - Department has expertise in various fields. The district administration and Government departments are using the services of the experts in the form of committee members.
- The department of Electrical Engineering actively engaged in testing and certification of Electrical Machines such as motor and transformers, street light fixtures etc., and Industrial lighting consultancy work. Energy auditing for local industries is undertaken as student's final year project work which is part of the curriculum.
- The department of Mechanical Engineering undertakes the consultancy in:
 - Testing of equipments, Design and development of lab experimental setup.
 - Rain water harvesting, fuel testing and solar systems.
 - Wear testing of metals and composites.
 - Condition monitoring of machinery.
- The department of Electronics & Communication Engineering is involved in installation & set up and quality assurance & certification of Computers and CCTV in Govt. organizations.

3.5.3 How does the institution encourage the staff to utilize their expertise and available facilities for consultancy services?

The Institution encourages the staff to utilize their expertise for consultancy services by networking with institutions, organizations and other agencies. The institution motivates the professionally qualified faculty for consultancy services with the permission of the institute. This helps in promoting liaison with industry/companies.

- Monetary benefits are offered to faculty involved in consultancy as per the institution policy. To meet the present scenario demands, our faculty regularly visit industries.
- Our institute always encourages the staff to attend seminars, workshops and FDPs of their own interest.
- The institute encourages the faculty to improve their careers prospects by encouraging them to have consultancy services.
- The faculty members based on the field of expertise are encouraged to carry out the research by using the licensed software and hardware facilities and Infrastructure available in the department.
- The Department level meeting is a platform where the expertise of the faculty will be exposed to the experts from industry and academics.

- The institution periodically organizes conferences/STTPs/ Workshops to present and demonstrate the expertise of the faculty members through which the areas of expertise of the faculty members are publicized.
- The workload at the department level is minimized and leave with pay is approved for the Consultants.
- Consultancy services in the institute range from utilization of laboratory equipment, logistics and extending in-house expertise to the clients. Revenue generated through consultancy services would be shared between the institution and faculty-in-charge in proportion to 50:50.

3.5.4 List the broad areas and major consultancy services provided by the institution and the revenue generated during the last four years.

Table 3.15 Broad Areas and Major Consultancy Services

Department	Consultancy	Revenue in Lakhs generated in last four years			
		2013	2014	2015	2016
Civil Engg.	Materials & Mixed Design	23.63	18.51	16.04	13.73
Mechanical Engg.	Condition Monitoring	--	0.1	0.488	0.323
Electrical Engg.	Testing and certification of Electrical Machines	0.296	0.536	0.278	0.191

3.5.5 What is the policy of the institution in sharing the income generated through consultancy (staff involved: Institution) and its use for institutional development?

The institution has a policy to share the revenue generated by doing consultancy among the faculty members and institution. Along with it, there are several other monetary and non-monetary benefits provided to the faculty members. Out of income received from outside sources under the head consultancy, 50% will be provided to the faculty members (both teaching & non-teaching staff) and remaining 50% will be utilized for the research work facilities like software, hardware, consumable and non consumable items.

3.6 Extension Activities and Institutional Social Responsibility (ISR)

The institution promotes institution-neighborhood-community network and student engagement, contributing to good citizenship, service orientation and holistic development of students. Blood donation camps, several awareness programs or rallies on/off the campus like Swachh Bharat and health awareness rally have been organized under the banner of NSS unit, Chiranthana-Renewable Energy Club and B-School Social Responsibility (BSR). Mechanical department manages Rain Water Harvesting and District Bio-fuel Information & Demonstration Centre. It regularly organizes demonstration sessions to general public and farmers. The Electronics &

Communication Department regularly organizes Workshop on Electronics for High school students, Internet awareness and online digital transactions workshops for Senior citizens and Housewives.

3.6.1 How does the institution promote institution-neighbourhood-community network and student engagement, contributing to good citizenship, service orientation and holistic development of students?

JNNCE has the following clubs promoting institution-neighborhood-community network and student engagement, contributing to good citizenship, service orientation and holistic development of students:

- **NSS Unit:** JNNCE NSS unit organizes Blood donation camps, several awareness programs and NSS camps serving the needs of general public. It motivates the students in contributing to good citizenship, service motto and holistic development. Following are some of such instances:
 - Arranged the “World Ozone Layer Protection Day” at administrative seminar hall of JNNCE Shivamogga on 01.10.2014.
 - Arranged the inauguration of “Rastriya Swachatha Andolan” at JNNCE Campus on 13.04.2015.
 - Arranged the programme to collect Nepal Earthquake Relief Fund on 09.06.2015.
 - Arranged programme to celebrate “Rastriya Sadbhavana Diwas” an account of late Rajiv Gandhi Birth Day at JNNCE on 20.08.2015.
 - Conducted the Blood Donation Camp in association with Rotary, Red Cross and McGann. Govt. Hospital at JNNCE-Shivamogga on 18.03.2016.
 - Organized NSS Camp at Mattur, Shivamogga District during Feb. 2017
- **Chiranthana-Renewable Energy Club** established in the year 2006 coordinated by Dr. L. K. Sreepathi, Prof. Mechanical Engg., department, promotes eco friendly life styles, renewable energy devices and energy conservations. It showcases some of the product demos in exhibitions and also organizes educative and awareness programs for the general public by visiting villages. Following are the objectives and important programs of the club:

Aims and Objectives:

To create awareness about,

- The impact of conventional energy sources on global environment.
- The importance of the use of renewable energy sources.
- The significance of energy conservation and its methodologies.
- Conducting demo, competitions for school and college students on this topic.
- Information on rain water harvesting to students, farmers and societies.

Activities

- Demo of various energy saving instruments to Public.
- Various Competitions to school and college students.
- Nature camps and trekking.
- Surveys of various resources.
- Open discussions on current nature threats, and Solutions.
- Invited talks from various resourceful persons.

- Nature Games.
- Conservation Activities with the help of Government.
- Celebration of various nature festival.
- Vanamohatsava program.
- **B-School Social Responsibility (BSR):** BSR programme was launched in September 2011.
 - Objectives: To inculcate a sense of social responsibility & contributory participation among students.
 - Activities: “Save-a-rupee-a-day” and utilize the collections to donate assistance in kind to underprivileged children studying in neighbourhood schools.
- Initiatives are started to make green environment with less carbon and achieve carbon credits. To become the role model to the society, following are the steps taken in the campus:
 - Solid Waste Management where in manure is generated from biomass and food waste has been installed already.
 - Initiated the energy automation to bring down the electricity charges. The various ways like installing LED lights, solar power, make energy audit to automate few of the high energy consuming areas, waste plastic to fuel etc.
 - Rain Water Harvesting initiative aids the campus water requirement.

3.6.2 What is the Institutional mechanism to track students’ involvement in various social movements / activities which promote citizenship roles?

During the annual day celebrations JANVEY, NSS camps, “Parisara Jagruthi Dinacharane”-a popular event of Chiranthana green technology centre, the social responsibility activities undertaken by students are recorded and honored. Programs such as JANVEY, Techzone and Department Forum activities are organized for promoting cultural and technical activities. JNNCE believes in fostering student’s talents in a variety of disciplines and encourages a host of cultural activities including dramatics, singing, dancing, quiz, debates, music and more. Students participate in various intercollegiate competitions, showcase their talent and consistently win awards. The alumni meet-Nenapina Angala is organized every year during JANVEY in the campus invites passed out students and current students for a gathering. During this gathering students’ active participation in social and other activities are recorded and the deserving students are given commendation certificates.

3.6.3 How does the institution solicit stakeholder perception on the overall performance and quality of the institution?

- Governing Council meeting, Parents Meet, Alumni Meet and meeting with management, staff and students are regularly conducted to appraise them about the progress of institute and the road map of the Institution.
- Advices are sought and received from stakeholders such as alumni, parents and industry personnel.

3.6.4 How does the institution plan and organize its extension and outreach programmes? Providing the budgetary details for last four years, list the major extension and outreach programmes and their impact on the overall development of students.

- JNNCE organizes INSPIRE Internship camps for Pre-University science stream students since 2010. The objective of the camp is to inculcate scientific temper and motivate the young minds to take up research in science and technology as their career. The DST-INSPIRE program is funding the camp, and leading scientists and technologists from reputed research institutions like IISc., IIT's participate in the camp as mentors. So far, the institution has conducted seven camps with a funding of around 9 lakh rupees per camp from DST. This programme is organized in coordination with Chiranthana green technology centre and students of JNNCE.
- JNNCE organizes TECHZONE- an annual technical National level symposium which comprises of technical competitions like Paper presentation, Circuit Debugging, Technical treasure Hunt etc. This event is completely designed and coordinated by students in a professional manner.
- Various departments organize technical awareness programmes for the benefit of general public. The Department of Electronics & Communication and Telecommunication Engineering organizes Workshop on Electronics for high school students of Shivamogga district. Also, the programs on usage of Internet, Online transactions are conducted for senior citizens and women. These programmes are jointly organized by IETE Shivamogga Centre and JNNCE ECE & TCE Departments. These programmes are designed, coordinated and managed by both staff and students. It was observed that the students actively participate in such programmes.
- JNNCE organizes an awareness programme on Engineering Admission details to general public of Shivamogga district every year. Many public in and around Shivamogga participate in this programme.

3.6.5 How does the institution promote the participation of students and faculty in extension activities including participation in NSS, NCC, YRC and other National/ International agencies?

- Students' attendance criteria have been relaxed to participate in extension activities including participation in NSS and other club activities.
- Students are motivated to participate in NSS and Chiranthana green technology centre activities by rescheduling academic activities like IA Tests and Seminars if required.
- BSR Club of MBA department inculcate a sense of social responsibility & contributory participation among students.
- Faculty members are given additional weightage during the time of review if they have taken part in extension activities.

3.6.6 Give details on social surveys, research or extension work (if any) undertaken by the college to ensure social justice and empower students from under-privileged and vulnerable sections of society?

- Under the banner of JNNCE NSS Unit, Socio-Economic Survey of villages like Mosaralli, Santhe Kadur, Mattur of Shivamogga District are conducted.
- Survey on Energy Consumption Pattern, Energy Source, Renewable Energy Availability and Energy Saving is conducted for rural areas of Shivamogga District.
- Survey on Electricity Consumption for Water Supply of Shivamogga City is carried out.
- Survey on usage of petroleum products (Kerosene, Diesel, Petrol) by rural population is carried out.
- Soft Skill, Vocational Training for underprivileged youth and school dropouts conducted at JNNCE during Aug-Sept 2014 under Bosch Skills India Programme.

3.6.7 Reflecting on objectives and expected outcomes of the extension activities organized by the institution, comment on how they complement students' academic learning experience and specify the values and skills inculcated.

The extension activities organized by the college will enhance the social responsibilities of a graduate, which will reflect their commitment to live in the society harmoniously. Such activities motivated the students to take up Project works which addresses societal requirements and problems. To name a few, TIDY BINS-Smart Garbage Collecting System, Intelligent Gesture controlled Wireless Wheelchair for the Physically Handicapped, Quad copter for Pesticides control in Agriculture, Design and Implementation of Rescue Robot to save a child in Bore hole, Hazardous Waste Disposal etc. These projects are exhibited to general public by arranging Project exhibitions.

3.6.8 How does the institution ensure the involvement of the community in its reach out activities and contribute to the community development? Detail on the initiatives of the institution that encourage community participation in its activities?

JNNCE organizes reach out programmes for community development through NSS Unit, Chiranthana Green Technology Centre and BSR. These programmes are conducted on regular basis which are planned at the beginning of the academic year without hampering the academic activities. Some of them are:

- NSS Camp.
- Blood Donation Camps.
- Free Medical Checkup camp.
- Raising funds during Natural Calamities.
- Educating rural public about various energy saving instruments.
- Conducting Competitions to school and college students.
- Organizing Vanamohatsava program.
- BSR club practice "Save-a-rupee-a-day" contributes the collected fund to needy public. Some of the following are such instances:

- School books & bags, writing stationery, uniforms, sports goods, furniture, library books, worth about Rs. 25,000.00 distributed among underprivileged children in several local unaided/govt. schools.
- Blood Donation Camps.
- Assistance for medical treatment of poor patients.
- Distribution of School Uniform to 80 students of Kumsi High school (Rs. 20,000.00).
- Distribution of Book to ITI Students Kumsi (Rs. 11,435.00).
- Distribution of library books, sports equipments, and Office Cupboard to Gurukula school, Shivamogga (Rs.25,000.00).
- Fixing of Eureka Forbs Water filter in Gurkula School (Rs. 18,000.00).
- Distribution 40 Nilkamal plastics Chairs to Thayimane, NGO, Shivamogga.

3.6.9 Give details on the constructive relationships forged (if any) with other institutions of the locality for working on various outreach and extension activities.

- JNNCE Chiranthana Green Technology Centre organizes various outreach and extension activities in association with other institutions of Shivamogga and surrounding Districts. Following are the examples to cite a few of them:

Table 3.16 Outreach and Extension Activities of Chiranthana Club

Sl. No.	Date	Program	Place
1.	10.07.14	Talk on “climate change” at Institute of Engineers	Davanagere
2.	27.08.14	“Parisara Jagruthi Dinacharane’	JNNCE
3.	04.09.14	Talk on “Global Warming” at PES, Mandya	Mandya
4.	09.09.14	Tree plantation in association with BBM college students	JNNCE
5.	10.09.14	Talk on “Renewable Energy Sources” by H B Suresh for SKDRDP programme	Shivamogga
6.	16.09.14	“Ozone Day” programme in association with pollution Contro Board	JNNCE
7.	20.10.14	Talk on Biomass at SMVIT, Bantakal	Udupi
8.	11.11.14	Talk on Science at Govt.PU College	Shivamogga
9.	24.12.14 to 28.12.14	Visit of INSPIRE participants	JNNCE.
10.	13.02.15	Workshop on Air, Noise and pollution from jelly crushers in association with PCB, Shivamogga	JNNCE
11.	14.02.15	Visit of Higher primary school students from goutham pura near Anandapuram	JNNCE

12.	27.02.15	Public consultation meeting on climate change in association with PCB, Shivamogga	JNNCE
13.	28.02.15	Talk on renewable energy at BGS residential school	Shivamogga
14.	01.03.15	Talk on Bio fuels and rural development at Rotary district conference.	Mangalore
15.	12.03.15	Talk on “Bio fuels and rural development” at UGC sponsored State level seminar at Sahyadric college	Shivamogga
16.	30.03.15	Talk on Global warming at KNM college for Women	Shivamogga

- Workshop on Electronics for High School Students is arranged regularly in association with IETE Centre Shivamogga where the Shivamogga District High School students with teachers attend the programme.
- Students from ECE & TCE branch arrange training programs on Basics of Electronics in nearby schools and colleges to motivate young minds to take up further studies in Electronics.
- JNNCE organizes INSPIRE Internship camps for Pre-University science stream students since 2010. The objective of the camp is to inculcate scientific temper and motivate the young minds to take up research in science and technology as their career. The DST-INSPIRE program is funding the camp and leading scientists and technologists from reputed research institutions like IISc., IIT's participate in the camp as mentors. So far, the institution have conducted seven camps with a funding of around 9 lakh rupees per camp from DST. This programme is organized in coordination with Chiranthana green technology centre and students of JNNCE. In this programme JNNCE regularly interacts with other institutions of Shivamogga district.
- A project work on performance study on Straight Vegetable Oil (SVO) blended with Petrol and Diesel as a substitute fuel in CI Engine, is supported by KSCST, IISc and Karnataka State Bio Energy Development Board (KSBDB).

3.6.10 Give details of awards received by the institution for extension activities and/contributions to the social/community development during the last four years.

- Dr. L. K. Sreepathi has been awarded with “SURYA MITHRA AWARD” by SELCO INDIA for his remarkable contribution on Solar Energy utilization for the year 2011. This award is given for the various extension activities organized by Chiranthana green technology centre in the areas of Solar Energy Utilization.

3.7 Collaboration

3.7.1 How does the institution collaborate and interact with research laboratories, institutes and industry for research activities. Cite examples and benefits accrued of the initiatives - collaborative research, staff exchange, sharing facilities and equipment, research scholarships etc.

- Discussions were initiated for Industry collaboration to set up competence center, Center of Excellence with the following industries:
 - NVIDIA Graphics (Multinational Company headquartered at USA).
 - Infineon (German based Semiconductor Company).
- MoUs Signed with Qualitas Technologies, Bengaluru for advance image processing area and Laser Consult Kft. for technology transfer and commercialization.
- In view of the above discussions, Sumathi K, Asst. Professor, ECE Dept., has been deputed to Qualitas Technologies, Bengaluru during December-January 2017.
- An MOU with University of Agriculture Sciences Shivamogga is signed to carry out Agriculture based engineering projects to cater to the needs of farmers. In this context, several projects are carried out. To name a few: Improving the thermal capacitance of Tobacco barn, Drying of Agriculture products by using condenser heat of refrigerator.

3.7.2 Provide details on the MoUs/collaborative arrangements (if any) with institutions of national importance/other universities/industries/Corporate (Corporate entities) etc. and how they have contributed to the development of the institution.

Proposal was submitted for funding for U.S.-India Joint Clean Energy Research and Development Center,

- This is a Consortium between India and USA wherein there are about 14 Institutions, one company from India and 5 from USA have joined together. From India, IITs, NITS, and premier institutions are participating and JNNCE is the only college among the private engineering colleges from the entire India. The lead university is Toledo University in USA.
- This Project is submitted from the Electrical & Electronics Engineering department of the institution for Solar Smart Grid management and grant requested is Rs.1.57 crores for five years. Application was submitted on 12th Oct 2016.

3.7.3 Give details (if any) on the industry-institution-community interactions that have contributed to the establishment/creation/up-gradation of academic facilities, student and staff support, infrastructure facilities of the institution viz. laboratories/library/new technology /placement services etc.

- JNNCE organizes TECHZONE-an annual National level Technical Symposium and many National/International Conferences and Workshops, which is co-sponsored by organizations and Local industries like Computer Society of India (Formerly X-changing,

Shivamogga), Perfect Alloy Components Pvt. Ltd., Malnad Alloy Components, Shivamogga, Shanthala Spherocasts Pvt. Ltd., Shivamogga etc.

- Students carry out Internships and Project works in research organizations like DRDO, CMTRI, CSIR, BEL, HAL and also in local industries.
- One day training programme for professionals for industries on Applications of Vibrations and Acoustics in Industries on 21.04.2012.
- Computer Society of India (Formerly X-changing, Shivamogga) offers placement for JNNCE students.
- TCS conducted a National level Project Exhibition “EngiNX”- Engineering for Next generation held at Pune, where our students: Prashanth Kumar U S, Naveen H K, Amogh Kumar, T Pawan Das of ECE department bagged first prize and given an ipod worth Rs. 36,000.00 each, Internship and Direct Job offer letter.

3.7.4 Highlighting the names of eminent scientists/participants who contributed to the events, provide details of national and international conferences organized by the college during the last four years.

Table 3.17 Eminent Scientists/Participants

Sl. No.	Name of the Department	Programme	Eminent Scientists / researchers visited
1.	Department of Mechanical Engineering	National Conference on Advance in Mechanical Engineering - 2010 during	1. Dr. Ganapathi Bhat, TCS, Mumbai 2. Sri. Sudhir Sanna, CEO, Strobo Automation, Pune 3. Dr. S. Vijayarangan, Director, MCE & T, Pollachi
2.	Department of ECE, TCE, CSE, ISE and Mechanical Engineering	International Joint Colloquium on Computer, Electrical and Mechanical – CEM 2011, in association with Association of Computer Science, Electronics & Electrical Engineers – ACEEE, Trivendrum, during 27-28, December 2011	1. Dr. D. H. Rao, Principal & Director, Jain College of Engg., Belagavi 2. Dr. K. V. Suresh, Professor, E & C Dept. SIT, Tumkur 3. Dr. Ashok Babu, Professor, Mechanical Engg. Dept.,NITK, Suratkal. 4. Dr. Yogesh Chaba, Associate Professor, Dept. of Computer Sc. & Engg, Guru Jambheshwar University of Sc. & Technology, Hisar , Haryana 5. Dr. Pawanaja UB, Evangelist & Mentor, Excel Soft Technologies,

3.	Department of ECE, TCE, CSE and ISE	International Conference on “Multimedia Processing, Communications and Information Technology – MPCIT 2013 sponsored by DRDO, New Delhi. During 19-21, Dec. 2013	<ol style="list-style-type: none"> 1. Dr. Devendra Jalihal, IIT, Chennai 2. Dr. A. G. Ramakrishnan , IISc., Bengaluru 3. D. Manjunath, IIT, Mumbai 4. R K Manjunath, National Head TX Planning Nokia Siemens, Networks, Bengaluru 5. Dr. G K Patra, Principal Scientist CSIR-4PI, Bengaluru 6. Dr. D. S. Guru, Reader, DOS in Computer Science, University of Mysore 7. Karunakara A K, Professor, MCA & Deputy Director Manipal University
4.	Department of ECE and TCE	National Workshop on Cryptology – NWC2016 organized by Department of Electronics & Communication Engg., JNNCE, Shivamogga in association with Cryptology Research Society, Kolkatta during 11-13, August, 2016	<ol style="list-style-type: none"> 1. Dr. C. E. Venimadhavan, IISc., Bengaluru 2. Dr. Kannan Srinathan, IIIT, Hyderabad 3. Dr. Somitra Sannadya, IIIT Delhi 4. Dr. G. K. Patra, CSIR 4PI, Bengaluru 5. Dr. Srimanta Bhattacharya, ISI, Kolkatta 6. Dr. Purushottam B R, NIT, Goa 7. Dr. Shashank Singh, ISI, Kolkatta 8. Dr. P. K. Saxena, Office of Principal Scientific Adviser to Govt. of India 9. Dr. Bimal Roy, ISI, Kolkatta 10. Prof. Ravindra Dastikop, SDMCE, Dharwad 11. Dr. C. Pandurangan, IIT, Chennai

3.7.5 How many of the linkages/collaborations have actually resulted in formal MoUs and agreements? List out the activities and beneficiaries and cite examples (if any) of the established linkages that enhanced and/or facilitated -

Table 3.18 Internship/On-the-Job Training

Sl. No.	Name of the Student	Department	Organization
1.	Vidya M H	ECE, M.Tech (DECS)	CSIR, 4PI, Bengaluru
2.	Medhini H K		CSIR, 4PI, Bengaluru
3.	Swathishree S V		DRDO, Bengaluru
4.	Nirantha H S		CSIR, 4PI, Bengaluru
5.	Chandini		CSIR, 4PI, Bengaluru
6.	Arundathi		DRDO, Bengaluru
7.	Shwetha		DRDO, Bengaluru
8.	Sheethal S Prabhu		ISRO, Bengaluru
9.	Shreyas.S S		ISRO, Bengaluru
10.	Manoj		CMTRI, Bengaluru
11.	Poojashri C S		Motorola, Bengaluru
12.	Vanishree H V		Motorola, Bengaluru
13.	Ankitha C Prabhu		ISRO, Bengaluru
14.	Pavithra B		ISRO, Bengaluru
15.	Priyanka B R	M.Tech in CSE	CSIR-4PI, Bengaluru
16.	Preetham	Mechanical Engg.,	Shanthala Spherocast, Shivamogga
17.	Surendra G	Mechanical Engg.,	Malnad Alloys & Casting Pvt. Ltd.

Faculty exchange and professional development

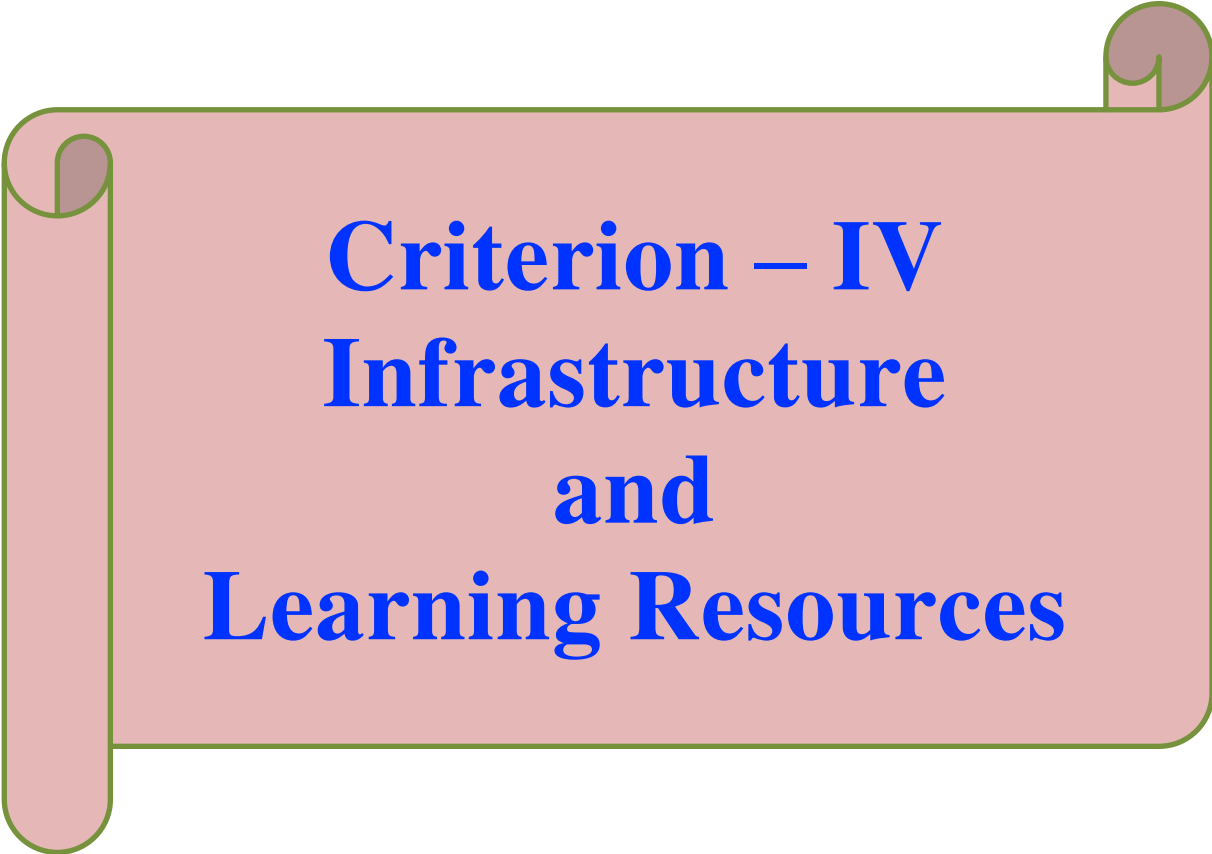
- Sumathi K, Asst. Professor, ECE Dept., has been deputed to Qualitas Technologies , Bengaluru during December-January 2017.
- Jayavardhana Acharya. N., Lecturer, Mechanical Engineering, is a resource person in the field of Hydraulics and Pneumatics for VTU-BOSCH REXROTH Centre of Competence.

3.7.6 Detail on the systemic efforts of the institution in planning, establishing and implementing the initiatives of the linkages/collaborations.

- Proposal for starting Research and Innovation Center at JNNCE (JNNRIC) is submitted to NES management for approval. As part of this, Lecture Series is arranged for Faculty by eminent personalities.
- Proposal was submitted for funding for U.S.-India Joint Clean Energy Research and Development Center, This is a Consortium between India and USA wherein there are about 14 Institutions, one company from India and 5 from USA have joined together. From India, IITs, NITS, and premier institutions are participating and JNNCE is the only college among the private engineering colleges from the entire India. The lead university is Toledo University in USA.This Project is submitted from the Electrical & Electronics

Engineering department of the institution for Solar Smart Grid management and grant requested is Rs.1.57 crores for five years. Application was submitted on 12th Oct 2016.

- Discussions were initiated for Industry collaboration to set up competence center, Center of Excellence. Among these three are in final stages of signing MoUs and they are :
 - NVIDIA Graphics (Multinational Company headquartered at USA).
 - Infineon (German based Semiconductor Company).
 - The process of identifying collaboration with Foreign Universities has been initiated and one such activity with METU University Turkey is in the final stage. In this connection two rounds of discussion over video conference have been carried out and the MoU to be signed soon.



**Criterion – IV
Infrastructure
and
Learning Resources**

CRITERION IV: INFRASTRUCTURE AND LEARNING RESOURCES

4.1 Physical Facilities

4.1.1 What is the policy of the Institution for creation and enhancement of infrastructure that facilitate effective teaching and learning?

The Institution has policies to create infrastructure as per the standards and norms of AICTE / VTU.

The policy followed is:

- To construct class rooms and labs as per prescribed floor area and provide LCD wherever necessary.
- To establish labs with equipments as per syllabus.
- To provide sufficient number of seminar rooms with LCD.
- To provide well ventilated furnished library.
- To provide browsing centre for students beyond working hours.
- To provide well furnished common room for girl students.
- To make available clean and safe drinking water at different points of campus.

4.1.2 Detail the facilities available for

- a) Curricular and co-curricular activities—classrooms, Technology enabled learning spaces, seminar halls, tutorial spaces, laboratories, botanical garden, Animal house, specialized facilities and equipment for teaching, learning and research etc.**
- b) Extracurricular activities - sports, outdoor and indoor games, Gymnasium, auditorium, NSS, NCC, cultural activities, Public speaking, Communication skills development, yoga, health and hygiene etc.**

The institution is situated in an area of 49 acres. The total built-up area is 48564.870 sqm comprising of Classrooms, Seminar halls, Drawing halls, Laboratories, Workshops, one air-conditioned boardroom, Central library, Staff Rooms, Administrative block, Medical Centre, Canteen, ATM, Co-operative Consumer Society, Guest House, Hostels, Reverse Osmosis Plant, Post office and Staff quarters for drivers. The entire campus is networked using fiber optic link. There is common room for girls with rest rooms.

a) Co-curricular activities?

The institution provides opportunities for developing technical skills, updating knowledge, personality development and service to the society through the following professional societies and associations. Each department has department forums under which activities like technical paper presentation, hobby projects, conduction of workshop etc. are regularly conducted.

The institution has a very good infrastructure for sports. This facility is utilized by the students. Many of the students have represented the institution at the University and State level sport events. Equal importance is given to showcase the cultural talents of the students through the music club and the

college cultural committee. Techzone a national level technical competition is conducted annually.

Details of classrooms, tutorial rooms, seminar halls and laboratories

Classrooms:

The Institution has sufficient number of well-furnished, well ventilated, spacious classrooms with LCD projectors for conducting theory classes and area is as per norms.

Laboratories:

All laboratories are well equipped, and well maintained both for syllabus oriented practical's and research activities.

Seminar Halls:

The institution has two air-conditioned Seminar Halls, one with 200 capacity and another hall of 150 capacity. In addition, each department is provided with a seminar hall of 75 capacity equipped with LCD projector.

Auditorium:

The Institution has one open air auditorium with a seating capacity of 1000. Institute events are conducted in this auditorium.

Tutorial classrooms:

Each department has tutorial classrooms to conduct tutorial classes for slow learners.

Specialized facilities and equipment for teaching, learning and research:

- The Institution has an exclusive language lab equipped with audio, video facility.
- Apart from the central library, each department has a separate departmental library with reference and text books.
- EDU-SAT facility is provided in a furnished room.
- For self learning, reference books for all the subjects are available in the central library.
- E-Journals and Books are available through VTU Consortium.

b) Extra-curricular activities—sports, outdoor and indoor games, gymnasium, auditorium, NSS, NCC, cultural activities, Public speaking, communication skills development, yoga, health and hygiene etc.

Sports (outdoor and indoor games), Gymnasium:

- Grounds/courts are available for outdoor games such as ball-badminton and shuttle badminton, volleyball, throw ball, cricket, football, kabaddi, Kho Kho, basket ball, handball etc.
- Separate indoor games facility for table-tennis, carom, chess and gym is provided.
- A Turf Cricket ground of international standard is available in Campus.
- Students are encouraged to take part in sports activities.

- College teams are formed to take part in VTU competitions and other intercollegiate competitions.
- Sports competitions are conducted at the interdepartmental level every academic year and the winners are awarded on sports day.
- Physical Director takes care of training & grooming the students in games, sports activities.

Cultural Activities:

- A cultural committee takes care of mentoring and grooming students in cultural activities.
- Students are encouraged to participate in cultural events at the College Day Program.
- Interdepartmental competitions are conducted to enhance the talents of students.
- The institution hosted 4th VTU inter collegiate fest in 2004 in which 50 Engineering colleges participated.
- The institute is represented every year in VTU fest, Davana fest of BIET Davangere and other inter collegiate fests and bagged several prizes.

Communication Skills Development:

The placement and training cell of the college arranges soft skill and communication skill development courses for I year students every year. For higher semester students the departmental forums also arrange training programs in addition to programs conducted by the Placement and Training department.

4.1.3 How does the institution plan and ensure that the available infrastructure is in line with its academic growth and is optimally utilized? Give specific examples of the facilities developed/ augmented and the amount spent during the last four years (Enclose the Master Plan of the Institution / campus and indicate the existing physical infrastructure and the future planned expansions if any).

- The infrastructure of the college is as per norms and it is sufficient for the present intake and number of courses offered.
- The infrastructure facilities of the institution are utilized at all times.
- Depending upon the requirement new infrastructure would be added.
- A library and information center complex has been completed last year.

Table 4.1 Infrastructure Expenditure Details

Sl. No.	Items	Expenditure year wise rupees in lakhs			
		2012-13	2013-14	2014-15	2015-16
1.	Administrative block	---	---	---	0.90
2.	MBA Building	8.49	---	---	0.50
3.	Student Amenities center	1.87	3.75	0.5	1.13
4.	Extension of STEP Building	0.96	---	---	3.8
5.	Pavilion Block	9.92	1.48	0.48	5.26
6.	Library Building	109.28	247.55	11.07	30.65
7.	Extension of Machine shop & EE building	4.13	0.8	0.26	---
8.	New hostel building	97.99	14.88	0.36	---
9.	ATM building	0.4	---	---	---
10.	Electrical sub station	4.06	---	---	---
11.	New Ladies Hostel Block	---	70.00	39.04	21.61
	Total	237.1	338.46	51.71	63.85

4.1.4 How does the institution ensure that the infrastructure facilities meet the requirements of students with physical disabilities?

The Institution follows the guidelines laid down by VTU and AICTE for physically challenged students by providing ramp, toilet room facility at ground floor. During examinations care is taken to allot ground floor rooms for such persons.

4.1.5 Give details on the residential facility and various provisions available within them:

- Hostel Facility-Accommodation with mess facility available.
- Recreational facilities, gymnasium, yoga center etc.
- Facilities for medical emergencies.
- Library facility in the Ladies hostel.
- Internet and Wi-Fi facility.
- ATM
- Residential facility for the non teaching staff on campus.
- Generator facility.
- Library time extended for reference for Hostel Students during exams.
- Round the clock security is available for hostels and the college.

4.1.6 What are the provisions made available to students and staff in terms of health care on the campus and off the campus?

- A Health centre is available in campus and well qualified medical officer is appointed for Medical aid of staff and students.
- For emergency cases vehicles are available to reach the nearest hospital
- Health awareness camps and Blood donation camps are organized regularly by NSS.
- Medi-claim facility extended for hostel students and also health insurance for students.

4.1.7 Give details of the Common Facilities available on the campus–spaces for special units like IQAC, Grievance Redressal unit, Women’s Cell, Counseling and Career Guidance, Placement Unit, Health Centre, Canteen, recreational spaces for staff and students, safe drinking water facility, auditorium, etc.

The institution has provided separate spaces for the following special units:

Facility for IQAC:

The IQAC has been constituted by the Institution to monitor and guide to improving the quality of the students. A separate room is allotted for IQAC, which is equipped with computer/printer and internet connection to carry out the IQAC work progressively.

Grievance Redressal Unit

The cell is constituted to address the problems of students and staff. The Unit is headed by senior professors and senior faculty members from all departments. Student representatives are also members.

Students’ Amenities Centre

A separate building called ‘Students’ Amenities Centre’ of three floors houses Health Centre, Canteen, Post office, Bank, Co-operative Society, Hostel office, Guest House and Prayer/Yoga Hall.

4.2 Library as a Learning Resource

4.2.1 Does the library have an advisory committee? Specify the composition of such a committee. What significant initiatives have been implemented by the committee to render the library, student/user friendly?

Yes, the library has an advisory committee which consists of the following members

Table 4.2 Library Advisory Committee

Sl. No.	Committee Members	Department	Designation
1.	Dr. H. R. Mahadevaswamy	Head of the Institution	Principal
2.	Sri. S. Sabareshwaran	Civil Engineering	Asst. Professor
3.	Dr. E. Basavaraj	Mechanical Engineering	Professor
4.	Dr. H. B. Suresh	Electrical and Electronics Engineering	Professor
5.	Sri. S. M. Sharath	Electronics and Communication Engineering	Asst. Professor
6.	Dr. Mohinuddin Khan	Chemistry	Assoc. Professor
7.	Dr. Sanjeev Kunte	Computer Science and Engineering	Professor
8.	Sri. R. J. Raghavendra	Information Science and Engineering	Asst. Professor
9.	Sri. S. P. Raghavendra	MCA	Asst. Professor
10.	Dr. H. G. Rajaprakash	Physics	Asst. Professor
11.	Smt. Aparna	Telecommunication Engineering	Asst. Professor
12.	Ms. Shaila Bhat	Mathematics	Asst. Professor
13.	Sri. Chandrakanth R Bhat	Library and Information Science	Librarian

All the major decisions/issues connected to library are discussed and action taken accordingly.

The following significant initiatives have been taken and implemented.

- User education program to the newly admitted students.
- Improvement of library services.
- Internet facility
- Library working hours to suit the readers free time.
- Establishment of digital library with campus Wi-Fi connection.
- Extra book bank facility to the meritorious economically poor and deserving students.
- Book purchase policy as per the requirements of the students & faculty.
- Subscription of printed & online journals.
- Enhancing the reprographic facility for the benefit of the students

- Updating by inclusion of reference materials of subscription of e-journals.
- Improving the basic infrastructure facilities.
- Question paper bank: previous question papers are arranged semester wise and subject wise systematically & kept in the reference section for the access of the students & faculty.
- Library is a member of DELNET.
- Providing open access in reference section.
- Periodical up-gradation of Library & Information Centre's information in the institution website.
- Independent library website available.
- Extending library working hours during examinations.

4.2.2 Provide the details of the following

- **Total area of the library (in Sq. Mts) : 2049.03 Sq. Mts.**
- **Total seating capacity : 200**
- **Working hours (on working day, on holidays, before examination days, examination days, during vacation.)**
 - **On working days**
 - Reference section : 8.00 AM to 8.00 PM
 - Lending section : 9.30 AM to 5.30 PM
 - **On Saturday**
 - Reference section : 8.00 AM to 5.30 PM
 - Lending : 9.30 AM to 1.30 PM
 - **On Holidays**
 - Reference Section : 10.00 AM to 5.00 PM
- **Before Examination Days:**
 - Lending Section : 9.30 AM to 5.30 PM
 - Reference section : 8.00 AM to 8.00 PM
- **During examination days**
 - Reference section : 8.00 AM to 10.00 PM
 - Lending : 9.30 AM to 5.30 PM
- **Layout of the library**
 - Ground floor Lending & General Book Bank section
 - 1st Floor: Reference & News paper Section
 - 2nd Floor: Reference Section

Table 4.3 Library Details

Total volumes	1,08,088
Total Titles	29,029
Total amount spent till date	Rs. 2.56 crores
No. of Journals Subscribed	42 & Member of VTU consortium
No. of News papers Subscribed	14
General Magazines	21
No. of Back Volumes	3,755

Table 4.4 No. of Books Purchased and Amount Spent

Sl. No.	Year	No. of books purchased	Amount Spent in Rs. Lakhs
1	2012-13	5726	25.01
2	2013-14	5662	27.08
3	2014-15	4136	18.970
4	2015-16	1140	5.14

4.2.3 How does the library ensure purchase & use of current titles, Print & e-journals and other reading materials? Specify the amount spent on procuring new books, Journals & e-resources during the last four years.

The library advisory committee will conduct meeting twice or thrice a year and discuss the following:

- The book list forwarded by HoDs of departments.
- The demand book list received from students.
- Budgetary provisions.
- Approval of book list.
- Call for quotation from book suppliers and then identify the particular supplier who extend maximum discount.
- Forward the requirement for management approval.
- On obtaining the approval book purchase is made before the commencement of the semesters.
- The same process is made to procure journals, e-journals and furniture etc.

Table 4.5 Statement of books purchased and amount spent for past four years (in Lakhs)

Library holdings	2012-13		2013-14		2014-15		2015-16	
	Number	Total cost	Number	Total cost	Number	Total cost	Number	Total cost
Text books	4766	20.82	4802	22.97	3703	16.98	1067	4.64
Reference Books	960	4.19	860	4.11	433	1.98	73	0.31
Journals/Periodicals	161	4.57	161	4.57	163	4.57	163	4.57
e-Resources	DELNET	0.11	DELNET	0.11	DELNET	0.11	DELNET	0.11
Any others (specify) VTU Consortium	-----	-----	-----	-----	-----	-----	-----	2016: 15.52 2017: 15.04

4.2.4 Provide details on the ICT and other tools deployed to provide maximum access to the library collection.

- **OPAC**

As library is fully automated for searching of books & journals separate online public access catalogue is provided near circulation section.

- **Electronic Resource Management Package for e-journals**

JNNCE library is a member of DELNET, with the help of DELNET; we get the e-journals & e-books. JNNCE is also member of VTU Consortium for procuring the e-International journals.

- **Federated Searching Tools to Search Articles in Multiple Database**

Nil

- **Library Website**

Separate library website is hosted which contains detail information about library collection and services. The same information is in institution website.

- **In House/Remote Access to e-publications**

JNNCE library is a member of VTU consortium. With the help of this one can access the e-journals and e-books. With the DELNET also the e-journals and e-books can be accessed.

- **Library Automation**

Library and Information Centre is fully automated by using easy-Lib, Library Management Software

- **Total number of Computers for public Access: 30**

- **Total Number of Printers for public access: 02**

- **Internet band width/speed []2mbps []10 mbps []1 GB[] 16 Mbps [√]**

- **Institutional Repository**

Institutional Repository has been established with Wi-Fi campus network.

- **Content Management system for e-learning**

Nil

- **Participation in Resource sharing networks consortia (like INFLIBNET)**

JNNCE library is the member of DELNET consortium and VTU Consortium

4.2.5 Provide details on the following items

- **Average number of walk-Ins per day**

Circulation : 200-225

Reference/Periodical Section : 150-175

News Paper Section : 50-70

- **Average number of books issued/returned per day**

Circulation : 300-350

Returned : 170-200

- **Ratio of Library books to students enrolled : 1 : 18**

- **Average of books added during last three years: 3646**

- **Average number of login to (OPAC): 200-225**

- **Average number of login e-resources: 150-200**

- **Average number of e-resources downloaded (Printed): 50-100**

- **Number of information library trainings Organized:** Every semester one or two information literacy programmes organized through book exhibition and user education.

- **Details of weeding out of books and other materials**

- Based on change in syllabus and demand from faculty and students the unused books are listed and recommendation for weeding out is sent for management approval.

- In some case the unused books are sent to library of sister institutions based on request from them for their use.

4.2.6 Give the details of the specialized services provided by the library

- **Manuscripts**

Nil

- **Reference**

Separate reference section is provided in the library and stacked with good number of latest reference books on different subjects and competitive exam books, GATE TOEFL, Encyclopedia and other reference books are available.

- **Reprography: Available**

- **ILL (Inter Library Loan Service)**

With the help of DELNET we provide the Inter Library Loan Services.

- **Information deployment and notification**

Information about the new arrivals of books and journals is given to the faculty and students by displaying in new arrival stand. Brochures related to Higher Education Opportunities, Employment opportunities are displayed.

- **Downloads:**

Downloading of information from VTU consortium, e-journals facility is provided.

- **Printing:**

Printing of downloaded information from the VTU consortium/e-journals facility is provided.

- **Reading List/Bibliography Compilation**

OPAC is provided.

- **In-House/Remote Access to e-Resources**

Library is a member of VTU Consortium, e-Journals are downloaded. Separate computers are provided for remote access to e-journals.

- **User Orientation and Awareness**

User Orientation programs are arranged every year for newly admitted students to acquaint them the services provided to each semester for the benefit of the students to make use of library facilities to the maximum extent.

Additional information is also provided in the Hand Book given to first year students during the orientation program.

- **Assistant in Searching Database**

Library staff is assisting the students and faculty in searching the database.

- **INFLIBNET/IUE Facilities**

Not subscribed.

4.2.7 Enumerate On the Support Provided by the Library Staff to the Students and Teachers of the College

The library has 08 well trained staff, who is student friendly and co-operative in providing the library services to the faculty and students.

The following support/help is provided by the library staff

- Helping the students and faculty to locate the books/Journals/Information needed.
- Helping the students to search bibliographical details through OPAC.
- Display of new Arrivals.
- Helping how to Access e-Resources.
- Helping the users to make use of Institutional Repository.
- Librarian orients the Students at the beginning of every Academic year.

4.2.8 What are the special facilities offered by the library to the visually/Physically challenged persons? Give details?

As on date no such case is reported. But however facility is made

- Help from library staff is provided to such students in locating required books.
- To avoid hardships, repeated renewal of books borrowed is not insisted upon.

4.2.9 Does the library get the feedback from its users? If yes, how it is analyzed and used for improving the library services (what strategies are deployed by the library to collect the feedback from the users? How the feedback analyzed used for further improvements of the library services?

- Suggestion/Complaints box is kept in the library in which the students can put their views/suggestions/response/related to library. The box is opened periodically and acted upon the remarks and conditions.

4.3 IT Infrastructure

4.3.1 Give details on the computing facility available (hardware and software) at the institution Number of computers with configuration (provide actual number with exact configuration of each available system)

Computing Facility of the Institution

Table 4.6 Computing Facility in Department of Civil Engineering

Sl. No.	Item Description	Nos.
1	HCL Busy Bee 2.66 Ghz 915 Gv Mbd/256MB DDR RAM/40GB HDD 1.44 FDD, 52X CD ROM, 15" Monitor, Key board, Optical mouse, Multimedia Speakers- Bill No 50396	17
2	HCL Busy Bee 2.66 Ghz 915 Gv Mbd/256MB DDR RAM/40GB HDD 1.44 FDD, combo drive, 15" Monitor, Key board, Optical mouse, Multimedia Speakers- Bill No 50396	1
3	Software-SCADDS/Nuclues RC-2007,Single user with USB key Bill No-426	1
4	Auto plotter ver6 X Professional edition, Road Estimator 6 X CAN SE 2.0 with 5 user LAN Bill No-02	1
5	BECN INDIA STRUCTURAL PERPETUAL LISENCE CE-P-2008/09/175	1
6	BECN INDIA STRUCTURAL PERPETUAL SUBSCRIPTIO – 47235652	1

7	Archicad Software education version (Unlimited liscence) Bill No-CH020/10-11	1
8	20 computers HP Elite core 15-650(3.2GHZ/4MB CAHE 320 GB HDD 2 GB RAM 1PS2 Mouse 1X16XSATA DVD 18.5" WTFT(1366X768) Bill No-YT081	20
9	Bently academic civil bundle software select subscription for 3 years Bill No-PS PL /51/11-12/151	3
10	Bently academic civil bundle software includes MX-ROAD(3 liscences) Bill No-PSPL/71/11-12/064	3
11	ACER desktop computers and ACER LED monitors Bill No-YT/316/15-16	15

Table 4.7 Computing Facility in Department of Mechanical Engineering

Sl. No.	Specifications	Nos.
1	ACER New Intel Core 2 Dual Standalones, DTAPG312DIM/C2D Intel Core 2 duo 2.8ghz chipset M/B 1GB DDR 2RAM/160GB SATA HDD 10/100 MBPS LAN/keyboard Mouse/ATX cabinet.	18
	ACER New Intel Core 2 Dual Standalones, DTAPG312DIM/C2D Intel Core 2 duo 2.6ghz chipset M/B 512MB DDR 2RAM/80GB SATA HDD 10/100 MBPS LAN/keyboard Mouse/ATX cabinet.	41
2	Hp Elite Desktop(Core i5@3.20Ghz,2 GB RAM,350Gb HDD)	10
3	ACER Desktop CI3-2120(3.30 Ghz). 500 GB SATA HDD, 4GB DDR3 RAM , H61 Mother Board	20
4	ACER Desktop Core i5@3.20Ghz,4 GB RAM,500Gb HDD	10
5	ACER SYSTEMS Veriton (I3-2120 (3.30 Ghz)/500 GB. HDD 2 GB RAM with 18.5 TFT Monitor)	23
6	HCL DTAPG312DIM/C2D Intel Core 2 duo 2.2ghz chipset M/B 512MB DDR 2RAM/80GB SATA HDD 10/100 MBPS LAN/keyboard Mouse/ATX cabinet.	11
7	IBM Server	3

Table 4.8 Computing Facility in Department of Electrical & Electronics Engineering

Sl. No.	Specifications	Nos.
1	HCL Intel P-IV Standalones, P-IV (2.2GHz chipset, 1GB DDR1 RAM, 160GB SATA HDD 10/100 MBPS LAN/keyboard Mouse/ATX cabinet.	02
2	HCL Busybee Intel P-IV Standalones, P-IV (2.6GHz chipset 2GB DDR2 RAM/500GB SATA HDD 10/100 MBPS LAN/keyboard Mouse/ATX cabinet.	02
3	ACER Intel P-IV Standalones, P-IV (2.66GHz chipset 1.5GB DDR1 RAM/80GB SATA HDD 10/100 MBPS LAN/keyboard Mouse/ATX cabinet.	01
4	ACER Intel P-IV Standalones, P-IV(2.6GHz chipset 2GB DDR2 RAM/500GB SATA HDD 10/100 MBPS LAN/keyboard Mouse/ATX cabinet.	01
4	ACER PWR series, Intel Core2Duo E8400 (3.00GHz chipset, 1GB DDR1 RAM, 160GB SATA HDD, 10/100 MBPS LAN/keyboard Mouse/ATX cabinet.	12
5	IBM Intel Xeon QuadCore Server, keyboard Mouse/ATX cabinet.	01
6	ACER Desktop Core i3-2120(3.30 Ghz), 500 GB SATA HDD, 4GB DDR3 RAM, H61 Mother Board/keyboard Mouse/ATX cabinet.	10
7	ACER Desktop Core i5-3330(3.20Ghz), 500 GB SATA HDD, 4+ 4GB DDR3 RAM , H61 Mother Board/keyboard Mouse/ATX cabinet.	25
8	ACER Veriton Desktop Core i3-4160 (3.60 Ghz) ,500 GB SATA HDD, 2GB DDR3 RAM, keyboard Mouse/ATX cabinet.	20

Table 4.9 Computing Facility in Department of Electronics and Communication Engineering

Sl. No.	Computers Specifications	Nos.
1.	Pentium IV @ 2.4GHz (HCL Ezeebee)	13
2.	Pentium IV @ 2.66GHz (HCL Ezeebee)	14
3.	IBM Server	01
4.	Pentium IV 2.66 GHz (ACER)	04
5.	HCL INTEL CORE2 DUO 2.2 GHz	10
6.	Hp Elite Desktop(Core i5@3.20Ghz,2 GB RAM,350Gb HDD)	20
7.	Pentium IV Code2 Duo 3.00GHz (ACER)	01

8.	ACER Desktop Core i3-2120(3.30 Ghz), 500 GB SATA HDD, 4GB DDR3 RAM , H61 Mother Board/keyboard Mouse/ATX cabinet.	21
9.	ACER Desktop Computer C13-UX.VJSS1.L49/ C13/H81/2GB/500GB/DVD-RW/KB/OM	30

Table 4. 10 Computing Facility in Department of Computer Science & Engineering LAB-I (Windows Lab)

Sl.	Configuration	Qty
1	HCL P4@2.4 GHz, 256MB DDR, 40 GB IDE HDD, IDE 52X CD, USB Mouse 1.44 FDD	1
2	HCL BusyBee, P4@2.66 GHz, 256MB RAM, 40 GB HDD	5

Table 4.11 Computing Facility in Department of Computer Science & Engineering LAB-II (LINUX LAB)

Sl	Configuration	Qty
1.	PCS P-III@800MHz/256MB RAM/ 2x18GB HDD/ 15" Monitor	01
2.	ACER P4@2.66/865/512MB/80GB	19
3.	ACER P4@2.66/865/512MB /80GB	04
4.	HCL Busybee P-IV@1.9GHz, 128MB, 40GB HDD, 15" MONITOR	04
5.	HCL P4@2.4GHz, 256MB RAM, 40GB HDD, 17" COLOR MONITOR	01
6.	HCL P4@2.4 GHz, 256MB RAM, 40GB HDD,15" COLOR MONITOR	03
7.	Pentium IV system @2.66GHz, 512MB RAM, 80GB HDD, 15" monitor	01

Table 4.12 Computing Facility in Department of Computer Science & Engineering LAB-III (LAN LAB)

Sl. No.	Configuration	Qty
1.	Zenith make Pentium@90MHz, (Old Novel Sys.) , 32MB RAM, HDD SCSI 1GB, 14" VGA Mono monitor	01
2.	IBM Server X-206 Intel PIV@2.8 GHz, 7210 chipset, 2x512 MB DDR RAM, Dual Channel V320 SCSI with RAID 5, 36 GB SCSI HDD 1.44, 52x CD Drive	01
3.	Pentium IV @ 2.66GHz, 256MB RAM, 40GB HDD, 15" monitor	02
4.	Pentium IV @ 2.66GHz, 512MB RAM, 80GB HDD, 15" monitor	01

Table 4.13 Computing Facility in Department of Computer Science & Engineering

Sl.	System Configuration	Qty
1.	HCL P4@2.4 GHz, 256MB RAM, 40GB HDD, 17" COLOR MONITOR	03
2.	Zenith NoteBook Pentium M CPU@ 1.4 GHz, 14.1" TFT, 256 MB RAM, 30 GB HDD	01
3.	ACER PC P4 @ 2.66GHz/ 865/ 512MB RAM/ 80GB HDD	02
4.	ACER PC P4 @ 2.66GHz /865/512MB RAM / 80GB HDD	01
5.	ACER core i3/ 4GB/500GB/DVD RW/18.5" TFT	30

Table 4.14 Computing Facility in Department of Computer Science & Engineering LAB-V (HARDWARE LAB)

Sl. No.	System and configurations	Qty
1.	HCL P2 MMX@333MHz, 128MB RAM, 2GB HDD	5
2.	HCL P2@350MHz, 32MB RAM, 2GB HDD	1
3.	HCL P3@450 MHz, 64MB RAM, 4GB HDD	6
4.	WIPRO P3@550 MHz, 64MB RAM, 10GB HDD	10
5.	HCL CELRON@1.7GHz, 128MB RAM, 40 GB	8
6.	HCL BUSYBEE P4@1.9GHz, 128MB RAM, 20 GB	8
7.	Wipro P4@2.4GHz, 512 MB RAM, 40GB HDD	10

Table 4.15 Computing Facility in Department of Computer Science & Engineering [Research Lab]

Sl. No.	System and Conf.	Qty
1.	HP Desktop : Intel Core i3 : 3.2GHz : 4MB Cache, H57 Motherboard, 2GB DDR3 RAM, 320GB HDD, 18.5" TFT	10

Table 4.15A Computing Facility in Department of Computer Science & Engineering Procured under AICTE MODROB Grants (Internet Lab)

Sl.	System Configuration	Qty
1.	IBM Server X3400797ils Intel Dual Core 3.0 Ghz1 GB DDR RAM/160GB SATA HDD, Combo Drive.	01
2.	HCL make Pentium Dual Core@3.0 GHz Intel 945GZ Mother board, 512 MB RAM 160GB HDD, Combo Drive.	09

Table 4.16 Computing Facility in Department of Information Science & Engineering

Sl. No.	Specifications	Nos.
1	ACER New Intel Core 2 Dual DTAPG312DIM/C2D Intel Core 2 duo 3ghz chipset M/B 1GB DDR 2RAM/160GB SATA HDD	32
2	Hp Elite Desktop(Core i5@3.20Ghz,2 GB RAM,350Gb HDD)	15
3	ACER Desktop CI3-2120(3.30 Ghz). 500 GB SATA HDD, 4GB DDR3 RAM , H61 Mother Board	25
4	ACER Desktop Core i5@3.20Ghz,4 GB RAM,500Gb HDD	25
5	ACER SYSTEMS Veriton (I3-2120 (3.30 Ghz)/500 GB. HDD 2 GB RAM with 18.5 TFT Monitor)	15
6	Server (Internet Proxy Server)	1
7.	HCL-Intel Core 2 Duo E4500 Processor @ 2.2GHz, 160 GB SATA HDD, Monitor 15' TFT)	40
8.	HCL DTAPG312DIM/C2D Intel Core 2 duo 2.2ghz chipset M/B 512MB DDR 2RAM/80GB SATA HDD 10/100 MBPS LAN/keyboard Mouse/ATX cabinet.	11
9.	IBM Server	3

Table 4.17 Computing Facility in Department of MCA

Sl. No.	Computers Specifications	Nos.
1	HP Elite Desktop : Core i5-630 3.2 Ghz 4 Mb cache, 32NM H57 Mother Board, 1*320 Gb SATA HDD, 7200 RPM/ 1*2 Gb DDR3 1066 MHz RAM, 1*PS2 Kb 104 Keys, 1*PS2 Optical Mouse, 1*16 Sata DVD RAM, 1*250 Watts SMPS with cabinet, 1* Free DOS 1*MT chassis 18.5" WTPT (1366 X 768)	12
2	ACER Desktop : (i5-LED) ACER Desktop PC15852, C15/H61/500Gb/DVDRW, Kb, Optical Mouse , 18.5" ACER Monitors	08
3	ACER Desktop: (i3 –LCD) Ci3-2120 (3.30 Ghz) 500 GB SATA HDD, 4Gb RAM/H61Mb 16 X SATA DVD RWMT 250 watts SMPS/KB 104 , Optical Mouse	04
4	ACER Desktop : (i3-LED) ACER Desktop C13/H81/2GB/500GB/DVD-RW/KB/OM	10

5	Hp ELITE7100MJ Intel Core I5CPU @3.20 GHz, 2 GB RAM-DDR3/ 320 GB HDD, 18.5” Hp LCD MONITOR/DVD Writer, Hp Keyboard/ Hp Optical Mouse	39
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Table 4.18 Computing Facility in Department of MBA

Sl. No.	Item Description	Nos.
1	Standalone(HCL) Intel Core 2 Duo E4500 Processor @ 2.2GHz, 2x2MB L2 Cache,800MHz FSB, Intel 945 GC Original Mother Board , 512 MB RAM, 160 GB SATA HDD, OPT. Drive : CDROM Drive, Monitor 15’ TFT,Integrated10/100/1000 MBPS NIC, Integrated Audio, PCI Slots, USB Ports(Front Side 2 No’s & Back Side 4 No’s,) Keyboard, Optical Mouse, ATX Cabinet	40
2	WIPRO (Black) Intel 2.4GHz,256 MB RAM , 40 GB HDD, 15” CRT Monitor, Keyboard, Mouse	09
3	WIPRO (White) Intel P-III 500 MHz, 64 MB RAM , 40 GB HDD 14” CRT Monitor, Keyboard, Mouse	05
4	HCL (Busybee) Intel 1.9 GHz, 128 MB RAM , 40 GB HDD,15” CRT Monitor, Keyboard, Mouse	04
5	HCL (Ezeebee) Intel 2.4 GHz, 256 MB RAM , 40 GB HDD,15” CRT Monitor, Keyboard, Mouse	01
6	HCL (Infinity) Intel P-II 333 MHz, 64 MB RAM , 2 GB HDD,14” CRT Monitor, Keyboard, Mouse	06
7	Acer System 128 MB RAM , 40 GB HDD, 15” CRT Monitor, Keyboard, Mouse	01
8	WIPRO PIII Server	01
9	IBM Server Intel Xeon Quad Core 5310 Processor 1.6 GHz / 8 MB L2 Cache /1066FSB) 500 P MBD 1GB RAM / 250 GB HDD / COMBO Drive / 15” TFT Monitor /Mouse/Keyboard	01

Table 4.19 Computing Facility at Basic Science Department/Office /Hostel/Placement /Sports/Library

Sl. No.	Configuration	Nos.
1	ACER SYSTEMS Veriton (I3-2120 (3.30 Ghz)/500 GB. HDD 2 GB RAM with 18.5 TFT Monitor)	60

LAN facility: Yes.

- Speed 100/1000mbps.
- Backbone: Fiber Optics
- Backbone Speed: Megabyte/Gigabyte.
- Network Connectivity Redundancy: Fiber link between the blocks.
- Core Switch: Gigabyte 24 port switch.
- Edge Switch: Megabyte/Gigabyte
- Topology: Star.

Table 4.20 Licensed Software

Details	Effective Quantity
Office Professional Plus 2016	100
Exchange Server - Standard 2016	1
Exchange Server Standard CAL 2016	100
Sharepoint Server Standard CAL 2016	100
Skype for Business Server Standard CAL 2015	100
SQL - Device CAL 2016	100
SQL Server - Standard 2016	1
System Center Configuration Manager Client ML 1606	100
System Center Endpoint Protection 2012 R2	100
Windows Server - Standard 2012 R2	1
Windows Server CAL 2016	100
Windows 10 Enterprise 2016 LTSC	100
Windows 10 Home Get Genuine	190
Windows E3 Per Device 10 Education	100
Windows Starter 7	100
Ms Office 2016 Std Olp NL Academic Licenses	150
Windows Server Standard (Win Svr Std ALNG Lic SAPk OLV E 1Y Acdmc AP 2Proc)	1
Desktop Education (Dsktp Edu ALNG Lic SAPk OLV E 1Y Acdmc Ent)	100
SQL server Cals/User (SQLCAL ALNG Lic SAPk OLV E 1Y Acdmc Ent Dvc CAL)	100

SQL Server Standard (SQL Svr Std ALNG Lic SAPk OLV E 1Y Acdmc AP)	1
Exchange Server Standard (Exchg Svr Std ALNG Lic SAPk OLV E 1Y Acdmc AP)	1

Table 4.21 Software available in the Mechanical Department

Sl. No.	Name of the Software	Users
1.	Ansys V11	25
2.	Solid Edge V19	70
3.	Edge Cam 2011	20
4.	Lab View 8.5	50
5.	MOTO Sim	10
6.	Hyper Works V8	15

Table 4.22 List of Softwares available in E&C Dept.

Sl. No.	Title
1.	CADENCE VLSI Tools – 20 USERS (Analog), 10 users (Digital)
2.	MATLAB R2009a with tool boxes – 10 users license -perputual
3.	XILINX ISE Foundation - VLSI Design Software 12.1i Version – Multi users
4.	B2SPICE WITH MAGIC SOFTWARE
5.	National Instruments LABview - 5 users
6.	Code Composer Studio 3.1v

4.3.2 Details on the computer and internet facility made available to the faculty and students on the campus and off-campus?

- A central computing facility with 50 computers with internet is available on campus.
- Internet is enabled in all LAN connected computer labs as per requirement.
- The administrative block, library, placement cell, all department faculty rooms, labs are provided with computing facility and internet.
- E-resources and Lap-tops are provided to HoDs.
- Work is on progress to have Wi-Fi facility in campus and hostels.
- Presently arrangements are made for Wi-Fi facility in Boys and Girls Hostel.
- 16 Mbps leased line of BSNL is in use.
- Uninterrupted power supply of 150 KVA, supported by 250 KVA diesel generator set is provided.

4.3.3 What are the institutional plans and strategies for deploying and upgrading the IT infrastructure and associated facilities?

The Institution has a comprehensive IT Policy which is governed by the IT Planning and Monitoring Committee. This committee comprises of the Head of the Institution, HOD of CS/IS/MCA, Network administrator, System analysts and programmers.

Table 4.23 The IT Planning and Monitoring Committee is as under:

Sl. No.	Name	Designation
1	Dr. H R. Mahadevaswamy	Principal & Chairman
2	Dr. Nirmal Shivananda	H.O.D. CSE Department
3	Dr. Jyothi K	H.O.D. ISE Department
4	Dr. Ajith Danti	Director, MCA Department
5	Mr. H.K. Pradeep	Associate Professor/Network Administrator
6	Mr. Chetan K R	Assistant professor

The Committee plans all the IT requirements of the Institution and prepare a list of requirements and forward it to management. The purchases are made after negotiations with companies by the purchase committee.

1. Service Management

Service Management and delivery is carried out by the Service providers in coordination with the Network Administrator.

2. Information Security

The Network Administrator has full rights to access and modify the configuration of the network infrastructure. The Head of the Institution and the key executives have access to all the institutional information. Various cadres have access to the information pertaining to their domain. Students have restricted access within the ambit of academic requirements.

3. Network Security

The institute has a secured network set up with the following features:

- User based policy for HOD, staff and faculties
- Restricted access to various applications and servers based on their roles.
- End point security for prevention against virus, worms, malware and other attacks. Linux Based Squid Server for internet security comprising content filtering of websites, Intrusion and Prevention system, Antivirus and Anti spam, application filter, Bandwidth management. Wireless security based on the roles defined.

4. Web site Management

The website has been hosted in the server managed by an external agency. The Institution has the authority to update, modify and publish the contents. The contents will be published after approval from the Principal by the website

coordinator. IT infrastructure and associated facilities have been augmented periodically as and when there is a requirement and also to introduce new technology to the students and faculty. Computer systems are upgraded with the latest configuration as per the need and requirements of the various departments.

Services and Maintenance

All the computer systems in the campus are regularly monitored by the System Administrator and maintenance staff. There are two exclusive resident engineers placed by the computer suppliers for day to day maintenance under AMC clause. The trouble/problems experienced by the computers in the various laboratories are entered by the lab programmers/technicians in the complaint register which is kept in the central office. The maintenance staff will then go to the respective labs for identification of the problems and resolve the same at the respective places. (On an average 4 to 5 computers /day are being serviced) In case of major problems i.e. replacement of component/part during warranty they are sent to the respective service centers and get replaced at the earliest.

Plans to increase the Internet Bandwidth

New Wi-Fi technology with user level Authentication using Squid is being implemented. High end Access points with more than 70 Users simultaneous login to single access point. The Leased Line is available with 16Mbps (1:1 Ratio) with unlimited data usage.

Optical Fiber connectivity is established in the campus hostel. Campus buildings are connected through Optical Fiber.

4.3.4 Provide details on the provision made in the annual budget for procurement, up-gradation, deployment and maintenance of the computers and their accessories in the institution (Year wise for last four years)

Following are the provision made in the annual budget for procurement, up-gradation, deployment and maintenance of the computers and their accessories in the institution:

Table 4.24 Provision made in the annual budget for computers

Sl. No.	Financial Year	Budget Sanctioned in lakhs	Expenditure in lakhs
1	2016-2017	10.00	5.06
2	2015-2016	60.00	50.52
3	2014-2015	10.00	1.69
4	2013-2014	10.00	3.5

4.3.5 How does the institution facilitate extensive use of ICT resources including development and use of computer-aided teaching/ learning materials by its staff and students?

- Institute has provided faculty cabin with internet facility for Faculty members are for preparation of teaching/learning materials in their respective departments.
- In the library, Institute provides online resources which can be used by the faculties and students.
- Seminar halls and Auditoriums are provided with LCD projectors, computer systems and internet facility.
- More than 80 per cent of the classrooms and laboratories are equipped with LCD projectors.
- The faculties make use of Open office, and Microsoft office to prepare teaching materials.
- Each individual department develops its course materials through PowerPoint presentation for conducting classes.

4.3.6. Elaborate giving suitable examples on how the learning activities and technologies deployed (access to online teaching - learning resources, independent learning, ICT enabled classrooms/learning spaces etc.) by the institution place the student at the centre of teaching-learning process and render the role of a facilitator for the teacher.

- The Institution encourages the staff to undergo training on computer aided teaching and learning.
- All the faculties are provided with access to the computer system and are provided with Internet connection.
- Each individual department develops their course through PowerPoint presentation for conducting classes. The faculties make use of Open office, and Microsoft office to prepare teaching materials. Faculty incorporates videos in their training materials. Google Apps is also being used to prepare and distribute the teaching materials
- In the library, e-Journal and e-Books facility is available for both students and faculty members to gain knowledge. The campus is fully Wi-Fi enabled. The faculty is always available for any need based assistance in the use of ICT.

4.3.7 Does the Institution avail of the National Knowledge Network connectivity directly or through the affiliating university? If so, what are the services availed of?

- Visvesvaraya Technological University beams lectures in specialized subjects where the students finds difficulty through EDUSAT programme.
- NPTEL Lectures are used by faculty as well as students.

4.4 Maintenance of Campus Facilities

4.4.1 How does the institution ensure optimal allocation and utilization of the available financial resources for maintenance and upkeep of the following facilities (substantiate your statements by providing details of budget allocated during last four years)?

Table 4.25 Amount spent for the following in lakhs

Sl. No.	Items	Ongoing expenditure in 2016-17 (from 01.04.2016 to 26.02.2017)	Expenditure in 2015-16	Expenditure in 2014-15	Expenditure in 2013-14
1.	Building	3.56	42.26	12.67	268.45
2.	Lab Equipments	18.38	17.74	30.15	40.36
3.	Furniture	2.51	0.77	1.36	2.32
4.	Computer	5.06	50.52	1.69	3.5
5.	Vehicles	119.29	108.70	115.70	108.80
6.	Others	82.31	44.40	52.98	34.87
	Total	231.11	264.39	214.55	458.30

Institution makes budgetary provision for the maintenance and up keeping of institutional resources. Maintenance of the resources is done in regular time intervals, if required.

4.4.2 What are the institutional mechanisms for maintenance and upkeep of the infrastructure, facilities and equipment of the College?

The Institution has implemented proper mechanisms for maintenance and upkeep of the infrastructure, facilities and equipment of the Institute.

- Institute has employed a Campus Supervisor and other staff (on contract basis-CMS workers) for maintenance and repair of infrastructure. Round-the-clock services of a carpenter, electrician and a plumber are available on the campus.
- The civil works maintenance is taken care of by the Civil Engineering Department.
- Electrical maintenance is taken care of by an electrician appointed for the purpose. Electrical Engineering Department is looking after all the Electrical maintenance of the campus.
- A Computer Hardware engineer (System Administrator) is appointed to ensure the upkeep of all computers in the campus. The system administrator gets the servicing done through one of the servicing companies.

- The laboratory attenders ensure clean working conditions in the laboratory and maintain the cleanliness of the apparatus.
- For certain sophisticated instruments, maintenance contract is also signed.

The above measures make sure that the system function properly.

4.4.3 How and with what frequency does the institute take up calibration and other precision measures for the equipment/instruments?

The process of calibration and precision measures are handled by the expert agencies to upkeep all the electronics equipment. In each semester, the sample instruments are calibrated so that one can check the reading of the instruments and compare it with other instruments. The Departments take the initiative to calibrate the precision instruments for their optimum and assured performance. This exercise is particularly done on the eve of examination.

4.4.4 What are the major steps taken for location, upkeep and maintenance of sensitive equipment (voltage fluctuations, constant supply of water etc.)?

The steps taken for location, upkeep and maintenance of sensitive equipment are given below:

- Generators are provided in campus:

Table 4.26 Generators Provided in Campus

Place	Generator Capacity
Campus	10 KVA/140 KVA/320 KVA
Ladies Hostel	25 KVA/45 KVA

- The electrical department takes care of voltage maintenance as the campus is provided with H T facility.
- The labs are provided with voltage stabilizers, UPS of required capacity to protect computers, costly equipments and Air conditioners.
- The campus has water tanks of sufficient capacity both underground and over head at required points to cater to the needs of departments and hostels.

Any other relevant information regarding Infrastructure and Learning Resources which the Institution would like to include.

The college has the following facilities

- Separate browsing centre.
- Research labs
- Incubation Centre
- IT BT centre



Criterion – V
Student Support
and
Progression

CRITERION V: STUDENT SUPPORT AND PROGRESSION

5.1 Student Mentoring and Support

5.1.1 Does the institution publish its updated prospectus/handbook annually? If 'yes', what is the information provided to students through these documents and how does the institution ensure its commitment and accountability?

Yes. The Institution publishes updated Prospectus every year. It gives details of courses offered, rules and regulations, and other useful information.

The Prospectus Contains:

- Vision and Mission, statements of institution
- Admission procedure
- Courses offered
- Details about Management, Governing council
- Short profile of each Department along with photographs
- Placement details
- Information of scholarship
- Information of facilities
- Campus layout

The Hand Book contains

- Short profile of each department
- Transport details and Bus timings
- Important phone numbers
- Information about hostel.
- VTU rules and regulations
- Guidelines for I year students regarding study and exam preparation
- Information of CBCS scheme and grading system.
- The institute gives Hand book for first year students during orientation programs.

5.1.2 Specify the type, number and amount of institutional scholarships/ free ships given to the students during the last four years and whether the financial aid was available and disbursed on time?

- The Institution ensures financial assistance to the students in the form of Scholarships, free ships and other concessions as per government norms and disbursed on time.
- Semester Class Toppers, Meritorious students, Rank holders and Best Outgoing Students are given Cash awards from the Management fund during Annual institute day function.
- Students joining BE with CET ranks within 1000 are awarded Rs.25,000.00 scholarship.

Table 5.1 Total Scholarships Distributed for 2014-15

Year	Scholarship in Rs. Lakhs		
	OBC	SC/ST	Other
UG			
1 st year UG	26.82	20.85	1.23
2 nd year UG	38.67	13.60	0.72
3 rd year UG	35.65	19.32	0.12
4 th year UG	29.19	13.75	0.6
PG			
1 st year PG	30.76	22.27	0.74
2 nd year PG	19.73	5.88	0.45
3 rd year PG (MCA)	6.18 s	1.04	-----

Table 5.2 Total Scholarships Distributed for 2015-16

Year	Scholarship in Rs. Lakhs		
	OBC	SC/ST	Other
UG			
1 st year UG	37.28	22.78	2.16
2 nd year UG	48.92	17.63	0.96
3 rd year UG	39.09	18.45	0.69
4 th year UG	37.77	17.22	0.51
PG			
1 st year PG	18.24	13.37	0.34
2 nd year PG	33.41	11.52	0.99
3 rd year PG	5.11	2.50	---

5.1.3 What percentage of students receives financial assistance from state government, central government and other national agencies?

About 50% of the admitted students of UG and PG courses get financial assistance from various agencies.

5.1.4 What are the specific support services/facilities available for Students from SC/ST, OBC and economically weaker sections Students with physical disabilities

Students from SC/ST, OBC and economically weaker sections and Students with physical disabilities are provided with scholarships as per norms from various agencies.

Overseas students

Currently, we have only one overseas student in 1st year B.E. Civil Engineering and does not receive any scholarship.

Students to participate in various competitions/National and International level

- The Management provides avenues for students to participate in National and International competitions.
- Students are encouraged to participate in paper presentations, workshops, project competitions etc.
- The institute provides financial assistance for sport, cultural and extra-curricular activities.

Medical assistance to students: health centre, health insurance etc.

- A medical centre with qualified medical officer and first Aid facilities is established in the campus for dealing with matters relating to health issues.
- Transport facility is available in the campus during emergency.
- The students and hostel residents are referred to local Nanjappa super specialty hospital for any emergency.
- Medi-claim and group insurance for all hostel students.

Organizing coaching classes for competitive exams

Yes, the Engineering departments guide students for PG CET, GATE / TOEFL and other competitive exams. The department of MBA/ MCA conduct classes for PG CET for local / nearby degree colleges to help them join MBA / MCA.

Skill development (Spoken English, Computer literacy etc...)

- Communicative English: Lab and classes
- Computer skills: EXCEL classes

Support for “slow learners”

- At the time of admission, a Bridge course is conducted for students to understand the transformation from regular to professional learning, so that the slow learners are able to understand the learning process at the engineering level.
- The Institution arranges tutorial classes for slow learners and weak students in critical subjects like Mathematics, Electrical Sciences and Basic Electronics. Also the departments arrange remedial classes on need basis in higher semesters.
- The MBA Department arranges one week Bridge course after orientation to help students in subjects like Accounting, operation research, economics with the help of subject experts.

Exposure of students to other institutions of higher learning/ corporate/ business houses etc.

The students get exposure to institution of higher learning by

- Visit to such institutes and industries.
- Carry out project work and join internship programme at places of higher learning.
- Technical talks/ lectures by expert persons from industries and higher learning institutions.

Publication of student magazines

- College Magazine “Techzine” is published every year where students get opportunity to showcase their creativity and talent.

- Some of the departments also publish newsletters at department level viz.,
 - a. Electronics & Communication and Telecommunication-SAIL
 - b. MBA-Prabandhan.

5.1.5 Describe the efforts made by the institution to facilitate entrepreneurial skills, among the students and the impact of the efforts.

- There is a separate entrepreneurship development cell, which trains the students who wish to become entrepreneurs by giving them the know-how about procedures to be followed to start an enterprise. Lectures are arranged from successful entrepreneurs to motivate students and to give the requisite inputs.
- A government sponsored IT BT incubation centre is set up and students are encouraged to take-up project financed by Government of Karnataka.
- Innovative projects which are having commercial importance are done by students and a project exhibition is arranged at the end of every final semester. One project “Electric powered sugar cane bud scooping machine” of mechanical department has applied for patent.

The impact of the efforts:

- The first year students are also getting motivated to participate in innovation and research activities and also in entrepreneur development.
- It has helped the institution to get funds for student innovative projects through ITBT Incubation Centre and the number of such student entrepreneurs has increased.

5.1.6 Enumerate the policies and strategies of the institution which promote participation of students in extracurricular and co-curricular activities such as sports, games, Quiz competitions, debate and discussions, cultural activities etc.

- **Additional academic support, flexibility in examinations**
- **Special dietary requirements, sports uniform and materials**
- **Any other**
 - The Institution has allotted funds in the budget for extra-curricular, co-curricular and sports.
 - A qualified Physical education director take care of sports activities and a faculty advisor take care of extra-curricular activities.
 - The students are provided with well-equipped gym, indoor/outdoor sports facilities. A turf cricket ground is also available.
 - External coaches provide training for the students.
 - Students are encouraged to participate in various levels of competitions in both sports and cultural events.

- Every department has forums through which technical/non-technical activities take place.
- The outstanding performers in both cultural and sports events are recognized by suitable rewards.

Table 5.3 Departmental Forums

Sl. No.	Departments	Student Forums
1.	Civil Engineering	CONSTRO
2.	Mechanical Engineering	MEA
3.	Electrical & Electronics Engineering	POWERTRON
4.	Electronics & Communication Engineering and Telecommunication Engineering	SPECTRUM
5.	Computer Science and Engineering	COSMOS
6.	Information Science and Engineering	INSIGHT
7.	MBA	UTTHANA

5.1.7 Enumerating on the support and guidance provided to the students in preparing for the competitive exams, give details on the number of students appeared and qualified in various competitive exams such as UGC-CSIR- NET, UGC-NET, SLET, ATE / CAT / GRE / TOFEL / GMAT / Central /State services, Defense, Civil Services, etc.

Support

- Library is equipped with books and CDs pertaining to various competitive exams.
- Awareness is created among students for various competitive exams.
- Students are encouraged to take coaching from in-house faculty and external agencies for various competitive exams.

Table 5.4 Students Qualified in Competitive Exams for the last four years

GATE	NET	SLET	Defence	Civil Services	GRE	TOFEL
26	03	05	01	01	22	18

5.1.8 What type of counseling services are made available to the students (academic, personal, career, psycho-social etc.)

Academic

- The mentor interacts with the students and guides them to overcome their academic weakness. If necessary additional tutorial classes are arranged.
- For 1st year students orientation programme is arranged to give them an idea of course and bridge the gap between the +2 level and the course they have joined.

Personal and Psycho-social Counseling

- Trained Counselor for each department is identified and their list along with phone numbers are made available in hand book.
- The class counselors and the mentors counsel the students whenever required.
- The student grievance cell, anti-ragging cell, and sexual harassment cell are also involved in the counseling of students and solving their problems.

Career Guidance

The Institution provides professional career counseling through:

- Training and placement cell and departmental placement coordinators.
- Pre-placement talks.
- Interaction and talk by Alumni.

5.1.9 Does the institution have a structured mechanism for career guidance and placement of its students? If 'yes', detail on the services provided to help students identify job opportunities and prepare themselves for interview and the percentage of students selected during campus interviews by different employers (list the employers and the programmes).

- Orientation programs for I year students and their parents are arranged and the entire perspective of Placement and Training mechanism is explained.
- The training and placement cell provide pre placement talk, training programmes in soft skills, general aptitudes, communication skills, Group Discussion.
- Organize lectures from industry experts.
- Organize passport mela.
- EDP cell organises workshops, lectures to educate and motivate students for self-employment and entrepreneurship development.
- Arranging Business plans, Business quiz, and product management competition.

5.1.10 Does the institution have a student grievance redressal cell? If yes, list (if any) the grievances reported and redressed during the last four years.

Yes, institution has a student grievance redressal cell. No cases have been reported till date.

Table 5.5 Student Grievance Redressal Cell

Sl. No.	Name	Designation	Department
1.	Dr. H. R. Mahadevaswamy	Principal	
2.	Dr. Rajendra Khatawkar,	Prof. and HOD	Civil Engg.
3.	Dr. Y J Suresh,	Prof. and HOD	Mechanical Engg.
4.	Dr. P Manjunatha	Prof. and HOD	Electronics and Communication Engg.
5.	Dr. Usha Devi M B	Prof. and HOD	Telecommunication Engg.
6.	Dr. Nirmala Shivanand,	Prof. and HOD	Computer Science & Engg.
07.	Dr. Jyothi K	Prof. and HOD	Information Science & Engg.
08.	Dr. Surendra S	Prof. and HOD	Electrical & Electronics Engg.
09.	Dr. Moinuddin Khan M H	Assoc. Prof. & HOD	Chemistry
10.	Dr. Srikant C	Assoc. Prof. & HOD	MBA
11.	Dr. Ajit Danti,	Director	MCA

5.1.11 what are the institutional provisions for resolving issues pertaining to sexual harassment?

Table 5.6 Anti Sexual Harassment Committee

Sl. No.	Name	Designation	Profession
1	Dr. H R Mahadevaswamy	Chairman	Principal
2	Dr. Nirmala Shivanand	Member	Prof. & HOD, CSE
3	Dr. Jyothi K	Member	Prof. & HOD, ISE
4	Sri. Suresh G	Member	Placement Officer
5	Smt.R Sandhya	Member	Assoc. Professor
6	Smt. Anuradha C K	Member	Asst. Professor
7	Dr. Nirmala T	Member	Assoc. Professor
8	Dr. G R Manjula	Member	Assoc. Professor
9	Mrs. Mangala	Member	FDA

Table 5.7 Anti-Sexual Harassment Squad

Sl. No.	Name	Designation	Profession	Dept.
1.	Dr. Ushadevi M B	Chairperson	Prof. & HOD	TCE Dept.
2.	Mrs. Sankhya Nayak	Member	Asst. Professor	CSE Dept.
3.	Mrs. Bhuvana Khare	Member	Asst. Professor	TCE Dept.
4.	Ms. Shaila. S. Bhat	Member	Asst. Professor	Maths Dept.
5.	Mrs. Sunitha G P	Member	Assoc. Professor	ISE Dept.
6.	Mrs. N P Sunitha	Member	Assoc. Professor	EEE Dept.
7.	Mrs. Nalina S B	Member	Asst. Professor	ECE Dept.
8.	Mrs. Ashwini H A	Member	Asst. Professor	MBA Dept.

5.1.12 Is there an anti-ragging committee? How many instances (if any) have been reported during the last four years and what action has been taken on these?

Table 5.8 Anti-Ragging Committee

Sl. No.	Name	Designation	Profession
1.	Dr.H.R. Mahadevaswamy	Chairman	Principal
2.	Dr. Rajendra Khatawkar	Member	Prof. & Head, Civil
3.	Dr. Ramakrishna D S	Member	Prof., Mech
4.	Dr. Basappaji K M	Member	Prof., Mech & Warden
5.	Mr. Aravinda Kumar T V	Member	Assoc. Prof., Mech
6.	Dr. P. Manjunath	Member	Prof. & Head. E&C
7.	Mr. H K Harish	Member	Assoc. Prof., E&C
8.	Dr. Ushadevi M B	Member	Prof. & Head, TCE
9.	Dr. Moinuddin Khan	Member	Assoc. Prof. HOD Chem.
10.	Mr. Suresh C	Member	Asst. Prof. , Mech
11.	Dr. Nirmala Shivananad	Member	Prof. & Head, CSE
12.	Dr. Surendra S	Member	Prof. & Head, EEE
13.	Mr. Ramachandra Baliga	Member	Assoc. Prof., Phy
14.	Dr. Anandram B N	Member	Prof. & Head, Phy
15.	Dr. Suresh Y J	Member	Prof. & Head, Mech
16.	Mr. Suresh G	Member	Placement Officer
17.	Mr. C. R. Bhat	Member	Librarian
18.	Mr. Sunil A G	Member	Foreman, CSE
19.	Mr. Chandrashekar S	Member	Foreman (Sl. Gr.), EEE
20.	Security Supervisor	Member	
21.	Police Sub Inspector, Vinobnagara	Member	

Cases reported: --- Nil ----

5.1.13 Enumerate the welfare schemes made available to students by the institution.

- Scholarship (State Govt./Central Govt./Other Agencies)
- Group Insurance Scheme.
- MEDICLAIM facility for hostel students.
- Medical Centre
- Transportation
- Students are given railway concession for hometown travelling.
- Institute conducts toppers felicitation function once in a year which encourages them to do their best during exams. Students are felicitated by presenting a certificate and cash prize.
- Book bank scheme in the library/department library.

5.1.14 Does the institution have a registered Alumni Association? If 'yes', what are its activities and major contributions for institutional, academic and infrastructure development?

Yes, Institute has Alumni association.

Alumni meet is arranged once in a year at institute level.

- The alumni meet helps in interaction with students at department level.
- The students get the opportunity to know the training required for placement and about the recent scenario of industries.
- Alumni meet help in formulating vision and mission statements of the institute and the department.
- The academic requirement of industries and stakeholders are got known from alumni feedback which is forwarded to VTU for incorporating during up-gradation of the syllabus.
- Alumni who are entrepreneurs give technical talk during the meet which encourage the students to become entrepreneurs or help in getting a good placement.

5.2 Student Progression

5.2.1 Providing the percentage of students progressing to higher education or employment (for the last four batches) highlight the trends observed.

Table 5.9 Student Progression

Progression	Student progression			
	12-13	13-14	14-15	15-16
UG to PG	5.50%	5.30%	10%	8%
PG to M.Phil.	Not Applicable			
PG to Ph.D.	4.0%	2.5%	2.2%	2.5%
Employed				
• Campus selection	30%	30.7%	34.2%	38.3%
• Other than campus recruitment	Data not available			

5.2.2 Provide details of the programme wise pass percentage and completion rate for the last four years (course wise/batch wise as stipulated by the university)? Furnish programme-wise details in comparison with that of the previous performance of the same institution and that of the Colleges of the affiliating university within the city/district. The following tables provide programme wise pass percentage and completion rate:

Table 5.10 Civil Engineering

Batch	Student Admitted	Semester								Completion rate	Pass Percentage
		1	2	3	4	5	6	7	8		
2009-13	60	50	53	45	44	39	49	53	55	55/60	91.66
2010-14	60	44	48	31	44	50	56	47	55	55/60	91.66
2011-15	121	86	98	105	96	94	90	103	99	99/121	81.81
2012-16	125	79	75	80	78	100	94	103	104	104/125	83.20

Table 5.11 Mechanical Engineering

Batch	Student Admitted	Semester								Completion rate	Pass Percentage
		1	2	3	4	5	6	7	8		
2009-13	120	96	97	89	87	94	93	103	101	101/120	84.16
2010-14	120	103	94	76	91	76	90	101	108	108/120	90
2011-15	121	97	96	88	102	92	92	93	117	117/121	96.69
2012-16	120	93	80	87	97	74	71	90	95	95/120	79.16

Table 5.12 Electrical and Electronics Engineering

Batch	Student Admitted	Semester								Completion rate	Pass Percentage
		1	2	3	4	5	6	7	8		
2009-13	60	51	57	44	46	50	52	51	57	57/60	95
2010-14	60	43	53	42	42	47	47	52	53	53/60	88.33
2011-15	61	52	56	46	46	52	50	48	59	59/61	96.72
2012-16	64	52	39	39	28	40	43	48	48	48/64	75

Table 5.13 Electronics and Communication Engineering

Batch	Student Admitted	Semester								Completion rate	Pass Percentage
		1	2	3	4	5	6	7	8		
2009-13	57	49	55	55	48	50	54	53	54	54/57	94.73
2010-14	60	53	54	51	35	48	44	47	51	51/60	85
2011-15	64	53	61	51	41	49	42	52	59	59/64	92.18
2012-16	105	96	92	91	98	100	82	96	100	100/105	95.23

Table 5.14 Telecommunication Engineering

Batch	Student Admitted	Semester								Completion rate	Pass Percentage
		1	2	3	4	5	6	7	8		
2009-13	60	42	49	38	34	41	44	43	48	48/60	80
2010-14	51	42	37	35	28	31	36	38	37	37/51	72.54
2011-15	55	53	52	43	39	44	37	47	53	53/55	96.36
2012-16	60	52	44	32	34	37	39	44	42	42/60	70

Table 5.15 Computer Science and Engineering

Batch	Student Admitted	Semester								Completion rate	Pass Percentage
		1	2	3	4	5	6	7	8		
2009-13	121	105	101	81	99	98	111	105	112	112/121	92.56
2010-14	119	97	93	82	85	95	97	98	100	100/119	84.03
2011-15	124	113	99	108	92	113	117	95	102	102/124	82.25
2012-16	118	96	80	82	85	90	103	93	101	101/118	85.59

Table 5.16 Information Science and Engineering

Batch	Student Admitted	Semester								Completion rate	Pass Percentage
		1	2	3	4	5	6	7	8		
2009-13	104	70	71	63	76	60	74	82	93	93/104	89.42
2010-14	94	63	76	59	61	69	68	68	79	79/94	84.04
2011-15	115	98	105	81	75	89	96	98	103	103/115	89.56
2012-16	122	108	98	78	83	82	93	95	105	105/122	86.06

(UG) Lateral Entry

Table 5.17 Civil Engineering

Batch	Student Admitted	Semester						Completion rate	Pass Percentage
		3	4	5	6	7	8		
2010-13	6	5	6	6	6	6	6	6/6	100
2011-14	26	19	21	24	24	20	24	24/26	92.30
2012-15	29	29	27	25	30	32	32	32/29	103
2013-16	34	24	23	27	29	28	31	31/34	91.17

Table 5.18 Mechanical Engineering

Batch	Student Admitted	Semester						Completion rate	Pass Percentage
		3	4	5	6	7	8		
2010-13	12	5	9	11	7	10	10	10/12	83.33
2011-14	24	18	18	11	18	20	20	20/24	83.33
2012-15	24	15	20	15	18	16	24	24/24	100
2013-16	26	18	17	15	15	23	24	24/26	92.30

Table 5.19 Electrical and Electronics Engineering

Batch	Student Admitted	Semester						Completion rate	Pass Percentage
		3	4	5	6	7	8		
2010-13	6	4	2	3	5	5	5	5/6	83.33
2011-14	13	6	3	6	10	8	8	8/13	61.53
2012-15	16	4	9	7	13	11	12	12/16	75
2013-16	14	7	9	8	7	9	10	10/14	71.42

Table 5.20 Electronics and Communication Engineering

Batch	Student Admitted	Semester						Completion rate	Pass Percentage
		3	4	5	6	7	8		
2010-13	6	3	5	5	3	5	6	6/6	100
2011-14	12	7	8	7	8	10	12	12/12	100
2012-15	12	5	7	9	10	12	12	12/12	100
2013-16	34	13	17	20	12	23	29	29/34	85.29

Table 5.21 Telecommunication Engineering

Batch	Student Admitted	Semester						Completion rate	Pass Percentage
		3	4	5	6	7	8		
2010-13	9	6	5	7	5	6	7	7/9	77.77
2011-14	25	2	6	8	14	17	19	19/25	76
2012-15	26	0	7	9	8	13	15	15/26	57.69
2013-16	13	4	0	4	6	6	6	6/13	46.15

Table 5.22 Computer Science and Engineering

Batch	Student Admitted	Semester						Completion rate	Pass Percentage
		3	4	5	6	7	8		
2010-13	12	6	9	11	10	9	10	10/12	83.33
2011-14	25	7	12	19	17	20	20	20/25	80
2012-15	24	6	9	13	17	14	20	20/24	83.33
2013-16	27	16	16	9	17	15	22	22/27	81.48

Table 5.23 Information Science and Engineering

Batch	Student Admitted	Semester						Completion rate	Pass Percentage
		3	4	5	6	7	8		
2010-13	21	6	10	9	9	3	13	13/21	61.90
2011-14	47	1	8	19	25	22	23	23/47	48.93
2012-15	24	1	3	11	11	6	14	14/24	58.33
2013-16	17	0	1	0	1	3	6	6/17	35.29

PG Courses

Table 5.24 Master of Business Administration (MBA)

Batch	Student Admitted	Semester wise no. of student passed in first attempt				Completion rate	Pass Percentage
		1	2	3	4		
2011-13	116	59	60	53	82	82/116	70.68
2012-14	113	69	73	70	66	66/113	58.40
2013-15	116	35	59	72	80	80/116	68.96
2014-16	100	58	79	64	80	80/100	80

Table 5.25 Master of Computer Applications (MCA)

Batch	Student Admitted	Semester wise no. of student passed in first attempt						Completion rate	Pass Percentage
		1	2	3	4	5	6		
2010-13	59	56	58	58	52	59	59	59/59	100
2011-14	119	96	87	97	92	101	107	107/119	89.91
2012-15	63	49	40	55	49	54	57	57/63	90.47
2013-16	54	28	37	31	42	42	50	50/54	92.59

Table 5.26 M.Tech. in Computer Science and Engg.

Batch	Student Admitted	Semester wise no. of student passed in first attempt				Completion rate	Pass Percentage
		1	2	3	4		
2011-13	25	19	25	25	25	25/25	100
2012-14	25	24	24	24	24	24/25	96
2013-15	26	26	26	25	25	25/26	96.15
2014-16	25	23	20	20		20/25	80

Table 5.27 M.Tech. in Network and Internet Engg.

Batch	Student Admitted	Semester wise no. of student passed in first attempt				Completion rate	Pass Percentage
		1	2	3	4		
2011-13	17	17	17	16	16	16/17	94.11
2012-14	24	22	23	24	24	24/24	100
2013-15	24	23	22	24	24	24/24	100
2014-16	20	14	20	20		20/20	100

Table 5.28 M.Tech. in Design Engg.

Batch	Student Admitted	Semester wise no. of student passed in first attempt				Completion rate	Pass Percentage
		1	2	3	4		
2011-13	15	13	15	15	15	15/15	100
2012-14	18	18	16	18	18	18/18	100
2013-15	14	12	14	14	14	14/14	100
2014-16	16	8	11	11		11/16	68.75

Table 5.29 M.Tech. in Transportation Engineering and Management

Batch	Student Admitted	Semester wise no. of student passed in first attempt				Completion rate	Pass Percentage
		1	2	3	4		
2011-13	18	16	10	15	15	15/18	83.33
2012-14	17	15	15	16	16	16/17	94.11
2013-15	18	14	18	18	18	18/18	100
2014-16	18	17	18	18		18/18	100

Table 5.30 M.Tech. in Digital Electronics and Communication Systems

Batch	Student Admitted	Semester wise no. of student passed in first attempt				Completion rate	Pass Percentage
		1	2	3	4		
2011-13	18	13	16	16	16	16/18	88.88
2012-14	18	17	18	18	18	18/18	100
2013-15	17	14	16	17	17	17/17	100
2014-16	23	20	21	21		21/23	91.30

Table 5.31 M.Tech. in Computer Integrated Manufacturing

Batch	Student Admitted	Semester wise no. of student passed in first attempt				Completion rate	Pass Percentage
		1	2	3	4		
2012-14	18	12	18	18	18	18/18	100
2013-15	12	11	11	12	12	12/12	100
2014-16	8	8	8	8		8/8	100

Table 5.32 M.Tech. in Power Electronics

Batch	Student Admitted	Semester wise no. of student passed in first attempt				Completion rate	Pass Percentage
		1	2	3	4		
2014-16	13	13	13	13		13/13	100

Data of pass percentage and completion rate of the institute within city limit is not available.

5.2.3 How does the institution facilitate student progression to higher level of education and/or towards employment?

The Institution facilitates the students' progression by

- Library is equipped with books for all competitive exams.
- The Institution conducts soft skill, aptitude, GD training for students to face competitive exams both for entrance exams as well as employment.
- Training and career counseling services are provided to help students identify job opportunities.
- There is a separate Entrepreneurship Development Cell (EDC) which trains the students who wish to become entrepreneurs.
- Orientation & Pre-Placement Talks.
- M.Tech. students are encouraged to go to industries for internship and also to continue their major projects there. Our students have undergone internships and have done their projects at reputed industries like ISRO (LEOS), NAL, DRDO, BEL etc.

5.2.4 Enumerate the special support provided to students who are at risk of failure and drop out?

- Mentor Scheme
- Counseling
- Parent meet
- Remedial/ tutorial classes.
- Detained students are permitted to attend classes in the subjects in which they require academic support along with juniors. Or Crash Course during holidays are held.

5.3 Student Participation and Activities

5.3.1 List the range of sports, games, cultural and other extracurricular activities available to students. Provide details of participation and program calendar.

- Playground : Yes
 - a. Outdoor Games

Table 5.32 Out-Door Sports Infrastructure

Sl. No	Infrastructure	No of Grounds/ Courts
	Ground No. 1	
1.	Multipurpose turf playground used for Cricket, Football, Hockey, Track and Field events (with 400mtrs. Std. track) other minor area games.	01
2.	Handball court	01
3.	Volleyball Court	01

4.	Basketball Court	01
	Ground No. 2	
5.	Football + Cricket	01

b. Indoor Games

Table 5.33 In-Door Sports Infrastructure

Sl. No	Infrastructure	No of Grounds/ Courts
1.	Badminton court	01
2.	Table tennis	01
3.	Gymnasium: a) 24 Station Multi Gym b) Weight Lifting and Power lifting hall	01 01
4.	Judo / Wrestling / Taekwondo hall	01

Table 5.34 Rank Secured by institution in VTU Sports

Sl. No.	Year	Position
1.	2012 – 2013	13 th Position
2.	2013 – 2014	5 th Position
3.	2014 – 2015	7 th Position
4.	2015– 2016	13 th Position

Table 5.35 Cash awards received

Cash awards from VTU for Inter collegiate sports achievements		Cash awards from KSCA for JNNCE Sports Club achievements in league cricket	
Year	Amount	Year	Amount
2004	1,00,000.00	2011-12	75,000.00
2010	50,000.00	2012-13	60,000.00
2011	50,000.00	2014-15	60,000.00
2014	1,00,000.00	-	-

Table 5.36 Team Achievements in 2013 -14

Month & Year	Event / Games	Held at	Place secured
May 2013	RBZ Kho – Kho Men tournament	BGSIT, B G Nagar	3 rd Place
April 2013	SZ Kho Kho Women tournament	Acharya IT,Bengaluru	4 th Place
August 2013	SZ Chess Men tournament	KVGCE Sullia	2 nd Place

August 2013	SZ Chess Women tournament	KVGCE Sullia	2 nd Place
November 2013	Men 4x100 Mtrs Relay in VTU 16 th Athletic meet	JNNCE, Shivamogga	2 nd place
November 2013	Women 4x100 Mtrs Relay in VTU 16 th Athletic meet	JNNCE, Shivamogga	3 rd place

Table 5.37 Team Achievements in 2014 -15

Month & Year	Event / Games	Held at	Place secured
Feb 2014	CKZ Volleyball Men tournament	SIT, Tumkur	2 nd place
Feb 2014	IZ Volleyball Men tournament	RYMCE, Bellaty	3 rd place
March 2014	CKZ Football Men tournament	UBDT, Davanagere	1 st place
March 2014	RBZ Handball Men tournament	JNNCE, Shivamogga	1 st place
March 2014	IZ Handball Men tournament	JNNCE, Shivamogga	1 st place
March 2014	RBZ Handball Women tournament	JNNCE, Shivamogga	3 rd place
March 2014	RBZ Kho Kho Women tournament	SJMIT, Chitradurga	1 st place
March 2014	IZ Kho Kho Women tournament	SJMIT, Chitradurga	2 nd place
April 2014	RZ Ball Badminton Women tournament	Alvas, Moodbidri	2 nd place
May 2014	RBZ Tennis Men tournament	VTU, Belagavi	4 th place
August 2014	RBZ Chess Men tournament	VTU, Regional office Mysore	2 nd place
August 2014	RBZ Chess Women tournament	VTU, Regional office Mysore	5 th place
October 2014	CKZ Badminton Women tournament	JNNCE, Shivamogga	1 st place
October 2014	CKZ Badminton Men tournament	JNNCE, Shivamogga	3 rd place
November 2014	17 th VTU Men & Women Athletic meet	VTU, Belagavi	4 th place
November 2014	Men 4x400 Mtrs Relay team in VTU 16 th Athletic meet	VTU, Belagavi	2 nd place

Table 5.38 Team Achievements in 2015-16

Month & Year	Event / Games	Held at	Place secured
February 2015	CKZ Volleyball Men tournament	BCE, Shrvanabelagola	Winners
March 2015	CKZ Football Men tournament	JNNCE, Shivamogga	Runners
March 2015	CKZ Handball Men tournament	JNNCE, Shivamogga	winners
March 2015	IZ Handball Women tournament	GAT, Bengaluru	Winners
March 2015	Open Chess tournament	Manipal university, Manipal	3 rd place
March 2015	Sahyadri Cricket cup for staff	JNNCE/NES ground	Winners
April 2015	RBZ Kho Kho Women tournament	SKSVMS, Lakshmeshwara	Runners
April 2015	RBZ Ball badminton Women tournament	RLSIT, Doddaballapura	Runners
May 2015	RBZ Tennis Men tournament	Gopalan IT, Bengaluru	4 th place
August 2015	CKZ Badminton Men tournament	MCE, Hassan	Winners
August 2015	CKZ Badminton Women tournament	MCE, Hassan	Winners
2015	Group 1- 1 st Division Cricket league	KSCA, Shivamogga	Runner

Table 5.39 Team Achievements in 2016-17

Month & Year	Event / Games	Held at	Place secured
March 2016	CKZ Volleyball Men tournament	JNNCE, Shivamogga	Winner
March 2016	CKZ Handball Men tournament	JNNCE, Shivamogga	Winner
March 2016	IZ Handball Men tournament	JNNCE, Shivamogga	Winner
March 2016	RBZ Handball Women tournament	JNNCE, Shivamogga	Winner
March 2016	IZ Handball Women tournament	JNNCE, Shivamogga	Winner

April 2016	CKZ Football Men tournament	SIT, Tumkur	Runner
September 2016	CKZ Badminton Men tournament	AIT, Chikkamagaluru	Runner
September 2016	CKZ Badminton Women tournament	AIT, Chikkamagaluru	Winner
September 2016	IZ Badminton Women tournament	RYMEC, Bellary	Winner

Table 5.40 Events Hosted by the Institution during 2013-14:

Name of the tournament / Events	Held on /From
VTU Mysore zone Cricket Men tournament	19 th to 30 th February 2013
VTU Single zone Ball Badminton Men tournament	14 th to 16 th May 2013.
VTU Single zone Ball Badminton Women tournament	14 th to 16 th May 2013.
VTU Mysore zone Cricket Selection trails	10 th & 11 th September 2013.
16 th VTU Athletic meet	16 th to 19 th November 2013.
Coaching camp for VTU Athletic (M&W) team	17 th to 19 th December 2013
Coaching camp for VTU Ball Badminton (M) team	14 th to 17 th December 2013.
BCCI Syed Mustaq Ali South Zone T-20 Tournament	17 th to 22 nd March 2013.
BCCI India 'A' V/s West Indies 'A' Four day Test match	2 nd to 5 th October 2013.
Conducted Inter – Branch Sports for Annual day sports	23 rd April 2013

Table 5.41 Events Hosted by the Institution during 2014 -15

Name of the tournament / Events	Held on /From
Coaching camp for VTU Ball Badminton Women team	25 th to 30 th February 2014.
VTU Central Karnataka zone Cricket Men tournament	10 th to 14 th March 2014.
VTU Inter zone Cricket Men tournament	24 th to 28 th March 2014.

VTU Rest of Bengaluru zone Men Handball tournament	18 th & 19 th March 2014.
VTU Intrezone zone Men Handball tournament	21 st to 23 rd March 2014.
VTU Intrezone zone Women Handball tournament	21 st to 23 rd March 2014.
Coaching camp for VTU Handball Men & Women team	20 th to 27 th September 2014.
VTU Mysore zone Cricket selection trails	22 nd & 23 rd September 2014
VTU Central Karnataka zone Men Badminton tournament	25 th & 26 th October 2014.
VTU Central Karnataka zone Women Badminton tournament	25 th & 26 th October 2014
BCCI All India Under – 19 Cooch Behar Trophy	22 nd Nov to 1 st Dec 2014.
Conducted Inter – Branch Sports for Annual day sports	23 rd April 2013

Table 5.42 Events Hosted by the Institution during 2015 -16:

Name of the tournament / Events	Held on /From
VTU Rest of Bengaluru zone Volleyball women tournament	20 th & 21 st Feb 2015.
VTU Central Karnataka zone Football Men tournament	9 th & 10 th March 2015
VTU Inter zone intercollegiate football Men tournament	15 th & 16 th March 2015
VTU Inter University Football Men Selection trails	14 th & 15 th March 2015.
VTU Central Karnataka zone Handball Men tournament	14 th & 15 th March 2015.
BCCI through K S C A Conducted NCA Under 16 National Cricket zonal tournament to select Under 16 Indian team at JNNCE, Shivamogga	20 th May to 07 th June 2015
Conducted Inter – Branch Sports for Annual day sports	23 rd April 2015

Table 5.43 Events Hosted by the Institution during 2016 -17:

Name of the tournament / Events	Held on /From
VTU Central Karnataka zone Volleyball Men tournament.	1 st & 2 nd March 2016
VTU Inter zone Volleyball Men tournament.	3 rd & 4 th March 2016
VTU Volleyball Men team selection trails	4 th & 5 th March 2016

VTU Central Karnataka zone Handball Men tournament	16 th & 17 th March 2016
VTU Inter zone Handball Men tournament	18 th & 19 th March 2016
VTU Handball Men team selection trails	19 th & 20 th March 2016
VTU Rest of Bengaluru zone Handball Women tournament	16 th & 17 th March 2016
VTU Inter zone Handball Women tournament	18 th & 19 th March 2016
VTU Handball Women team selection trails	19 th & 20 th March 2016
VTU Rest of Bengaluru zone Kabaddi Women tournament	30 th April 2016
VTU Inter zone Kabaddi Women tournament	1 st & 2 nd May 2016
VTU Kabaddi Women team selection trails	2 nd & 3 rd
BCCI through KSCA Conducted Vijay Merchant Trophy Under 16 Cricket zonal tournament Held at JNNCE, Shivamogga	1 st December to 21 st December 2016
Conducted Inter – Branch Sports for Annual day sports	23 rd April 2016

CKZ = Central Karnataka zone,
IZ = Inter zone

RZ = Rest of Bengaluru zone

Cultural Achievements

Table 5.44 Achievements in Cultural Activities

Year	Event	Prizes secured
2013	Participated in DAVANA (an inter college youth fest) held at BIET, Davanagere JANVEY 2013 was successfully organized.	JNNCE Cultural Team bagged CHAMPIONSHIP.
2014	Participated in VTU Youth Fest held at BIET, Davanagere and Emerged as 2nd RUNNER UP TROPHYCHAMPIONS. JANVEY 2014 was made successful. Day 1- Ethnic Day, Prize distribution and Cultural evening (e-Swaraa Bengaluru based band performed) Day2- Felicitating scholars and merit students followed by cultural Evening)	2nd RUNNER UP TROPHYCHAMPIONS. 1st place in Photography 1st place in Collage Making 2nd place in Percussion The crew stood at 4th place in One Act Play. JANVEY 2014 was made successful.

2015	<p>Participated in VTU Utsav held at VTU Campus Belagavi and stood 4th place among 122 colleges took part in competition. Secured 4th & 7th places in Group Dance and One Act play respectively</p> <p>JANVEY 2015 was organized successfully. Day1- Ethnic Day followed by cultural eve Day2- Felicitation of scholars and meritorious students.</p> <p>Mr. Gowrish Akki and Mr. Somanna Machimada, of Kannada News Industry graced the occasion.</p>	<p>4th place among 122 colleges took part in competition.</p> <p>1st place in Rangoli</p> <p>1st place in Group song Competition</p> <p>1st place in Quiz</p> <p>2nd place in Light Indian Vocal Singing (solo event)</p>
2016	<p>Participated in VTU-Fest ‘Chakravyuha’ held at Alva’s Campus Moodabidri on 9th to 12th March 2016 and stood at 4th place among 105 colleges took part in.</p> <p>JANVEY 2016 was organized successfully.</p>	<p>4th place among 105 colleges took part in.</p> <p>2nd place in Classical Solo Singing</p> <p>3rd in Elocution</p>
2016	<p>Participated in Advitiya16 at KLEIT Hubli from 23rd & 24th Sep 2016 and secured below prizes.</p>	<p>1st Place in Technical Paper Presentation</p> <p>2nd Place in Techathon</p> <p>3rd Place in IT Quiz</p> <p>1st Place in Technical Treasure Hunt</p>
2016	<p>Participated in Robothon at NMAMIT, Nitte on 14th Oct 2016</p>	<p>1st Place in Robo Competition</p>
2016	<p>Participated in VTU Xpressions a techno-cultural fest at VTU Belagavi on 12st Oct 2016</p>	<p>1st in Group Dance</p> <p>1st in Quiz</p> <p>2nd in Rangoli</p> <p>3rd in solo Singing</p>
2017	<p>Participated in TCS Tec bytes at Tumkur on 14th March 2017</p>	<p>Secured 4th place among 20+ colleges participated.</p>
2017	<p>Participated in VTU YUVAKALAJALI at Sir. MVIT, Bengaluru 16th to 19th March 2017</p>	<p>Secured 2nd in Rangoli</p> <p>3rd in Group Dance (Folk)</p> <p>stood at 6th place among 100+ colleges</p>

5.3.2 Furnish the details of major student achievements in co-curricular, extracurricular and cultural activities at different levels: University / State / Zonal / National / International, etc. for the previous four years.

Table 5.45 Individual Achievements in 2013-14

Name of the student	Event / Games	Held at	Place secured
Shreeshan S (EC)	Coimbatore International Open chess tournament	Coimbatore	1 st place
Shreeshan S (EC)	All Indian Inter university Chess competition	Mahatma Phule Krishi Vidyapeet	3 rd place
Shreeshan S (EC)	South zone inter university chess competition	SRM University	1 st place
Sumanth Bharadwaj (IS)	Represented KSCA Moffusil U-19 Tournament	Bengaluru	---
Surabhi R (E&E)	Javelin throw in 16 th VTU Athletic meet	JNNCE, Shivamogga	3 rd place
Nihal N Kothari (E&E)	400 Mtrs Hurdles in 16 th VTU Athletic meet	JNNCE, Shivamogga	2 nd place
Vijay Kumar S M (CS)	800 Mtrs in 16 th VTU Athletic meet	JNNCE, Shivamogga	2 nd place
Vijay Kumar S M (CS)	1500 Mtrs in 16 th VTU Athletic meet	JNNCE, Shivamogga	2 nd place
Manohar G (MECH)	District boday building Championship	JNNCE, Shivamogga	1 st place
Chaitra R (CV)	100 Mtrs Hurdles in 16 th VTU Athletic meet	JNNCE, Shivamogga	1 st place
Chaitra R (CV)	Tripel jump in 16 th VTU Athletic meet	JNNCE, Shivamogga	2 nd place
Sharath Kumar C G (MECH)	VTU Inter Collegiate Wrestling Competition	BNMIT ,Bengaluru	3 rd place
Abhilash M (TC)	VTU Inter collegiate Power lifting Competition	Acharya IT, Bengaluru	2 nd Place
Kishore S S(MECH)	VTU Inter collegiate Power lifting Competition	Acharya IT, Bengaluru	3 rd Place

Table 5.46 Inter University Participation / Achievements in 2013-14

Name of the student	Event / Games	Held at	Place secured
Shreeshan S (EC)	South zone Inter University Chess Competition 2013-4	SRM University, Kattankulathur (TN) from 10-17 Oct 13	1 st Place
	All Indian Inter university Chess competition 2013-14	SRM University, Kattankulathur (TN) from 10-17 Oct 13	3 rd place
Manish Vijay (IS)	South zone Inter University Men Handball tournament 2013-14	Bharathidasan University, Tiruchirappalli from 20-23 Nov 2013.	-
Sunil Kumar K S (EC)	South zone Inter University Men Handball tournament 2013-14	Bharathidasan University, Tiruchirappalli from 20-23 Nov 2013.	-
Rakshith Kumar B L (MECH)	South zone Inter University Men Handball tournament 2013-14	Bharathidasan University, Tiruchirappalli from 20-23 Nov 2013.	-
Bhavyarani G N (EC)	South zone Inter University Women Handball tournament 2013-14	Bharathidasan University, Tiruchirappalli from 9-13 Nov 2013.	-
Nischala N V (CS)	South zone Inter University Women Handball tournament 2013-14	Bharathidasan University, Tiruchirappalli from 9-13 Nov 2013.	-
Nitya Bharadwaj (CS)	South zone Inter University Women Handball tournament 2013-14	Bharathidasan University, Tiruchirappalli from 9-13 Nov 2013.	-
Swathi P S(CS)	South zone Inter University Women Handball tournament 2013-14	Bharathidasan University, Tiruchirappalli from 9-13 Nov 2013.	-
Payal Kawada D (4 th CV)	South zone Inter University Women Handball tournament 2013-14	Bharathidasan University, Tiruchirappalli from 9-13 Nov 2013.	-

Parna N Pandith (EC)	South zone Inter University Net ball Women tournament 2013-14	Pt. Ravishankar Shukla University, Raipur, Chhattisgarh from 20-26 Jan 2014.	-
Neema Gonsalves (CS)	South zone Inter University Kho-Kho Women tournament 2013-14	Mangalore University, Mangalore from 23-26 Nov 2013.	-
Darshan K (CV)	South zone Inter University Ballbadminton Men tournament 2013-14	Algappa University, Karaikudi Tamilnadu 20-24 Dec. 2013-14	-
Bharath M (MTECH)	South zone Inter University Ballbadminton Men tournament 2013-14	Algappa University, Karaikudi Tamilnadu 20-24 Dec. 2013-14	-

Table 5.47 Sports Scholarship from V T U Belagavi. 2013-14

Name of the student	Event / Games	Held at	Amount for the year in Rs.
Abhilash S	Football	Visvesvaraya Institute of Advance Technology, Muddenahalli, Chikaballapur.	2500/-
Adithya J N	Handball		2500/-

Table 5.48 Individual achievements in 2014 -15

Name of the student	Event / Games	Held at	Place secured
Nihal N Kothari (E&E)	VTU SZ Cross Country Competition	KVGCE, Sullia	9 th place
Nihal N Kothari (E&E)	400 Mtrs Hurdles in 17 th VTU Athletic meet	VTU, Belagavi	2 nd place
Nihal N Kothari (E&E)	400 Mtrs in 17 th VTU Athletic meet	VTU, Belagavi	2 nd place
Vijay Kumar S M (CS)	1500 Mtrs in 17 th VTU Athletic meet	VTU, Belagavi	2 nd place
Sunil Gujjar (MECH)	VTU Inter collegiate Power lifting Competition	NMAMIT, Nitte	3 rd place
Rakesh Kumar (MECH)	VTU Inter collegiate Power lifting Competition	NMAMIT, Nitte	3 rd place

Table 5.49 Inter University Participation / Achievements: 2014 -15

Name of the student	Event / Games	Held at	Place secured
Manish Vijay (IS)	South zone Inter University Men Handball tournament 2014-15	Periyar University Salem October 2014	-
Sunil Kumar K S (EC)	South zone Inter University Men Handball tournament 2014-15	Periyar University Salem October 2014	-
Rakshith Kumar B L (MECH)	South zone Inter University Men Handball tournament 2014-15	Periyar University Salem October 2014	-
Darshan M Y (CV)	South zone Inter University Men Handball tournament 2014-15	Periyar University Salem October 2014	-
Bhavayarani G N (EC)	South zone Inter University Men Handball tournament 2014-15	Periyar University Salem October 2014	-
Sankranti S D (EC)	South zone Inter University Men Handball tournament 2014-15	Periyar University Salem October 2014	-
Nihal N Kothari (E&E)	All India inter university Men Cross Country competition 2014-15	Mahatma Gandhi University, Kottayam October 2014.	-
Nihal N Kothari (E&E)	All India inter university Men Cross Country competition 2014-15	Mahatma Gandhi University, Kottayam October 2014.	-
Nihal N Kothari (E&E)	All India inter university Men Athletic meet 2014-15	Rajiv Gandhi University of Health Sciences, B'lore	-
Neema Gonsalves (CS)	South zone Inter University Kho-Kho Women tournament 2014-15	Anna University, Chennai October 2014	-
Parna N Pandith (EC)	South zone Inter University Basketball Women tournament 2014-15	Hindustan University Chennai November 2014.	-

Table 5.50 Sports Scholarship from V T U Belagavi. 2014 -15

Name of the student	Event / Games	Held at	Amount for the year in Rs.
Manish Vijay	Handball	Visvesvaraya Institute of Advance Technology, Muddenahalli, Chikaballapur.	2500/-
Sunil Kumar K S	Handball		2500/-
Shreeshan S	Chess		17500/-

Table 5.51 Individual achievements: 2015 -16

Name of the student	Event / Games	Held at	Place secured
Kishore S S, 8 th sem MECH	National Dead lifting Championship organized by Indian power lifting championship	Delhi	1 st place
Sumukh M S 1 st sem CS	VTU Singale zone Taekwondo Men Championship	GCE, Ramanagara	3 rd place
Suraksha Shetty 2 nd ISE	District level Roller Skating	Mysore	3 Gold
	State level Roller Skating	Bengaluru	3 Gold 1 Sliver
	National level Roller Skating	Pune	1 Gold 1 Sliver

Table 5.52 Inter University participation / achievements:2015-16

Name of the student	Event / Games	Held at
Nihal M. Khothari 8 th MECH	All Indian Inter University Athletic meet 2014-15	Rajiv Gandhi University of Health Sciences, Bengaluru from 16-20Jan 2015.
Deepthi Umesh 7 th sem CV	South zone Inter University Badminton tournament 2015-16	SRM University, Kattankulathur (TN) from 1-5 Oct 2015.
Karthik 7 th Mech	South zone Inter University Kho-Kho Competitions 15-16	Annamalai University, Tamilnadu 27-31 Jan 16

Table 5.53 Sports Scholarship from V T U Belagavi. 2015-16

Name of the student	Event / Games	Held at	Amount for the year in Rs.
Nihal M. Khothari 8 th sem MECH	Athletic& Cross Country	Visvesvaraya Institute of Advance Technology, Muddenahalli, Chikaballapur.	3000/-
Sunil Kumar K S 7 th sem E&C	Handball		3000/-
Manish V 8 th sem CS	Handball		3000/-
Rakshith B M 7 th sem MECH	Handball		2500/-
Bhavyarani 5 th sem E&C	Handball		2500/-
Parna N Pandith 5 th sem E&C	Basketball & Netball		2500/-
Neema Gonselves 8 th sem CS	Kho – Kho		2500/-

Table 5.54 Individual achievements: 2016 -17

Name of the student	Event / Games	Held at	Place secured
Chaitra, 8 th CV	VTU Single zone Athletic competition 100 Mts Hurdles	Sir MVIT, Bengaluru	1 Bronze
Sharadhi S, 1 ST MECH	State level “Karnataka School Games Karate championship 2016” 65 kg above Kumite	Bengaluru	1 Gold
	State level “Karnataka School Games Karate championship 2016” 65 kg above Kata	Bengaluru	1 Sliver
Suraksha R Shetty 4th CS	State level Roller Skating	Mysore	1 Gold 2 Sliver
Suhas S	VTU Single zone Taekwondo competition	VDRIT, Haliyal	62 Kg 1 Bronze
Premkiumar R 4 th CV	VTU Single zone Power Lifting competition	GAT, Bengaluru	66 Kg 1 Gold

Bhuvan G S	VTU Single zone Power Lifting competition	GAT, Bengaluru	74 Kg 1 Gold
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Table 5.55 Inter university participation/University achievements:2016-17

Name of the student	Event / Games	Held at
Prathibha H G (CV)	South zone Inter University Badminton tournament 2016-17	Kamraj University, Madurai, Tamilnadu from 3-7 Oct 2016
Bhuvan G J (MECH)	All Indian Inter University Power Lifting 2016-17	Panjab University, Chandigarh from 23-26 Feb 2017
Prem Kumar (CV)	All Indian Inter University Power Lifting 2016-17	Panjab University, Chandigarh from 23-26 Feb 2017

Table 5.56 Individual Cultural Achievements

Year	Event	Name of the participant with prizes secured
2013	Participated in DAVANA (an inter college youth fest) held at BIET, Davanagere JANVEY 2013 was successfully organized.	Secured CHAMPIONSHIP
2014	Participated in VTU Youth Fest held at BIET, Davanagere and Emerged as 2nd RUNNER UP TROPHY CHAMPIONS.	<ul style="list-style-type: none"> • Mr. Manohar Chatra 1st place in Photography • Ms. Pooja 1st place in Collage Making • Mr. Sachin Prakash 2nd place in Percussion • The crew stood at 4th place in One Act Play.
2015	Participated in VTU Utsav held at VTU Campus Belagavi and stood 4 th place among 122 colleges took part in competition. Secured 4 th & 7 th places in Group Dance and One Act play respectively	<ul style="list-style-type: none"> • Ms. Pooja 1st place in Rangoli • Ms. Smudyatha & Team 1st place in Group song Competition • Mr. Vijeeth vinod & Team 1st place in Quiz • Ms. Samudyatha 2nd place in Light Indian Vocal Singing (solo event)

2016	Participated in VTU-Fest 'Chakravyuha' held at Alva's Campus Moodabidri on 9 th to 12 th March 2016 and stood at 4 th place among 105 colleges took part in.	<ul style="list-style-type: none"> • Ms. Samudyatha 2nd place in Classical Solo Singing • Ms. Lalithya 3rd in Elocution
2016	Participated in Advitiya16 at KLEIT Hubli from 23 rd & 24 th Sep 2016	<ul style="list-style-type: none"> • Mr. Sanjay Acharya & Team secured 4th Place in Robo Race • 1st Place in Technical Paper Presentation • 2nd Place in Techathon • 3rd Place in IT Quiz • 1st Place in Technical Treasure Hunt
2016	Participated in Robothon at NMAMIT, Nitte on 14 th Oct 2016	<ul style="list-style-type: none"> • Mr. Sanjay Acharya & Team (Mechanical Branch) 4 Students secured 1st Place in Robo Competition
2016	Participated in VTU Xpressions a techno-cultural fest at VTU Belagavi on 12 st Oct 2016	<ul style="list-style-type: none"> • Ms. Pragna & Team 1st in Group Dance • Mr. Vijeet Vinod & Team 1st in Quiz • Ms. Pooja 2nd in Rangoli • Mr. Bharath 3rd in solo Singing
2017	Participated in TCS Tec bytes at Tumkur on 14 th March 2017	<ul style="list-style-type: none"> • Mr. Vijeeth & Team secured 4th place
2017	Participated in VTU YUVAKALAJALI at Sir.MVIT, Bengaluru 16 th to 19 th March 2017	<ul style="list-style-type: none"> • Ms. Pooja 2nd in Rangoli • Ms. Pragna & Team 3rd in Group Dance (Folk)

5.3.3 How does the college seek and use data and feedback from its graduates and employers, to improve the performance and quality of the institutional provisions?

The institute has a well-defined mechanism of obtaining the feedback from the students and stake holders which are

- Feedback from students, every semester.
- Feedback from Alumni, during alumni meet.
- Feedback from parents, during parents meet twice every year.
- Feedback from faculty, during department meeting.

These feedbacks are given importance in IQAC meetings, HOD meetings and resolutions made in these meetings are forwarded to the management. The management after discussion in its meeting permits to implement for quality improvement and performance.

5.3.4 How does the college involve and encourage students to publish materials like catalogues, wall magazines, college magazine, and other material? List the publications/ materials brought out by the students during the previous four academic sessions.

The institute encourages students to submit articles in the institute magazine TECHZINE every year. In some of the departments news letters are brought out twice in a year. In EC/TC department newsletter SAIL encourage students to write technical and non-technical articles. Department of MBA publishes PRABANDHAN once in a semester.

5.3.5 Does the college have a Student Council or any similar body? Give details on its selection, constitution, activities and funding.

There is no student council at institute level. But every department has a student council formed by nominating a boy and girl student from each semester and section.

These councils conduct technical, non-technical, sports and other activities throughout the year.

There are separate sports council and cultural council at the institute level. These councils arrange competitions at the institute level and form institute teams to participate in various level competitions in intercollegiate and inter-university level.

The activities at the institute level are funded by the institute.

5.3.6 Give details of various academic and administrative bodies that have student representatives on them.

The student representatives are nominated for conducting of Cultural activities, Institute fests, Workshops, Science fests, Annual day and forum activities through the following committees.

- Sports Committee
- Cultural Committee
- Grievance Cell
- Anti-Ragging Cell
- Departmental Technical Associations/Clubs

5.3.7. How does the institution network and collaborate with the Alumni and former faculty of the Institution

The Institution has a Alumni Association. The alumni association is engaged in organizing alumni meets once a year; and extends its activity regarding Student Support and Progression.

Alumni Networking:

- The Alumni Association is formed at the institute to have a strong alumni network.
- The Alumni Meet is organized at the Campus once a year and outside Shivamogga once a year.

- Alumni have a separate portal in the Institution website.
- Alumni share their Technical expertise with the students guiding on projects/placement/contests/internships and events like HACKATHON, SMARTHON, KODATHON.
- They guide students aspiring for higher education by providing GATE coaching and assistance.

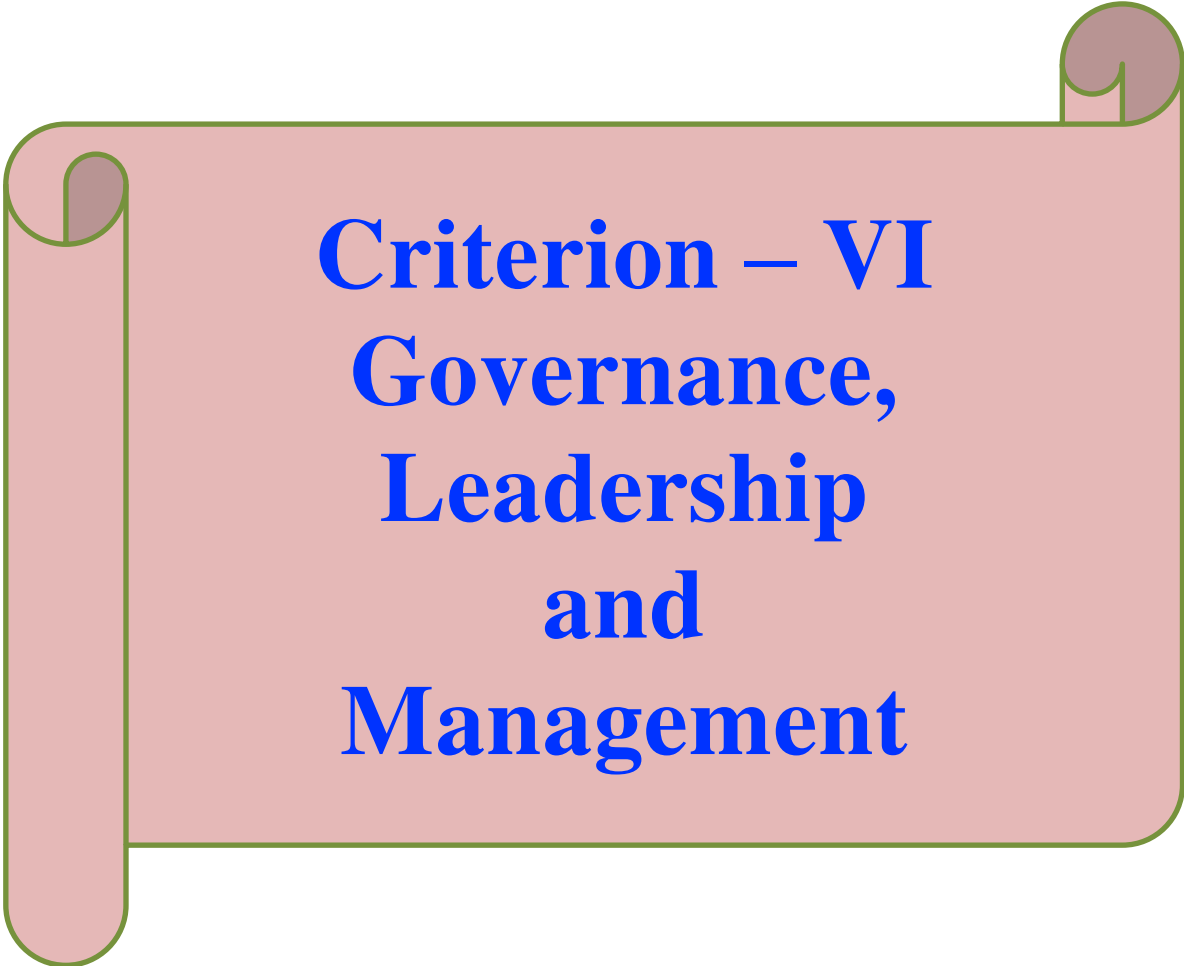
Alumni off Campus - Student support

Students are provided with off-campus drive information as part of campus support. These offers are open to students for nearly 4-5 years from their year of passing out. Alumni achievements are always highlighted in the campus buzzes, who indeed are the role models for the juniors at the campus.

Alumni are encouraged to visit the institution regularly to interact with the students as well as the faculties, which in turn helps in upgrading the knowledge with current and upcoming trends. Various latest technologies that are adopted by the companies are introduced to the students to enhance their technical skills and also help the faculties to analyze industry requirements.

5.3.8. Any other relevant information regarding Student Support and Progression which the college would like to include.

- Orientation Programme
- Bridge Course
- Placement and Training Cell
- Aptitude training
- Soft skills training
- Interaction with Alumni
- Entrepreneurship development cell
- Counseling
- Science and Technology Entrepreneurship Park.
- HAMs club/Spectrum Amateur club
- Departmental Technical Associations/Clubs



**Criterion – VI
Governance,
Leadership
and
Management**

CRITERION VI: GOVERNANCE, LEADERSHIP AND MANAGEMENT

6.1 Institutional Vision and Leadership

6.1.1 State the vision and mission of the Institution and enumerate on how the mission statement defines the institution's distinctive characteristics in terms of addressing the needs of the society, the students it seeks to serve, institution's traditions and value orientations, vision for the future, etc.?

The Vision & Mission of institution are:

Vision

To be a pacesetter institute in technical & management education and research for producing highly competent engineers, managers & entrepreneurs to meet the needs of industry and society.

Mission

- Impart quality education through flexible and innovative teaching - learning process
- Enable and Ignite young minds to excel in their career and life with entrepreneurial spirit, professional ethics and human values
- Facilitate invention based research and collaborate with industries to address societal needs.

Quality Policy

- Providing state of art technology support and best possible educational infrastructure.
- Development of faculty through supporting policies and procedures towards achieving higher qualifications, short-term courses, participation and presentation in seminars & conferences.
- Encourage R&D, consultancy and improve teaching learning process by introducing innovative pedagogical and student interaction mechanism.

Yes, Mission statement defines the distinctive characteristics of the institution in terms of addressing the needs of the students and the society. Also, it seeks to serve, institution's traditions and value orientations, vision for the future. This can be justified by the following points:

- Jawaharlal Nehru National College of Engineering (JNNCE) is managed by National Education Society (NES), a philanthropic Society founded by freedom fighters.

- The motivation for starting this society was to impart education to all sections of the society without any discrimination. And to provide this, JNNCE was started in the year 1980 and is following the same motto.
- JNNCE's vision and mission right from its inception have key words like entrepreneurial spirit, professional ethics, human values and societal needs.
- The vision clearly shows the commitment towards nation building, societal and environmental concerns.
- The management is providing free-ship and fee concession to meritorious students.
- The Alumni and faculty are contributing by way of scholarships to support the economically weaker and meritorious students.
- At the institution level, every student is imbued with ethical responsibilities towards the society. The students are groomed to apply their knowledge creatively so as to develop sustainable technologies for the betterment of society.

6.1.2 What is the role of top management, Principal and Faculty in design and implementation of its quality policy and plan?

Top Management

- The role of the top management is important in providing quality Education and set the Vision, Mission and associated goals accounting all the stakeholders associated with institute.
- JNNCE is managed by the NES-Executive Committee, and monitored by the Governing council of the institute.
- Governing council consists of Chairman who is the President of NES and it also consists of 8 other members of NES. There are five senior Professor nominated by VTU, Govt. of Karnataka, AICTE, and one Staff Nominee of JNNCE. The Principal of the institution is the Ex-officio member secretary of the Governing council.
- The Strategic plan and its execution, HR policy, income and expenditure, pertaining to the institution are discussed and approved in the Governing council.
- NES convenes Governing Council meeting to review the academic administration, research and development, testing and consultancy services and any other agenda planned for the growth of the institution. Major policy decisions are being taken in such meetings.

This blend of academicians, policy makers, industrialists and philanthropists help in balanced policy making, utilization of funds and student and staff welfare measures.

Principal

- Principal is Empowered at various levels to bring in the efficiency as envisaged by Planning and monitoring of Academic, Research, Training, Placement, Sports, Hostel and Culture.

- The Principal conducts monthly meeting with all the Heads of the departments regarding academic activities, following up of the academic calendar, students' progress, placement and training details, research and extension activities, industry interaction, consultancy assignments, alumni interaction etc.
- The Principal conducts meetings periodically with all the faculty and staff members to discuss about the institute plans, updates and seek their active participation and support.
- Head of the department regularly conduct department meetings with all the faculty members of their department.

Faculty

- Involvement of every faculty member in activities with respect to academic, research, consultancy, evaluation, counseling and mentoring, interaction with all stakeholders concerned.
- Individual faculty devises an effective plan and deliver mechanism to implement need based learning and evolve practicing engineers.
- The Internal Quality Assurance Cell ensures maintenance of the quality of the teaching learning process ensuring continuous improvement.

6.1.3 What is the involvement of the leadership in ensuring: The policy statements and action plans for fulfillment of the stated mission?

The policy statements and action plans:

- Policy statements and the action plan are formulated by the Governing Council.
- Prior to implementation of any program a feasibility study is made in the regular faculty meetings. Regular meetings at various levels ensure that the developments in terms of infrastructure, learning resources are upgraded to take care of the dynamic changing educational environment.

Interactions with the stakeholders:

There is a regular interaction with all the stakeholders of the system

- Review meetings with the top management.
- Monthly meetings with the heads of the department
- HOD meetings with their faculty.
- Parent - teacher meetings every year.
- Conduction of Alumni meet every year
- Interactions with the students through meeting with class representatives, mentoring and meeting with cultural committee.
- Parents are invited for Orientation Programmes, Cultural programme and parents-teacher meeting regularly to get first hand information about their wards.

The policy of the institution is designed in consultation with all the stakeholders after thorough analysis of requirements and technological advancement that add professional value to the students.

Decentralization of Authority:

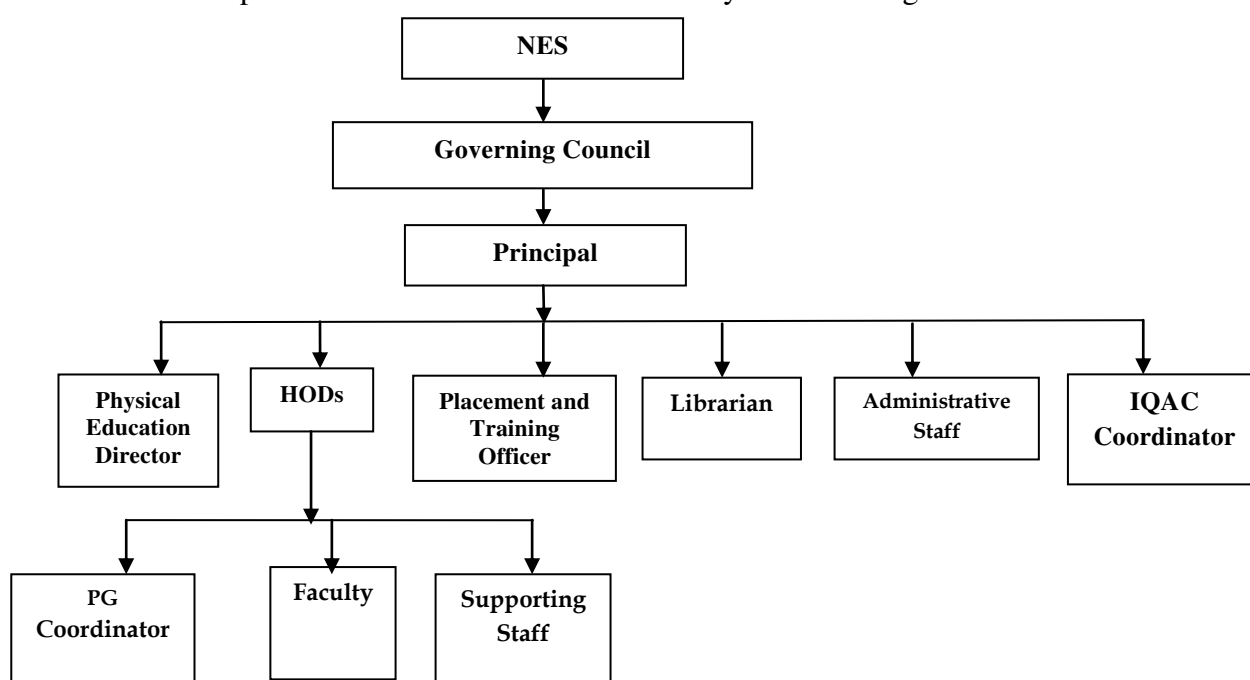
HODs are authorized to take important decisions at various levels to ensure the development of the institution. HODs and senior faculty members focus on teaching-learning and research, Pedagogy, introduction of new courses, increase in student intake, improvement of results, establishment of new labs, enhancing industry connectivity for placement, internships, etc.

6.1.4 What are the procedures adopted by the institution to monitor and evaluate policies and plans of the institution for effective implementation and improvement from time to time?

At the beginning of every academic year, Principal seeks action plan from the HODs about the activity planned for the entire year like procuring new equipments, conduction of workshops/conferences, new recruitment etc. This is forwarded by the Principal to the management. Based upon this, the management takes suitable decision which is in turn communicated to the concerned.

6.1.5 Give details of the academic leadership provided to the faculty by the top management?

Top management formulates independent entities to nurture the academic leadership in the institute which is illustrated by the following flow chart.



6.1.6 How does the college groom leadership at various levels?

JNNCE has decentralized its activities for effective implementation of its vision. It believes to act together within the framework of its individual and collective responsibilities by involving all the faculty members at the department and Institution level. HODs are nominated by rotation on tenure basis which provides an opportunity to all the Senior Professors to head the department. To bring the sense of responsibility, faculty members are assigned as chairman/members of various committees.

6.1.7 How does the college delegate authority and provide operational autonomy to the departments / units of the institution and work towards decentralized governance system?

Key action plans of the institute are discussed and disseminated in consultation with the HODs of various departments. These are further deliberated by the HODs in consultation with their faculty, which are again consolidated by Principal, and NES Management. JNNCE thus maintains an organizational structure where the NES Management is the supreme authority of the organization who appoints the Principal. The Principal of the college is the highest academic authority responsible for the academic process. Heads of departments report to the Principal. HODs have operational autonomy at their department level to conduct various academic activities which reflect in their departmental academic calendar.

6.1.8 Does the college promote a culture of participative management? If 'yes', indicate the levels of participative management.

Yes. The college promotes a culture of participative management at all levels right from the students up to the senior faculty members.

- The institution believes in the participation of faculty, Principal and Management in planning as well as execution.
- Management representatives are members of Governing body, Purchase committee, Hostel committee and Infrastructure committee.
- There are four levels of participation
 - Student representatives
 - Faculty
 - HODs
 - Management

6.2 Strategy Development and Deployment

6.2.1 Does the Institution have a formally stated quality policy? How is it developed, driven, deployed and reviewed?

The institution has a formally stated quality policy. This policy has been designed by involving and considering the inputs from different stakeholders of the institute. The quality policy reflects the vision and mission of the institution. The stated quality policy is driven and deployed to all the stakeholders of the system by practicing Outcome Based Education. It is

driven through academic, administrative and research policies as well as processes in the institution. All these policies are governed by different industry standards and are reviewed by periodical internal auditing and by external auditing done annually.

6.2.2 Does the Institute have a perspective plan for development? If so, give the aspects considered for inclusion in the plan.

The Institution has a specific perspective plan for the development. To ensure this, the institute focus on 3 variables, viz., i) Input, ii) Process and iii) Output:

1) Input

- Institute makes every effort to attract the top ranking students in the admission process through CET, COMEDK, Management quota and PG CET. Also, meritorious students are encouraged with adequate scholarships.

2) Process

- Institute focuses on developing effective and efficient Teaching – learning process, Training and Evaluation in all respects.
- Institution recruits the qualified faculty with a passion for teaching, through a selection process, testing the technical knowledge, communication skills, attitude and acumen for one's professional growth as well as for Research and Development.
- Students are also encouraged to pursue engineering through adequate project based learning with the support of hands-on training in state-of-the-art technology.
- For the overall development of students, their involvement in Co-curricular and extra-curricular activities like sports and cultural activities are encouraged & outstanding students in these areas are provided with additional facilities and training to excel in their field. Students excelling in co-curricular and extracurricular activities are honored in Annual day celebrations.

3) Output

- To ensure that students complete the course with suitable job opportunities, Training and placement department is set up to identify appropriate companies and groom the students with adequate training.
- For the year 2016-17, 360 students are already placed in 25 companies.
- Many students graduated from the institution have become successful entrepreneurs and they are contributing towards the employments generation.
- Students are also trained to pursue higher studies and research. Many of the students are pursuing their higher studies in premier institutes of India and abroad.

6.2.3 Describe the internal organizational structure and decision making processes.

The HODs discuss the department requirements in the departmental meeting and the proceedings are communicated to principal. The principal will consolidate the requirements of all the departments and finalize in the HODs meeting. The proceedings of the HODs meeting is sent to the management which will be discussed and approved in the governing council of the institute and ratified in the executive committee meeting. The approved requirements will be taken care of by the Principal and HODs.

6.2.4 Give a broad description of the quality improvement strategies of the institution for each of the following:

1) Teaching & Learning

The entire perspective of teaching and learning is done through development of Course Plan, Course Delivery, Course Evaluation, use of ICT in teaching with suitable empowerment, and accountability. Some of the issues of teaching learning are fulfilled as below:

- JNNCE ensures effective and efficient Teaching - learning process for the diversity of learners with respect to their background, abilities and other personal attributes.
- JNNCE faculty employs an interactive and participatory approach creating a feeling of responsibility in learning and makes learning a process of construction of knowledge.
- Faculty Development programs are organized at the departmental level every semester during vacation.
- Faculty members are deputed to Faculty Development Programs/ Workshops/Conferences.
- Regular industry institute interaction to know the industry expectations.
- Study material is provided to students at the commencement of each new chapter.
- Feedback from the students (Twice in a year) is taken for regular improvement of course curriculum.

2) Research & Development

- Department has 8 research centers which instills the invention and innovation in the minds of the students.
- Under the research interaction program eminent scientists from industry and academia are invited to explore research opportunity.
- Faculty members motivated to pursue higher studies, faculty exchange programs and seminars/conferences/workshops to enhance their skills.
- Faculty members will be encouraged to apply for funds under DST (Young Scientists Award), AICTE (Faculty Recharge Program), VGST (Young Scientist Award) and international collaborative

research initiatives. This year institute applied for about 15 AICTE funded projects.

3) Community engagement

Apart from the teaching-learning process, the Institution has taken up an initiative to bring about environmental and behavioral changes to improve the health of the society. All community engagement activities are under taken at all levels:

- To inculcate a sense of social responsibility and contributory participation among students, Institute implemented social responsibility programs to contribute the needy people.
- On weekly basis institute conducts the Swachha Bharath Abhiyan in the campus in association with National Education Society (NES).
- Institute initiates various social related activities through its NSS wing.
- B-School Social Responsibility (BSR) Activity is developed by the MBA department to help under-privileged school students.
- Workshops and Training program for High School students.
- Workshops for Senior Citizen and Housewives on Internet awareness and on line Digital Transactions.
- Regular Workshops and Demos for school children, teachers, farmers, NGOs and public about the Bio-diesel plant and renewable energy.
- INPIRE programmes sponsored by Department of Science Technology are conducted every year for local Pre University Students.

4) Human resource management

Institute HR Policy manual which consists of policy regarding recruitment, salary, increments, leaves, settlement of disputes, grievance handling, and welfare measures etc. is under review and will be finalized soon.

5) Industry interaction

Institute regularly interacts with industry experts to know what the industry expects. It arranges guest lectures, seminars and workshops at the departmental level to bridge the gap between the industry and academia. Local chapters of Professional Societies like Institution of Electronics & Telecommunication Engineers (IETE) Institution of Engineers (India) and Society of Automotive Engineers (SAE) are functioning in the campus.

6.2.5 How does the Head of the institution ensure that adequate information (from feedback and personal contacts etc.) is available for the top management and the stakeholders, to review the activities of the institution?

The Institution has implemented a formal mechanism to obtain feedback from students and different stakeholders.

1) Staff Feedback:

- Staff feedback is obtained in departmental meeting and staff meeting with Principal.
- Formal feedback mechanism will be established soon.

2) Students Feedback:

- The student feedback is obtained twice in a year (End of the semester). Student feedback is collected online and given to individual faculty members.
- From this year, it is planned to conduct exit survey for out-going students and course end survey in all the courses end of every semester.

3) Parent Feedback:

- Progress reports of the students are sent to the parents twice in a semester and feedback from the parents are obtained by the concerned mentors
- Slow learners with poor performance and their parents are counseled and suitable remedial measures are taken.
- The Parents feedback is obtained during parents'-teacher meetings.

4) Industry Feedback:

- Placements cell collects the feedback from executives of companies visiting placement to understand the expectations from students.
- Institute also collects Industry feedback during student's project exhibition, industry visits, guest lecturers/workshops and seminars.
- Many of our alumni are working in top management position in many industries. During their visit to the institution, feedback about the curriculum and industry expectations is collected from them.

5) Alumni Feedback:

- Institution organizes the alumni meet (Nenapina Angala) in the campus or in Bengaluru every year. Many of our alumni are working in top management position in many industries. During the alumni interaction, institute collects feedback about the curriculum and industry expectations from them.

Collected feedback from different stakeholders is communicated through Principal to the management and the other stakeholders, to review the activities of the institution.

6.2.6 How does the management encourage and support involvement of the staff in improving the effectiveness and efficiency of the institutional processes?

Institute and the management encourage and support involvement of the staff in improving the effectiveness and efficiency of the institutional processes. The Institution has a Policy which takes care of Professional development. Promotion, Increment, awards and Welfare are the key issues where the management is devoted to the employees. Through decentralizing its activities, Institute encourages the participative management by faculty. Institute assigns different responsibility to individual faculty based on their interests, competency, and capacity.

6.2.7 Enumerate the resolutions made by the Management Council in the last year and the status of implementation of such resolutions.

Following are resolutions made by the Management Council in the last year and the status of implementation of such resolutions.

- Promotion of Research: 8 departments are recognized by VTU as research centers and Institute applied for 1 more research center.
- Innovation and Entrepreneurship: Institute started the Incubation centre and started funding innovative projects.
- Consultancy projects: Civil, Mechanical and Electrical departments are involved in various consultancy projects.
- Applying to various funding agencies like VGST, DST, AICTE, KSCST: Institute applied many funding projects under Atal Innovation Mission, 15 projects under AICTE Quality Improvements scheme and 15 projects under ITBT department of Karnataka Govt.

6.2.8 Does the affiliating university make a provision for according the status of autonomy to an affiliated institution? If 'yes', what are the efforts made by the institution in obtaining autonomy?

Yes, there is provision for according the status of autonomy to an affiliated institute by the VTU.

At present the institute has

- Processed the application to get NAAC certification.
- Processing is in progress to get the renewal of accreditation by NBA as first step towards autonomy.
- The institute has started practicing Outcome Based Education from this academic year as a part of requirement of NBA.

6.2.9 How does the Institution ensure that grievances/complaints are promptly attended to and resolved effectively? Is there a mechanism to analyze the nature of grievances for promoting better stakeholder relationship?

- The institute has got a redressal committee, for complaints and grievances with a senior professor as convener and other senior faculty members in the team.
- In addition to this a complaint cum grievances cell is also in place having the members of faculty and deputy warden of the hostel. These committees receive the grievances if any from the students and forward them to the respective departments for redressal.
- In addition to these two committees, students can also represent their problems through class representatives meeting, mentor meeting, hostel meeting, Anti Ragging Committee and Disciplinary Committee. This ensures a better relationship with the stakeholders.
- The grievance matters are stratified depending on the nature of complaint and the concerned institutional members are invited to the

grievance committee meeting and involving the stakeholders affected in the grievance matter and redressal measures are given.

Table 6.1 Different Committees and Chairman

Committee	Chairman
Anti-Ragging Committee	Dr. H.R. Mahadevaswamy
Cultural Activity Team	Prof .Madhusudhan G
Grievance Redressal Committee	Dr. H.R. Mahadevaswamy
Internal Quality Assurance Cell	Dr. H.R. Mahadevaswamy
NAAC Committee	Prof. H. K. Harish,
Sexual Harassment Prevention Committee	Dr. H.R. Mahadevaswamy
Student Counselling Cell	Prof. C. K. Anuradha
Hostel Committee	Dr. K. M. Basappaji Dr. H. B. Suresh
Admission Committee	Prof. C. Manjunath
Chiranthana	Dr. L. K. Sreepathi
Transportation Committee	Prof. C. Manjunath
Sports Committee	Mr. Chethan

6.2.10 During the last four years, has there been any instances of court cases filed by and against the institute? Provide details on the issues and decisions of the courts on these?

No.

6.2.11 Does the Institution have a mechanism for analyzing student feedback on institutional performance? If 'yes', what was the outcome and response of the institution to such an effort?

Yes.

- The institution has a mechanism for analyzing student feedback on institutional performance.
- From this year, it is planned to conduct exit survey for out-going students and based upon the feedback regarding infrastructure and facilities like library, class room, hostel, laboratory corrective measures will be taken.

6.3 Faculty Empowerment Strategies

6.3.1 What are the efforts made by the institution to enhance the professional development of its teaching and non teaching staff?

The institute aims to inculcate in every faculty three competency namely Knowledge, skill and ability by adopting the following steps:

- Developing an organizational culture which respects each individual for the capability and special trait exhibited by individual.

- To develop each individual, the institution regularly arranges various professional talks on topics like-Time management, motivational topics, and current trend technical issues.
- Faculty are regularly encouraged and deputed for National and International conferences.
- Institution also encourages faculty members to involve in research.
- Institution deutes faculty to various Faculty development programmes organized by various institutes under the banner of QIP and Staff Development Programme.
- Eight departments are already recognized as research centre which has led to the creation of strong research environment in the campus. JNNCE Research and Innovation Centre is proposed to be set up in the campus.
- Pedagogy trainings are also carried out from time to time for probationary faculty members during vacation.
- For the non-teaching staff technical, soft skill as well as skill development programs are conducted during vacation.
- Institution arranges skill development and training programmes for the technical staff to upgrade their knowledge.

6.3.2 What are the strategies adopted by the institution for faculty empowerment through training, retraining and motivating the employees for the roles and responsibility they perform?

The institution regularly motivates its teaching and non-teaching staff to participate in various soft skills programme conducted by the institute and also by other institutes of repute. This helps the teaching and non-teaching staff to improve their communication, self-belief and develop their overall personality.

6.3.3 Provide details on the performance appraisal system of the staff to evaluate and ensure that information on multiple activities is appropriately captured and considered for better appraisal.

The institute has an appraisal system which is very fair and transparent. The faculty members are evaluated by using four stage processes namely:

- Self-evaluation by faculty.
- Student feedback through a structured questionnaire which he/she gives in an online platform to maintain confidentiality.
- Evaluation by HOD taking into consideration various criteria like:
 - Academic Excellence like-Subject excellence, Paper presented in National and International forum.
 - Administrative involvement.
 - Rating given by Student in feedback form.
- Review by Committee comprising of Principal and screening committee.

6.3.4 What is the outcome of the review of the performance appraisal reports by the management and the major decisions taken? How are they communicated to the appropriate stakeholders?

Faculty members who are found to be underperformers are counseled by HOD and Principal. The underperforming individual is mentored and asked to attend training programme for upgrading the competence level.

6.3.5 What are the welfare schemes available for teaching and non teaching staff? What percentage of staff have availed the benefit of such schemes in the last four years?

- Group Insurance
- Research Promotion
- Study Leave
- ESI & EPF are given as per the statutory norms.
- LIC Group Gratuity scheme provided to all employees.
- Earned Leave
- Commuted leave for HODs and Non-vacation staff.
- Special Casual Leave facility to attend Seminar, workshop and other University assignments.
- Paid maternity leave facility for women.
- Paid paternity leave facility
- Majority of the staff members have been allotted sites through the housing co-operative of National Education Society

6.3.6 What are the measures taken by the Institution for attracting and retaining eminent faculty?

The Institution has strategized the following actions for attracting and retaining eminent faculty members:

- Fair and Transparent Recruitment process: The selection process is transparent which is supervised by management, Principal, HOD and subject experts.
- Promotions, additional salary increments as per AICTE extended to deserving candidates, for retaining the eminent faculty members.
- Healthy and supportive work atmosphere.
- Encouragement provided for career development of Staff.
- Research promotion programmes sponsored by institute.
- Supportive Infrastructure created for nurturing education eco system.
- Faculty members are permitted to take up consultancy activities.

6.4 Financial Management and Resource Mobilization

6.4.1 What is the institutional mechanism to monitor effective and efficient use of available financial resources?

The institute has a very robust and active financial system. The finance management is done by following steps:

- The admission for the academic year and the amount collected through the process is recorded.
- The HODs are expected to indicate their budget for the academic year.
- Institute Budget is prepared and presented to JNNCE-Governing Council and after approval is sent to NES-Executive Council for final approval.
- The budgetary planning includes salary, revenue expenditure, capital investment, infrastructure maintenance, retirement benefits etc.

6.4.2 What are the institutional mechanisms for internal and external audit? When was the last audit done and what are the major audit objections? Provide the details on compliance.

The institute has ensured financial audits are taken up by the chartered accountants at the end of each financial year. The auditing has not indicated any major auditing remarks. The management has created a system to ensure that cash book is checked on timely basis.

The latest audit was done in the year 2016. No negative audit observations are made.

6.4.3 What are the major sources of institutional receipts/funding and how is the deficit managed? Provide audited income and expenditure statement of academic and administrative activities of the previous four years and the reserve fund/corpus available with Institution, if any.

The major source of institutional funding is fees collected from students. Audited income and expenditure statement of academic and administrative activities of the previous four years is enclosed at the end of criteria VI.

6.4.4 Give details on the efforts made by the institution in securing additional funding and the utilization of the same (if any).

Faculty members are encouraged to apply for grants/funding from various funding agencies like AICTE, VTU, VGST, KSCST etc. These funds are used for research, conducting workshops/conferences. The details of the funding received by these agencies for the last three years are given below:

Table 6.2 Details of the funding received

Sl. No.	Funding agency	2015-16 Rs in Lakhs	2014-15 Rs in Lakhs	2013-14 Rs in Lakhs
1.	AICTE	-	-	15.2
2.	VGST	-	20.00	20.00
3.	KSCST	0.41	0.36	0.52
4.	IE(I)	-	1.00	0.4

Also institute is generating internal revenue generation through consultancy work and is still at initial stage with less revenue. Institute has plans to generate internal revenue through technology transfer, licensing of technologies which developed by faculty & students.

6.5. Internal Quality Assurance System (IQAS)

6.5.1 Internal Quality Assurance Cell (IQAC)

a) Has the institution established an Internal Quality Assurance Cell (IQAC)? If 'yes', what is the institutional policy with regard to quality assurance and how has it contributed in institutionalizing the quality assurance processes?

Yes, A Internal Quality Assurance Cell has been established. This cell is headed by a senior faculty member as coordinator and one faculty member from each department is the member of the cell.

The main aim of the IQAC is to ensure the imparting of the technical education using the state-of-the-art technology, prepare the students as per the industry needs and face the challenges, as per the quality policy of the institute.

Objectives of IQAC

- Verification of the implementation of the processes established.
- Planning the Remedial Coaching classes for the slow learners.
- Providing state of art technology support and best possible educational infrastructure.
- Development of faculty through supporting policies and procedures towards achieving higher qualifications, short-term courses, participation and presentation in seminars and conference.
- Encourage R&D, consultancy and improve teaching learning process.
- Mentoring system is established for Counseling and guiding the students in their personal/academic matters/dispatch of progress reports.
- To follow and implement the academic rules of VTU at appropriate levels.

b) How many decisions of the IQAC have been approved by the management /authorities for implementation and how many of them were actually implemented?

The management supports all the activities that help in providing quality education as mentioned in the mission and vision statements.

The Management has approved the following proposals of IQAC and implemented:

- Applying for NAAC and renew of NBA certification.
- Implementation of the Outcome Based Education (OBE) system
- Student mentoring activities planned and organized.
- To arrange parent teacher interaction meet.
- Feedbacks on the faculty members through student feedback system.
- To arrange lectures of eminent personalities in the field of technical & non-technical aspects.
- To organize one National / International Conference in every year in the institution
- To equip all class rooms with LCD facility.

c) Does the IQAC have external members on its committee? If so, mention any significant contribution made by them.

No, at present the committee consists of internal members. In future external members will be identified and included.

d) How do students and alumni contribute to the effective functioning of the IQAC?

Presently the IQAC consists of only faculty members. Feedbacks obtained from the alumni are considered for improvement in the academic processes. The student members and alumni members will be inducted at a later stage.

e) How does the IQAC communicate and engage staff from different constituents of the institution?

- The IQAC coordinator will send meeting notice along with agenda of the meeting to the IQAC department wise coordinators.
- The department IQAC coordinators will discuss the agenda with HOD and other colleagues in department meeting.
- The feedback from each department is discussed in the IQAC meeting.
- The finalized minutes of IQAC meeting is communicated to Principal, HODs and department IQAC coordinators.
- The IQAC meeting minutes are informed to all the staff of respective department.
- The minutes of meeting is forwarded to the management for approval and for any financial sanctions required for development.

6.5.2 Does the institution have an integrated framework for Quality assurance of the academic and administrative activities? If 'yes', give details on its operationalisation.

Yes, the institute has an integrated framework for quality assurance of academic and administrative activities. Academic and administrative activities are discussed by the principal in the HODs meeting. The minutes of the meeting are informed to faculty members in departmental meetings. After feedback, any modification necessary is made and implemented.

The Academic Monitoring Committee (AMC) has been constituted and consists of five to six senior faculty members of the institution, one external member, and one management representative with Principal as chairman.

Functions:

The Academic Monitoring Committee (AMC) shall be responsible for rendering the following functions:

- The AMC shall focus and oversee the working of the college particularly in the conduct of regular theory and practical classes, lesson plans prepared by the faculty members, course completion, delivery mechanism, curriculum transaction and conduct of internal assessment in the institute.
- The AMC shall make sure that the departments complete all activities within the defined period mentioned in the Academic Calendar.
- The AMC shall make sure that the departments prepare all the required academic and administrative documents before commencement of the classes and are properly highlighted on time and brought to the notice of all concerned stakeholders.
- The AMC shall ensure that all the departments are conducting internal assessments, properly evaluating the scripts and notifying the marks in the departmental notice boards.
- The AMC shall monitor that the various activities mentioned in the University Academic Calendar and Institute Academic Calendar are properly executed by the departments and concerned authorities/ persons of the college.
- The AMC shall collect periodical reports from each department regarding the activities and performance of the departments within seven days from each internal examination.
- The AMC shall ensure that the workload of each department is distributed proportionately amongst the teachers of the departments concerned.
- The AMC shall submit a confidential Comprehensive Report regarding the performance of the department to the Principal.

6.5.3 Does the institution provide training to its staff for effective implementation of the Quality assurance procedures? If ‘yes’, give details enumerating its impact.

Yes

The institute has conducted various quality awareness workshops on Standard Operating Procedures (SOP) and suitable feedback is given so that gaps can be controlled better. Orientation program on NAAC has been conducted to train the staff members. Staff members are aware of the importance of the quality procedure and its adoption by the Institution. The institute also has conducted 5 days awareness workshop on NBA so that overall functioning can be improved.

6.5.4 Does the institution undertake Academic Audit or other external review of the academic provisions? If ‘yes’, how are the outcomes used to improve the institutional activities?

The Academic Monitoring Committee regularly inspects department to check in the following areas:

- To assess Attendance Report, Syllabus Coverage, Faculty File, Attendance Register, Work Load Distribution, and Student’s Feedback, Blue-book etc.
- The affiliating university has an annual audit for the entire process through a Local Inquiry Committee (LIC) constituted by them.

6.5.5 How is the internal quality assurance mechanisms aligned with the requirements of the relevant external quality assurance agencies/regulatory authorities?

The mechanisms designed by the Internal Quality Assurance Cell help in meeting the requirements of external quality assurance agencies namely the AICTE, University, NAAC and NBA.

Table 6.3 External Quality-assurance Regulatory Authorities

Quality requirement	Regulatory authority
Extension of approval and affiliation	Visvesvaraya Technological University
Extension of approval	AICTE
Accreditation of courses	NAAC and NBA

6.5.6 What institutional mechanisms are in place to continuously review the teaching learning process? Give details of its structure, methodologies of operations and outcome?

Student focused:

- At the beginning of the semester the profile of the student is taken as per requirement and given to mentors.
- The mentors monitor the attendance and academic performance of the student.
- The performance is communicated to the parents and parent-teacher meet is arranged once in a semester so that the parents can interact with the faculty members and discuss the progress of their ward.
- Remedial steps are taken wherever required.

Faculty focused:

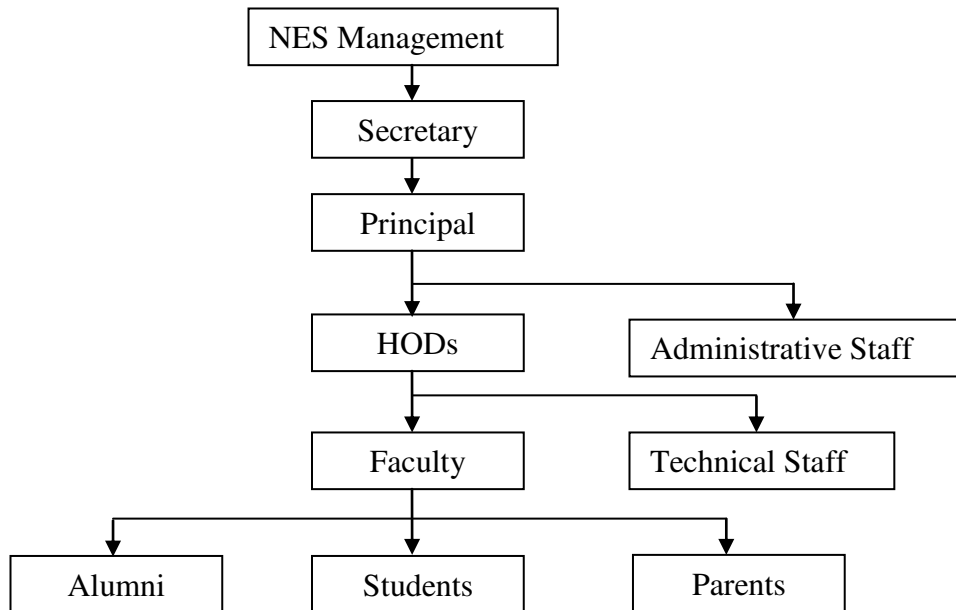
- The HODs and staff of every department conduct department meeting in the end of a semester for subject allotment to every staff.
- The faculty prepares the lesson plan, teaching material, Power Point Presentation required for effective teaching during vacation.
- Every faculty is provided with work diary as per NBA format in which lesson plan/work execution along with Course Outcome and Programme Outcome mapping is done. Result analysis of exam is also entered.
- The classrooms are provided with ICT facility for effective teaching.
- The institute calendar events help the faculty to complete the syllabus within the prescribed time.
- The question paper pattern, performance of students in tests, attendance position of students are discussed & finalized in department meetings.
- The student feedback is taken at the end of semester for evaluation of faculty and also self appraisal.

6.5.7 How does the institution communicate its quality assurance policies, mechanisms and outcomes to the various internal and external stake holders?

- Institution communicates its quality assurance policies, mechanisms and outcomes to students and staff through meetings, circulars and notice boards
- Parents, Alumni, Industries, through college websites, brochures, magazines and Hand Book etc.
- By means of conducting meetings with parents and alumni.

Any other relevant information regarding Governance Leadership and Management which the college would like to include.

The following is the flow chart of Governance Leadership and Management





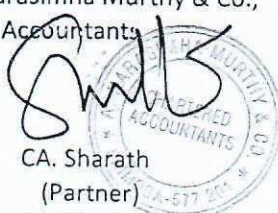
**Audited Financial
Statements**



4

JAWAHARLAL NEHRU NATIONAL COLLEGE OF ENGINEERING, SHIVAMOGGA
UNIT OF NATIONAL EDUCATION SOCIETY®, SHIMOGA

BALANCE SHEET AS ON 31.3.2016

SOURCES OF FUNDS	SCH	CY (Amt in Rs.)	PY (Amt in Rs.)
CORPUS FUNDS			
Capital Fund	A1	65,08,26,396	
General Fund	A2	5,94,62,299	
LOANS/ BORROWINGS			
Secured Loans	B1	-	
Unsecured Loans	B2	-	
PAYABLES			
Advances / Deposits Payable	C1	96,94,065	
Payable to NES/ other Institutions	C2	-	
CURRENT LIABILITIES & PROVISIONS			
Current Liabilities	D1	3,16,90,492	
Provisions	D2	27,03,20,772	
TOTAL		1,02,19,94,025	
APPLICATION OF FUNDS			
FIXED ASSETS			
Tangible Assets	E1	44,27,46,953	
Intangible Assets	E2		
Capital Work in Progress	E3	12,55,36,914	
INVESTMENTS	F	37,83,06,102	
RECEIVABLES			
Advances / Deposits Receivable	G1	93,49,857	
Receivable from NES/ other Institutions	G2	1,34,34,680	
CURRENT ASSETS	H	5,26,19,514	
TOTAL		1,02,19,94,025	
	22		
<p>Date: 14.11.2016 for Jawaharlal Nehru National College of Engineering, Shivamogga</p> <p style="text-align: center;"><i>Dr. H R Mahadevaswamy</i> Dr. H R Mahadevaswamy (Principal) Principal J N N College of Engineering Shivamogga.</p>		<p style="text-align: right;">As per our report of even date annexed for A. Narasimha Murthy & Co., Chartered Accountants</p> <p style="text-align: center;"><i>CA. Sharath</i> CA. Sharath (Partner) Membership No: 214269 F.R.No: 011107 S</p> 	

5

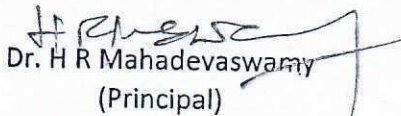
JAWAHARLAL NEHRU NATIONAL COLLEGE OF ENGINEERING, SHIVAMOGGA
UNIT OF NATIONAL EDUCATION SOCIETY®, SHIMOGA

INCOME & EXPENDITURE ACCOUNT FOR THE YEAR ENDED 31.3.2016

PARTICULARS	R&P Sch.Ref.	CY(Amt. in Rs.)	PY(Amt. in Rs.)
INCOME			
Academic Receipts	2	30,78,99,399	
Salary Grant	3	-	
Contribution Received	5	-	
Other Grants (Revenue)	6	15,88,376	
Other Incomes	4	3,73,83,039	
TOTAL (A)		34,68,70,814	
EXPENDITURE			
Salary	15	20,45,70,854	
Academic Expenses	14	2,70,39,784	
Administrative & General Expenses	16	2,65,93,647	
Other Expenses	17	41,71,920	
Contribution to NES	18	1,06,00,000	
Depreciation		2,19,26,455	
TOTAL (B)		29,49,02,660	
Balance being Excess of Income over Expenditure		5,19,68,154	

Date: 14.11.2016

for Jawaharlal Nehru National College of Engineering,
Shivamogga


Dr. H R Mahadevaswamy
(Principal)

Principal
J N N College of Engineering
Shivamogga.

As per our report of even date annexed
For A. Narasimha Murthy & Co
Chartered Accountants


CA. Sharath
(Partner)

Membership No: 214269
F.R.No: 011107 S

National Education Society (R.) Shivamogga
JAWAHARLAL NEHRU NATIONAL COLLEGE OF ENGINEERING, SHIVAMOGGA
 BALANCE SHEET AS ON 31ST MARCH 2015

LIABILITIES		ASSETS	
AMOUNT AS ON 31.03.2014	Sch	AMOUNT AS ON 31.03.2014	Sch
517421528	Capital Fund	420146391	D FIXED ASSETS
59462299	Development Fund	121327722	F Capital Work in Progress
20698244	Current Liabilities	7742376	G Advance towards Contractors, Suppliers, Equipments & Others
226636449	Depreciation Reserve	10634680	H Advance to other NES Schools / Colleges
10070459	Other Funds and Deposits	1488950	I Staff Salary Advances
		39135084	J Cash & Bank Balance
		231598594.4	K Fixed Deposit with Banks
		550784	L Other Deposit
		59382	M Receivables
		1605014	N TDS On Fixed Deposit
834288977		834288977	
			AMOUNT AS ON 31.03.2015
			428718913
			122471378
			9531056
			13434680
			2094650
			26081657
			324621013
			550784
			61780
			4438029
			932003940

Date: 10.10.2015
 Place, Shivamogga

For Jawaharlal Nehru National College of Engineering

For A. Narasimha Murthy & Co.,



(Dr.R Srinivasa Rao Kunte)

Principal

Jawaharlal Nehru

National College of Engineering,
 SHIMOGGA.

Partner, M.No.214269, Firm Reg.No.011107 S

JAWAHARLAL NEHRU NATIONAL COLLEGE OF ENGINEERING, SHIVAMOGGA

BALANCE SHEET AS ON 31ST MARCH 2015

AMOUNT AS ON 31.03.2014	EXPENDITURE	AMOUNT AS ON 31.03.2015	AMOUNT AS ON 31.03.2014	INCOME		AMOUNT AS ON 31.03.2015
				By		
192856293	To ESTABLISHMENT	187111666	217964555	FEES COLLECTION		228363110
10880153	" ADMINISTRATIVE EXPENSES	8891001	17744865	" UNIVERSITY FEES / EXAM FEES		19201534
9681793	" TRAINING AND DEVELOPMENT	7898272	3902145	" GRANTS / CONTRIBUTION		2613313
1503638	" STUDENTS ACTIVITIES	1134215	9787769	" MISCELLANEOUS FEES		16940672
16023260	" FEES PAID UNIVERSITIES / BOARDS / GOVT	19976840	59090624	" MISCELLANEOUS RECEIPTS		41821130
17526349	" MAINTENANCE	16162433	2365830	" LIBRARY FEES		2417862
1128735	" LIBRARY, BOOKS, MAGAZINES	1233823		" BANK INTEREST		40290523
4638000	" OTHER EXPENSES	5884682				
626628	" STUDENTS WELFARE EXPENSES	360635				
18300000	" Management contribution	19800000				
23220803	" Depreciation Reserve	21757865				
14470137	" Excess of Income Over Expenditure	61436714				
310855788		351648144	310855788			351648144

Date: 10.10.2015

Place, Shivamogga For Jawaharlal Nehru National College of Engineering

For A. Narasimha Murthy & Co.
Chartered Accountants
(Signature)
CA. Sharath

Partner, M.No.214269, Firm Reg No.0111107 S

(Signature)
(Dr. R Srinivasa Rao Kunte)
Principal

Principal
Jawaharlal Nehru
National College of Engineering
SHIMOGGA.

JAWAHARLAL NEHRU NATIONAL COLLEGE OF ENGINEERING, SHIMOGA

BALANCE SHEET AS ON 31ST MARCH 2014

AMOUNT AS ON 31.03.2013	LIABILITIES	Sch	AMOUNT AS ON 31.03.2014	AMOUNT AS ON 31.03.2013	ASSETS	Sch	AMOUNT AS ON 31.03.2014
470821908	Capital Fund	A	517421528	411857374	FIXED ASSETS	D	420146391
594622299	Development Fund	B	594622299	95016352	Capital Work in Progress	F	121327722
17365792	Current Liabilities	C	20698244	7540700	Advance towards Contractors, Suppliers, Equipments & Others	G	7742376
203415646	Depreciation Reserve	D	226636449	10634680	Advance to other NES Schools / Colleges	H	10634680
6817110	Other Funds and Deposits	E	10070459	2563500	Staff Salary Advances	I	1488950
				20089983	Cash & Bank Balance	J	39135084
				209584800	Fixed Deposit with Banks	K	231598594.4
				550784	Other Deposit	L	550784
				44581	Receivables	M	59382
					TDS On Fixed Deposit	N	1605014
757882755	Total		834288977	757882755	Total		834288977

Date : 11.11.2014

for Jawaharlal Nehru National College Of Engineering, Shimoga

(Dr.R Srinivas Rao Kunte)

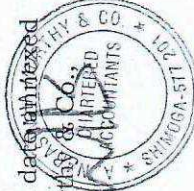
Principal

Principal

Jawaharlal Nehru

National College of Engineering

SHIMOGA.



As Per our report of even date with interest for A.Narasimha Murthy & Co.

(Sharath)

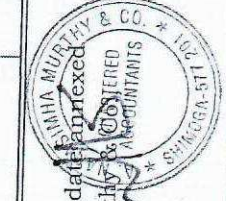
PARTNER

NATIONAL EDUCATION SOCIETY @, SHIMOGA

JAWAHARLAL NEHRU NATIONAL COLLEGE OF ENGINEERING, SHIMOGA

INCOME AND EXPENDITURE FOR THE YEAR ENDED 31ST MARCH 2014

AMOUNT AS ON 1.03.2013	EXPENDITURE	AMOUNT AS ON 31.03.2014	AMOUNT AS ON 31.03.2013	INCOME		AMOUNT AS ON 31.03.2014
				By	FEEES COLLECTION	
152795196	To ESTABLISHMENT	192856293	203824337			217964555
10358715	" ADMINISTRATIVE EXPENSES	10880152.94	15768094	"	UNIVERSITY FEES / EXAM FEES	17744865
6128346	" TRAINING AND DEVELOPMENT	9681793	1492571	"	GRANTS / CONTRIBUTION	3902145
956437	" STUDENTS ACTIVITIES	1503638	7911075	"	MISCELLANEOUS FEES	9787769
15127939	" FEES PAID UNIVERSITIES / BOARDS / GOVT	16023260	61338734	"	MISCELLANEOUS RECEIPTS	59090624.33
15526265	MAINTENANCE	17526349	2319164	"	LIBRARY FEES	2365830
755140	" LIBRARY, BOOKS, MAGAZINES	1128735				
6827066	" OTHER EXPENSES	4638000				
452550	" STUDENTS WELFARE EXPENSES	626628				
10000000	" CONTRIBUTION TO NES MGMT	18300000				
25090318	" DEPRECIATION RESERVE	23220803				
48636003	" EXCESS OF INCOME OVER EXPENDITURE	14470137				
292653975	Total	310855788	292653975		Total	310855788



As Per our report of even date annexed for A.Narasimha Murthy & Co. Chartered Accountants (Sharath)

for Jawaharlal Nehru National College Of Engineering, Shimoga

(Dr.R Srinivas Rao Kunte)
Principal

PARTNER

Jawaharlal Nehru
National College of Engineering

Date: 11.11.2014

NATIONAL EDUCATION SOCIETY ®, SHIMOGA
Jawaharlal Nehru National College of Engineering, Shimoga

Balance Sheet as on 31st March 2013

Amount	Liabilities	Sch	Amount	Amount	Assets	Sch	Amount
31.03.2012			31.03.2013	31.03.2012			31.03.2013
404,485,905	Capital Fund	A	470,821,908	353,375,211	Fixed Assets	D	411,857,374
59,462,299	Development Fund	B	59,462,299	111,484,138	Capital Work in Progress	F	95,016,352
19,170,871	Current Liabilities	C	17,365,792	2,963,260	Advance towards Contractors, Suppliers equipments and others	G	7,540,700
178,325,328	Depreciation Reserve	D	203,415,646	10,634,680	Advance to other NES Schools & Colleges	H	10,634,680
6,859,972	Other Funds and Deposits	E	6,817,110	1,886,000	Advances to Teaching & Non Teaching Staff	I	2,563,500
				25,360,936	Cash and Bank	J	20,089,983
				162,000,000	Fixed Deposit with Banks	K	209,584,800
				545,825	Other Deposits	L	550,784
				54,324	Receivables	M	44,581
668,304,375	Total		757,882,755	668,304,375	Total		757,882,755

Date: 15.11.2013

for Jawaharlal Nehru National College of Engineering

As per our report of even date annexed
for A. Narasimha Murthy & Co.,
Chartered Accountants



(Signature)

(Dr. R. Srinivas Red Kunte)
Jawaharlal Nehru
National College of Engineering
SHIMOGA.

(CA Sharath)
Partner

MND-214-269
FRN 0111079

NATIONAL EDUCATION SOCIETY @, SHIMOGA
Jawaharlal Nehru National College of Engineering, Shimoga

Income & Expenditure Account for the year ended 31st March, 2013

Amount (Rs.) as on 31.03.2012	Expenditure	Amount (Rs.) as on 31.03.2013	Amount (Rs.) as on 31.03.2012	Income	Amount (Rs.) as on 31.03.2013
121,404,395	To Establishment Expenses	152,795,196	187,725,860	By Fees Collection	203,824,337
9,284,819	* Administrative Expenses	10,358,715	14,191,161	* University Fees	15,768,094
8,972,217	* Training and Development Expenses	6,128,346	6,479,708	* Miscellaneous Fees	7,911,075
784,263	* Students Activities	956,437	2,085,295	* Grants / Contribution	1,492,571
12,637,656	* Fees Paid to University/ Board / Govt	15,127,939	42,721,020	* Miscellaneous Receipts	61,338,734
12,828,382	* Maintenance Expenses	15,526,265	1,893,519	* Library Fees	2,319,164
1,192,340	* Library Books and Magazines	755,140			
479,872	* Students Welfare Expenses	452,550			
8,868,359	* Other Expenses	6,827,066			
	* Contribution to NES Mgmt.	10,000,000			
21,389,286	* Depreciation	25,090,318			
57,254,974	* Excess of Income Over Expenditure	48,636,003			
255,096,563	TOTAL	292,653,975	255,096,563	TOTAL	292,653,975

Date : 15.11.2013

for Jawaharlal Nehru National College of Engineering

As per our report of even date annexed
for A. Narasimha Murthy & Co.,
Chartered Accountants



(Signature)
(CA Sharath)

Partner
M No 514269
FRN 0111075

(Signature)
(Dr. R. Srinivas Rao Kunte)
Jawaharlal Nehru
National College of Engineering
SHIMOGA.



**Criterion – VII
Innovations
and
Best Practices**

CRITERIA VII: INNOVATIONS AND BEST PRACTICES

7.1 Environment Consciousness

7.1.1 Does the Institute conduct a Green Audit of its campus and facilities?

Yes. The institute had conducted an informal Green Audit/ Assessment of the campus in December 2003. The outcome was positive, reflecting the green initiatives that the institute has taken on campus. The major suggestion of the green audit was to have an effluent treatment plant, which was duly commissioned and operationalised by the College in 2004.

7.1.2 What are the initiatives taken by the college to make the campus eco-friendly?

- **Energy conservation**
Institute vehicles are monitored for specific fuel consumption. Necessary maintenance work is being carried out as per requirement.
- **Use of Lights and Fan:**
Frugal use of lights and fans is facilitated by the highly eco-friendly structure of our building. All rooms are provided with large windows to let light in and air to circulate. The compact fluorescent lamps (CFLs) are used as these use one-fifth the energy of conventional tungsten bulbs while giving the same output, reducing CO₂ emissions, and lasting 9,000 + hours longer than incandescent bulbs. There is reduced energy consumption and lower emission of heat, reducing cooling requirements.
- **Purchase of new Energy efficient equipment :**
New purchases which are made keeping in mind the energy efficiency of the equipments viz., Air Conditioners, LED Displays, Computers, Printers, Lab equipments etc.
The power saving regulators and thermostats are set at energy conservation mode to control consumption and running costs. Wherever possible, the air-conditioners are placed in shady locations to give added advantage of 10% less energy consumption.
The Annual Maintenance Contracts (AMC) of major equipments are strictly adhered to, for enhancing energy efficiency and longer life.
The Campus maintains multiple Solar Panels to derive energy from natural sources. Every block in the institution has individual power control panels and energy meters installations, which help in individual effective monitoring and control of energy consumption. The UPS batteries are maintained in good condition and regularly checked, which reduces energy consumed for charging batteries.
Energy conserving lights like CFL, T5 tube lights and LED's are used in the campus. Informative Posters are put up in all departments educating students regarding the necessity of energy conservation.

- **Use of renewable energy**
Institute has Solar and LED based streetlights and indoor lighting systems. Institute has Bio-diesel plant of 100 lpd capacity. The Bio Diesel is blended with fossil diesel in vehicles.
- **Water harvesting**
The Institution has the facility of 10 million liter capacity rain water collection, which collected from all the buildings in the campus. In addition to this, surface water collection (rain) in another pond. Sewage Treatment Plant (STP) of capacity 1.5 lakhs liters per day is used for gardening.
- **Check dam construction**
The institute has constructed two reservoirs in the campus, with a total storage capacity of 10 million liters of water; besides, two underground sumps have been constructed to store water and supply by pumping the same to various points; in addition, thus enabling the institution to collect and store water necessary for its diverse consumption needs.
- **Efforts for Carbon neutrality**
Optimization of the college bus trips so as to minimize the fuel consumption. Extensive plantation activities are organized. Efficient lighting systems are installed. Solid waste is segregated and bio-degradable waste is being converted in to manure in solid waste management system installed at our campus.
- **Plantation**
 - The institute campus is spread over 49 acres of lush green land and contains thousands of pongamia, avenue, teak and other trees.
 - The campus characterizes a comforting green environment with old and recently planted trees visible on all sides with great effort and hard work over the last many years.
 - The institute lawns have been brought under planned landscaping. The institute now sports an enviable green lawn and gardens, maintained by a dedicated team of employees that enhance the beauty of the campus and social experience of students.
 - Plantation of saplings exercises are undertaken regularly where students and staff are involved in plantation of diverse species of plants. In fact, many of the plants now adorning the MBA lawns are planted by the alumni students, as a regular itinerary every year as part of their annual alumni meet held on the campus.
 - The institute NSS wing conducts tree plantation of regular varieties of trees, as part of 'Vanamahotsava' during July every year.
- **Hazardous waste management**
 - Not much hazardous waste is generated in institute. The waste water from the chemistry lab is treated in the STP.
 - JNNCE Management has devised a unique system of segregation of the solid waste other than the food and organic waste. It includes

the setting up of colour coded bins which differentiate between different types of wastes, viz., recyclable, non-recyclable and compostable wastes. This is a very good measure as it helps in segregating the wastes at the source itself.

- A message is also sent out by this practice to the students and the staff that they too can practice the same method in their own households by segregating wastes before its disposal.
- Besides, 'litter-free campus' campaigns are regularly arranged by the departments, involving students and staff. A number of exercises are being conducted by the institute as part of recently-started 'Swatcha Bharath Abhiyan' of Union Government.
- **e-waste management:**
Old computers are reused in schools run by NES. The e-waste is periodically handed over to the vendors of electronic equipment for safe and proper disposal.

7.2 Innovations

7.2.1 Give details of innovations introduced during the last four years which have created a positive impact on the functioning of the college.

- **Biomass gasification:** Study on performance of biomass gasifier for power generation using wood and wood agro residue mixtures was carried out. The Project was funded by All India Council for Technical Education, Govt. of India. The gasifier system with gas engine for power generation was installed and the electric power was being supplied to institute grid under the supervision of Dr. L. K. Sreepathi, Professor, and Mechanical Engineering.
- A project on scaling of solar water heaters and correlation development relating life of collector and water quality was carried out as a part of Ph.D. research work.
- Studies on solar passive cooling techniques was carried out as part of Ph.D. research work.
- **Waste plastic to oil unit:** A simple domestic scale waste plastic to petro unit has been designed and developed. Performance tests were carried out successfully.
- **Automatic Power operated Sugarcane scooping machine:** This was developed by Mechanical department that scoops the seeds of the sugarcane automatically, preventing the use of large amount of sugarcane otherwise for growing sugarcane.
- The following are the details of Patents filed:

Table 7.1 Patents filed

Sl. No.	Patent/ Copyright	Applicant	Year of Application	Granted
1	Power Operated Sugarcane Seed Scooping Machine	Dr. D. S. Ramakrishna, Professor, Dept. of Mechanical Engg.	2012	In Process
2	Device Measuring Load on a Crane Hook	Dr. D. S. Ramakrishna, Professor, Dept. of Mechanical Engg.	2013	In Process

- Prashanth Kumar U S, Naveen H K, Amogh Kumar, T Pawan Das of ECE department have successfully carried out a project titled “Krishi Mitra”- a novel approach based disease identification in Paddy crops using Image Processing under the guidance of Mr. Sandeep Kumar E, TCE Department in the year 2015.

7.3 Best Practices

7.3.1 Elaborate on any two best practices in the given format at page no. 98, which have contributed to the achievement of the Institutional Objectives and/or contributed to the Quality improvement of the core activities of the college.

BEST PRACTICE -1

1. Title of the Practice: Evolving JNNCE as a “Green Campus”

2. Goal

The goal is to promote “Green campus concept” and become a role model for the educational institutions in particular and society in general.

Green solutions:

- Green building design.
- Wind and solar energy for electricity, demand side management, energy conservation, e-administration, etc.
- Bio diesel Bicycle for in campus transportation.
- Bio gas from canteen, hostel waste, night soil, solar energy for cooking.
- Rain water harvesting.
- Promotion of local food.

3. The Context

The campus is located on a hard rock bed. It is difficult to achieve sustainable solutions for water problems. Percolation of rain water is very low and hence the underground water source does not yield

sufficient water. In order to overcome the problem, a reservoir of 10 million liter capacity is created.

4. The Practice

Following green solutions are being promoted in the campus

- A proposal to install solar power system of 300KW is being processed for the entire electrical power needs of the campus.
- Bio diesel is being promoted as a blend for transportation.
- Waste water treatment system supplies water for secondary usage thus reducing the fresh water requirement.
- Solid waste management system handles the bio degradable waste and converts it in to good manure.
- Promotional activities are being carried out for public and other institutions through, “Chirantana Green Technology Center” established in our institute.

5. Evidence of Success

- Self-reliance on water management.
- Reduction in fuel bill for transportation has been achieved.
- Pollution free campus.

BEST PRACTICE -2

1. Title of the Practice: “To encourage Entrepreneurship among students”.

2. Goal:

- To act as an institutional mechanism for providing motivation, guidance, information and support services on enterprise-building to budding Science & Technology entrepreneurs.
- To create an entrepreneurial culture in the Institution to support the technically qualified youth, women and weaker sections of the society.
- To inculcate a culture of innovation-driven entrepreneurship to enable students to carry out in-house projects.
- To ease pressure on campus placements, by showcasing alternate and rewarding career opportunities.
- To respond effectively to the emerging challenges in the business world.

3. The Context:

More than one lakh students get their engineering graduation in Karnataka every year. There are significant number of students who have valuable entrepreneurial ideas which do not germinate and grow to completion, for want of the necessary environment and support. Allowing students to start working on innovative ideas while they are in college, can be expected to make them contribute significantly to the growth of a robust entrepreneurial system in the society.

4. The Practice:

- Institution has setup New Age Incubation Network Centre-NAIN sponsored by Department of ITBT, Govt. of Karnataka to encourage faculty members to submit their research ideas and undertake research work funded by NAIN during 2015 headed by a Regional Coordinator. Also, Entrepreneurship Development Cell-JNNCE EDC-a member of National Entrepreneurship Network is functioning since 2013.
- This is a platform for students to initiate entrepreneurship activities. BE & M.Tech students are part of the above Cell.
- Students are motivated to do innovative projects during 4th year. Faculty members support learning, design, and implementation of problem for successful completion of projects.
- Inspirational talks by successful entrepreneurs and start-ups, Business plan contests, participation in workshops, project exhibitions, etc. are regularly arranged as part of this initiative.
- The results of above said practice also increases the number of papers published by the faculty members.
- Student entrepreneurship is done in 3 stages.
 - **Preparation In-house stage:** The expert committee formed for the evaluation of ideas shall interview each candidate and analyze his profile, interest and potentiality.
 - **Review and establishment:** Team formation is the key for the entrepreneur to commence his/her journey before starting his/her own company.
 - **Prototype development:** The working model or prototype of the technology idea to be developed and this is to be certified by experts for commercialization.

5. Evidence of Success

The NAIN Centre, JNNCE provides platform for students to innovate, design and prototype industry relevant products. Funds worth Rupees 60 Lakhs from Department of ITBT, Govt. of Karnataka have been received in the last two years to work on industry standard hardware & software resources and research projects.

6. Problems Encountered and Resources Required.

- Generating and sustaining students' interest in entrepreneurial activities is a challenge, as many are risk-averse, and are lured by cozy jobs in corporate world under different compulsions.
- Takes a lot of work and long hours before a project is successfully implemented.

In the final analysis, the success of the idea depends on the uncertain and volatile marketplace.

7. Notes(Optional): Nil

8. Contact Details

Name of the Principal:	Dr. H. R. Mahadevaswamy		
Name of the Institution:	Jawaharlal Nehru National College of Engineering		
City:	Shivamogga		
Pin Code:	577204		
Accredited Status:	Not Accredited		
Work Phone	08182-26707/8/9	Fax	08182-222450
Website	www.jnnce.ac.in		
Email	principal@jnnce.ac.in		
Mobile	+91 - 7899478990		



**Evaluative Reports
of the Departments**



Civil Engineering

1. Name of the department: Civil Engineering

Vision

To become centre of academic excellence and place for learning professional skills to cater the technical challenges posed by the ever changing global environment and development.

Mission

Impart quality education and advances in Civil Engineering to meet the changing scenario of infrastructure development.



**Dr. Rajendra
Khatawkar
Professor &Head**



**Mr. Shashikumar M.
Hiremath
Co-ordinator**



**Dr. Karthika B.S
Co-ordinator**

2. Year of Establishment: 1980

3. Names of Programmes / Courses offered (UG, PG, M.Phil., Ph.D., Integrated Masters, Integrated Ph.D., etc.)

Sl. No.	Name of the Program	Intake
1.	Degree: B.E. Discipline: Civil Engineering	120
2.	Degree: M.Tech Discipline: Transportation Engineering and Management	18
3.	Research: Ph.D. in Civil Engineering	17 registerd

4. Names of Inter-disciplinary courses and the departments/ units involved.

Table CE – 2: Interdisciplinary courses			
Sl. No	Semester	Course Title	Department
UG – Civil Engineering			
1	I/ II/ III/ IV	Engineering Mathematics I, II, III, IV, MATDIP	Mathematics
2	I/II	Engineering Physics	Physics
3	I/II	Engineering Chemistry	Chemistry
4	I/II	Programming in C & Data Structures	Computer Science & Engineering/ Information Science & Engineering
5	I/II	Elements of Mechanical Engineering	Mechanical Engineering
6	I/II	Computer Aided Engineering Drawing	Mechanical Engineering
7	I/II	Basic Electrical Engineering	Electrical and Electronics Engineering
8	I/II	Basic Electronics	Electronics & Communication Engineering/ Telecommunication Engineering
9	I/II	Workshop Practice	Mechanical Engineering
10	I/II	Computer Programming Lab	Computer Science & Engineering/ Information Science & Engineering
11	I/II	Engineering Physics Lab	Physics
12	I/II	Engineering Chemistry Lab	Chemistry
13	I/II	Language Kannada/English	Humanities
PG – M.Tech. Transportation Engineering and Management			
1	I	Applied Statistics	Mathematics

5. Annual/ semester/ choice based credit system (programme wise)

Table CE - 3: System Followed			
Sl. No.	Degree	Courses offered	System followed
1.	B E	Civil Engineering	<ul style="list-style-type: none"> • CBCS Scheme from academic year 2015-2016 onwards • Previously Non-CBCS Scheme
2.	M. Tech	Transportation Engineering and Management	<ul style="list-style-type: none"> • CBCS Scheme from academic year 2014-2015 onwards • Previously Non-CBCS Scheme
3.	Ph. D.	Civil Engineering	Ph.D. Guidelines / Part Time as per Visvesvaraya Technological University, Belagavi

6. Participation of the department in the courses offered by other departments

Table - 4: Subject supported			
Sl. No.	Semester	To Department	Course taught
1.	I/II	To all branches of Engineering	Elements of Civil Engineering and Mechanics
2.	I/II	To all branches of Engineering	Environmental Studies

7. Courses in collaboration with other universities, industries, foreign institutions, etc.: --- Nil ---

8. Details of courses/programmes discontinued (if any) with reasons: --- Nil ---

9. Number of Teaching posts

Table CE - 5: Teaching posts				
Teaching post	UG		PG	
	Sanctioned	Filled	Sanctioned	Filled
Professors	2	2	1	1
Associate Professors	6	1	1	Nil
Asst. Professors	16	20	1	2

10. Faculty profile with name, qualification, designation, specialization (D.Sc./D.Litt. /Ph.D./M.Phil.etc.,)

Table CE – 6: Teaching Faculty						
Sl. No.	Name	Qualification	Designation	Specialization	No. of Years of Experience	No. of Ph.D. Students Guided/Guiding for the last 4 years
1	Dr. A. V. Pradeep Kumar	B.E, M.Tech, Ph.D.	Professor	Highway Engineering	35	4/6
2	Dr. Rajendra Khatawkar	B.E, M.Tech, Ph.D.	Professor & Head	Highway Engineering	33	7
3	Dr. B. M. Gangadharappa	B.E, M.Tech, Ph.D.	Professor	Structural Engg	29	4
4	Mr. G. H. Basavarajappa	B.Sc, M.Sc.	Assoc. Professor	Geology	35	NA
5	Mr. A. N. Srinivasa Pandit	B.E, M.E.	Asst. Professor	Water Resources	16	NA
6	Mr. Shashikumar M. Hiremath	B.E, M.Tech, (Ph.D).	Asst. Professor	Environmental Engineering	12	NA
7	Mr. Umapathi	B.E, M.E, (Ph.D).	Asst. Professor	Highway Engineering	16	NA
8	Dr.B. S. Karthika	B.E, M.Tech, Ph.D.	Asst. Professor	Remote sensing and GIS, Soft Computing	7.5	NA
9	Mr. Rabinandan J.	B.E, M.Tech.	Asst. Professor	Remote sensing and GIS	8.5	NA
10	Mr. Irfan Khan	B.E, M.Tech.	Asst. Professor	Hydraulic and water resources	6.5	NA
11	Mr. Raghuram K. C.	B.E, M.E.	Asst. Professor	Highway Engineering	6.5	NA

12	Mr. Sabareshwaran S	B.E, M.Tech.	Asst. Professor	Structural Engg	5.5	NA
13	Mr. Dattatreya S B	B.E, M.Tech.	Asst. Professor	Structural Engg	5	NA
14	Mr. Mohamed Ibrahim N.	B.E, M.Tech, (Ph.D).	Asst. Professor	Structural Engg	4.5	NA
15	Mr. Adarsha S R	B.E, M.Tech.	Asst. Professor	Construction Technology	4	NA
16	Mr. Anand B	B.E, M.Tech.	Asst. Professor	Structural Engg	4.5	NA
17	Mrs. Bindiya	B.E, M.E.	Asst. Professor	Geo Tech. Engg	3.5	NA
18	Miss. Akshatha.M	B.E, M.Tech.	Asst. Professor	Highway Technology	3.5	NA
19	Mrs. Chaya D Y	B.E, M.Tech	Asst. Professor	Water Resources Engg. And managt	3.5	NA
20	Mr. Sreenivasa V	B.E, M.Tech.	Asst. Professor	Geo Tech. Engg	6	NA
21	Mr. Arun V	B.E, M.Tech.	Asst. Professor	Transportation Engg & Managt	3	NA
22	Mr. Anirudh N	B.E, M.Tech.	Asst. Professor	Transportation Engg & Managt	3	NA
23	Mr. Sagar H	B.E, M.Tech.	Asst. Professor	Industrial Structure	3	NA
24	Mr. Bhuvan Kumar V S	B.E, M.Tech.	Asst. Professor	Construction Engg& Managt	3	NA
25	Mr. Neeraj S N	B.E, M.Tech, (Ph.D).	Asst. Professor	Transportation Engg & Managt	2.5	NA
26	Miss. Kanchana H J	B.E, M.Tech.	Asst. Professor	Hydraulics Engineering	2.5	NA

11. List of senior visiting faculty: --- Nil ---

12. Percentage of lectures delivered and practical classes handled (programme wise)by temporary faculty: --- Nil ---

13. Student-Teacher Ratio (programme wise):

Table CE – 7: Students Teacher Ratio		
Sl. No.	Program	Student Teacher ratio
1	U G (B.E)	17:1
2	P G (M. Tech. in Transportation Engg. & Mgmt.)	12:1

14. Number of academic support staff (technical) and administrative staff; sanctioned and filled

Table CE – 8: Academic and Administrative Staff		
Staff	Sanctioned	Filled
Administrative staff	2	2
Academic support staff	7	7

15. Qualifications of teaching faculty with DSc/D.Litt/Ph.D/MPhil/PG.

Table CE – 9: Qualification of Faculty	
Qualification	Number of Staff
Ph. D	04
P G	22

16. Number of faculty with ongoing projects from a) National b)International funding agencies and grants received
a) National

Table CE – 10 (a): Ongoing projects						
Sl. No.	Title of Ongoing Project	Principal Investigator	Amount Sanctioned (Rs.)	Sanctioned Year	Duration	Agency Sanctioned
01.	“Pervious Concrete for Paver Blocks”	Mr. Neeraj S.N. Assistant Professor	3,00,000	2016	3 years	New Age Incubation Network, Govt. of Karnataka

Table CE – 10 (b): Proposed projects						
Sl. No.	Title of Proposed Project	Principal Investigator or	Funding Applied (Rs.)	Proposed Year	Duration	Funding Agency
01.	“Evaluation of Bituminous mixes using waste plastic”	Mr. Raghuram K. C. Assistant Professor	3,00,000	2017	3 years	New Age Incubation Network, Govt. of Karnataka
02.	“Steel Fibre Reinforced Cement Concrete”	Mr. Raghuram K. C. Assistant Professor	3,00,000	2017	3 years	New Age Incubation Network, Govt. of Karnataka

b) International: --- Nil ---

17. Departmental projects funded by DST-FIST; UGC, DBT, ICSSR, etc. and total grants received: --- Nil ---

18. Research Centre/facility recognized by the University

Table CE – 11(a): Research Centre/facility	
Research Centre	Department of Civil Engineering, JNNCE.
Year of establishment	2002
Recognized by	VTU, Belagavi
Total number of Research Guides	04
Total number of Research Scholars	17 Scholars registered under VTU 4 Scholars awarded under Kuvempu University

19. Publications: Number of publications listed in International database (for E.g: Web of science and Scopus)

Total No. of papers published in international Journals	:	13
Total no. of papers published in National Journals	:	05
Citations	:	13

Table CE – 12: Journal Details (Last Four Years)					
Sl. No.	Faculty name	National	International	Citations	H - index
1	Dr. Rajendra Khatawkar	---	1	---	---
2	Dr. B. M. Gangadharappa	2	2	---	---
3	Mr. Shashikumar M. Hiremath	---	2	6	3
4	Mr. Umapathi	2	---	---	---
5	Dr.B. S. Karthika	---	2	5	---
6	Mrs. Bindiya	---	2	---	---
7	Mrs. Chaya	1	---	---	---
8	Miss. Akshatha.M	---	1	---	---
9	Mr. Anirudh N	---	2	2	---
10	Miss. Kanchana H J	---	1	---	---

20. Areas of consultancy and income generated:

Table CE - 13 : Consultancy			
Sl. No.	Year	Area	Revenue generated in Rs.
1	2016-2017	Material testing, mix design	13,73,629
2	2015-2016	Material testing, mix design	16,04,094
3	2014-2015	Material testing, mix design	18,51,221
4	2013-2014	Material testing, mix design	23,63,814

21. Faculty as members in

- a) National Committees: --- Nil ---
- b) International Committees: --- Nil ---
- c) Editorial boards: --- Nil ---

22. Student projects

- a) Percentage of students who have done in-house projects including interdepartmental programme
- b) Percentage of students placed for projects in organizations outside the institution i.e.in Research laboratories/Industry/ other agencies

Student projects UG:

Table CE – 14 (a): Students projects			
Sl. No	Year	Percentage of (a)	Percentage of (b)
01	2016-2017	100	Nil
02	2015-2016	100	Nil
03	2014-2015	100	Nil
04	2013-2014	100	Nil

Student projects PG:

Table CE – 14 (b): Students projects			
Sl. No	Year	Percentage of (a)	Percentage of (b)
01	2016-2017	100	-
02	2015-2016	100	-
03	2014-2015	100	-
04	2013-2014	82	18

23. Awards / Recognitions received by faculty and student Awards / Recognitions received by faculty

Table CE – 15: Students achievements						
Sl. No	Name	USN No.	Award	PG/UG	Batch	Current Position
1	Miss. Harshitha G	4JN14CT M05	1 st Rank (Gold Medal)	M.Tech (Transportation Engg & Managt)	2014-2016	Assistant Engineer, PWD, Sagar Taluk, Shivamogga District.
2	Miss. Rashmi S. B.	4JN13CT M10	3 rd Rank	M.Tech (Transportation Engg & Managt)	2013-2015	Assistant Professor, CIVIL Engg Dept, JJ Magdum College of Engg, Jaysingpur, Kohlapur.
3	Miss . Swathi M	4JN11C V104	7 th Rank	B.E. Civil	2011-2015	Studying Final Year M.Tech (Struct Engg) in BVB College, Hubballi.
4	Mr. Arun V.	4JN11CT M02	2 nd Rank	M.Tech (Transportation Engg & Managt)	2011-2013	Assistant Professor, CIVIL Engg Dept, JNNCE, Shivamogga

24. List of eminent academicians and scientists / visitors to the department

Table CE – 16: Eminent Academicians and Scientists / Visitors				
Sl.No.	Name	Designation	Company	Date
1	Mr. Vinay	CEO	Hydraulics Company, Bengaluru	17/03/2017 & 18/03/2017

25. Seminars/ Conferences/ Workshops organized & the source of funding:

a) National

Table CE – 17: Conferences and Workshops conducted						
Sl. No.	Course/ Programme/ Co-ordinator	Duration	Date	Source of funding	Target Audience	Resource Persons
1.	“Office Automation” / Head of the Department,	ONE Week	03-06-2013 to 07-06-2013	Engineering Staff Training College, Govt. of Karnataka, KRS	Professionals from Government Agencies	Anand B. and Akshatha M., Civil Engg Dept. JNNCE
2.	“Total Station” / Head of the Department,	ONE Week	22-07-2013 to 26-07-2013	Engineering Staff Training College, Govt. of Karnataka, KRS	Professionals from Government Agencies	Shashikumar M. Hiremath and M. R. Venkatesh, Civil Engg Dept. JNNCE
3.	“Soil Mechanics & Testing Road Engineers” / Head of the Department,	ONE Week	19-08-2013 to 23-08-2013	Engineering Staff Training College, Govt. of Karnataka, KRS	Professionals from Government Agencies	Bindiya K. and Srinivasa V., Civil Engg Dept. JNNCE

4.	“Advanced Computer Application” / Head of the Department,	ONE Week	21-08-2013 to 25-08-2013	Engineering Staff Training College, Govt. of Karnataka, KRS	Professionals from Government Agencies	Mohamed Ibrahim N. and Sagar H., Civil Engg. Dept., JNNCE
5.	“STAAD Pro” / Head of the Department,	ONE Week	26-09-2013 to 30-09-2013	Engineering Staff Training College, Govt. of Karnataka, KRS	Professionals from Government Agencies	Dattatreya S. Bhasari and Sabareshwaran S., Civil Engg. Dept., JNNCE
6.	“Internet and Outlook Express” / Head of the Department,	ONE Week	07-10-2013 to 11-10-2013	Engineering Staff Training College, Govt. of Karnataka, KRS	Professionals from Government Agencies	Rabinandan J. and Umaphathi., Civil Engg. Dept., JNNCE
7.	“Advanced MS EXCEL” / Head of the Department,	ONE Week	25-11-2013 to 29-11-2013	Engineering Staff Training College, Govt. of Karnataka, KRS	Professionals from Government Agencies	Raghuram K. C. and Adarsha S. R., Civil Engg. Dept., JNNCE
8.	“Engineering Mechanics” / Dr. B. M. Gangadharappa, Professor	TWO week	26-11-2013 to 06-12-2013	IIT Bombay	Teaching Faculty of Engineering Colleges	Teaching Faculty from IIT Bombay through MOOC
9.	“AUTOCAD” / Head of the Department	ONE Week	24-12-2013 to 28-12-2013	Engineering Staff Training College, Govt. of Karnataka, KRS	Professionals from Government Agencies	Irfan Khan and Bhuvan Kumar V. S., Civil Engg. Dept., JNNCE

10.	“Fluid Mechanics” / Head of the Department	TWO week	20-05-2014 to 30-05-2014	IIT KHARAGPUR	Teaching Faculty of Engineering Colleges	Teaching Faculty from IIT Kharagpur through MOOC
11.	“Office Automation” / Head of the Department,	ONE Week	09-06-2014 to 13-06-2014	Engineering Staff Training College, Govt. of Karnataka, KRS	Professionals from Government Agencies	Chaya D. Y. and Kanchana H. J., Civil Engg. Dept., JNNCE
12.	“Forensic in Civil Engineering and Its Fundamentals” / Head of the Department,	ONE Week	21-07-2014 to 26-07-2014	ISTE and SRM University sponsored	Teaching Faculty of Engineering Colleges	B.S.C. Rao, Institute of Metro and Railway Technology, Hyderabad, Umesh B. Rao, Civil Designing company, Bengaluru and Dr.C.V.Srinivas, Prof. Civil Engg. Dept., Global Academy of Technology, Bengaluru.
13.	“Total Station” / Head of the Department,	ONE Week	29-12-2014 to 02-01-2015	Engineering Staff Training College, Govt. of Karnataka, KRS	Professionals from Government Agencies	Shashikumar M. Hiremath and Sabareshwaran S., Civil Engg. Dept., JNNCE

14.	“Environment al Studies” / Shashikumar M. Hiremath, Asst. Prof.,	TWO week	02-06-2015 to 12-06-2015	IIT Bombay	Teaching Faculty of Engineering Colleges	Teaching Faculty of IIT Bombay through MOOC
15.	“Introduction to Structural Engineering” /Sabareshwar an S., Asst. Prof.,	TWO week	30-12-2015 to 09-01-2016	IIT KHARAGPUR	Teaching Faculty of Engineering Colleges	Teaching Faculty of IIT Kharagpur through MOOC

b) International: --- Nil ---

26. Student profile programme/course wise:

Table CE – 18: Student profile						
Year	Name of the Course/ programme	Applications received	Selected	Enrolled		Pass percentage
				M	F	
UG Students						
2012-16	B.E. (Civil Engineering)	126	126	75	51	83.20
2011-15		126	121	79	42	81.81
2010-14		60	60	43	17	91.66
2009-13		60	60	49	11	91.66
PG Students						
2014-16	M .Tech. (Transportation Engineering and Management)	18	18	13	5	100.00
2013-15		18	18	13	5	100.00
2012-14		18	18	14	4	94.11
2011-13		18	18	16	2	83.33

*M = Male *F = Female

27. Diversity of Students:

Table CE – 19(a): Diversity of UG Students				
Year	Name of the Course	% of students from the same state	% of students from other States	% of students from abroad
2016-17	B.E. (Civil Engineering)	99.17	Nil	0.83
2015-16		99.14	0.86	Nil
2014-15		99.17	0.83	Nil
2013-14		99.17	0.83	Nil

Table CE – 19 (b): Diversity of PG Students				
Year	Name of the Course	% of students from the same state	% of students from other States	% of students from abroad
2016-17	M .Tech. (Transportation Engineering and Management)	100	Nil	Nil
2015-16		100	Nil	Nil
2014-15		100	Nil	Nil
2013-14		100	Nil	Nil

28. How many students have cleared national and state competitive examinations such as NET, SLET, GATE, Civil services, Defense services, etc.?

8 Students (2013-2016)

Table CE – 20: Exam qualified			
Sl. No.	Competitive Exam	Year	No. of students qualified
1.	GATE	2015-2016	3
		2014-2015	--
		2013-2014	2
		2012-2013	2
2.	GRE	2014-2015	1

29. Student progression:

Table CE - 21: Student progression				
Student Progression	Percentage against enrolled			
	2015-16	2014-15	2013-14	2012-13
UG to PG	10.00	10.00	--	--
PG to M. Phil	--	--	--	--
PG to Ph. D	5.56	5.56	5.56	--
Employed Campus Selection	10.39	4.05	--	--
Other than Campus Selection	40	40	--	--
Entrepreneurship/Self-Employment	0.65	2.70	--	--

30. Details of Infrastructural facilities

a) Library

Table CE – 22 (a): Library	
Details	Number
Department Library	1800
Journals	120
Reports	125
Syllabus	VTU (2006,2010,2014,2015 Scheme)
Question Papers	VTU (2006,2010,2014,2015 Scheme)

b) Internet facilities at institute level:

The institute has Internet connectivity of 16 Mbps leased line and OFC enabled connectivity. Internet facility is provided for both students and staff. HOD's and staff are provided with JNNCE email ID to access their account.

The academic block is internally connected through Wi-Fi as well as wired LAN with 03 outdoor access points.

c) Classrooms with ICT facility:

There are 8 classrooms in the department to conduct the classes and 1 seminar hall. All the classrooms are equipped with overhead projectors, PC and Wi-fi.

d) Laboratories:

Table CE– 22 (b): Laboratory			
Sl. No.	Laboratory Name	Equipped with	Area in m ²
1	Basic Materials Testing Laboratory	Universal testing machine, Compression testing machine, Impact testing machine, Vicker hardness testing m/c, Rockwell cum Brinell Hardness Tester capacity 187.5 kgf. Model PMT 5C, Pendulum Impact Testing m/c – Mechanical version model SMT 30 capacity 30 kgm (300 joules), Load Frame test bin, UTM Software.	137.96
2	Survey Stores	Pentax Electronic Total Stations Model W – 625NX, W-825EX, V-227, LYNX Electronic Theodolite LETA-05, LYNX Auto Level LAL-6G, LYNX Std. Vernier Theodolite (10 No.s), LYNX Dumpy Levels (05 No.s).	28.32

3	Hydraulic and Hydraulic Machines Laboratory	Venturi meter, Francis turbine, Kaplan turbine, Centrifugal pump, Pelton wheel, Flexy glass flume apps, Francis Turbine Model, Water current meter, Jet Vanes.	485.29
4	Highway and Concrete Laboratory & M.Tech Lab	Abbrasion testing machine, Block making m/c, Marshal stability testing apps, Schmidh Concrete test hammer, LYNX Digital Compression Testing 3000 KN capacity m/c, LVDT Indicator, Pressure cell indicator, Software, Data,, Monitoring and acquisition system – 15 channels, Benkelman Beam (Karnataka Traders Bang), Ductility Testing Machine, Flash & Fire Point Apparatus (2 Nos), Radar gun speed measurement, Merlin for measurement of unevenness.	71.29
5	Geotechnical Engineering Laboratory	Direct Shear apparatus, Consolidation apparatus – three gangs, Constant pressure system, Moisture meter, Swell pressure test apps, Load frame, Triaxial outfit, VDT 0-100mm indicator, 0-50 T Load cell comprs, 0-100 T Load cell comprs, Hydraulic jack 50 T capacity, Direct Shear test apparatus, Permeability apparatus.	129.88
6	Applied Geology Engineering Laboratory	Resistivity meter, different types of minerals and rocks	89.10
7	Environmental Engineering Laboratory	Bousch Lamb Spectronic, B O D Incubator, Jar test apparatus, Photo flurometer, Digital Conductivity meter, pH meter, Dissolved Oxygen meter, Water Quality Analyser.	171.60
8	CAD Centre	Computers, Laser and inkjet printers, LCD projectors, UPS, Civil Softwares.	89.20
9	Model Laboratory	Model Set	28.20

31. Number of students receiving financial assistance from college, university, government or other agencies:

Table CE - 23 : Scholarship							
Sl no	Year	Central Government Scholarship for SC/ST	Fee Concession OBC	Ex-Defense Scholarship	Defense Scholarship	Municipal	Management
1	2014-2015	40	148	-	-	5	-
2	2015-2016	50	185	-	-	6	-

- Every year best outgoing student from Civil Engineering Department receives an award titled “G. Sharadamma Rudrappa Memorial Award” financed by Prof. G. R. Manjunath, HOD Civil Engineering Department, Atria College of Engineering, Bengaluru.

32. Details on student enrichment programs (special lectures / workshops / seminar) with external experts

Table CE – 24: Student Enrichment Programs					
Sl. No	Co-ordinator	Topic	Guest name/Resource person	Date	Target Audience
01	Sreenivasa V. Asst. Prof., Civil Engg. Dept., JNNCE	TWO DAY workshop on “Design of Tall Structures”	Mr. Vinay, CEO, SPM Hydraulics Company, Bengaluru	17 and 18-03-2017	Prefinal year and Final Year Civil Engg. Students
02.	Sreenivasa V. Asst. Prof., Civil Engg. Dept., JNNCE	National Creativity Aptitude Test 2017	Offline test conducted for prefinal year and final year civil students organized by IIT Bombay	03-03-2017	Prefinal year and Final Year Civil Engg. Students
03.	Anand B. and Bindiya K. Asst. Profs., Civil	Work Shop on “AUTO CAD by AUTODESK”	Mr. Anil Ghaste, ISCT and AutoDesk Training centre Dharwad	29-09-2016	Prefinal year and Final Year Civil Engg.

	Engg. Dept., JNNCE				Students
04.	Anand B. and Bindiya K. Asst. Profs., Civil Engg. Dept., JNNCE	Technical Talk on “Technical events for civil engineers by ACC ltd”	Mr. Sunil S Shinde, Customer service incharge, ACC limited, Sales Unit, Hubballi	11-08-2016	All Civil Engg. Students
05.	Anand B. and Bindiya K. Asst. Profs., Civil Engg. Dept., JNNCE	Technical Talk on “Cement Manufacturing”	Mr. Nitanth Sha, Technical Head, J.K. Cements, South India	20-03-2016	All Civil Engg. Students
06.	Irfan Khan, Asst. Profs., Civil Engg. Dept., JNNCE	Technical Seminar on “Autodesk products for Civil Engineers”	Mr. Anil Ghaste, ISCT and AutoDesk Training centre Dharwad	27-02-2015	Prefinal year and Final Year Civil Engg. Students

33. Teaching methods adopted to improve student learning:

The following normal practices adopted by faculty:

- Black board teaching
- Power point presentation
- Group discussion on specific topics
- Assigning mini-projects, assignments, seminars
- Organizing technical visits to construction sites
- Arranging technical talks from industry and academic experts
- Updating students knowledge by exposure to latest civil engineering softwares and their applications (E.g. Auto CAD, Revit, Staad Pro, MS Roads)

34. Participation in Institutional Social Responsibility (ISR) and extension Activities

- Activity participation in NSS camp organized by JNNCE NSS unit
- Faculty members were involved in data collection and analysis of report for Shimoga smart city proposal
- Faculty member and students of the department have involved voluntarily in blood donation camp at college premises

Table CE – 25: Activities		
Sl.No	Date	Program
1	11-02-2017 to 17-02-2107	NSS camp

35. SWOC analysis of the department and future Plans.

Strengths:

- Faculty members of the department are involved in the consultancy activities in various streams of civil engineering.
- The laboratories in the department are equipped with sophisticated instruments and softwares.
- The department has well qualified and competent faculty.
- Full strength admission both in UG and PG.

Weakness:

- Placement record needs to be enhanced.
- Student's academic performance index upgradation is required.
- Improvement in quality research publications are in need.

Opportunities

- Collaboration with academic / industries/ Local bodies need to be improved.
- To have MoU's with academic and industries
- To motivate faculty for innovative research publications
- Encourage for faculty to apply for research project proposals
- Improvement in Rank / Merit levels of students.

Challenges:

- Rating of the Department of Civil Engineering name
- Motivation to take up R & D projects
- Exposing students to practical experience.
- To attract students of excellent academic background for admission.

Future Plans:

- To add new PG programs to the department.
- To encourage faculty members to enroll for Ph.D programme.
- To create internship opportunities for UG students.
- Concentrate on upgradation of existing laboratory facilities.

Mechanical Engineering

1. **Name of the Department:** Mechanical Engineering

Vision

To be a model department with academic excellence and technical expertise, grooming students to become Mechanical Engineers of best quality to meet ever changing needs of industry and society.

Mission

- Impart technical education of highest standard by qualified and experienced faculty in the field of Mechanical Engineering through effective teaching learning process.
- Continuously upgrade knowledge, skill and engage in Research & Development activity by executing challenging projects in association with academia and industry.
- Imbibe ethical, environmental and social values amongst students using value based education.



Dr. Y.J.Suresh
Professor & Head



Dr.K.M.Basappaji
Professor



Mr. Shivanandappa.N.D.
Assistant Professor

2. **Year of Establishment:** 1980

3. **Names of Programmes/Courses offered (UG, PG, M.Phil., Ph.D., Integrated Masters, Integrated Ph.D., etc.)**

Table ME – 1 : Name of Program		
Sl. No.	Name of the Program	Intake
1	Degree: Bachelor Degree in Engineering Discipline: Mechanical Engineering	120
2	Degree: Master of Technology Discipline: Design Engineering	18

3	Degree: Master of Technology Discipline: Computer Integrated Manufacturing	18
4	Research: Ph. D in Mechanical Engineering	----
5	M.Sc.(Engineering) by Research	----

4. Names of Interdisciplinary courses and the departments/units involved

The list of interdisciplinary courses offered to B.E (Mechanical) is mentioned in the table below:

Table ME – 2 : Interdisciplinary courses				
Sl. No	Semester	Course Title	Department	Units involved
1	I/ II/ III/ IV	Engineering Mathematics I, II, III, IV, MATDIP	Mathematics	72
2	I/II	Engineering Physics	Physics	16
3	I/II	Elements of Civil Engg. & Engineering Mechanics, Environmental Science	Civil Engineering	16
4	I/II	Programming in C & Data Structures	Computer Science & Engineering/ Information Science & Engineering	16
6	I/II	Computer Programming Lab	Computer Science & Engineering/ Information Science & Engineering	15
7	I/II	Physics Lab	Physics	15
8	I/II	Environmental Studies	Civil Engineering	04
9	I/II	Engineering Chemistry	Chemistry	16
10	I/II	Engineering Chemistry Lab	Chemistry	15
12	I/II	Basic Electronics	Electronics & Communication Engineering/ Telecommunication Engineering	16

13	I/II	Basic of Electrical Engineering	Electrical & Electronics Engineering	16
14	I/II	Language Kannada/English	Humanities	04
M.Tech – Design Engineering				
1	I	Applied Mathematics	Mathematics	08
M.Tech – Computer Integrated Manufacturing				
1	I	Applied Mathematics	Mathematics	08

5. Annual/semester/choice based credit system (programme wise)

Table ME – 3 : System Followed			
Sl. No	Degree	Courses offered	System followed
1	B E	Mechanical Engineering	<ul style="list-style-type: none"> • CBCS Scheme from academic year 2015-2016 onwards • Previously Non-CBCS Scheme
2	M. Tech	Design Engineering	<ul style="list-style-type: none"> • CBCS Scheme from academic year 2014-2015 onwards • Previously Non-CBCS Scheme
3	M. Tech	Computer Integrated Manufacturing	<ul style="list-style-type: none"> • CBCS Scheme from academic year 2014-2015 onwards • Previously Non-CBCS Scheme
4	MSc Engg/ Ph. D.	Mechanical Engineering	-----

6. Participation of the Department in the courses offered by other Departments

Following are the courses offered to other departments, taught by the faculty of mechanical department.

Table ME – 4 : Subject supported				
Sl. No	Semester	To Department	Course taught	Units involved
1	I/II	To all branches of Engineering	Computer Aided Engineering Drawing	120
2	I/II		Elements of Mechanical Engineering	40
3	I/II		Workshop Practice	45

7. Courses in collaboration with other Universities, Industries, Foreign Institutions, etc.: ---Nil ---

8. Details of courses/programmes discontinued (if any) with reasons

---Nil---

9. Number of Teaching posts

Table ME – 5 : Sanctioned and Filled Position						
Teaching post	Under Graduate		Post Graduate (Design Engineering)		Post Graduate (Computer Integrated Manufacturing)	
	Sanctioned	Filled	Sanctioned	Filled	Sanctioned	Filled
Professors	02	04	01	02	01	02
Associate Professors	06	06	01	00	01	01
Asst. Professors	16	11	01	01	01	00

10. Faculty profile with name, qualification, designation, specialization,

Table ME – 6 : Faculty Specialization						
Sl no	Name	Qualification	Designation	Specialization	No. of Years of Experience	No. of Ph.D. Students Guided/Guiding for the last 4 years
1.	Dr.Y.J. Suresh	ME,Ph.D	Professor & HOD	Machine design	35	01/00
2.	Dr.D.S. Ramakrishna	ME, Ph.D	Professor	Design Engineering	33	01/05
3.	Dr.L.K. Sreepathi	M.Tech, P.hD	Professor	Thermal engineering	31	04/04
4.	Dr.K. Sabeel Ahmed	M.Tech, Ph.D	Professor	Characterization of composite materials	31	00/02
5.	Dr.E.Basavaraj	M.Tech, Ph.D	Professor	Composites	26	00/01
6.	Dr.H.Raghavendra	M.Tech, Ph.D	Professor	Manufacturing and materials	31	00/02
7.	Dr.M.M.Rajath Hegde	M.E, Ph D	Professor	Nanomaterials	26	00/02
8.	Dr.K.M. Basappaji	M.Tech, Ph.D	Professor	Condition monitoring and cleaner	24	-

9.	Mr.C. Manjunath	M.Tech	Associate. Professor	Thermal and Fluid Engineering	33	-
10.	Mr.V. Ashok	M.Tech	Associate. Professor	Thermal sciences (I C ENGINES)	33	-
11.	Mr.T.V. Aravindkumar	M.Tech	Associate. Professor	Production management	33	-
12.	Mr.J.Ashok	M.Tech	Associate. Professor	Production engineering	33	-
13.	Mr.S.R. Venkatesh	M.Tech	Associate. Professor	Foundry technology	30	-
14.	Mr.M.Ramesh	M.Tech	Associate. Professor	Production engineering	27	-
15.	Mr.C.D. Ashok Kumar	M.Tech	Associate. Professor	Production engineering	24	-
16.	Mr.G.V. Girish	M.Tech	Asst. Professor	Production engineering	19	-
17.	Ms.Sathyaprema	M.Tech	Asst. Professor	Production engineering	19	-
18.	Mr.Shanthikiran M	M.Tech	Asst. Professor	Mechanical engineering	21	-
19.	Mr.C. Suresh	M.Sc. Engg	Asst. Professor	RFID	35	-
20.	Mr.G.H.Manjunathachary	M.Tech	Asst. Professor	Machine design	12	-
21.	Amith Kumar S J	M.Tech	Asst. Professor	Design engineering	12	-
22.	Mr.Shivanandappa N D	M.Tech	Asst. Professor	Design engineering	11	-
23.	Mr.Abdul Saleem S	M.Tech	Asst. Professor	Thermal sciences and engineering	18	-
24.	Mr.M.K. Srinivasa Murthy	M.Tech	Asst. Professor	Industrial automation and Robotics	09	-
25.	Mr.Jayavardhana Acharya N	B.E.	Lecturer	Mechatronics	07	-
26.	Mr.Parameshwara.S	M.Tech	Asst. Professor	Design Engineering	05	-
27.	Mr.Pradeep N.B.	M.Tech	Asst. Professor	Production Engineering	05	-
28.	Mr.Ravikumar B.N.	M.Tech	Asst. Professor	Thermal Engineering	06	-

11. List of senior visiting faculty: ---Nil ---

12. Percentage of lectures delivered and practical classes handled (programme wise) by temporary faculty: ---Nil ---

13. Student-Teacher Ratio (programme wise):

Table ME – 7 : Student Teacher Ratio		
Sl. No.	Program	Student Teacher ratio
1.	BE-Mechanical	21:1
2.	M.Tech-Design Engineering	12:1
3.	M.Tech-Computer Integrated Manufacturing	12:1

14. Number of academic support staff (technical) and administrative staff; sanctioned and filled

Table ME – 8 : Academic and Administrative Staff Sanctioned and Filled		
Staff	Sanctioned	Filled
Academic support staff	19	19
Administrative staff	07	07

15. Qualifications of teaching faculty with DSc/D.Litt/Ph.D/MPhil/PG.

Table ME – 9 : Qualification of Faculty	
Qualification	Number of Staff
Ph. D	08
P.G.	19
U.G.	01

16. Number of faculty with ongoing projects from a) National b)International funding agencies and grants received

Table ME – 10 : Ongoing projects					
Sl. No.	Title of Ongoing Project	Principal Investigator	Amount Sanctioned in Lakh	Agency Sanctioned	Date of sanction
1	Development of decarticator	Dr.L.K.Sreepathi	0.75	KSBDB	2012

17. Departmental projects funded by DST-FIST; UGC, DBT, ICSSR, etc. and total grants received

Table ME – 11 : Funded projects						
Sl. No	Name of the Funding Agency	Name of the Scheme	Programme Title	Year of Funding	Amount Sanctioned in Lakhs	Status
1	KSCST	Research Fund	Testing of SVO on diesel engines	2016	1.00	completed
2	MAMCOS	Research Fund	Extraction of Arecoline	2016	0.15	completed
3	MAMCOS	Research Fund	Extraction of Tannin from Areca Husk	2015	0.15	completed
4	AICTE	MODROBS	Setting up of FMS lab	2013	19.00	completed

18. Research Centre/facility recognized by the University

Table ME – 12 : Research Centre/facility		
Research Centre	Department of Mechanical Engineering, JNNCE, Shimoga	
Year of establishment	2001	
Recognized by	Visvesvaraya Technological University, Belgaum	
Total number of Research Guides	08	
Total number of Research Scholars	Internal students	External students
	04	19

19. Publications:

Number of publications listed in International database:	12
Total No. of papers published in international Journals:	31
Total no. of papers published in National Journals:	01
Monographs:	Nil
Citations:	75.32

Table ME – 13 : Journal Details					
Sl. No	Faculty name	Natio nal	Internation al	Citation s	H - ind ex
1	Dr.D.S. Ramakrishna	---	02	07	01
2	Dr.Y.J. Suresh	---	07	---	---
3	Dr.L.K. Sripathi	---	03	20	02
4	Dr.K. Sabeel Ahmed	---	06	338	02
5	Dr.E.Basavaraj	01	01	29	04
6	Dr.M.M.Rajath Hegde	---	---	08	02
7	Dr.K.M. Basappaji	---	05	09	01
8	Ms Sathyaprema	---	01	---	---
9	Mr.G.H.Manjunathachary	---	01	---	---
10	Mr.Amith Kumar S J	---	05	48	03
11	Mr.Shivanandappa N D	---	01	---	---

20. Areas of consultancy and income generated:

Table ME - 14 : Consultancy		
Sl. No.	Area	Revenue generated in Lakhs.
1	Testing of equipments, Design and development of lab experimental setup	0.25
2	Rain water harvesting, fuel testing, solar systems	0.25
3	Wear testing of metals and composites	0.10
4	Condition monitoring	0.91

21. Faculty as members in

a) National Committees:

Table ME – 15 : Memberships			
Sl. No.	Faculty Name	Committee	Year
1	Dr. L.K.Sreepathi	Chairman for pollution monitoring committee of Bhadravathi Industrial Cluster Appointed by Central Pollution Control Board, Govt. of India.	2015 to 17
2	Dr. L.K.Sreepathi	Member of “Green campus committee” for central university Gulbarga.	2015

b) International Committees:---Nil---

c) Editorial boards:---Nil---

22. Student projects

- a) Percentage of students who have done in-house projects including inter-departmental programme.
- b) Percentage of students placed for projects in organizations outside the institution i.e.in Research laboratories/Industry/ other agencies.

Table ME – 16 (a) : Students projects			
Sl. No	Year	Percentage of (a)	Percentage of (b)
1	2016-17	97	3
2	2015-16	100	0
3	2014-15	97	3
4	2013-14	83	17

Student projects PG: Design Engineering

Table ME – 16 (b) : Students projects			
Sl. No	Year	Percentage of (a)	Percentage of (b)
1	2016-17	44	56
2	2015-16	78	22
3	2014-15	82	18
4	2013-14	60	40

Student projects PG: Computer Integrated Manufacturing

Table ME– 16 (c) : Students projects			
Sl. No	Year	Percentage of (a)	Percentage of (b)
1	2016-17	100	0
2	2015-16	80	20
3	2014-15	80	20
4	2013-14	83	17

23. Awards / Recognitions received by faculty and students

- a) Awards / Recognitions received by faculty:

Table ME – 17 (a) : Faculty achievements				
Sl. No	Name	Award	Venue	Date
1	Dr D S Ramakrishna	Filed application for patent “Device for load Measurement Using Crane Hook” No 3766/CHE/2013	----	26-08-2013
2	Dr L.K.Sreepathi	Documentary on green champion	NDTV	2015
3	Dr L.K.Sreepathi	Organizer	IIT (BHU), Varanasi	2016

4	Dr L.K.Sreepathi	Organizer	DBACE, Nagpur	2015
5	Dr L.K.Sreepathi	Observer	Indian Science Congress, ISAR, Pune	December 2015
6	Dr K.M.Basappaji	BOSCH certified Soft Skill Trainer	Bangalore	2014-15
7	Mr. Jayavardhana Acharya N	Resource Person at VTU training program	Mysore	2015

b) Awards / Recognitions received by students

Table ME – 17 (b) : Student achievements				
Sl. No	Name	Award	Venue	Date
1	Dheerank R, Gaurav V Kotecha and team	First prize for best project	XII IPRoMM, Nagpur	23/12/2016
2	Dheerank R	Paper selected for world tribology congress	Beijing, China	to be held in September 2017
3	Manjunath Singh and Team	Best paper award	National Institute of Engineering, Mysore	April 2017

24. List of eminent academicians and scientists / visitors to the department

Table ME – 18 : Eminent Academicians and Scientists / Visitors				
Sl.No.	Name	Designation	Company	Date
1	Prakash Krishnaswamy	CEO	XITADEL	03/03/2017
2	KPJ Reddy	Professor Emeritus	IISc Bangalore	18/02/2017
3	Dr.Prasad	Professor	NITE,Mumbai	23/03/2016

25. Seminars/ Conferences/Workshops organized & the source of funding

a) National

Details of Conferences and Workshops conducted:

Table ME – 19 (a) : Conferences and Workshops conducted				
Sl. No.	Course/ Programme	Duration	Month / Year	Source of funding
1	A STTP on “Experimental techniques in Mechanical Engineering” certified by ISTE during 27 th to 31 st January 2014 at JNNCE, Shivamogga.	1 week	27-31, January, 2014	Local industry and college
2	Workshop on Robotics for Manufacturing applications	2 days	4 th -5 th March 2016	Industry sponsorship and participation fee

b) International: ---Nil---

26. Student profile programme/course wise:

Table ME – 20 (a) : Student profile - B.E (Mechanical Engineering)						
Batch	Name of the Course/ programme	Applications received	Selected	Enrolled		Pass percentage
				M	F	
2012-16	B.E(Mechanical Engineering)	120+6	120	116	4	79.16
2011-15		120+6	121	117	4	96.69
2010-14		120+6	120	119	1	90.00
2009-13		120+6	120	120	-	84.16

Table ME – 20 (b) : Student profile - M.Tech (Design Engineering)						
Batch	Name of the Course/ programme	Applications received	Selected	Enrolled		Pass percentage
				M	F	
2014-16	M.Tech(Design Engineering)	18	17	16	1	68.75
2013-15		18	14	14	-	100
2012-14		18	18	18	-	100
2011-13		18	16	14	2	100

Table ME– 20 (c) : Student profile - M.Tech (Computer Integrated Manufacturing)						
Batch	Name of the Course/ programme	Applications received	Selected	Enrolled		Pass percentage
				M	F	
2014-16	M.Tech(Computer Integrated Manufacturing)	18	8	7	1	100
2013-15		18	13	13	-	100
2012-14		18	18	18	-	100
2011-13		-	-	-	-	-

27. Diversity of Students:

Table ME – 21 (a) : Diversity of UG Students				
Year	Name of the Course	% of students from the same state	% of students from other States	% of students from abroad
2016-17	Mechanical Engineering	99	1	---
2015-16		100	---	---
2014-15		99	1	---
2013-14		92.5	7.5	---

Table ME – 21 (b) : Diversity of PG Students (Design Engineering)				
Year	Name of the Course	% of students from the same state	% of students from other States	% of students from abroad
2016-17	Design Engineering	100	---	---
2015-16		100	---	---
2014-15		100	---	---
2013-14		100	---	---

Table ME – 21 (c) : Diversity of PG Students (Computer Integrated Manufacturing)				
Year	Name of the Course	% of students from the same state	% of students from other States	% of students from abroad
2016-17	Computer Integrated Manufacturing	100	---	---
2015-16		100	---	---
2014-15		100	---	---
2013-14		100	---	---

28. How many students have cleared national and state competitive examinations such as NET, SLET, GATE, Civil services, Defense services, etc.? : --- Nil ---

29. Student progression:

Table ME– 22 : Student progression				
Student Progression	Percentage against enrolled			
	2015-16	2014-15	2013-14	2012-13
UG to PG	2.5	5.0	2.5	2.5
PG to M. Phil	Nil	Nil	Nil	Nil
PG to Ph. D	Nil	Nil	Nil	10
Employed Campus Selection	35	20	18	11
Other than Campus Selection	---	---	---	---
Entrepreneurship / Self-Employment	---	---	---	---

30. Details of Infrastructural facilities

a) Library

Table ME - 23 : Library	
Details	Number
Department Library	1505
E-BOOKS	Nil
Student Project Reports	640
Syllabus	Nil
Question Papers	Nil

b) Internet facilities for staff and students:

The institution has Internet connectivity of 16 Mbps leased line and OFC enabled connectivity. Internet facility is provided for staff. HOD's and staff are provided with JNNCE email ID to access their account.

c) Classrooms with ICT facility:

The department has ten classrooms of which eight are provided with ICT facility.

d) Laboratories:

Table ME – 24 : Laboratory			
Sl. No.	Laboratory Name	Equipped with	Area in m ²
1	Workshop Practice	FITTING SECTION: Bench Grinder, Drilling machine, Working tables,	390

		Shearing machine, Tools, Hand drilling machine, Hand Blower, Files, Vice & other tools, Display charts, Power Hacksaw, Tools for workshop, Toools V height gauge chasses etc, Tools Files , Bench, leg vice files ball pin hammer, Surface Plate, anvil, angle plate, Weighing Machine, Sheet metal stakes, Jenny machine for sheet metal WELDING SECTION: Spot welding machine , Welding transformer, Portable single phase welding transformer,	
2	STEP CAD LABORATORY	Computers: 45, Printer: 01, Projector: 01 UPS: 10KVA, Battery: 20Nos Software usage: Solid Edge	71
3	ADMIN BLOCK CAD LABORATORY	Computers: 36 Printer 1 Projector 1 UPS 10KV Battery 20Nos Software usage Solid Edge	90
4	CAE/CAM LABORATORY	Computers: 27 Printer 1 Projector 1 UPS 10KV Battery 20Nos Ansys, Edge Cam, Ansys,Hyper Mesh Software usage LS Dyna	94
5	Metallographic & Material Testing Laboratory	pin-on-disk wear apparatus, Universal testing machine, Fatigue testing Machine , Impact Testing , Brinell hardness B-3000, Rockwell	209
6	Foundry & Forging Lab	Furnaces Permeability Tester Compression strength Tester Moisture teller Sand rammer Universal sand testing machine Permeability Tester with Tube	118

7	Machine Shop	1. SHAPER: 08 nos 2. LATHE: 15 nos 3.MILLING MACHINE: 2 nos 4.SLOTTING MACHINE: 1 no 5.GRINDING MACHINE : 3 nos	464
8	Heat & Mass Transfer Lab	Natural convection (cylinder) Pin fin apparatus Unsteady state heat transfer Equipment Air conditioner test rig 2 Refrigeration test rig vapour compression	102
9	Design Lab	Whirling of shaft with accessories 10 channel strain indicator Motorized Gyroscope Journal bearing test rig Universal Governor Polarizer analyzer to photo elasticity setup	100
10	Energy Conversion Lab	Red wood viscometer with accessories Two stroke single cylinder Petrol engine Four stroke four cylinder Petrol engine Four stroke single cylinder Diesel engine Bomb calorimeter	148
11	Metrology	Digital Temperature gauge Dead Weight Pressure gauge Tester Balancing and switching unit Microvolt meter H P Digital multimeter	139
12	FM Lab	Calibration of V-Notch Centrifugal blower test rig Centrifugal Pump (Single Stage) Centrifugal Pump (Multi Stage) Francis Turbine Electrical loading Impact of Jet on vanes	190

31. Number of students receiving financial assistance from college, university, government or other agencies:

Table - 25 : Scholarship							
Sl no	Year	Central Government Scholarship for SC/ST	Fee Concession OBC	Ex-Defense Scholarship	Defense Scholarship	Municipal	Management
1	2015-16	41	156	Nil	Nil	Nil	Nil
2	2014-15	44	119	Nil	Nil	Nil	Nil

32. Details on student enrichment programs (special lectures / workshops / seminar) with external experts

Table ME – 26 : Student Enrichment Programs			
Sl. No	Topic	Guest name/ Resource person	Date
1	Two days workshop on Soft Skills	Mr.Ramani Freelance Software Trainer, Bangalore	05- 06/11/2016
2	Two days Workshop on Autodesk Fusion 360 Software	Mr.Anil Ghaste	02- 04/04/2016
3	Lecture and interaction on Hyper loop	Dr.S.L.Gombi Professor, KLSGIT, Belagavi	12/03/2016
4	Two days workshop on Robotics	Mr.Madhusudhan	07- 08/11/2015
5	Lecture and interaction on Aerospace	Dr.B.N.Sreedhara	05/04/2015
6	Two days workshop on Aeromodelling	Jetwing Technologies, Bangalore	26- 27/04/2014
7	Two days workshop on Robotics	M/S Robogenesis, Bangalore	06- 07/04/2013
8	Hands on Training for final year UG and PG students on Condition Monitoring and Vibration Analysis	Mr. S.K.M. Rao Managing Director ENVICON Bangalore	October 2012 and December 2013.

33. Teaching methods adopted to improve student learning:

Following are some of the teaching methods adopted by the department to enhance the student learning;

- Teaching the curriculum by using PPT presentations helped to cover more topics with video presentations and diagrams. The use of chalk-talk method helped the students to understand step by step procedure of solving engineering problems.
- Tutorial classes are conducted to allow the students to work out problems and clarify doubts.
- Students are evaluated on continuous basis by providing three tests per subject. Addition to these, students are given assignments to promote self study.

- Students are assigned to give seminars on few topics to ascertain their technical and communication skills.
- Experts from industries and alumni are invited to interact with students, so that the latter will gain practical knowledge.
- Students are encouraged to carry out project works and learn the real problem solving skills.
- Encourage students to take up hobby projects on problems proposed by industries.
- Visits to industries and power plants are arranged to enhance practical knowledge.
- Students are encouraged to exhibit projects in exhibitions which improves their communication skills and interaction with public.

34. Participation in Institutional Social Responsibility (ISR) and extension Activities

Table ME– 27 : Institutional Social Responsibility (ISR) and Extension Activities		
Sl. No.	Program	Date
1	Visit of High School, Shimoga students to the Department to enrich knowledge about engineering education.	14/07/2014
2	Public awareness programme of energy and water conservation through Chiranthana club and mechanical engg dept.	Nearly 20 Programmes are done Yearly. Details are available in the reports.
3	Biofuel information and demonstration center is conducting awareness programme on sustainable energy for rural india.	Nearly 20 Programmes are done Yearly. Details are available in the reports.
4	Vikasa High School, Shimoga students visited the department	4-6/01/2016
4	Vikasa High School, Shimoga students visited the department	08-10/09/2016
5	Visit of Engineers and other Technical staffs of Malnad Alloy Castings Pvt. Ltd. to see the facility of department and students project	19/07/2014
6	JNNCE signed MOU with UAHS, Shimoga to take up Agricultural projects to help the farming community	2015

7	Kenich Imamura , Project Head &Chief Advisor, Yaskawa India Pvt. Ltd., Gurgaon and Sri Ajay Gujjar, General Manager, Yaskawa India Pvt. Ltd, Bangalore have interacted with industrialists, Faculties and students on Industrial automation	14/03/2015
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35. SWOC analysis of the department and future Plans.

Strengths

- Good infrastructure with supportive management.
- Highly qualified and experienced faculty in diverse areas of Mechanical Engineering.
- State of the art research labs viz FMS Lab, Wear testing lab, Condition monitoring lab and Inverse FEM lab to cater to the needs of students and Industry personnel.

Weaknesses

- Limited R&D and consultancy activities.
- Placement in the core Industries is not adequate.
- Faculty knowledge enrichment programs conducted are very few.
- Lack of MOUs with Industries and reputed academia.

Opportunities

- Improving research activities through funded projects and quality publications.
- To enhance the competency level of faculty through more number of knowledge enrichment programmes.
- Strengthen the teaching-learning process to improve the quality of the students.
- Strengthening of alumni and industry support for student internships, projects and placements.

Challenges

- Improving the quality of students by imbibing better teaching learning environment.
- To attract core Mechanical Industries for campus recruitment.
- Bridging the gap between the Industries and Institution.

Future plans

- To bring more research grants from various funding agencies by submitting proposals on current and emerging research areas.
- To file patents for innovative projects of the department.
- Encourage faculty to publish more research papers in reputed International Journals.
- MOUs with Industries and Foreign Universities for research and development activities.
- To organize National /International conference.
- To setup a product development centre to provide incubation for startup entrepreneurs.

**Electrical &
Electronics
Engineering**

1. Name of the department: Electrical & Electronics

Vision

To be a premier department in Electrical and Electronics Engineering by excelling in imparting education and facilitating research of the highest standards through innovation and team work to cater the ever growing needs and aspirations of industry and society.

Mission

Strive for delivering the quality technical education to students in Electrical and Electronics Engineering by incorporating the emerging technologies and work towards enhancing the knowledge on a continual basis.



Dr. Surendra S
Professor & HOD



Vinayaka K
Asst. Professor
NAAC Coordinator

2. Year of Establishment: 1980

3. Names of Programmes/ Courses offered (UG, PG, M.Phil., Ph.D., Integrated Masters; Integrated Ph.D., etc.)

Table E&E – 1: Name of Program		
Sl. No.	Name of the Program	Intake
1	Degree: (B E) Discipline: Electrical & Electronics	60
2	Degree: (M.Tech) Discipline: Power Electronics	18
3	Research: Ph.D. in Electrical Engineering/MSc. Engineering by research	----

4. Names of Inter disciplinary courses and the departments/ units involved:

Table E&E – 2: Interdisciplinary Courses – (UG)			
Sl. No	Semester	Course Title	Department
1	I/ II/ III/ IV	Engineering Mathematics I, II, III, IV, MATDIP	Mathematics
2	I/II	Engineering Physics	Physics
3	I/II	Elements of Civil Engg. & Engineering Mechanics, Environmental Science	Civil engineering
4	I/II	Programming in C & Data Structures	Computer Science & Engineering/ Information Science & Engineering
5	I/II	Computer Aided Engineering Drawing	Mechanical Engineering
6	I/II	Computer Programming Lab	Computer Science & Engineering/ Information Science & Engineering
7	I/II	Engg. Physics Lab	Physics
8	I/II	Environmental studies	Civil
9	I/II	Engineering Chemistry	Chemistry
10	I/II	Engineering Chemistry	Chemistry
11	I/II	Workshop Practice	Mechanical Engg
12	I/II	Basic Electronics	Electronics & Communication Engineering/ Telecommunication Engineering
13	I/II	Language Kannada/English	Humanities

Table E&E – 3: Interdisciplinary Courses (PG)		
Semester	Course Title	Department
I	Applied Mathematics	Mathematics

5. Annual/semester/choice based credit system (programme wise):

Table E&E - 4: System followed			
Sl. No.	Degree	Courses offered	System followed
1	B. E.	Electrical & Electronics Engineering	<ul style="list-style-type: none"> • CBCS Scheme from academic year 2015-2016 onwards • Previously Non-CBCS Scheme
2	M. Tech.	Power Electronics	<ul style="list-style-type: none"> • CBCS Scheme from academic year 2015-2016 onwards • Previously Non-CBCS Scheme
3	Ph.D. /MSc. Engg. by Research	Electrical Engineering	-----

6. Participation of the department in the courses offered by other departments

Table E&E - 5: Subject supported			
Sl. No.	Semester	To Department	Course taught
1.	I/II	To all branches of Engineering	Basic Electrical Engineering

7. Courses in collaboration with other universities, industries, foreign institutions, etc. : --- Nil ---

8. Details of courses/programmes discontinued (if any)with reasons --- Nil ---

9. Number of teaching posts

Table E&E – 6 (a): Sanctioned and Filled Position		
Teaching post (UG)	Sanctioned	Filled
Professors	2	2
Associate Professors	3	3
Asst. Professors	4	4

Table E&E – 6 (b): Sanctioned and Filled Position		
Teaching post (PG)	Sanctioned	Filled
Professors	1	1
Associate Professors	0	0
Asst. Professors	2	2

10. Faculty profile with name, qualification, designation, specialization, (D.Sc./D.Litt./Ph.D./M.Phil.etc.)

Table E&E – 7: Faculty Specialization						
Sl. No.	Name	Qualification	Designation	Specialization	No. of Years of Experience	No. of Ph.D. Students Guided/Guiding for the last 4 years
1	Dr. Surendra S	Ph.D.	Prof.	Power System Indian Institute of Science, Bangalore	25	2
2	Dr. Thejaswi A H	Ph.D.	Prof.	Power Quality JNTU, Hyderabad	21	1
3	Dr. Suresh H B	Ph.D.	Prof.	Energy System JNTU, Hyderabad	23	1
4	D S Prakash Wodeyar	M.Tech	Assoc. Prof.	Industrial Electronics Mysore University	32	---
5	N P Suneetha	M.E	Assoc. Prof.	Control Systems Bharathiar University	31	---
6	Shailashree K	M.Tech	Assoc. Prof.	Lighting Science & Engg, Mangalore University	27	---
7	Ajjanna N G	M.Tech	Asst. Prof.	Energy Systems Engg. VTU, Belagavi	17	---
8	Maheswarappa H M	M.Tech	Asst. Prof.	Energy Systems Engg. VTU, Belagavi	17	---
9	Soumya K T	M.Tech	Asst. Prof.	Computer Science & Engg. VTU, Belagavi	12	---
10	Vinayaka K	M.Tech	Asst. Prof.	Computer Application in Industrial Drives VTU, Belagavi	10	---

11	Veerasha K B	M.Tech	Asst. Prof.	Digital Electronics VTU, Belagavi	11	---
12	Manjula M G	M.Tech	Asst. Prof.	Computer Science & Engg. Kuvempu University	10	---
13	Supreetha M R	M.Tech	Asst. Prof.	VLSI Design & Embedded Systems VTU, Belagavi	12	---
14	Vidyashankar M	M.Tech	Asst. Prof.	Power Electronics VTU, Belagavi	2	---

11. List of senior visiting faculty: --- Nil ---

12. Percentage of lectures delivered and practical classes handled (programme wise) by temporary faculty: --- Nil ---

13. Student-Teacher Ratio (programme wise)

Table E&E – 8: Students Teacher Ratio		
Sl. No.	Program	Student Teacher Ratio
1	U G (B.E)	20:1
2	P G (M. Tech)	12:1

14. Number of academic support staff (technical) and administrative staff; sanctioned and filled

Table E&E – 9: Academic and Administrative Staff Sanctioned and Filled		
Staff	Sanctioned	Filled
Academic support staff	5	5
Administrative staff	6	3

15. Qualifications of teaching faculty with D.Sc/ D.Litt/ Ph.D/ MPhil/ PG.

Table E&E – 10: Qualification of Faculty	
Qualification	Number of Staff
Ph.D.	3
PG	11

16. Number of faculty with on-going projects from a) National
b) International funding agencies and grants received: ---Nil---

17. Departmental projects funded by DST-FIST; UGC, DBT, ICSSR, etc.
and total grants received

Table E&E –11: Project proposed from the Department						
Sl. No.	Agency	Area	Coordinator / PI	Amount	Date applied	Status
1	Indo-US Joint clean energy Research and development centre (JCERDC)	Reduction of Harmonics and synchronization of grid connected Photo Voltaic system	Dr. Surendra S, Coordinator Dr. Tejaswi A H Principal Investigator	1.57 Crore	30/11/16	First Level of Presentation in India is completed
2	AICTE Research Promotion Scheme	Renewable Energy	Dr. Surendra S	20 lakhs	20/1/17	Awaited
3	AICTE MODROBS	Control System Laboratory	Dr. Surendra S	20 lakhs	20/1/17	Awaited
4	DST DHI-TPEM	Development of AC charger with net metering facility capable of demonstrating communication between net meters, vehicles and the control centers	PI Dr. P Manjunath HOD E & C Dept. Co-PI Veerasha K B Asst. Prof. E & E Dept.	177.9 2 lakhs	31/1/17	Awaited

18. Research Centre/facility recognized by the University:

Table E&E – 12: Research Centre/facility	
Research Centre	Electrical & Electronics Department
Year of establishment	2003
Recognized by	Visvesvaraya Technological University, Belagavi
Total number of Research Guides	03
Total number of Research Scholars registered	4 Ph.D.
	1 MSc. Engg. by research
Total number of Ph.D. awarded	4
Total number of MSc. awarded	1

19. Publications:

Number of publications listed in International database

Total no. of papers published in international Journals : 4

Total no. of papers published in National Journals : 2

Monographs : --- Nil ---

Citations : --- Nil ---

h-index : --- Nil ---

Books with ISBN/ISSN with details of publishers:

Table E&E – 13: Books Published				
Author	Title	ISBN	Publisher	Year
N G Ajjanna Asst. Professor E & E Dept.	Energy Auditing & Demand Side Management (Elective subject for VIII Semester E & E Engg. VTU 2010 Scheme	ISBN: 97893506717 19	Gauthami Publicatio n	2013 Reprint: 2015

20. Areas of consultancy and income generated

Table E&E - 14 : Consultancy			
Sl. No.	Title of the Consultancy Projects under taken	Customer /Party	Billed amount in Rs. Inclusive of all taxes
Year 2016-17			
01	Testing of U G Cables	A.E.E., Sub-div, Shivamogga City Municipal Corporation	4,600=00
02	Testing of U G Cables	A.E.E., Sub-div, Shivamogga City Municipal Corporation	4,600=00
03	Testing of U G Cables	A.E.E., Sub-div, Shivamogga City Municipal Corporation	2,876=00
04	Inspection of Electrification work	C.M.C., Sagara	7,099=00
Year 2015-16			
01	Testing of 33kV Cable	The Superintendent Engineer, MESCOM, Shivamogga	11,500=00
02	Testing of Street Lighting fittings (Tube Light & HPSV)	A.E.E., Sub-div, Shivamogga City Municipal Corporation	1,995=00
03	Testing of Motor Pumps and Starters	M/s R. K. Electricals, Bhadravathi	5,500=00
04	Testing of U G Cables	A.E.E., Sub-div, Shivamogga City Municipal Corporation	4,560=00
05	Inspection of TWO mini Hi mast lighting towers	A.E.E., Sub-div, Shivamogga City Municipal Corporation	2,280=00
06	Testing of 2 L.E.D, Street light fittings	City Municipal Corporation, Shivamogga	1,995=00
Year 2014-15			
01	Checking of Lumina of Lighting inside factory	M/s Vijay Technocrats Pvt. Ltd. Machenahalli, Shivamogga	4,495=00
02	LED Street light fitting testing	City Municipal Corporation, Shivamogga	3,372=00
03	Testing of 3Phase AC Motor Pump sets and Main Control Panels	City Municipal Corporation, Shivamogga	33,713=00
04	High Mast Light Towers	City Municipal Corporation, Bhadravathi	12,000=00

Year 2013-14			
01	Testing of Turbine and Generator	M/s Turbo Turbine Lights, Jayapura, Chikamagalur	5,634=00
02	Gandhi Park Lighting Scheme	Nirmithi Kendra, Bhadravati	15,000=00
03	Checking of Lumina of Lighting inside factory	M/s Vijay Technocrats Pvt. Ltd., Maachenahalli, Shivamogga	4,495=00
04	Checking of Lumina of Lighting inside factory	M/s Naetek Ferro casts Pvt. Ltd., Maachenahalli, Shivamogga	4,495=00

21. Faculty as members in

- a) **National committees** : --- Nil ---
- b) **International Committees** : --- Nil ---
- c) **Editorial Boards** : --- Nil ---

22. Student projects

- a) Percentage of students who have done in-house projects including inter departmental/ programme.
- b) Percentage of students placed for projects in organizations outside the institution i.e.in Research laboratories/Industry/ other agencies

Student projects UG:

Table E&E – 15(a): Students projects			
Sl. No	Year	Percentage of (a)	Percentage of (b)
1	2016-2017	100	0
2	2015-2016	100	0
3	2014-2015	100	0
4	2013-2014	100	0

Student projects PG:

Table E&E – 15 (b): Students projects			
Sl. No	Year	Percentage of (a)	Percentage of (b)
1	2016-2017	100	0
2	2015-2016	77	23
3	2014-2015	NA	NA
4	2013-2014	NA	NA

23. Awards / Recognitions received by faculty and student

Table- 16: Recognition received by student		
Sl. No.	Name	Recognition
1	Mr. Sriram Sadashiva Jois USN: 4JN09EE051	Selected to Ph.D. program in 2015 at University of Florida in Physics Department with stipend of \$23,000/for 12 months and tuition fee waived off

24. List of eminent academicians and scientists/visitors to the department:

Table E&E – 17: Eminent Academicians and Scientists / Visitors					
Sl. No.	Name	Designation	Company	Target Audience	Date
1	Mr. Tushar	Escalating Manager	MICROSOFT INDIA, Bangalore	All Electrical Engineering Students	29/4/2016
2	Naveen C J	Delivery Manager	Robert Bosch India	All Electrical Engineering Students	2013

25. Seminars/Conferences/Workshops organized & the source of funding

- a) National : ---- Nil ----
b) International : ----- Nil -----

26. Student profile programme/course wise:

Table E&E – 18(a): Student profile (UG)						
Year	Name of the Course/ Programme	Applications received	Selected	Enrolled		Pass percentage
				M	F	
2009-13	E & E Engg.	60	60	35	25	95
2010-14	E & E Engg.	60	60	30	30	88.33
2011-15	E & E Engg.	60	61	34	27	96.72
2012-16	E & E Engg.	60	63	37	26	75

27. Diversity of Students

Table E&E –19(a): Diversity of UG Students				
Year	Name of the Course	% of students from the same state	% of students from other States	% of students from abroad
2016-17	B.E. E & E Engg.	54	---	---
2015-16		55	---	---
2014-15		58	---	---
2013-14		55	2	---

Table E&E – 18(b): Student profile (PG)						
Year	Name of the Course/ programme	Applications received	Selected	Enrolled		Pass percentage
				M	F	
2016-17	M.Tech. in Power	18	5	1	4	-
2015-16	Electronics	18	7	1	6	-
2014-15		18	13	8	5	100%

Table E&E – 19(b): Diversity of PG Students				
Year	Name of the Course	% of students from the same state	% of students from other States	% of students from abroad
2016-17	M.Tech. in Power Electronics	5	---	---
2015-16		7	---	---
2014-15		13	---	---

28. How many students have cleared national and state competitive examinations such as NET, SLET, GATE, Civil services, Defenceservices, etc.?

GATE/ PGCET/ TOFEL: (2013-2016)

Table E&E -20: Exam qualified					
Sl. No.	Competitive Exam	No. of students qualified			
		2015-16	2014-2015	2013-2014	2012-2013
1	GATE	2	--	--	4

29. Student progression

Table E&E - 21(a): Student progression (UG)				
Student Progression	Percentage against enrolled			
	2015-16	2014-15	2013-14	2012-13
UG to PG	2	--	--	--
PG to M. Phil	--	--	--	--
PG to Ph. D	1	--	--	--
Employed Campus Selection (Selected/Eligible)	15/34	13/38	5/32	12/41
Other than Campus Selection	--	--	--	--
Entrepreneurship / Self- Employment	--	--	1	--

Table E&E - 21 (b) : Student Results											
Batch	Student Admitted	Semester wise no. of student passed in first attempt								Completion rate	Pass Percentage
		1	2	3	4	5	6	7	8		
2009-13	60	51	57	44	46	50	52	51	57	57/60	95
2010-14	60	43	53	42	42	47	47	52	53	53/60	88.33
2011-15	61	52	56	46	46	52	50	48	59	59/61	96.72
2012-16	64	52	39	39	28	40	43	48	48	48/64	75

Table E&E - 21 (c) : Student Results (Lateral Entry)									
Batch	Student Admitted	Semester wise no. of student passed in first attempt						Completion rate	Pass Percentage
		3	4	5	6	7	8		
2010-13	6	4	2	3	5	5	5	5/6	83.33
2011-14	13	6	3	6	10	8	8	8/13	61.53
2012-15	16	4	9	7	13	11	12	12/16	75
2013-16	14	7	9	8	7	9	10	10/14	71.42

30. Details of Infrastructural facilities

a) Library

Table E&E - 22: Library	
Details	Number
Department Library	2000
E-BOOKS	---
Reports	200
Syllabus	VTU (2010, 2014, 2015 Scheme)
Question Papers	VTU (2010, 2014, 2015 Scheme)

b) Internet facilities for staff and students:

The institute is provided with Internet connectivity of 16 Mbps leased line with OFC enabled connectivity. Internet facility is provided for both students and staff. HOD's and staff are provided with JNNCE email ID to access their account. Department PG students are provided with six systems having internet facility

c) Class rooms with ICT facility:

Table E&E - 23: Class rooms		
Class rooms	ICT facility	Area in m ²
EC 202	---	95.04
EC 203	---	62.48
EE Seminar Hall	Yes	94.06
EE Library/Room	Yes	51.88

d) Laboratories

Table E&E - 24: Laboratory				
Sl. No.	Laboratory Name	Semester/ Course Code	Equipped with	Area in m ²
1	Electrical Machines Lab	III /15EEL37 V/10EEL58 IV/15EEL47 VI/10EEL67	AC/DC Machines, 1- Φ , 3- Φ transformers, Loading equipment, starters	303.58
2	Electrical Circuits and Measurement Lab	V/10EEL57	DC and AC Bridges, Energy meter, Megger etc.	50.02
3	Relay and High Voltage Lab	VII /10EEL77	Relays Over Current, Over/Under Voltage relays, Generator &Transformer differential	148.72

			relays, 100kV & 30kV transformers, Impulse generator, Oil test kit & Electrolytic tank	
4	Control Systems Lab	VI /10EEL68	Lead Lag network, PID controller, DC & AC servo motors etc.	53.49
5	Power Electronics Lab	IV/10EEL48	Chopper, Converter, Inverter (1-Φ), firing circuits, commutation circuits CRO, shunts etc.	68.33
6	Computer Lab	VI/10EE65 VII /10EEL78	Core i-5 systems	68.45
7	Analog Electronics Lab	III/10ESL37 III/15EEL37	CRO, AFO, DC Power supplies, Breadboards and Electronic Components	53.49
8	Digital Electronics Lab	III/10ESL38 IV/15EEL48	IC Tester, Digital Trainer kit, Digital IC's,	68.33
9	Micro Controller Lab	IV/10ESL47	8051 kits, Kiel compiler, Interface units, Power supplies	68.45
10	Research Centre		Systems, Server and PSCAD/ETAP software	17.66

31. Number of students receiving financial assistance from college, university, government or other agencies

Table E&E- 25 : Scholarship (UG+PG)							
Sl. No.	Year	Central Government Scholarship for SC/ST	Fee Concession OBC	Ex-Defense Scholarship	Defense Scholarship	Municipal	Management
1	2015-2016	27 + 0	88 + 0	--	--	3 + 0	--
2	2014-2015	19 + 0	76 + 3	--	--	3 + 1	--

32. Details on student enrichment programmes (special lectures/ workshops/ seminar) with external experts

Table E&E - 26: Student Enrichment Programs			
Sl. No.	Topic	Guest name / Resource person	Date
1	Power system automation Targeted Audience Final Year students	Dr. V. Girish, Assistant Executive Engineer, MRS, KPTCL, Shivamogga.	12/08/2015
2	Variable frequency drives and its applications Pre-final & Final year UG, III SEM M.Tech students	Mr. Surjeeth Mishra, Deputy General Manager, Electrical, B. F. and SMS Division, VISL, Bhadravathi	03/09/2015
3	Power System Planning For India” with a special focuses on Micro/Smart Grids All Electrical Branch Students	Mr. Shankar Sharma, Power Policy Analyst, Mysore.	24/02/2016
4	Gear-up for electrifying tomorrow, A talk on personality development for budding Electrical Engineers All Electrical Branch Students	Mr. Nikhil K V, CEO, M/s VESTO Education Solutions, Mysore	29/02/2016
5	Two day work shop on Project Building and Automation Targeted Audience: Second Year E & E students	Mr. Nikhil K V & Team Project Manager M/s VESTO Education Solutions, Mysore	19 & 20/02/2016
6	Maintenance of Transformers All Electrical Branch Students	Mr. Mohammed Zakriya Assistant Executive Engineer, Relay & Testing Division, KPTCL, Shivamogga.	4/11/2016
7	Workshop on “Building wiring, Electrical Controls and Servicing of Home Appliances” (VI E & E, 25 Students)	Mr. Chandrashekhara S (Foreman) & Team	11/7/16 to 16/7/2016
8	Workshop on “Building wiring, Electrical Controls and Servicing of Home Appliances” (VI E & E, 29 Students)	Mr. Chandrashekhara S (Foreman) & Team	6/7/15 to 7/7/2015

9	Workshop on “ Building wiring, Electrical Controls and Servicing of Home Appliances ” (VI E & E, 31 Students)	Mr. Chandrashekhara S (Foreman) & Team	7/7/14 to 19/7/2014
10	Workshop on “ Building wiring, Electrical Controls and Servicing of Home Appliances ” (VI E & E, 25 Students)	Mr. Chandrashekhara S (Foreman) & Team	17/7/13 to 24/7/2013

33. Teaching methods adopted to improve student learning

- Student mentoring programs
 - To inform the progress of the students to the concerned wards and to address any difficulties in learning aspects
- Machine tutor/models to demonstrate the working principle of Electrical machines
 - Constructional features of machine will be made easier with physical models
- Regular visits to Main Receiving Station (Electrical substation of 220kV) located at Shivamogga
 - Helpful in learning practical aspects of Electrical Power Transmission & Distributed systems / better understanding of constructional features and working of switch gear and protective relays and related topics.
- Visits to nearby Hydel power Stations
 - Varahi Hydel Power Plant situated in Udupi district: supportive learning and practical exposure in power generation concept and associated equipment of Hydel power system
- Circuit debugging event conduction
 - To improve and learn some fundamental concepts of electronic circuits and its applications
- Mentoring and tutoring from senior students
 - To encourage group discussion, to able to communicate freely with seniors in order to overcome some compulsions and inhibitions of students

34. Participation in Institutional Social Responsibility (ISR) and Extension activities

Table E&E- 27: Institutional Social Responsibility (ISR) and Extension Activities			
Sl. No.	Event	Resource person/Organizer	Date conducted
1	Talk on conservation of energy by using LED bulb at NSS Camp at Mattur village, Shivamogga	Mr. Chandrashekhara S (Foreman E & E Dept.)	12/02/2017
2	Two day work shop on Physics, Electronics & Electrical Engg. for the benefit of High School students under IETE sub center	Mr. Chandrashekhara S (Foreman E & E Dept.) & Mr. Keshavamurthy (Instructor)	20/8/2016 & 21/08/2016
3	Awareness on energy conservation using LED bulbs in association with government of Karnataka in the college campus under POWERTRON association E&E Dept.	Mr. H B Suresh Prof. E & E Dept. & Mr. Chandrashekhara S (Foreman E & E Dept.)	5/5/2016 & 6/5/2016
4	Two day work shop on Physics, Electronics & Electrical Engg. for the benefit of High School students under IETE sub centre	Mr. Chandrashekhara S (Foreman E & E Dept.) & Mr. Keshavamurthy (Instructor)	24/7/2015 & 25/07/2015
5	Department students take active participation in Blood donation camps, NSS and activities conducted by Chiranthana club at the institution level		

35. SWOC analysis of the department and Future plans

Strength

- Qualified and experienced faculty with Ten years of average experience
- Satisfactory admissions to UG program
- Faculty members of the department are involved in the consultancy activities
- Faculty members are involved in social activities

Weakness

- Limited floor area for both academic and laboratory sessions
- Lack of funded research activities / projects
- Lack of MOU with industries
- Conduction of conference/workshops

Opportunities

- Scope for industry institute collaboration
- MOU with universities, industries and research organizations
- To generate funds from funding agencies by taking up research activities
- Strengthening of Alumni interactions for the growth of department

Challenges

- Improvement of teaching learning process
- Recruitment of eligible students in companies
- Involvement of faculty in research activities
- Improvement of PG admissions
- To organize workshops/conferences on recent trends

Future Plans

- Continuous improvement of academic performance
- To enhance industry institute interaction in order to promote research & entrepreneurship qualities of students
- Strive to place students in the core Electrical industries
- To minimize grid power utilization by switching over to self-sustained energy sources in the campus

**Electronics &
Communication
Engineering**

1. Name of the department: Electronics & Communication Engineering

Vision

To be one of the premier departments excelling in Electronics & Communication Engineering for producing competent engineers catering to the needs of industry and society.

Mission

- Impart quality education through innovative and continuous teaching – learning process
- Groom the students with required foundations of Electronics & Communication Engineering and inculcate in them the professional ethics and human values.
- Train the students and the faculty in state-of-the-art technologies and motivate them for higher studies and innovation based research for the needs of the industry and society.
- Create centers of excellence in the field of Electronics & Communication Engineering in collaboration with the industries and academic organizations.



Dr. Manjunatha P
Professor & Head of the
department



Dr. Sathyanarayana S V
Professor & Dept.
NAAC Coordinator



Mr. Prashanth G S
Assistant Professor
Dept. NAAC Coordinator

2. Year of Establishment: 1980

3. Names of Programmes/ Courses offered (UG, PG, M.Phil., Ph.D., Integrated Masters; Integrated Ph.D., etc.):

Sl. No	Name of the Programme	Intake
1	UG: B.E. in Electronics and Communication Engg.	120
2	PG: M.Tech in Digital Electronics and Communication Systems	24
3	Ph.D in Electronics & Communication	15 (Registered)

4. Names of Interdisciplinary courses and the departments/units involved:

Table- ECE-2: Interdisciplinary Courses			
Sl. No	Semester	Course Title	Department
1.	I/II/III/IV	Engineering Mathematics I,II,III,IV, MATDIP	Mathematics
2.	I/II	Engg. Physics Lab	Physics
3.	I/II	Programmemeing in C & Data Structures	Computer Science & Engineering
4.	I/II	Engineering Physics	Physics
5.	I/II	Elements of Civil Engg.& Engineering Mechanics	Civil Engineering
6.	I/II	Computer Programmemeing Lab	Computer Science & Engineering
7.	I/II	Computer Aided Engineering Drawing	Mechanical Engineering
8.	I/II	Environmental studies	Civil
9.	I/II	Engineering Chemistry	Chemistry
10.	I/II	Workshop Practice	Mechanical Engg
11.	I/II	Language Kannada/English	Humanities

5. Annual/ semester/ choice based credit system (Programme wise) :

Table –ECE-3: System Followed			
Sl. no	Degree	Courses offered	System followed
1.	B E	Electronics & Communication Engineering	<ul style="list-style-type: none"> • CBCS Scheme from academic year 2015-2016 onwards • Previously Non-CBCS Scheme
2.	M.Tech	Digital Electronics & Communication system	<ul style="list-style-type: none"> • CBCS Scheme from academic year 2015-2016 onwards • Previously Non-CBCS Scheme
3.	Ph.D	Electronics & Communication	As Per VTU Norms

6. Participation of the department in the courses offered by other departments: --- Nil ----

7. Courses in collaboration with other universities, industries, foreign institutions, etc.: --- Nil ----

8. Details of courses/Programmes discontinued(if any) with reasons:

--- Nil ----

9. Number of Teaching posts

a) UG:

Table –ECE-5(a): Sanctioned and Filled position		
Teaching Post	Sanctioned	Filled
Professors	02	02
AssociateProfessors	06	01
AssistantProfessors	16	16

b) PG

Table –ECE-5(b): Sanctioned and Filled position		
Teaching Post	Sanctioned	Filled
Professors	01	01
Associate Professors	01	00
Assistant Professors	02	03

10. Faculty profile with name /qualification, designation, specialization, (D.Sc./ D.Litt./ Ph.D./ M.Phil. etc.,)

Table-ECE-6: Faculty Specialization						
Sl. no.	Name	Qualification	Designation	Specialization	No. of Years of Experience	No. of Ph.D. Students Guided/Guiding for the last 4 years
1	Dr.Srinivasarao Kunte	B.E, M.E, Ph.D	Professor	Image processing	35	2/0
2	Prof..H.K Harish	B.E, M.Tech	Associate Professor	Electronics and communication	33	NA
3	Dr. S V Sathyanarayana	B.E, M.E, Ph.D	Professor	Cryptography	24	0/6

4	Dr. P Manjunatha	B.E, M.E, Ph.D	Professor & HOD	Wireless sensor networks	20	0/6
5	Mr. M.D Sunil	B.E, M.Tech, (Ph.D)	Assistant Professor	Digital electronics	14	NA
6	Ms G. C Kamalamma	B.E	Assistant Professor	Electronics & Communication	28	NA
7	Mrs. B S Ujwala	B.E, M.Tech	Assistant Professor	Digital electronics & communication	11	NA
8	Mrs. S B Nalina	B.E, M.Tech	Assistant Professor	Networking & Internet Engineering	12	NA
9	Mr. P Ajay Betur	B.E, M.Tech	Assistant Professor	Digital Electronics	13	NA
10	Mr. S M Sharath	B.E, Mtech (Ph.D)	Assistant Professor	VLSI	8	NA
11	Mr. N Abhijith	B.E, M.Tech	Asisstant Professor	Electronics	8	NA
12	Mr. K V Darshan	B.E, M.Tech	Assistant Professor	Digital electronics & Communication Systems	9	NA
13	Mr. J Anil Kumar	B.E, M.Tech	Assistant Professor	VLSI design	6	NA
14	Mr. S Sheela	B.E, M.Tech, (Ph.D)	Assistant Professor	Digital Electronics	11	NA

15	Mrs. B S Roopa	B.E, M.Tech	Assistant Professor	Digital Electronics & Advanced communication	6	NA
16	Mr. S C Pradeepa	B.E, M.Tech	Assistant Professor	VLSI Design	7	NA
17	Mrs. K N Prema	B.E, M.Tech, (Ph.D)	Assistant Professor	Digital electronics & Communication Systems	4.5	NA
18	Mrs S M.Smitha	B.E, M.Tech	Assistant Professor	Digital Communication & networking	4.5	NA
19	Mrs. K Sumathi	B.E, M.Tech	Assistant Professor	Digital electronics & Communication Systems	3.5	NA
20	Mrs. H R Shwetha	B.E, M.Tech, (Ph.D)	Assistant Professor	VLSI design	4	NA
21	Mr. G S Prashanth	B.E, M.Tech	Assistant Professor	Digital electronics & Communication Systems	4	NA
22	Mrs. B Shwetha	B.E, M.Tech (Ph.D)	Assistant Professor	Digital Electronics & Communication Systems	4	NA
23	Ms. P M Sowmya	B.E, M.Tech	Assistant Professor	Digital Communication & Networking	0.6	NA

11. List of senior visiting faculty: --- Nil ---

12. Percentage of lectures delivered and practical classes handled (Programme wise) by temporary faculty: ---Nil ----

13. Student-Teacher Ratio(Programmewise):

Table-ECE-7: Student –Teacher Ratio		
Sl. No.	Programme	Student ratio
1	B.E(E&C)	19:1
2	M.Tech(DECS)	12:1

14. Number of academic support staff(technical) and administrative staff; sanctioned and filled:

Table-ECE-8: Academic and Administrative staff Sanctioned and filled		
Staff	Sanctioned	Filled
Administrative staff	03	03
Academic support Staff	09	09

15. Qualifications of teaching faculty with DSc/D.Litt/Ph.D/MPhil/PG.

Table – ECE-9 : Qualification of Faculty	
Qualification	Number of Staff
Ph.D	3
P.G	19
U.G	1

16. Number of faculty with ongoing projects from a)National b)International funding agencies and grants received:

a)National

Table –ECE-10: Ongoing projects				
Sl. No.	Title of the ongoing project	Principal investigator	Amount sanctioned (Rs)	Agency Sanctioned
1	Smart Vehicle Surveillance, Sanctioned in 2016-2017	Mr. Pradeepa SC	3,00,000/-	Karnataka new age Incubation centre, Bengaluru

17. Departmental projects funded by DST-FIST; UGC, DBT, ICSSR, etc. and total grants received :

Table –ECE-11: Funded Projects					
Sl. No.	Name of the funding agency	Name of the Scheme	Programme Title	Year of funding	Amount Sanctioned
1	AICTE, New Delhi	MODROBS	Establishment of Advanced Communication Lab	1995	5 lakhs
2	AICTE, New Delhi	MODROBS	Modernization of Microprocessor systems and application lab	1997	7.5 Lakhs
3	AICTE, New Delhi	MODROBS	Modernization of D.S.P lab	2008	10 lakhs

18. Research Centre/facility recognized by the University:

Table ECE-12: Research centre/facility	
Research centre	Electronics & Communication Engineering
Year of establishment	2006
Recognized by	VTU
Total number of Research Guides	03
Total number of Research Scholars	15 – Pursuing, 02 - Awarded
MSc Engineering	1- awarded

19. Publications: (Number of publications listed in International Database (For Eg: Web of Science and Scopus etc.)

Total No. of papers published in International Journals : **20**
 Total No. of papers published in National Journals : **03**
 Monographs : **---Nil---**
 Citations : **207**

Table- ECE-13(a): Journal Details					
Sl. No	Faculty name	National	International	Citations	H-index
1	Dr. Manjunatha P	0	5	77	20
2	Dr.Srinivasa rao kunte	0	5	67	4
3	Dr.Sathyanarayana S V	2	6	63	4
4	Prof. Harish H K	1	0	0	0
5	Mr. Ajay Betur P	0	1	0	0
5	Mr. Abhijit N	0	1	0	0
6	Mr. Prema K N	0	1	0	0
7	Mr. Prashanth G S	0	1	0	0

Table –ECE-13(b): Books				
Author	Title	ISBN	Publisher	Year
Matt Bishop &Dr. Sathyanarayana S V	Introduction to Computer Security	81-7758-425-1	Pearson Asia Publications	2005
Dr. Sathyanarayana S V, reviewed a book on “Public Key Cryptography “ for Pearson Asia Publications				
Dr. Sathyanarayana S V, prepared the study materials for the following subjects for BSc(IT)/MSc(IT) course of K.S.O.U Mysore and Kuvempu University:				
<ul style="list-style-type: none"> • Data Structures using C language (III sem, B.Sc(IT)) • Distributed databases and Computing(IV sem MSc(IT)) 				

20. Areas of consultancy and income generated: --- Nil ---

21. Faculty as members in

- a) National committees : --- Nil ---
- b) International Committees : --- Nil ---
- c) Editorial Boards : 01

22. Student projects

- a) Percentage of students who have done in-house projects including inter departmental/ Programme
- b) Percentage of students placed for projects in organizations outside the institution i.e. in Research laboratories/ Industry/ other agencies

Student projects UG: B.E(E&C)

Table-ECE-14(a): Student projects			
Sl. No.	Year	Percentage of (a)	Percentage(b)
1	2013-2014	100%	0%
2	2014-2015	100%	0%
3	2015-2016	100%	0%
4	2016-2017	100%	0%

Student projects PG: M.Tech(DECS)

Table-ECE-14(b): Student projects			
Sl. No.	Year	Percentage of (a)	Percentage(b)
1	2015-2016	72.8%	27.2%
2	2014-2015	65.22%	34.78%
3	2013-2014	82.36%	17.64%
4	2012-2013	100%	0%

23. Awards/ Recognitions received by faculty and students

a) Awards/ Recognitions received by faculty: --- Nil ---

b) Awards/ Recognitions received by students

Table-ECE-15: Student achievements				
Sl. No.	Name	Award	Venue	Year
1	Anusha N C	7 th rank in B.E(E&C)	VTU	2017
2	Adarsh B P	Firstplace in Robo Soccer	SIT, Tumkur	2017
3	Sanjay A C, Keerthana A B , Sucharitha Bhat J S and Vikas H C	fourth place in E- Yantra+ National level Robotics Competition	IIT, Bombay	2016
4	Tpawandas, Naveen HK, Amoghkumar, Prashanth Kumar	Direct job offer letter from TCS	Bangalore	2015

24. List of eminent academicians and scientists/ visitors to the department

Table –ECE-16:Eminent Academicians and Scientists/Visitors				
Sl. No.	Name	Designation	Company	Date of visit
1	Dr. KPJ Reddy	Professor	IISC Bangalore	18-02-2017
2	Padma Vibhushan Prof. U R Rao	Former Chairman	ISRO , Bangalore	10-11-2016
3	Dr. Ashok Rao	Guest Professor	IIM, Bangalore	22-10-2016
4	Dr. Venimadhavan	Professor	IISC, Bangalore	11-08-2016
5	Dr. Bimal Roy	General secretary	CRSI, Indian statistical institute , kolkata	11-08-2016
6	Dr. P.K Saxena	Scientific consultant	Office Of Prinicpal Scientific Advisor, Govt. of India	11-08-2016
7	Dr.KChidananda Gowda	Former Vice Chancellor	Kuvempu University	10-10-2013

25. Seminars/ Conferences/ Workshops organized & the source of funding

a) National

Table-ECE-17: Conference and Workshops conducted				
Sl. No.	Course/ Programme	Duration	Month / Year	Source of funding
1.	IETE National Conference on RFW-13	Three days	9-05-2013 to 11-05-2013	IETE, New Delhi
2.	Two Week ISTE workshop on Signals & Systems (under NMEICT, IIT, Kharagpur)	Two Week	2-01-2014 to 12 -01-2014	MHRD
3.	Two Week ISTE workshop on Cyber Security (under NMEICT, IIT, Bombay)	Two Week	10-07-2014 to 20-07-07-2014	MHRD
4.	Two Week ISTE workshop on Control Systems (under NMEICT, IIT, Kharagpur)	Two Week	2-12-2014 to 12-12-2014	MHRD
5.	National Workshop on Cryptology 2016	Three Days	11-08-2016 to 13-08-2016	NBHM, Mumbai, DRDO ,RCB, CRSI, Kolkata

b) International

Table –ECE-18: International conference/workshops organized				
Sl. No.	Course/ Programme	Duration	Month / Year	Source of Funding
1.	International Conference on “Multimedia Processing, Communications and Information Technology – MPCIT 2013”	Three days	19-12-2013 to 21-12-2013	DRDO, New Delhi

26. Student profile Programme/ course wise:

UG

Table-ECE-19(a): Student Profile						
Batch	Name of the Course/ Programm	Applications received	Selected	Enrolled		Pass percentage
				M	F	
2012-16	B.E (E&C)	105	105	51	54	95.23
2011-15		64	64	34	30	92.18
2010-14		60	60	42	18	85
2009-13		57	57	37	20	94.13

PG

Table-ECE-19(b): Student Profile						
Batch	Nameofthe Course/ Programme	Applications received	Selected	Enrolled		Pass percentage
				M	F	
2014-16	M.Tech(Digital Electronics & Communication Systems)	24	23	6	17	91.3
2013-15		18	18	6	12	100
2012-14		18	18	7	11	100
2011-13		18	18	11	7	88.88

M=Male F=Female

27. Diversity of Students:

a) B.E (E&C)

Table–ECE-20(a): Diversity of students(UG)				
Year	Nameofthe Course	%of students fromthe samestate	%of students fromother States	%of students from abroad
2013-2014	B.E(E&C)	94.444 %	6.666 %	0
2014-2015		100 %	0 %	0
2015-2016		100 %	0 %	0
2016-2017		99.2 %	0.8 %	0

b) M.Tech(DECS)

Table –ECE-20(b) : Diversity of students(PG)				
Year	Nameofthe Course	%of students fromthe samestate	%of students fromother States	%of students from abroad
2013-2014	M.Tech(Digital Electronics & Communication)	100 %	0	0
2014-2015		100 %	0	0
2015-2016		100 %	0	0
2016-2017		100 %	0	0

28. How many students have cleared national and state competitive examinations such as NET, SLET, GATE, Civil services, Defense services, etc.?

Table- ECE-21: Exam Qualified		
Sl. No.	Competitive Exam	No. of students qualified
1	GATE-2016	05
2	GATE-2017	03

29. Student progression

Table-ECE-22: Student Progression				
Student progression	Percentage against enrolled			
	2013-14	2014-15	2015-16	2016-17
UGtoPG	4%	5%	8%	-----
PGtoM.Phil.	NIL	NIL	NIL	NIL
PGtoPh.D.	2%	0%	0%	3%
Ph.D.toPost-Doctoral	NIL	NIL	NIL	NIL
Employed Campus selection	31%	37.33 %	52.6%	59.18%
Other thanCampusselection	-----	-----	-----	-----
Entrepreneurship/Self-employment	-----	-----	-----	-----

30. Details of Infrastructural facilities

a) Department Library

Table – ECE-23: Library	
Details	Number
Department Library Books	1676
E-books	Nil
Reports	687
Syllabus	VTU(2006,2010,2014,2015 Scheme)
Question Papers	VTU(2006,2010,2014,2015 Scheme)

b) Internet facilities for Staff & Students-

The Institution has Internet connectivity of 16 Mbps leased line and OFC enabled connectivity. Internet facility is provided for both students & staff. HOD's and staff are provided with JNNCE email ID to access their email account.

c) Class rooms with ICT facility

Total of five classrooms are provided with CPU and LCD projectors.

d) Laboratories

Table-ECE-24: Laboratories			
Sl. No.	Laboratory Name	Equipped with	Area in m²
1.	Analog Electronics Lab	CROs, POWER SUPPLIES, FUNCTION GENERATORS	101.00

2.	Communication Lab	MICROWAVE TEST BENCHES, MICROSTRIP SETUP, OFC KITS, DSOs, COMMUNICATION TRAINER KITS, CROs, AFOs	100.00
3.	Computer Centre	DSP KITS, PCs with CORE2DUO processors, IBM SERVER, PRINTERS, SCANNERS,	101.00
4.	Digital Electronics Lab	DIGITAL TRAINER KITS, IC TESTERS, CROs, POWER SUPPLIES, MULTIMETERS	101.00
5.	Microprocessor Lab	MICROCONTROLLER KITS, VLSI KITS, MICROPROCESSOR KITS, INTERFACE MODULES,	101.00
6.	Power Electronics Lab	POWER SCOPE, MOTORS , CONTROLLER MODULES, POWER ELECTRONIC KITS,	101.00
7.	M.Tech Computer Lab	PCs, MP Kits, DSP KITS, SIMULATION PACKAGES LIKE MATLAB & CCS	100.00
8.	Research Centre	PCs, DSP KITS, SIMULATION PACKAGES LIKE MATLAB	16.62

31. Number of students receiving financial assistance from Institution, university, government or other agencies

Table-ECE-25: Scholarship							
Sl. No	Year	Central Government scholarship for SC/ST	Fee Concession OBC	Ex-defence scholarship	Defence Scholars	Municipal	Management
1	2015-2016	31	156	Nil	Nil	Nil	Nil
2	2014-2015	28	105	Nil	Nil	Nil	Nil

32. Details on student enrichment Programmes (special lectures / workshops /seminar) with external experts

Table –ECE-26: Student Enrichment Programs			
Sl. No	Topic	Guest name/Resource person	Date
1	Magical World of shock waves	Dr. KPJ Reddy, Professor, IISC Bangalore	18-02-2017
2	India's role in space- the ultimate frontier	Padma Vibhushan Prof. U R RAO, Former Chairman, ISRO , Bangalore	10-11-2016
3	3R of research- Research, Researchers, Researching	Dr. Ashok Rao ,Guest professor, IIM, Bangalore	22-10-2016
4	Integer Factoring- Computational Challenges	Dr. Venimadhavan , Professor, IISC Bangalore	11-08-2016
5	Estimation of true Quantiles from Obfuscated data	Dr. Bimal Roy, General secretary, CRSI, Indian statistical institute , Kolkata	11-08-2016
6	Global connectivity: Security Issues and solutions	Dr. P.K Saxena , Scientific consultant, Office Of Prinicipal Scientific Advisor Govt. of India	11-08-2016
7	Grand convergence beyond information communication technology	Dr.KChidananda Gowda, Former Vice Chancellor, Kuvempu University	10-10-2013

33. Teaching methods adopted to improve student learning modern learning technologies with projectors and demo

- Invited technical talks from eminent industry and academic personalities on current technology trends are organized for students
- Classroom teaching, PPTs, Assignment, Tutorial classes, seminars, remedial classes.
- Student mentoring – Each faculty is assigned some students to mentor them to improve their performance.
- Paper presentation, Debugging and poster presentations to encourage creative and analytical thinking.

- Internship Programmes for M.Tech students
- Initiated Outcome based Education – Defining PEOs, PSOs, COs and mapping COs with PO and PSOs.
- Adapting Rubrics for Seminar and Project work Evaluation of final year and PG students.

34. Participation in Institutional Social Responsibility (ISR) and Extension activities

- One day workshop on Internet awareness Programme for senior citizens and house wives was conducted on 12-11- 2016
- Two day workshop on digital transactions and internet awareness Programme for housewives and senior citizens was conducted on 17-03-2017 and 18-03-2017 on the account of women’s day under IETE shimoga and JNNCE shimoga.
- UG students have given the demo to various high school and PUC Institution students regarding electronic devices and hobby projects regularly
- Regular conduction of Workshop on Electronics, Electrical & Lasers for High School Students
- Department students involved in Blood donation camps and NSS camps organized by the institution every year

35. SWOC analysis of the department and Future plans

Strengths

- Full quota of admissions.
- Experienced faculty with average length of service more than 12 years.
- Less attrition rate.
- Effective teaching-learning process.
- Vibrant student forum of Institution of Electronics and Telecommunication Engineers.

Weakness

- Less number of placements in core industries.
- Shortage of instructional area.
- Poor quality publications.
- Poor research competence.

Opportunities

- Scope for getting funds from funding agencies.
- Scope for collaboration with industry and research organizations.
- Effective tapping of alumni network.
- Improve faculty competency level.

Challenges

- To compete with Autonomous Universities.
- To encourage students to become entrepreneurs.
- To motivate faculty towards R&D and funded projects
- To reach out under privileged students.
- To improve quality publication with Scopus index.

Future Plans

- To strengthen innovation and invention based research to serve societal problems.
- To attract core companies for campus interviews.
- To promote research culture among students.
- To organize national international conference within next two years.

Computer Science and Engineering

1. Name of the department: Computer Science & Engg.,

Vision

To be one of the pre-eminent department to provide technical and knowledge based education, utilizing the potential of Computer Science & Engineering to meet the ever changing needs of industry and society.

Mission

Mould the students to meet the emerging challenges of industry and society, emphasizing on research and effective industry interaction for the development of state of the art technological infrastructure and faculty component.



**Dr. Nirmala Shivananda,
Professor & Head**



**Mr. Chetan K. R,
Asst. Prof.
Co-ordinator**

2. Year of Establishment: 1991

3. Names of Programmes / Courses offered (UG, PG, M.Phil., Ph.D., Integrated Masters, Integrated Ph.D., etc.)

Table – CSE-1: Name of Program		
Sl. No.	Name of the Program	Intake
1.	Degree: (UG) : Bachelor Degree in Engineering Discipline: Computer Science & Engineering	120
2	Degree: (PG) : Master of Technology Discipline: Computer Science & Engineering	25
	Degree: (PG) : Master of Technology Discipline: Network & Internet Engineering	24
3.	Research: Ph. D in Computer Science & Engineering	----

4. Names of Inter disciplinary courses and the departments/ units involved

Table – CSE-2: Interdisciplinary courses			
Sl. No	Semester	Course Title	Department
1.	I/ II/ III/ IV	Engineering Mathematics I, II, III, IV, MATDIP	Mathematics
2.	I/II	Engineering Physics Engg. Physics Lab	Physics
3.	I/II	Elements of Civil Engg. & Engineering Mechanics, Environmental Science	Civil engineering
4.	I/II	Computer Aided Engineering Drawing	Mechanical Engineering
5.	I/II	Environmental studies	Civil
6.	I/II	Engineering Chemistry Chemistry Lab	Chemistry
7.	I/II	Workshop Practice	Mechanical Engg
8.	I/II	Basic Electronics	Electronics & Communication Engineering/ Telecommunication Engineering
9.	I/II	Basic of Electrical Engineering	Electrical & Electronics Engineering
10.	I/II	Language Kannada/English	Humanities

5. Annual/semester/choice based credit system (programme wise)

Table - CSE- 3: System Followed			
Sl. no	Degree	Courses offered	System followed
1.	B E	Computer Science & Engineering	<ul style="list-style-type: none"> • CBCS Scheme from academic year 2015-2016 onwards • Previously Non-CBCS Scheme
2.	M. Tech	Computer Science & Engineering, Network & Internet Engineering	<ul style="list-style-type: none"> • CBCS Scheme from academic year 2015-2016 onwards • Previously Non-CBCS Scheme
3.	Ph. D.	Computer Science & Engineering	-----

6. Participation of the department in the courses offered by other departments

Table – CSE-4: Subject supported			
Sl. no	Semester	To Department	Course taught
1.	I/II	To All Branches of Engineering	Programming in C and Data Structures
2.	I/II	To All Branches of Engineering	Computer Programming laboratory

7. Courses in collaboration with other universities, industries, foreign institutions, etc.: ---Nil ----

8. Details of courses/ programmes discontinued (ifany) with reasons ---Nil ----

9. Numberof Teachingposts

Table – CSE-5: Sanctioned and Filled Position						
Teaching post	Under-graduate		Post-Graduate (CS&E)		Post-Graduate (NIE)	
	Sanctioned	Filled	Sanctioned	Filled	Sanctioned	Filled
Professors	02	02	01	01	01	00
Associate Professors	06	02	01	00	01	00
Asst. Professors	16	18	02	03	02	04

10. Faculty profile with name, qualification, designation, specialization, (D.Sc./ D.Litt. / Ph.D./ M.Phil.etc.,)

Table–CSE-6: Faculty Specialization						
Sl. no.	Name	Qualification	Designation	Specialization	No. of Years of Experiences(in yrs)	No. of Ph.D. Students Guided/Guiding for the last 4 years
1.	Dr. Nirmala Shivanand	B.E, M.Tech, Ph.D.	Professor and HoD	Image Processing and pattern recognition	29	0/2

2.	Dr.R.Sanjeev Kunte	B.E, M.Tech, Ph.D.	Professor	Image Processing and pattern	19	0/3
3.	Dr. K M Poornima	B.E, M.Tech, Ph.D.	Professor	Image Processing and pattern	17	0/3
4.	Mr. Jalesh Kumar	B.E, M.Tech, (Ph.D.)	Associate Professor	CSE	18	
5.	Dr. Manjula G R	B.E, M.Tech, Ph.D.	Associate Professor	Steganography	17	
6.	Mr. Chetan K R	B.E, M.Tech, (Ph.D.)	Asst. Professor	Networking and Internet Engg.	14	
7.	Mrs. Ganavi M	B.E, M.Tech, (Ph.D.)	Asst. Professor	CSE	12	
8.	Mr. Vedananda D E	B.E, M.Tech, (Ph.D.)	Asst. Professor	CSE	13	
9.	Mrs. Sankhya N Nayak	B.E, M.Tech, (Ph.D.)	Asst. Professor	CSE	15	
10.	Mr. Benakappa S M	B.E, M.Tech, (Ph.D.)	Asst. Professor	CSE	14	
11.	Mrs. Sreedevi S	B.E, M.Tech	Asst. Professor	CSE	12	
12.	Mr. Hiriyanna G S	B.E, M.Tech	Asst. Professor	CSE	11	
13.	Mrs. Thaseen Bhashith	B.E, M.Tech	Asst. Professor	CSE	19	
14.	Mr. Manohar Nelli V	B.E, M.Tech	Asst. Professor	CSE	10	

15.	Mr. Sathyanarayana S	B.E, M.Tech	Asst. Professor	Networking and Internet Engg.	11	
16.	Mrs. Sowmya D	B.E, M.Tech	Asst. Professor	CSE	10	
17.	Mr. Narendra Kumar S	B.E, M.Tech, (Ph.D.)	Asst. Professor	CSE	11	
18.	Mr. Ravindra S	B.E, M.Tech, (Ph.D.)	Asst. Professor	Networking and Internet Engg.	9	
19.	Mr. Sandeep B	B.E, M.Tech	Asst. Professor	CSE	9	
20.	Mrs. Sushma R B	B.E, M.Tech	Asst. Professor	CSE	8	
21.	Mr. Chakrapani D S	B.E, M.Tech	Asst. Professor	CSE	7	
22.	Mrs. Ayesha Siddiqa	B.E, (M.Tech)	Asst. Professor	CSE	7	
23.	Mr. Sayyed Johar	B.E, M.Tech	Asst. Professor	CSE	7	
24.	Mrs. Pushpa R N	B.E, M.Tech	Asst. Professor	CSE	9	
25.	Mrs. Vidya B M	B.E, M.Tech	Asst. Professor	CSE	2	
26.	Mrs. Namitha M V	B.E, M.Tech	Asst. Professor	CSE	5	
27.	Mr. Nandish M	B.E, M.Tech	Asst. Professor	CSE	5	
28.	Mr. Mohan H G	B.E, M.Tech	Asst. Professor	CSE	4	
29.	Mrs. K V Chaitra	B.E, M.Tech	Asst. Professor	CSE	2	
30.	Mrs. Radhika S N	B.E, M.Tech	Asst. Professor	CSE	1	

11. List of senior visiting faculty: --Nil ----

12. Percentage of lectures delivered and practical classes handled (programme wise) by temporary faculty : ---Nil ---

13. Student-Teacher Ratio (programmewise):

Sl. No.	Program	Student Teacher ratio
1	U G (B.E)	16:1
2	P G (M. Tech CS&E)	12:1
3	P G (M. Tech NIE)	12:1

14. Number of academic support staff (technical) and administrative staff; sanctioned and filled

Staff	Sanctioned	Filled
Administrative staff	1	1
Academic support staff	6	6

15. Qualifications of teaching faculty with DSc/D.Litt/ Ph.D/ MPhil/ PG.

Qualification	Number of Staff
Ph. D	4
P G	25
U G	1

16. Number of faculty with ongoing projects from

a) National: ---Nil ---

b) International funding agencies and grants received: ---Nil ----

17. Departmental projects funded by DST-FIST; UGC, DBT, ICSSR, etc. and total grants received

Sl. No	Name of the Funding Agency	Name of the Scheme	Programme Title	Year of Funding	Amount Sanctioned
1.	DST	Project Grants	FIST	2008-09	11.12 Laks

18. Research Centre/ facility recognized by the University

Table –CSE-11: Research Centre/facility		
Research Centre	The Department of Computer Science and Engineering	
Year of establishment	2003	
Recognized by	VTU	
Total number of Research Guides	7	
Total number of Research Scholars	Internal	11
	External	12

19. Publications:

Number of publications listed in International database (for E.g: Web of science and Scopus)

Total No. of papers published in international Journals : 46

Total no. of papers published in National Journals : ---Nil ---

Monographs : ---Nil ----

Citations : 299

Table – CSE-12 (a): Journal Details					
Sl. No.	Faculty name	National	International	Citations	H - index
1	Dr. Nirmala Shivananda	Nil	7	40	3
2	Dr. R Sanjeev Kunte	Nil	9	159	7
3	Dr. Poornima K M	Nil	4	14	2
4	Mr. Jalesh Kumar	Nil	2	5	1
5	Dr. Manjula G R	Nil	3	10	2
6	Mr. Chetan K R	Nil	4	57	3
7	Mrs. Ganavi M	Nil	3	0	0
8	Mr. Vedananda D E	Nil	1	0	0
9	Mrs. Sankhya N Nayak	Nil	1	0	0
10	Mr. Benakappa S M	Nil	4	3	1
11	Mrs. Sathyanarayana S	Nil	3	0	0
12	Mrs. Sowmya D	Nil	2	0	0
13	Mr. Narendra Kumar S	Nil	1	0	0
14	Mr. Ravindra S	Nil	3	11	1
15	Mr. Sayyed Johar	Nil	1	0	0
16	Mr. Nandish M	Nil	2	0	0
17	Mr. Mohan HG	Nil	2	0	0

20. Areas of consultancy and income generated: ---Nil ---

21. Faculty as members in

a) National Committees:

Table –CSE-13(a): Memberships		
Sl. No.	Faculty Name	Committee
1.	Dr. Nirmala Shivananda	Technical Committee member for International Conference CSITSS 2016 at RVCE, Bangalore.
2.	Dr. R Sanjeev Kunte	Technical Committee member for International Conference ICIT – 2014 at PESITM, Shimoga. Technical Committee member for International Conference ICNIC- 2014 at Sri Venkateshwara College of Engineering, Bangalore. Advisory committee member for National Conference NCSIP – 2015 at Vivekananda College of Engineering and Technology, Puttur on 1 st May 2015. Advisory committee member for the International Conference ICNIC- 2015 at Sri. Venkateshwara College of Engineering, Bangalore on May 2015.
3.	Dr.K.M.Poornima	Technical Expert committee member of Kuvempu university

b) International Committees: ---Nil ---

c) Editorial boards:

Table –CSE-13(b): Editorial board		
Sl. No.	Faculty Name	Editorial Board
1	Dr. R Sanjeev Kunte	Editorial member - IEAE International Journals on Engineering

22. Student projects

- Percentage of students who have done in-house projects including interdepartmental programme
- Percentage of students placed for projects in organizations outside the institution i.e.in Research laboratories/Industry/ other agencies

Student projects UG:

Table – CSE-14 (a): Students projects			
Sl. No	Year	Percentage of (a)	Percentage of (b)
1.	2016-2017	100	NIL
2.	2015-2016	100	NIL
3.	2014-2015	100	NIL
4.	2013-2014	100	NIL

Student projects PG:

Table– CSE-14 (b): Students projects			
Sl. No	Year	Percentage of (a)	Percentage of (b)
1.	2016-2017	78	22
2.	2015-2016	80	20
3.	2014-2015	82	18
4.	2013-2014	82	18

23. Awards / Recognitions received by faculty and student Awards / Recognitions received by faculty

a) Awards / Recognitions received by faculty

Table – CSE-15(a): Faculty achievements				
Sl. No.	Name	Award	Venue	Date
1.	Dr.Sanjeev Kunte	Best paper award	AIT, Chickmagalore	04/05/2016
2.	Mr. Jalesh Kumar	Best paper award	AIT, Chickmagalore	04/05/2016
3.	Mr. Chetan K.R	Best presentation award	Trivandram	16/12/2015 to 19/12/2015
4.	Dr.K.M.Poornima	Best paper award	Kottayam	07/04/2011 to 09/04/2011
5.	Dr. Nirmala Shivananda	Secured Second Place in development of Project in DIP	E&E Department, IISc, B.lore.	02/06/2008 to 12/06/2008

b) Awards / Recognitions received by student

Table – CSE-15 (b): Faculty achievements				
Sl.No.	Name	Award	Venue	Date
1.	Abhishek DS	Won Popular project award in Make In India Hackathon conducted in IIT	Bombay	2016
2.	Abhishek DS	Selected as Campus Ambassador for Twenty19.com,	Chennai	2014

24. List of eminent academicians and scientists / visitors to the department

Table– CSE-16: Eminent Academicians and Scientists / Visitors				
Sl.No.	Name	Designation	Company	Date
1.	Dr. P Nagabhushan,	Professor,	DoS in CS, University of Mysore	20/03/2017
2.	Dr K P J Reddy	Professor	Aerospace Engg., Dept.. IISc, Bangalore	18/02/2017
3.	Padmabhushan Prof. U R Rao	Former Chairman	ISRO	10/11/2016
4.	Dr. Ashok Rao	Guest Professor	IIM Bangalore	22/10/2016
5.	Mr. Kittur Nagesh,,	Founder &CEO,	Cognito Networks, Inc, San Francisco, USA.	29/07/2016
6.	Dr. Shreenath N K,	Professor,	CS&E Dept. RVCE, B'lore	09/08/2016
7.	Mrs. K S Bhanumathi,	Convenor, SIG Group	CSI, B'lore chapter.	05/03/2016 to 06/03/2016
8.	Mr. Madhudande,	Associate consultant,	TCS, B'lore	18/02/2016
9.	Ms. Bhargavi U S	Software Engg.	TCS, B'lore	06/03/2015
10.	Mr. Vishwakiran	Technical Consultant	Verisoft Solutions, Bangalore	14/02/2015 to 23/02/2015
11.	Mr. Ravindra Dastikop,	Professor,	SDM College of Engg. Dharwad	28/03/2014 to 29/03/2014
12.	Mr. Amith Kumar Gundad,	Asst. Professor,	Dept. of CS&E BVBCE, Hubli	22/02/2014 to 23/02/2014
13.	Mr. Nithin,	Software engineer,	TCS, Bangalore	15/02/2014
14.	Mr. Sachin,	Software engineer,	TCS, B'lore	26/09/2013

25. Seminars/ Conferences/Workshops organized & the source of funding

a) National

Table – CSE-17 (a): Conferences and Workshops conducted				
Sl. No.	Course/ Programme	Duration	Month / Year	Source of funding
1.	ESDM Workshop	2 days	05/03/2016 & 06/03/2016	CSI, Govt of Karnataka

b) International:

Table – CSE-17 (b): Conferences and Workshops conducted				
Sl. No.	Course/ Programme	Duration	Month / Year	Source of funding
1.	International Conference MPCIT	3 Days	19/12/2013 to 21/12/2013	DRDO

26. Student profile programme/course wise:

Table– CSE-18(a): Student profile of M.Tech CSE						
Year	Name of the Course/ programme	Applications received	Selected	Enrolled		Pass percentage
				M	F	
2014-16	M.Tech CS&E	25	25	6	19	80
2013-15		26	26	7	19	96.15
2012-14		25	25	10	15	96
2011-13		25	25	15	10	100

Table– CSE-18(b): Student profile of M.Tech NIE						
Year	Name of the Course/ programme	Applications received	Selected	Enrolled		Pass percentage
				M	F	
2014-16	M.Tech NIE	24	21	5	16	100
2013-15		24	24	13	11	100
2012-14		24	24	15	9	100
2011-13		18	18	10	8	100

Table– CSE-18(c): Student profile of B.E. CSE						
Year	Name of the Course/ programme	Applications received	Selected	Enrolled		Pass percent age
				M	F	
2012-16	B.E. CSE	120	118	48	68	85.59
2011-15		124	124	58	66	82.25
2010-14		120	120	59	61	84.03
2009-13		121	121	56	65	92.56

*M = Male *F = Female

27. Diversity of Students:

Table– CSE-19(a): Diversity of UG Students				
Year	Name of the Course	% of students from the same state	% of students from other States	% of students from abroad
2016-17	BE CS&E	100	Nil	Nil
2015-16	BE CS&E	99	1	Nil
2014-15	BE CS&E	98.4	1.6	Nil
2013-14	BE CS&E	93.54	6.4	Nil

Table– CSE-19 (b): Diversity of PG Students				
Year	Name of the Course	% of students from the same state	% of students from other States	% of students from abroad
2016-17	M.Tech.(CSE)	100	Nil	Nil
	M.Tech.(NIE)	100	Nil	Nil
2015-16	M.Tech.(CSE)	94	6	Nil
	M.Tech.(NIE)	100	Nil	Nil
2014-15	M.Tech.(CSE)	100	Nil	Nil
	M.Tech.(NIE)	100	Nil	Nil
2013-14	M.Tech.(CSE)	100	Nil	Nil
	M.Tech.(NIE)	100	Nil	Nil

28. How many students have cleared national and state competitive examinations such as NET, SLET, GATE, Civil services, Defense services, etc.?

Table – CSE-20: Exam qualified		
Sl. No.	Competitive Exam	No. of students qualified
1.	GATE	5

2.	GRE	15
3.	TOEFL	15

29. Student progression:

Table –CSE-21: Student progression				
Student Progression	Percentage against enrolled			
	2015-2016	2014-2015	2013-2014	2012-2013
UG to PG	3	5	4	5.2
PG to M. Phil	NIL	NIL	NIL	NIL
PG to Ph. D	1	1	NIL	1
Employed Campus Selection	60	63	50	61
Other than Campus Selection	20	20	22	21
Entrepreneurship / Self-Employment	NIL	NIL	NIL	NIL

30. Details of Infrastructural facilities

a) Library

Table - CSE-22: Library	
Details	Number
Department Library	844
E-BOOKS	-
Reports	300
Conference Proceedings	15
Syllabus	VTU (2006,2010,2014,2015 Scheme)
Question Papers	VTU (2006,2010,2014,2015 Scheme)

b) Internet facilities for staff and students:

Internet facility is provided at the institute level for both students and staff. HOD's and staff are provided with JNNCE email ID to access their account.

Wireless Access Points: 07

c) Classrooms with ICT facility:

Eight Class Room and a Seminar Hall are Equipped with LCD projector, Black board with adequate No. of lights and fans.

d) Laboratories:

Table –CSE-23: Laboratory			
Sl.No.	Laboratory Name	Equipped with	Area in m ²
1.	Lab1	HP Core i5 3.2 GHz 2GB RAM 320GB Hardisk (30 systems)	76.04
2.	Lab2	Acer PIV 2.66 Ghz 512MB RAM 80GB Hard Disk (25 systems) HCL PIV 2.4 Ghz 256 MB RAM 40 GB Hard disk (5 systems)	82.14
3.	Lab3	Acer Core i3 3.5 GHz 2Gb RAM , 500 GB Hard Disk (30 systems)	101.88
4.	Lab4	Acer Core i3 4GB RAM 500 GB Hard Disk (30 Systems)	101.88
5.	Lab5	Wipro PIII 550 MHz 10GB Hard Disk 64MB RAM (20 Systems) Interfaces like Microprocessor Kits, ADC Interface, Key Pad Interface, Display Interface, DAC Interface, Elevator Interface, Stepper Motor Interface, Logic Controller Interface, PCA Add ons, Emulator for 8085-86, Power Supplies, Oscilliscopes, Multimeters, probes, Function Generators	78.48
6.	Research Lab	HP Desktop Core I3, Work station, IBM Server, Pentium Dual Core – 5 systems	28.25

31. Number of students receiving financial assistance from college, university, government or other agencies:

Table –CSE-24: Scholarship							
SI No.	Year	Central Government Scholarship for SC/ST	Fee Concession OBC	Ex-Defense Scholarship	Defense Scholarship	Municipal	Management
1	2015-2016	35	140	Nil	Nil	Nil	Nil
2	2014-2015	39	122	Nil	Nil	3	Nil

32. Details on student enrichment programs (special lectures / workshops / seminar) with external experts

Table – CSE-25: Student Enrichment Programs			
Sl.No	Topic	Guest name/Resource person	Date
1.	Brain storming problems in algorithm design	Dr. P. Nagabhushan,	20/03/17
2.	Magic world of shock waves	Dr. K.P.J Reddy,	18/02/2017
3.	Placement and Project	Dr. Shreenath N K,	09/08/2016
4.	Cloud computing and Big data Analytics	Mrs. K S Bhanumathi,	05/03/2016 to 06/03/2016
5.	Big data research perspectives	Mr. Madhudande,	18/02/2016
6.	Android application development & embedded android	Mr. Vishwakiran,	14/02/2015 to 23/02/2015
7.	Science talk on time traver	Ms. Bhargavi U S,	06/03/2015
8.	Cloud computing	Mr. RavindraDastikop, Mr. PravinHanchinal,	28/03/2014 to 29/03/2014
9.	Android workshop	Mr. Amith Kumar Gundad,	22/02/2014 to 23/02/2014
10.	Responsive web design	Mr. Nithin,	15/02/2014
11.	Demonstration of Prezi	Mr. Sachin	26/09/2013

33. Teaching methods adopted to improve student learning:

The following normal practices adopted by faculty:

- Hands-on experience on Android application development, Java and web based programs to meet the demands of the industries.
- To improve the soft skills of students, aptitude training and value added courses are conducted through the external sources.
- Knowledge enrichment programme for students are conducted by eminent personalities from industry and academics.

- Assignment and remedial class are conducted to improve the performance of weak students.

34. Participation in Institutional Social Responsibility (ISR) and extension Activities

Table –CSE-26: Institutional Social Responsibility (ISR) and Extension Activities		
Sl. No.	Program	Date
1.	Health Check up Camp for Women	10/12/2016
2.	Blood donation camp in association with rotary, red cross and McGan Governement hospital	18/03/2016
3.	Awareness talk on blood donation by Dr V L S Kumar	17/03/2016
4.	Entrepreneurship boot camp at MBA seminar hall	24/09/2015
5.	Environment Awareness day under Chiranthana Club, JNNCE	29/08/2015
6.	Programme to collect Nepal earth quake relief fund in JNNCE Campus	09/06/2015
7.	Rastriya Swachatha Andolan at JNNCE Campus	13/02/2015
8.	Awarness rally on crackers free Deepavali	20/10/2014
9.	Blood donation camp	25/03/2014

35. SWOC analysis of the department and future Plans.

Strengths

- Experienced and dedicated Faculty
- Low Attrition Rate.
- Training students towards cutting edge technologies.
- Good Placement Record of students in reputed companies.

Weakness

- Low research profile
- Low Industry Institute interactions.
- IEEE Student Chapter is not utilized effectively.
- Low utilization of open source software tools in labs for carrying out project works.

Opportunity

- Revenue generation opportunities through consultancy.
- Encouraging students towards Entrepreneurship.
- Writing proposals for funding agencies.
- Enhancing the industry visits.

Challenges

- Attracting top ranking students
- Securing top ranks at University levels
- Establishing strong alumni network.
- Enhancing the internship opportunities to students.

Future plans

- To get departmental accreditation by NBA.
- To establish centre of excellence in Genomics.
- Developing solutions for agriculture related problems.
- To start new courses in emerging technologies
- Strengthening of Teaching Learning process

**Information Science
& Engineering**

1. Name of the department: Information Science & Engineering

Vision

To be recognized as a centre of excellence in the field of Information Science and Engineering for education, research and entrepreneurial skills with a vision of building creative and dynamic IT professionals to meet global challenges.

Mission

- Impart quality education, training and competence in information science domain through best-in class faculty and facilities.
- Inspire a zest into students for open discussions, debates and sharing ideas in the department.
- Inculcating the students to pursue career in higher studies and research.



**Dr. Jyothi K.
Professor & Head**



**Mr. Girish Mantha
Asst. Prof.
Co-ordinator**

2. Year of Establishment: 1999

3. Names of Programs / Courses offered (UG & PG)

Table ISE-1 :Course and Intake		
Sl. No.	Name of the Program	Intake
1	Degree : Bachelor of Engineering Discipline : Information Science and Engineering	120

4. Name of Interdisciplinary courses and departments involved:

Table ISE-2 : Interdisciplinary courses			
Sl. No	Sem	Course Title	Department
1	I / II/ III / IV	Engineering Mathematics I, II, III, IV, MATDIP	Mathematics
2	I/II	Engineering Physics& Lab	Physics
3	I/II	Elements of Civil Engg.	Civil Engineering
4	I/II	Basic Electronics	Electronics & Communication Engg.
5	I/II	Basic Electrical Engg.	Electrical and Electronics Engg.
6	I/II	Engineering Chemistry& Lab	Chemistry
7	I/II	Environmental Engineering	Civil Engineering
8	I/II	Computer Aided Engineering Drawing	Mechanical Engineering
9	I/II	Elements of Mechanical Engg.	
10	I/II	Workshop Practice	

5. Annual/ semester/choice based credit system (program wise):

The UG and PG Programs follow the Visvesvaraya Technological University (VTU) guidelines with percentage and CBCS based semester system.

Table ISE-3 : System Followed			
Sl. No.	Degree	Courses offered	System followed
1	B.E.	Information Science & Engineering	<ul style="list-style-type: none"> • CBCS Scheme from academic year 2015-2016 onwards • Previously Non-CBCS Scheme

6. Participation of the department in the courses offered by other departments:

Table ISE-4 : Subject Supported			
Sl. No.	Sem	Course Title	Department
1	I/II	Programming in C & Data Structures	To all other departments
2	I/II	Computer Programming Lab	EC, ME, TE, EE, CS& CV

7. Courses in collaboration with other universities, industries, foreign institutions, etc: --- Nil ---
8. Details of courses/programs discontinued (if any) with reasons: --Nil--
9. Number of Teaching posts sanctioned and filled (Professors/ Associate Professors/ Asst. Professors).

Table ISE-5 : Teaching Posts		
Teaching Post	Under Graduate	
	Sanctioned	Filled
Professors	2	2
Associate Professors	6	5
Asst. Professors	16	15
Lecturers	0	1

10. Faculty profile with name, qualification, designation specialization, (D.Sc./ D.Litt./ Ph.D/ M.Phil.,etc)

Table ISE-6 : Faculty Profile					
Name	Specialization	Qualification	Designation	No.of Years of experience	No.of Ph.D students guided/guiding for the last 4 years
Dr. Prabhudeva S	CSE	MS, Ph.D	Professor	27.0	00/07
Dr. Jyothi K	M.Tech, Ph.D	Computer Vision	Professor and Head	19.0	00/02
Mr. C VSuresh	CSE	M.E	Associate Professor	32.0	-
Mr. Pradeep H K	CSE	M.Tech	Associate Professor	27.0	-
Mrs. Rashmi R	CSE	M.Tech	Associate professor	16.0	-
Mrs. Sunitha G P	CSE	MCA, M.Tech (Ph.D)	Associate Professor	17.0	-
Mr. Ragavendra R J	CSE	M.Sc. (Engg) (Ph.D)	Associate Professor	20.0	-
Mrs. Samara Mubeen	CSE	M.Tech. (Ph.D)	Assistant Professor	19.0	-

Mr. Vishwas CGM	CSE	M.Tech, (Ph.D)	Assistant Professor	13.6	-
Dr. Kiran M	Ad Hoc Networks	M.Tech, Ph.D	Assistant Professor	12.0	00/05
Mrs. G V Sowmya	NIE	M.Tech, (Ph.D)	Assistant Professor	14.0	-
Mr. Sayed Aftab Ahamed	CSE	M.Tech	Assistant Professor	9.7	-
Mr. SathyanarayanaK B	NIE	M.Tech	Assistant Professor	8.0	-
Mr. Akshay M J	CSE	M.Tech	Assistant Professor	8.0	-
Mr. M Pavan	CSE	M.Tech	Assistant Professor	8.0	-
Mr. Sharath Kumar S R	CSE	B.E. (M.Tech)	Lecturer	7.0	-
Mr. Pavan Kumar M P	CSE	M.Sc. (Engg), (Ph.D)	Assistant Professor	8.0	-
Mr. Chethan G S	NIE	M.Tech, (Ph.D)	Assistant Professor	7.0	-
Mrs. Suchethana H C	CSE	M.Tech	Assistant Professor	9.0	-
Mrs. Prathima L	CSE	M.Tech	Assistant Professor	7.0	-
Mrs. Deepa V B	CSE	M.Tech (Ph.D)	Assistant Professor	7.0	-
Mr. Girish Mantha	CSE	M.Tech	Assistant Professor	10.0	-
Mr. Arun Kumar P	CSE	M.Tech	Assistant Professor	8.0	-

11. List of senior visiting faculty: ---Nil ----

12. Percentage of lectures delivered and practical classes handled (program wise) by temporary faculty: --- Nil ---

13. Student Teacher Ratio (Program-wise):

Table- 7: Students Teacher Ratio		
Sl. No.	Program	Student Teacher ratio
1	B.E. – Information Science and Engineering	17:1

14. Number of academic support staff (Technical) and administrative staff sanctioned and filled:

Table ISE-8 : Academic and Administrative Staff		
Staff	Sanctioned	Filled
Academic support Staff	5	5
Administrative Staff	2	2

15. Qualifications of teaching faculty with M.Tech/Ph.D.

Table ISE-9: Qualification of Faculty	
Qualification	Number of Staff
Ph. D	3
P G	19
U G	1

16. Number of faculty with ongoing projects from a) National b)International funding agencies and grants received: -- Nil ---

17. Departmental projects funded by DST-FIST; UGC, DBT, ICSSR, etc. And total grants received

Table ISE-10 : Funded projects						
Sl.No	Name of the Funding Agency	Name of the Scheme	Program Title	Year of Funding	Amount Sanctioned (Rs in Lakhs)	Principal Investigator
1	Govt. of Karnataka	K-BITS	Arogya Mitra	2016-17	3.00	Dr. Prabhudeva S
2	Govt. of Karnataka	K-BITS	Smart Plant Manager	2016-17	3.00	Mr.Pradeep H K
3	Govt. of Karnataka	K-BITS	Arecadrone	2015-16	3.00	Mr.Pradeep H K & Mr. Sharath Kumar S R
4	Govt. of Karnataka	K-BITS	I – Machine Diagnostic System	2015-16	3.00	Mr.Pradeep H K
5	Govt. of Karnataka	K-BITS	A Smart Helmet for Two Wheelers : An	2015-16	3.00	Mr.Pradeep H K

			Intelligent Safety Helmet for Motorcyclist			
6	DST	NRDM S	“Automated fish farming using wireless sensor networks”	Applied and Rejected in EC Committee meeting	15.00	Dr. Kiran M
7	Govt. of Karnataka	VGST	“Wireless sensor network based fish pond automation using bio-inspired routing protocol”	Submitted the proposal	10.2	Dr. Kiran M

18. Research Centre/facility recognized by the University: --- Nil ---

19. Publications

- a) Total no. of papers published in international journals: 30
 b) Total no. of papers published in national journals: 01

Table ISE-11 : Journal Details							
Sl. No.	Faculty name	National	International	Citations	H - index	Scopus	DBLP
1	Dr. Prabhudeva S	0	11	-	-	-	-
2	Dr. Jyothi K	0	3	1	1	2	2
3	G P Sunitha	0	1	-	-	-	-
4	Raghavendra RJ	1	1	-	-	-	-
5	Samara Mubeen	0	5	1	-	-	-
6	Dr. Kiran M	0	4	-	3	-	-
7	Pavankumar M P	0	2	1	-	-	-
8	Deepa V B	0	3	-	-	-	-

Table ISE-12 : Books published				
Sl.No	Faculty Name	Book Title	ISBN	Publisher
1	Dr. G Ram Mohana Reddy & Dr. Kiran M	Mobile Ad Hoc Networks Bio Inspired QoS aware Routing protocols	9781498746854 CAT# K27017	CRC Press, Taylor and French Group, 1 st Edition- 2016

20. Areas of consultancy and income generated: --- Nil ---

21. Faculty as members in National committees, international committees, editorial boards.

- a) National Committees: --- Nil ---
- b) International Committees: --- Nil ---
- c) Editorial Boards: --- Nil ---

22. Student projects:

- a) Student who have done in house projects including interdepartmental/ Program
- b) Student Placed for Project in organization outside the institute i.e., in Research laboratory/Industry/to agencies

Student projects UG:

Table ISE-13 : Students projects			
Sl. No.	Year	Percentage of (a)	Percentage of (b)
1	2013-2017	100	0
2	2012-2016	100	0
3	2011-2015	100	0
4	2010-2014	100	0

23. Awards / recognitions received by faculty and students: --- Nil ---

24. List of eminent academicians and scientists/visitors to the dept:

Table ISE-14 : Eminent Academicians and Scientists / Visitors				
Sl.No.	Name	Designation	Company	Date
1	Prof. K. B. Shadaksharappa	Former HOD, CSE Dept.	PESIT, Bangalore	06/04/2017
2	Mr. Anup D Rao	Senior Software Egg	Infogain, Bangalore	27/03/2017
3	Dr. P Naghabushan	Professor	Mysore University	20/03/2017

4	Dr. K P J Reddy	Scientist	IISc, Bangalore	18/02/2017
5	Mrs. Rashmi Suryanarayana	Centre Head	Xchanging, Shimoga	13/02/2017
6	Mr. Srinivas Acharya	Engineering Manager	HP, Bangalore	02/05/2015

25. Seminars/ Conferences/workshops organized and the source of funding

a) National

Table ISE-15(a) : Conferences and Workshops conducted				
Sl. No.	Course/ Programme	Duration	Month / Year	Source of funding
SEMINAR/WORKSHOPS				
1.	Workshop on “Outcome based education and Flipped Classroom”	2 Days	08/2016	JNNCE
2.	A seminar through Video Conferencing on “IOT Market opportunity, solutions, research areas and applied innovation”	1 Day	07/2016	JNNCE
3.	ISTE Workshop on “Computer Networking”	2 weeks	07/2013	ISTE Workshop, IIT, Bombay
4.	Workshop on “Database Management Systems”	2 weeks	05/2013	ISTE Workshop, IIT Bombay
5.	workshop on “ Android application” By Mr. Mahesh Rakeja, Azure Skynet	3 Days	29/01/2015 to 31/01/2015	JNNCE

b) International

Table ISE-15(b) : Conferences and Workshops conducted				
Sl. No.	Course/ Programme	Duration	Month / Year	Source of funding
CONFERENCES				
1.	Multimedia processing, Communication and Information Technology	2 Days	12/2013	DRDO, and JNNCE

26. Student profile program/ Course wise:

Table ISE-16 : Student Profile						
Name of the Course	Academic Year	Application Received	Selected	Enrolled		Pass Percentage
				M	F	
BE (ISE)	2009-13	120	104	52	52	89.42
	2010-14	120	96	29	67	84.04
	2011-15	120	116	35	81	89.56
	2012-16	120	122	34	88	86.06

M* - Male F* - Female

27. Diversity of Students

Table ISE – 17 : Diversity of Students				
Name of the Course	Academic Year	No. of Students from the State %	No. of Students from the other State %	No. of Students from the other Countries
BE (ISE)	2016 - 20	99%	1%	NIL
	2015 - 19	99%	1%	
	2014 – 18	100%	0	
	2013 – 17	99%	1%	

28. How many students have cleared national and state competitive examinations such as NET, SLET, GATE, Civil services, Defence services, etc.?

Table ISE-18 :Competitive Examinations		
Academic Year	No. of Students passed GATE	No. of Students passed TOEFL/GRE/IELTS
2016 – 17	0	4
2015 – 16	4	3
2014 – 15	6	1
2013 – 14	6	1
2012– 13	5	1

29. Student progression

Table ISE-19 : Student Progression					
Student progression	Count against enrolled				
	2013 – 17	2012 – 16	2011 – 15	2010 – 14	2009 – 13
Total No of Students (Intake)	118	139	139	141	125
UG to PG	NA	7	7	7	6
Employed : Campus selection	40*	55	45	28	18
Other than campus recruitment	00	13	10	16	03
Entrepreneurship/Self-employment	00	01	0	0	0

* Campus recruitment in progress

* NA-Not Applicable

30. Details of Infrastructural Facilities:

a) Library

Table ISE – 20 : Library		
Title	Number	
Books	340	
E-BOOKS	20	
Reports	Project: 90	Seminar: 145
Syllabus:	VTU (2010,2014,2015 Scheme)	
Question Papers:	VTU (2010,2014,2015 Scheme)	

b) Internet facilities for staff and student

The department has internet connectivity of 16Mbps leased line OFC enabled connectivity and over 2 access points for wireless connectivity. Internet facility is provided for staff. Staff is provided with JNNCE email id to access their account. College is providing centralized browsing facility for students in separate block.

c) Classrooms with ICT facilities

There are 06 classrooms in the department to conduct the classes and 80% of the classrooms are equipped with LCD projectors.

d) Laboratories

Table ISE – 21 : Laboratories			
Sl. No	Laboratory Name	Equipped With	Area in m²
1	Hardware Lab	27Pcs, 1 LCD projector, UPS, Battery, 2- Network Switches	70.56
2	Linux Lab	27Pcs, 1 LCD projector, UPS, Battery, 2 Network Switches	95.84
3	Project Lab	27Pcs, 1 LCD projector, UPS, Battery, 2 Network Switches	91.23
4	Windows Lab	27Pcs, 1 LCD projector, UPS, Battery, 2 Network Switches	101.63

31. Number of students receiving financial assistance from college, university, government or other agencies:

Table ISE – 22 : Financial Assistance							
Sl. No.	Year	Central Government Scholarship for SC/ST (Karnataka)	Fee Concession for OBC students (Karnataka)	Ex-Defense children scholarship	Defense children fee reimburse	Municipal Scholar	Others (BeediScholarship, MHRD, Minority, etc)
1	2016-2017	-	-	1	-	-	-
2	2015-2016	30	NIL	1	NIL	0	122
3	2014-2015	23	NIL	1	NIL	5	NIL
4	2013-2014	-	-	1	-	-	-

32. Details on student enrichment programs (special lectures/ workshops/ seminar) with external experts

Table ISE-23 : Enrichment programs			
Sl no	Topic	Guest name / Resource person	Date
1	A Lecture on “Brainstorming challenges in algorithmic design”	Dr. P Naghbushan, Prof. Mysore University	20/03/2017
2	Seminar on “Magical world of shock waves”	Dr. K P J Reddy, Scientist, IISc, Bangalore.	18/02/2017

3	Two-day workshop on “Placement Training”	Mr. Ramani, HR Specialist	01/04/2016 to 02/04/2016
4	A technical talk on “E-Waste and its Management”	Mr. Kumaraswamy D R, Chief Environmental Officer, KSPCB, Bangalore	19/02/2016
5	A technical talk on “Innovative projects based on agriculture using smart phone or various mechanical or electronic devices”	Dr. K C Shashidar, Agriculture College, Shimoga	09/10/2015
6	A seminar on “Internet of Things (IOT)	Dr. Dilip Kumar S M, Asso. Professor, Dept. of CSE, UVCE, Bangalore	29/08/2015
7	Seminar on Cloud computing and open stack.	Mr. Srinivasa Acharya, Engg. Manager, HP Bangalore	02/05/2015
8	Technical talk on “ Cloud computing”	Dr. Sathish Babu, Dept. of CSE, SIT, Tumkur	29/09/2014
9	Seminar on “Problems around us in image and vision computing”	Dr. P Naghabhushan, Professor Mysore University.	2013

33. Teaching methods adopted to improve student learning

List of methods adopted for teaching encompass the below:

- Technical online and offline quiz programs for placements.
- Giving technical seminar to students and evaluating it.
- Encouraging and guiding to do mini projects using recent technologies, platforms and IDEs.
- Conducting technical talks by alumni and other eminent resource persons about recent trends and technologies.
- Smart class teaching techniques like usage of PPTs, NPTEL, MOOC videos, Tutorial class.

34. Participation in Institutional Social Responsibility (ISR) and Extension activities

Table ISE-24 : Institutional Social Responsibility (ISR) and Extension Activities		
Sl. No.	Program	Date
1	“Conducted an awareness program on Renewable energy, Astronomy and Basic Science Experiments” for Govt Primary school, Housoudi, Shimoga	24/08/2016
2	“Conducted an awareness program on Renewable energy, Astronomy and Basic Science Experiments” for Govt Primary school, Purappemane, Shimoga	09/02/2017
3	“Conducted an awareness program on Renewable energy, Astronomy and Basic Science Experiments” for Govt Primary school, Matturu, Shimoga	13/02/2017
4	“Conducted an awareness program on Renewable energy, Astronomy and Basic Science Experiments” for Govt Primary school, Mattimane, Shimoga	09/02/2017
5	“Conducted an awareness program on Renewable energy, Astronomy and Basic Science Experiments” for Govt Primary school, Kallahalli, Shimoga	14/03/2017
6	“Conducted an awareness program on Renewable energy, Astronomy and Basic Science Experiments” for Govt Primary school, Umblabailu, Shimoga	20/03/2017
7	“Conducted an awareness program on Renewable energy, Astronomy and Basic Science Experiments” for Govt Primary school, Gajnuru, Shimoga	23/10/2017
8	“Conducted an awareness program on Renewable energy, Astronomy and Basic Science Experiments” In NSS Program, Hosanagara, Shimoga	08/03/2017
9	Computer awareness Program for students of Govt High School, Newtown, Bhadravathi.	14-02-2017
10	Computer awareness Program for students of Dr. U R Ananthamurthy Govt High School Thirthahalli.	28/02/2017
11	“One Day Awareness program on Bar Code” for Rotary Club Shimoga	13/12/2014
12	Workshop on Barcodes and its applications, for JCI Shimoga	19/07/2015
13	“Conducted an awareness program on Renewable energy, Astronomy and Basic Science Experiments” for Govt Primary school, Heddaripura, Shimoga	06/02/2016

35. SWOC analysis of the department and Future plans:

Strength:

- In past four years the department has achieved 99% admissions.
- Well qualified and experienced teaching faculty.
- Department is encouraging R & D with 3 doctorates and 8 in house research scholars.

Weakness

- Comparatively low profile input for the department.
- Industry based projects and consultancies are limited.
- Limited number of licensed Software.
- Shortage of classrooms.

Opportunity

- High scope for academic collaboration with other institutes and industries.
- Opportunities to convert student projects to end products.

Challenges

- Attracting top ranking students.
- Enhancing the competency among the students.
- Qualification up gradation of teaching and non teaching staff.

Future Plans

- To prepare at least 5 academic project proposals for funding in the current academic year.
- To get at least 2 MOU's initiations with Industries or Institutions in current academic year.
- To conduct at least one international conference in next calendar year.
- To enter into OBE and accredited to NBA in next 2 to 3 years.
- To encourage faculties to enrich their knowledge in the identified thrust area to attract consultancy projects.

Telecommunication Engineering

1. Name of the department: Telecommunication Engineering

Vision

To emerge as a center of academic excellence in the field of Telecommunication Engineering by keeping pace with rapidly changing technologies and industry requirements to create technical manpower of global standard for the betterment of industry and society.

Mission

- Impart knowledge and skills required for the latest engineering & technological processes in the field of Telecommunication.
- Instill creative thinking through innovative and team-based methods to develop employability, entrepreneurial traits and research capability among the students.
- Provide value-based technical education empowering the students with ethical and humane values addressing the needs of industries and the society.



**Dr. Ushadevi M. B.
Professor & Head**



**Mrs. Ashwini S. R.
Co-ordinator**

2. Year of Establishment: 2000

3. Names of Programmes / Courses offered (UG, PG, M.Phil., Ph.D., Integrated Masters, Integrated Ph.D., etc.)

Table TE – 1: Name of Program		
Sl. No.	Name of the Program	Intake
1.	Degree: Bachelor of Engineering Discipline: Telecommunication Engineering	60

4. Names of Interdisciplinary courses and the departments/units involved

Table TE – 2: Interdisciplinary Courses			
Sl. No	Semester	Course Title	Department
1	I/ II/ III/ IV	Engineering Mathematics - I, II, III, IV, MATDIP	Mathematics
2	I/II	Engineering Physics Engineering Physics Lab	Physics
3	I/II	Elements of Civil Engineering, Engineering Mechanics, Environmental Studies	Civil engineering
4	I/II	Programming in C & Data Structures, Computer Programming Lab	Computer Science & Engineering/ Information Science & Engineering
5	I/II	Computer Aided Engineering Drawing, Workshop Practice	Mechanical Engineering
6	I/II	Engineering Chemistry, Engineering Chemistry Lab	Chemistry
7	I/II	Basics of Electrical Engineering	Electrical & Electronics Engineering
8	I/II	Language Kannada/English	Humanities
9	VI	C++ and Data Structures	Electronics & Communication Engineering

5. Annual/semester/choice based credit system(programmewise)

Table TE - 3: System Followed			
Sl. no	Degree	Discipline	System followed
1.	B E	Telecommunication Engineering	<ul style="list-style-type: none"> • CBCS Scheme from academic year 2015-2016 onwards • Previously Non-CBCS Scheme

6. Participation of the department in the courses offered by other departments

Table TE - 4: Subjects Supported			
Sl. no	Semester	To Department	Course Taught
1.	I/II	Computer Science & Engineering, Electrical & Electronics Engineering	Basic Electronics
2.	VIII	Electronics & Communication Engineering	Global Systems for Mobile
3.	VI	Electronics & Communication Engineering	Advance communication Lab

7. Courses in collaboration with other universities, industries, foreign institutions, etc.: ---Nil ---

8. Details of courses/programmes discontinued (if any) with reasons ---Nil ---

9. Number of Teaching posts

Table TE - 5: Sanctioned and Filled Position		
Teaching post	Sanctioned	Filled
Professors	01	01
Associate Professors	03	03
Asst. Professors	8	10

10. Faculty profile with name, qualification, designation, specialization, (D.Sc./D.Litt. /Ph.D./M.Phil.etc.,)

Table TE- 6: Faculty Specialization						
Sl. no.	Name	Qualification	Designation	Specialization	No. of Years of Experience	No. of Ph.D. Students Guided/Guiding for the last 4 years
1	Dr. Ushadevi M. B.	M. Tech, Ph.D	Professor and H.O.D	Switching Technologies for Computer Networking	19	00/02

2	Mr. P. S. Rajashekariah	M. Tech	Associate Professor	Industrial Electronics	34	---
3	Mr. Amarappa S.	M.E, (Ph.D)	Associate Professor	Electronics	30.2	---
4	Mr. Madhukar C.S.	M.E	Associate Professor	Digital Electronics	16.2	---
5	Mr. Harisha. S. B.	M. Tech	Assistant Professor	VLSI System Design	14.4	---
6	Mrs. Ashwini S. R.	M. Tech (Ph.D)	Assistant Professor	Networking and Internet Engg.	15.4	---
7	Mr. Shashikiran. S.	M.Sc (Engg), M.S (Engg. Mgmt), (Ph.D)	Assistant Professor	Character Recognition	20	---
	Mrs. Aparna	M.Tech	Assistant Professor	Digital Electronics & Communication System	11	---
9	Mr. Madhusudhan G.	M.Tech (Ph.D)	Assistant Professor	Digital Electronics	14.5	---
10	Mrs. Bhuvana Khare	M.Tech	Assistant Professor	CAID	9.9	---
11	Mr. Benak Patel M. P.	M.Tech	Assistant Professor	Electronics & Communication	7.1	---
12	Mrs. Rashmi M. Hullamani	M.Tech	Assistant Professor	Digital Communication	5.6	---
13	Mr. Harish T. S.	M.Tech	Assistant Professor	Digital Communication	4.4	---
14	Mr. Anand Raj S. N.	M.Tech, (Ph.D)	Assistant Professor	VLSI System Design	8.5	---

11. List of senior visiting faculty: ---Nil ---

12. Percentage of lectures delivered and practical classes handled (programmewise) by temporary faculty: ---Nil ---

13. Student-Teacher Ratio(programme wise) :

Table TE – 7: Students Teacher Ratio		
Sl. No.	Program	Student - Teacher ratio
1	B.E. - Telecommunication Engineering	15:1

14. Number of academic support staff (technical) and administrative staff; sanctioned and filled

Table TE – 8: Academic and Administrative Staff		
Staff	Sanctioned	Filled
Administrative staff	01	01
Academic support staff	02	02

15. Qualifications of teaching faculty with D.Sc/ D. Litt/ Ph.D/ MPhil/PG.

Table TE – 9: Qualification of Faculty	
Qualification	Number of Staff
Ph. D	01
P G	13

**16. Number of faculty with on going projects from a) National
b) International funding agencies and grants received: ---Nil---**

**17. Departmental projects funded by DST-FIST; UGC, DBT, ICSSR, etc.
and total grants received**

Table TE – 10: Funded Projects/Programmes					
Sl. No	Name of the Funding Agency	Name of the Scheme	Programme Title	Year of Funding	Amount Sanctioned (Rs.)
1	Govt. of Karnataka	KSCST Guide: Madhusudhan G.	Gorakshak	2017	5,500
2	Govt. of Karnataka	KSCST Guide: Aparna	Automatic electric billing system	2015	6,000
3	Govt. of Karnataka	KSCST Guide: Dr. Ushadevi M. B.	Advance driver assistant system	2015	5,000
4	Govt. of Karnataka	KBITS Guide: S B Harish	Cell phone network boosting device	2015	25,000

5	JNNCE	e-Yantra Lab Setup Initiative (eLSI) Co-ordinator: Amarappa S.	Nodal centre	2014	3,75,60 3
6	MHRD	National Mission on Education through ICT Co-ordinator: Dr. Ushadevi M.B.	Remote centre	2012 and thereaf ter for every works hop	20,95,6 05

18. Research Centre/facility recognized by the University: ---Nil---

19. Publications:

Total No. of papers published in International Journals : **16**

Total no. of papers published in National Journals : **--Nil--**

Table TE – 11 : Journal Details

Sl. No.	Faculty name	National	International	Citations	H – index
1	Dr. Ushadevi.M.B	--	03	--	--
2	Mr. Amarappa.S	--	05	--	--
3	Mr. Harisha.S.B	--	03	--	--
4	Mr. Shashikiran. S	--	02	--	--
5	Mr. Madhusudhan G	--	01	--	--
6	Mr. Benak Patel M P	--	01	--	--
7	Mr. Harish T S	--	01	--	--

20. Areas of consultancy and income generated: --- Nil ---

21. Faculty as members in

- a) National Committees : **---Nil---**
- b) International Committees : **---Nil---**
- c) Editorial boards : **---Nil---**

22. Student projects

- a) Percentage of students who have done in-house projects including interdepartmental programme
- b) Percentage of students placed for projects in organizations outside the institution i.e.in research laboratories/industry/ other agencies

Table TE – 12: Students Projects			
Sl. No	Year	Percentage of (a)	Percentage of (b)
1.	2013-2017	100	---
2.	2012-2016	100	---
3.	2011-2015	100	---
4.	2010-2014	100	---

23. Awards / Recognitions received by faculty and student Awards / Recognitions received by faculty

Table TE – 13 (a): Faculty achievements				
Sl. No.	Name	Award / Achievement	Venue	Date
1	Mr. Benak Patel M. P.	2 nd prize in National level e-yantra ideas competition (mentor)	IIT Bombay	10/04/2015 to 11/04/2015
2	Mr. Amarappa S.	3 rd place in All India Teacher's competition	IIT, Bombay	10/04/2014 to 11/04/2014
3	Mr. Harisha S. B.	3 rd place in All India Teacher's competition	IIT, Bombay	10/04/2014 to 11/04/2014

Awards / Recognitions received by students

Table TE – 13 (b): Student achievements				
Sl. No.	Name	Award	Venue	Date
1	Ashika T M	2 nd Prize in National Level E-yantra Ideas Competition	IIT Bombay	2015
	Ayesha tabassumn S N			
	Harshitha S A			
	Smitha N			
2	Manjunath M.S	3 rd Prize in National Level Robotic Competition	IIT Bombay	2014
	Ashwin G.V.			
3	Krishna Patil	2 nd Prize in National level E-yantra robotics competition	IIT Bombay	2013
	Kiran Kumar.M.			
	Ravishankar K.V.			
	Vivek P.			

24. List of eminent academicians and scientists/ visitors to the department

Table TE – 14: Eminent Academicians and Scientists / Visitors				
Sl.No.	Name	Designation	Company	Date
1	Dr. G R Sinha	Professor, ECE dept., Associate Director, Faculty of Engineering and Technology,	Shri Shankaracharya Technical campus, Junwani, Bhilai	10/02/ 2014
2	Dr. Ramakanth Kumar P.	HOD Dept of ISE	RVCE, Bangalore	11/10/2013
3	Dr. K. Chidananda Gowda	Ex – Vice Chancellor ,	Kuvempu University	10/10/ 2013
4	Mr. Pradeep & Mr. Adarsh	Software Engineers	Tycoon Software	16/02/2013
5	Mr. Kiran Patil	Engineer	Green Turtle India Pvt. Ltd	18/10/2012

25. Seminars/ Conferences/Workshops organized & the source of funding

a) National

Table TE – 15: Conferences and Workshops Conducted				
Sl. No.	Course/ Programme	Duration	Month / Year	Source of funding
1.	Workshop on “CMOS VLSI”, Online, under the Remote centre JNNCE by IIT, Kharagpur	2 weeks	20/6/2017 to 04/07/2017	MHRD
2.	National workshop on “A Pedagogy for effective use of Mathematics for research in Science and Technology” at JNNCE, Shimoga	1 week	27/07/2015 to 31/07/2015	JNNCE, IETE
3.	Workshop on “Pedagogy for Effective use of ICT in Engineering Education”, Online, under the Remote centre JNNCE by IIT, Bombay	2 weeks	05/01/2015 to 31/01/2015	MHRD
4.	Workshop on “Control Systems”, Online, under the Remote centre JNNCE by IIT, Kharagpur	2 weeks	02/12/2014 to 12/12/2014	MHRD

5.	Workshop with hands on training on “Latex, A tutorial perspective”	2 days	25/04/2014 to 26/04/2014	Self-sponsored
6.	Workshop on “Cyber security”, Online, under the Remote centre JNNCE, sponsored by IIT, Kharagpur	2 weeks	10/07/2014 to 2007/2014	MHRD
7.	Workshop on “Signals and Systems”, Online, under the Remote centre JNNCE, by IIT, Kharagpur	2 weeks	02/01/2014 to 12/01/2014	MHRD
8.	International Conference on Multimedia Processing, Communication and Information Technology (MPCIT-2013)	3 days	19/12/2013 to 21/12/2013	JNNCE, IETE
9.	Workshop on Introduction to Robotics, conducted by e-Yantra, IIT, Bombay	2 days	22/10/2013 to 23/10/2013	JNNCE
10.	6th IETE National Conference on RF & Wireless (ICON-RFW 13)	3 days	9/05/2013 to 11/05/2013	IETE
11.	workshop on “Analog Electronics”, Online, under the Remote centre JNNCE by IIT, Kharagpur	2 weeks	04/06/2013 to 14/06/2013	MHRD

b) International: ---Nil---

26. Student profile programme/Course wise:

Table TE-16 : Student Profile						
Name of the Course	Academic Year	Application Received	Selected	Enrolled		Pass Percentage
				M	F	
BE (ISE)	2009-13	60	60	34	26	80
	2010-14	60	52	24	28	72.54
	2011-15	60	55	22	33	96.36
	2012-16	60	60	20	40	70

27. Diversity of Students:

Table TE – 17: Diversity of UG Students				
Year	Name of the Course	% of students from the same state	% of students from other States	% of students from abroad
2016-2020	Telecommunication Engineering	100	--	--
2015-2019		100	--	--
2014-2018		100	--	--
2013-2017		100	--	--

28. How many students have cleared national and state competitive examinations such as NET, SLET, GATE, Civil services, Defense services, etc.?

Table – 18: Exam Qualified (2013-16)		
Sl. no.	Competitive Exam	No. of Students Qualified
1.	GATE	2
2.	GRE	6

29. Student progression:

Table TE – 19: Student Progression				
Student Progression	Percentage (%) Against Enrolled			
	2012-16	2011-15	2010-14	2009-13
UG to PG (No. of students)	2	4	4	3
Employed Campus Selection (% age)	36.7	50	53.3	21.7
Other than Campus Selection (% age)	18	18	20	20
Entrepreneurship / Self-Employment (No. of students)	--	01	--	01

30. Details of Infrastructural facilities

a) Library

Table TE - 20: Library	
Details	Number
Department Library	1676
E-BOOKS	--
Reports	56 (2012-2016)
Syllabus	VTU (2006,2010,2014,2015 Scheme)
Question Papers	VTU (2006,2010,2014,2015 Scheme)

b) Internet facilities for staff and students:

The institution has Internet connectivity for both students and staff. The academic block is internally connected through Wi-Fi as well as wired LAN with 2 indoor access points.

c) Classrooms with ICT facility:

There are three classrooms in the department to conduct lectures. All the classrooms are equipped with overhead projector. In view of ICT, PPT presentation based on the curriculum, NPTEL teaching materials, Instructor material from the publisher and student material from the publisher aids have been provided by the department:

d) Laboratories:

Table TE - 21: Laboratory			
Sl. No.	Laboratory Name	Equipped with	Area in m²
1	Analog Electronics Lab	CRO -12 Signal Generator -16 DC Power Supply -15 Multi Meter -5 Decade Box -40	100.80 Sq. M.
2	Digital Electronics Lab	I.C.Tester-1 IC Trainer Kit-15	81.80 Sq. M.
3	Communications Lab	Micro Wave Test Benches-6 Klystron Power Supplies -6 V. S.W.R. Meters-4 Microstrip Trainer Kits-4 V.C.OSources Antennas-6 6db Attenuators-5, Multimeters -5, Communication Lab Kits - 8.	81.80 Sq. M.
5	HDL Lab	FPGA Kits with Peripherals-12	112.87 Sq. M.
4	Microprocessor Lab	Projector, Printer, Microprocessor Kits with Peripherals – 15, PC's - 26	112.87 Sq. M.
5	Computer Communication Lab	Projector, Printer, PC's - 26	112.87 Sq. M.
6	Digital Signal Processor Lab	Projector-1, PC's- 26, Code Composer Studio, DSP Starter Kit -10	112.87 Sq. M.
7	Microcontroller Lab	PC's - 26, Keil, Single chip MCU Trainer Kit -20, 7 Segment LED Display -20,	112.87 Sq. M.

		Matrix Keyboard -20, Dual DAC -20 ADC -20, Stepper Motor – 20, DC Motor – 20, TXDX Interface -20, Pattern Generator Cum logic Analyzer -2 MSP 430 Kits-10	
--	--	--	--

31. Number of students receiving financial assistance from college, university, government or other agencies:

Table TE - 22 : Scholarship							
Sl no	Year	Central Government Scholarship for SC/ST	Fee Concession OBC	Ex-Defense Scholarship	Defense Scholarship	Municipal	Management
1	2015-2016	05	85	---	---	---	---
2	2014-2015	10	72	---	---	---	---

32. Details on student enrichment programs (special lectures / workshops / seminar) with external experts

Table TE – 23: Student Enrichment Programs			
Sl. No	Topic	Guest name/Resource person	Date
1	ISRO outreach Program and Exhibition	Sri. B R Guruprasad, Scientist/PRO, ISRO, Bangalore	8/09/2015 to 09/09/2015
2	Embedded Systems	Sri. M Raghavendra Bhat, General Manager, CloudE, Mysore	20/08/2015
3	Embedded Systems With project	Sri. Sunil K, Manager, ALS Instruments, Bangalore	18/08/2015
4	Advance in VLSI Design –System On Chip	Dr. S Y Kulkarani, Principal, M S Ramaiah Institute of Technology, Bangalore	20/08/2014

33. Teaching methods adopted to improve student learning:

The following normal practices adopted by faculty:

- Project based learning made mandatory for every student which is financially supported by KSCST (Karnataka state council for Science and Technology) scheme.

- Invited Technical talks organized from eminent industry and academic Personalities on current technology trends.
- Aptitude training and Value added courses by external sources.
- Tutorials classes for analytical subjects.
- PPTs, Classroom teaching, Assignment, Tutorial class, Remedial class, seminars, Group discussions and Demonstration.

34. Participation in Institutional Social Responsibility (ISR) and extension Activities

Table TE - 24: Institutional Social Responsibility (ISR)and Extension Activities		
Sl No	Program	Date
1	Workshop for women and senior citizens on Internet awareness and digital transaction in association with IETE Shimoga centre	17/03/2017 to 18/03/2017
2	ISRO outreach program in association with IETE Shimoga centre	08/09/2015 to 09/09/2015
3	Workshop on basic electronics, basic electrical and laser for 10th standard students in association with IETE Shimoga centre.	24/07/2015 to 25/07/2015
4	Internet awareness workshop for women and seniorcitizens in association with IETE Shimoga centre	12/03/2015 to 13/03/2015
5	Refresher course on physics for PU lecturers in association with IETE Shimoga centre	26/07/2013 to 27/07/2013
6	Internet awareness workshop for women in association with IETE Shimoga centre	18/06/2012 to 19/06/2012

35. SWOC analysis of the department and future Plans.

Strength

- Qualified and competent faculty with varied specialization and expertise.
- Faculties are motivated towards research.
- Focus on overall development of studentacademics, projects, sports and cultural activities.
- Conduction of workshop regularly for the benefit of faculty members.

Weakness

- Less number of quality publications.
- Affiliated to University - No freedom in curriculum design.
- Less number of funded projects.

Opportunity

- Adopt Outcome Based Education.
- To provide better placements to students with growing alumni members.
- Located in Smart City identified by Central Government.

Challenges

- To improve the merit of students.
- Preparing the students to face the challenges of competitive world and make them employable.
- Creating brand name through alumni.

Future plans

- Identification of specific areas of research and to develop infrastructure accordingly.
- To organize conference once in two years.
- Achieving 75% placement in next three years.
- All faculties to enroll for Ph.D.

Master of Computer Applications

1. Name of the department: Master of Computer Applications

Vision

To emerge as a center of excellence for imparting quality computer education to serve the society and industry as professionals, researchers and entrepreneurs with high ethical values.

Mission

- Enabling students to be creative and knowledgeable by using innovative teaching methodology for developing smart generation computing solutions.
- Producing highly competent professionals by providing soft skill training programme to bridge the gap between the institution and industry.
- Practicing ethical values among students to become socially committed professionals, researchers and entrepreneurs.



**Dr. Ajit Danti,
Professor & HOD**



**Mr. Santhosh S G
Co-ordinator**

2. Year of Establishment: 1995

3. Names of Programmes / Courses offered (UG, PG, M.Phil., Ph.D., Integrated Masters, Integrated Ph.D., etc.)

The following programs are offered in the Master of Computer Applications.

Table MCA – 1: Name of Programme		
Sl. No.	Name of the Program	Intake
1.	Degree: PG Discipline: Master of Computer Applications	120

4. Names of Inter-disciplinary courses and the departments/ units involved: ---Nil---

5. Annual/semester/choice based credit system (programme wise)

Table MCA - 2: System Followed			
Sl. No.	Degree	Courses offered	System followed
1.	PG	Master of Computer Applications	<ul style="list-style-type: none"> • CBCS Scheme from academic year 2016-2017 onwards • Previously Non-CBCS Scheme

6. Participation of the department in the courses offered by other departments: ----Nil---

7. Courses in collaboration with other universities, industries, foreign institutions etc.: ---Nil----

8. Details of courses/programmes discontinued (if any) with reasons: ---Nil----

9. Number of Teaching posts

Table MCA - 3: Sanctioned and Filled Position		
Teaching post	Sanctioned	Filled*
Professors	02	01
Associate Professors	06	02
Asst. Professors	16	09

*Due to low admissions, we are managing with shortage of faculty

10. Faculty profile with name, qualification, designation, specialization, (D.Sc./ D.Litt./ Ph.D./ M.Phil.etc.,)

Table MCA - 4: Faculty Specialization						
Sl. no.	Name	Qualification	Designation	Specialization	No. of Years of Experience	No. of Ph.D. Students Guided/Guiding for the last 4 years
1	Dr. AjitDanti	BE,MCM, M. Tech, Ph.D	Director & Head	Image Processing	26	04/05

2	Mrs. Sandhya R	MSc,M.Phil	Associate Prof.	Artificial Intelligence	20.5	
3	Mr. Santhosh S G	BSc,MCA	Associate Prof.	Computer Science	17.4	
4	Mr. Raghavendra S P	BSc,MCA	Assistant Prof.	Computer Science	12.6	
5	Mr. SudeepManohar	BE,M.Tech	Assistant Prof.	Computer Science	10.7	
6	Mr. Hemanth Kumar	B.Sc,MSc	Assistant Prof.	Computer Science	10.7	
7	Mr. Shoiab Ahmed	B.Sc,MCA	Assistant Prof.	Computer Science	8.1	
8	Mr. Manjunatha H. T.	B.Sc,MCA	Assistant Prof.	Computer Science	8	
9	Mr. Arun Kumar K L	B.Sc,MCA	Assistant Prof.	Computer Science	7.2	
10	Dr. Adarsh M J	B.Com,MCA, Ph. D	Assistant Prof.	Data Mining	13	
11	Mr. PrashantAnkalkoti	B.Sc,MCA	Lecturer	Computer Science	6.6	
12	Mrs. Vidya K	B.E.,MTech	Assistant Prof.	Computer Science	1.5	

11. List of senior visiting faculty: ---Nil ----

12. Percentage of lectures delivered and practical classes handled (programme wise) by temporary faculty: ---Nil---

13. Student-Teacher Ratio(programme wise)

Table MCA– 5: Students Teacher Ratio		
Sl.no	Program	Student Teacher ratio
1	PG (MCA)	17.5:1

14. Number of academic support staff (technical) and administrative staff; sanctioned and filled

Table MCA – 6: Academic and Administrative Staff		
Staff	Sanctioned	Filled
Administrative staff	03	03
Academic support staff	02	02

15. Qualifications of teaching faculty with DSc/ D.Litt/ Ph.D/ MPhil/ PG.

TableMCA– 7: Qualifications of Faculty	
Qualification	Number of Staff
Ph. D	02
PG	10

16. Number of faculty with ongoing projects from a) National b)International funding agencies and grants received:

----Nil----

17. Departmental projects funded by DST-FIST; UGC, DBT, ICSSR, etc. and total grants received:

----Nil----

18. Research Centre/facility recognized by the University:

a) NES Research Foundation, affiliated to Kuvempu University

19. Publications:

Number of publications listed in International database (for E.g: Web of science and Scopus)

Total No. of papers published in international Journals : **30**

Total no. of papers published in National Journals : **05**

Citations : **258**

Table MCA–8 (a): Journal Details					
Sl. No.	Faculty name	National	International	Citations	H - index
1.	Dr. AjitDanti	01	23	244	06
2.	Mrs. Sandhya R	-	01	-	-
3.	Mr. Raghavendra S P	02	02	4	-
4.	Mr. SudeepManohar	-	01	-	-
5.	Mr. Hemanth Kumar	-	01	-	-
6.	Mr. Shoiab Ahmed	02	02	10	1
7.	Dr. Adarsh M J	01	05	-	-
8.	Mr. PrashantAnkalkoti	01	01	-	-
9.	Mrs. Vidya K	-	01	-	-

TableMCA – 8 (b): Books				
Author	Title	ISBN	Publisher	Year
Dr. AjitDanti	Emerging Research in Electronics, Computer Science and Technology for a book chapter entitled <i>Identification of Common Indian Leafy Vegetables Based on Statistical Measures on Combined Color and Texture Features</i>	ISBN: 978-81-322-1156-3	Springer	2013
	Face detection & recognition	ISBN 978-3-8484-0492-6	Lambert Academic Publishing, GmbH & Co. KG Germany.	2012
	Face recognition	ISBN 978-3-902613-03-5	International Journal of Advanced Robotic Systems.	2007

20. Areas of consultancy and income generated: ---Nil---

21. Faculty as members in

- a) National Committees: ---Nil---
- b) International Committees: **01** - Reviewer of Journal of Telecommunication, Computing, Electronics & Control, ISSN 1693-6930
- c) Editorial boards: ---Nil---

22. Student projects

- a) Percentage of students who have done in-house projects including interdepartmental programme
- b) Percentage of students placed for projects in organizations outside the institution i.e.in Research laboratories/Industry/ other agencies

Table MCA– 9: Students projects			
Sl. No	Year	Percentage of (a)	Percentage of (b)
1.	2016-2017	3%	97%
2.	2015-2016	0%	100%
3.	2014-2015	2%	98%
4.	2013-2014	6%	94%

23. Awards / Recognitions received by faculty and student Awards / Recognitions received by faculty

Sl.No	Name of the students	Award Details	Year
1	Shoiab Ahmed, Ajit Danti	Best paper Award for the paper presentation at International Conference on Computational Intelligence in data Mining, at Bhuvaneshwar, Odissa.	2015
2	Dileep K, Ajit Danti	Best paper Award for the paper presentation entitled Two Level Decision for Recognition of Human Facial Expressions using Neural Network in the 3 International Conference on Computing and Intelligence Systems	2015
3	III & V Sem MCA students Team	Championship award at Semaphore 2013, South India Level Technical Intercollegiate Fest, NMAIT, Nitte	2013
4	V Sem MCA students Team	Championship award at Semaphore 2012, South India Level Technical Intercollegiate Fest, NMAIT, Nitte	2012
5	Preethi Achar, Ajit Danti	Best paper Award for the paper presentation (Randomized Image Steganography Based on Bit Embedding”,) National Seminar on Recent trends in Image Processing & Pattern Recognition-RTIPR, Bidar	2010

24. List of eminent academicians and scientists / visitors to the department

Table MCA – 10: Eminent Academicians and Scientists / Visitors				
Sl. No.	Name	Designation	Company	Date
1	Dr. P. Nagabhushan	Professor & Chief Nodal Officer, Choice Based Credit System	University Of Mysore, Mysore	20.03.2017
2	Dr. Lingaraju G M	Professor, MSRIT, Bangalore	VTU, MSRIT, Bangalore	15.02.2014

25. Seminars/ Conferences/ Workshops organized & the source of funding

a) National:

Details of Conferences and Workshops conducted:

TableMCA – 11: Conferences and Workshops conducted				
Sl. No.	Course/ Programme	Duration	Month / Year	Source of funding
1.	FDP on OpenGL, NS Tools and Image Processing Tools	5 Days (07th to 11th July 2014)	July 2014	VTU, Belgaum

26. Student profile programme/course wise:

Table MCA – 12: Student profile					
Year	Name of the Course/prog ramme	Application s received	Enrolled		Pass percentage
			M*	F*	
2016-17	MCA	Admission through PG CET/K-MAT	33	51	Eligibility Criteria is 45%for SC/ST &50% for other
2015-16			10	28	
2014-15			39	64	
2013-14			25	29	

*M = Male *F = Female

27. Diversity of Students:

Table MCA – 13: Diversity of PG Students				
Year	Name of the Course	% of students from the same state	% of students from other States	% of students from abroad
2016-17	MCA	100	NIL	NIL
2015-16		100	NIL	NIL
2014-15		100	NIL	NIL
2013-14		100	NIL	NIL

28. How many students have cleared national and state competitive examinations such as NET, SLET, GATE, Civil services, Defense services, etc.?

Table MCA – 14: Exam qualified		
Sl. No.	Competitive Exam	No. of students qualified
01	SLET	02

29. Student progression:

Table MCA - 15: Student progression				
Student Progression	Percentage against enrolled			
	2013-2016	2012-2015	2011-2014	2010-2013
PG to M. Phil	---	---	---	---
PG to Ph. D	---	---	---	---
Employed Campus Selection	47.16	44.06	23.36	33.33
Other than Campus Selection	52.83	50.84	42.05	58.33
Entrepreneurship / Self-Employment	---	---	1.86	3.33

PG – MCA Admission

Batch	Student Admitted	Semester wise no. of student passed in first attempt						Completion rate	Pass Percentage
		1	2	3	4	5	6		
2010-13	59	56	58	58	52	59	59	59/59	100
2011-14	119	96	87	97	92	10	107	107/119	89.91
2012-15	63	49	40	55	49	54	57	57/63	90.47
2013-16	54	28	37	31	42	42	50	50/54	92.59

30. Details of Infrastructural facilities

a) Library

Table MCA - 16: Library	
Details	Number
Department Library	900
E-BOOKS	NIL
Reports	220(Students Report)
Syllabus	VTU (2010,2013,2016 Scheme)
Question Papers	VTU (2010,2013,2016 Scheme)
e-learning Materials	NPTEL

b) Internet facilities for staff and students:

Internet Speed	16 Mbps
Cable Type	OFC
WiFi Access Points	06(4 Indoor + 2 outdoor units)
Email id	For both staff & Students

c) Classrooms with ICT facility:

All classrooms (4 No) are equipped with LCD projectors and internet through LAN connections. In view of ICT the following teaching aids have been managed by the Department.

- PPT presentation based on the curriculum
- Instructor material from the publisher
- Student material from the publisher.

d) Laboratories:

TableMCA - 17: Laboratory			
Sl.No.	Laboratory Name	Equipped with	Area in m ²
1.	LAB01	Computer -36(Acer) Intel Core i3, 3MB Cache, 2Gb/50GB Server (IBM) -01 Intel Xeon Quad Core Processor,, 16Ghz, 8MB L2 Cache, 1GB/250GB LCD projector with whiteboard/Screen -01 Printer-01	100.74
2.	LAB02	Computer -55 Intel Core i3, 3MB Cache, 2Gb/50GB Server (IBM) -0, Intel Xeon Quad Core Processor,, 16Ghz, 8MB L2 Cache, 1GB/250GB LCD projector with whiteboard/Screen -01 Printer-01	159.65
3.	CCC-LAB	Computer -39 Server (IBM) -01 Printer-01	186.9

31. Number of students receiving financial assistance from college, university, government or other agencies:

Table MCA- 18 : Scholarship							
Sl no	Year	Central Government Scholarship for SC/ST	Fee Concession OBC	Ex-Defense Scholarship	Defense Scholarship	Municipal	Management
1	2015-2016	15	83	-	-	04	-
2	2014-2015	10	74	-	-	04	-

32. Details on student enrichment programs (special lectures / workshops / seminar) with external experts

TableMCA –19: Student Enrichment Programs			
Sl.No	Topic	Guest name/Resource person	Date
1.	Grid Computing	Dr. Lingaraju, Professor, Dept. of CSE, MSRIT, Bangalore	15-02-2014
2.	RDBMS	Mr. PrashanthJayaram Cognizant Tech, USA	20-05-2014
3.	Microsoft Technologies	Mr. Raghavendra S, Unwired Technologies, Bangalore	22-08-2015
4.	PHP	Mr. Prithvi Raj H S Unwired Technologies, Bangalore	19-09-2015
5.	Android Applications Development	Mrs. Smruthi C Software Engineer, Bangalore	27-02-2016
6.	Android Apps	Mr. ShreeHarsha	05-11-2016
7.	IT Jobs	Mr. Maxim Pinto, Project Manager, Qatar Airways Qatar	07-03-2017
8.	Algorithm Development	Dr. P Nagabhushan, Professor, Dept. of Computer Science, University of Mysore.	20-03-2017
9.	Hadoop&Bigdata	Narasihmmurthy M	Feb 2014
10.	DataMiningand Team games	Mr. Prabhu Sr. Technical Analystat IBM	March 2015
11.	Soft Skills	Mr. Aftab Former Qatar AirwaysExecutive	Feb 2017
12.	Verbal Ability & English	Mr. Sanjay HebbaniFounder and CEO IILT, Bangalore	Feb 2016

33. Teaching methods adopted to improve student learning:

Best practices adopted by faculty:

- Identifying weak and slow learners and addressing their issues.
- Remedial classes for lateral entry students to align with regular students.
- Assignments are given for more practice.
- Seminars are given by students to improve their communication skills.
- Collect summary of the chapter by the students.

- Conducting open book tests, Surprise tests to test their academic readiness.
- Internal assessment as per the university norms(best 2 out 3 are considered)
- Promoting certificate exams like CISCO, Microsoft, Android, IOT etc.
- Additional Problems given to solve in labs
- Each faculty is assigned a group of students to mentor them to improve their performance
- Paper presentation, Quiz etc., to encourage creative and analytical skills

34. Participation in Institutional Social Responsibility (ISR) and extension Activities.

Table MCA - 20: Institutional Social Responsibility (ISR) and Extension Activities		
Sl. No	Program	Date
1	Participated in Rotary Model Youth Parliament Organized by Rotary Club Shimoga.	08-02-2014
2	Donated Bedsheets and Water filter to Old age home (JeevanaSanje) Gopala Extension, Shimoga	05-06-2014
3	Donated Rs. 4750.00 for treatment of Snake catcher Mr. Kiran(Snake Kiran) collected by students and staff	18-03-2017
4	Organizing IT Mela(ANTHARJAAL) for Govt schools in association with BOE and District Commissioner office.	Every Year 3 days

35. SWOC analysis of the department and future Plans.

Strength

- Good academic infrastructure for studies.
- Competent faculty with highly experienced academic & technical staff.
- Imparting soft skills for students to improve campus recruitments
- Exclusive Placements drive for below average Students.
- Good alumni support for student projects, placements & Talks
- Good encouragement for Cultural& Co-Curricular activities.

Weakness

- Low Quality input due to semi urban area & low communication skills,
- Less admission due to reduced demand in MCA Course.
- Weak analytical skills affect students placements.

Opportunity

- Establishment of EDC and MOUs with IT industry.
- Provisioning for higher education and research projects.
- Wide avenues for easier commuting facilities to reach college.

Challenges

- Reduced placement opportunity due to market volatility
- Attracting more admissions even in low demand for MCA course.
- Addressing inter-disciplinary students like BSc., BCA, B.Com, BA for employability in software industry and low communications skills.
- Creating good brand name and Benchmark

Future plans:

- Increase in input quality with good PG CET ranking and better output.
- Planning for National Conference./Workshops
- Target for 100% Placements

**Department of
Management Studies
(MBA)**

1. Name of the department: Department of Management Studies

Vision

“To develop the department as a premier management institution that contributes to the development of business and society”.

Mission

- Bridge the gap between theory and practice in the knowledge economy through meaningful partnerships with business, academia, government and social sectors;
- Develop competent, responsible and ethical business professionals and entrepreneurs through a culture of excellence in teaching, research, training and consulting.



**Dr. C. Srikant
Head**



**Dr. Santhosha
Co-ordinator**

2. Year of Establishment: (1996)

3. Names of Programmes / Courses offered (UG, PG, M.Phil., Ph.D., Integrated Masters, Integrated Ph.D., etc.)

The following programs are offered in the Department of Management Studies

Table – MBA-1: Name of the Program		
Sl. No.	Name of the Program	Intake
1	Degree: (PG) Discipline: MBA	(120)
2	Research: Ph. D in Faculty of Management	11

4. Names of Interdisciplinary courses and the departments/units involved: -----Not Applicable -----

5. Annual/ semester/choice based credit system (programme wise)

Table - MBA-2: System Followed			
Sl. No.	Degree	Courses offered	System followed
1.	PG MBA	MBA in Finance, Marketing and Human Resource	<ul style="list-style-type: none"> • CBCS Scheme from academic year 2015-2016 onwards • Previously Non-CBCS Scheme
2.	Ph. D.	Faculty of Management	<ul style="list-style-type: none"> • University (VTU) Regulations-2014

6. Participation of the department in the courses offered by other departments: ----Nil----

7. Courses in collaboration with other universities, industries, foreign institutions, etc. : ----Nil----

8. Details of courses/programmes discontinued (if any) with reasons ----Nil----

9. Number of teaching posts

Table –MBA-3: Sanctioned and Filled Position		
Teaching post	Sanctioned	Filled
Professors	02	01
Associate Professors	04	03
Asst. Professors	10	10

10. Faculty profile with name, qualification, designation, specialization, (D.Sc./D.Litt. /Ph.D. / M. Phil. etc.,)

Table– MBA-4: Faculty Specialization						
Sl. no.	Name	Qualification	Designation	Specialization	No. of Years of Experience	No. of Ph.D. Students Guided/Guiding for the last 4 years
1.	Dr. Srikant C	B.Sc., MBA, Ph.D.	Director	Human Resource & Marketing	19	03

2	Dr. M G Krishnamurthy	M.Com, PGDFM, PGDBA, MBA, Ph.D.	Professor	Finance	32	05
3	Mr. Lakshmeesha Kanti K S	BE, MBA	Associate Professor	Finance	32	00
4	Dr. K S Habeebur Ur Rahman	B.Sc., MBA, Ph.D.	Associate Professor	Marketing	23	03
5	Mrs. Anuradha C K	MA (Psy)	Assistant Professor	Human Resource	20	00
6	Dr. Srikant G Sugur	M.Com, Ph.D.	Assistant Professor	Finance	14	00
7	Ms. Subhadra P S	MBA, MA (Eng), MA (San)	Assistant Professor	Human Resource	12	00
8	Mr. Vikrama D K	BE, MBA, M. Phil, SLET	Assistant Professor	Marketing & Statistics	10	00
9	Mr. Srinivasa Murthy B V	MA (Eco), MBA, M. Phil.	Assistant Professor	Marketing & Economics	15	00
10	Mr. Vikram V	MBA, K-SLET	Assistant Professor	Marketing	12	00
11	Mrs. Ashwini H A	M.Com, MA(Eng), MBA, NET(Com)	Assistant Professor	Finance	10	00
12	Dr. Ravisha N S	MBA,M.Com, Ph.D., NET (Mgt. & Com.)	Assistant Professor	Finance and Statistics	06	00
13	Dr. Santhosha	MBA, Ph.D.	Assistant Professor	Marketing	12	00
14	Mrs. Aishwarya Hittanagi	PGDM	Assistant Professor	Marketing	10	00

11. List of senior visiting faculty: ----Nil----

12. Percentage of lectures delivered and practical classes handled (programme wise) by temporary faculty: -----Nil ----

13. Student -Teacher Ratio (programme wise):

Table– MBA-5: Students Teacher Ratio		
Sl. No.	Program	Student Teacher ratio
1	P G (MBA)	17:1

14. Number of academic support staff (technical) and administrative staff; sanctioned and filled

Table– MBA-6: Academic and Administrative Staff Sanctioned and Filled		
Staff	Sanctioned	Filled
Administrative staff	01	01
Academic support staff	03	03

15. Qualifications of teaching faculty with DSc/ D.Litt/ Ph.D/ MPhil / PG.

Table – MBA-7: Qualification of Faculty	
Qualification	Number of Staff
Ph. D	06
P G	06
M Phil	02

16. Number of faculty with ongoing projects from a) National b) International funding agencies and grants received: ----Nil ----

17. Departmental projects funded by DST - FIST; UGC, DBT, ICSSR, etc. and total grants received:

---Nil--- (5 projects Applied; Awaiting sanction)

18. Research Centre /facility recognized by the University

Table – MBA-8: Research Centre/facility		
Research Centre	Department of Management Studies, Jawaharlal Nehru National College of Engineering, Shivamogga	
Year of establishment	2006	
Recognized by	Visvesvaraya Technological University (VTU), Belagavi	
Total number of Research Guides	03	
Total number of Research Scholars	Internal	07
	External	09

19. Publications:

Number of publications listed in International database (for E.g.: Web of science and Scopus): 15

Total No. of papers published in international Journals : 54

Total no. of papers published in National Journals : 79

Monographs : 51

Citations : Nil

Table – MBA-9 (a): Journal Details					
Sl. No.	Faculty name	National	International	Citations	H - index
1	Dr. Srikant C	04	03	-	-
2	Dr. M G Krishnamurthy	21	11	-	-
3	Mr. Lakshmeesha Kanti K S	2	1	-	-
4	Dr. K S Habeebur Ur Rahman	2	13	-	-
5	Mrs. Anuradha C K	06	01	-	-
6	Dr. Srikant G Sugur	04	01	-	-
7	Ms. Subhadra P S	02	03	-	-
8	Mr. Vikrama D K	01	03	-	-
9	Mr. Srinivasa Murthy B V	03	04	-	-
10	Mr. Vikram V	03	01	-	-
11	Mrs. Ashwini H A	05	01	-	-
12	Dr. Ravisha N S	02	10	-	-
13	Dr. Santhosh	20	-	-	-
14	Mrs. Aishwarya Hittanagi	04	02	-	-

Table –MBA-9 (b): Books				
Author	Title	ISBN	Publisher	Year
Dr. Ravish NS	Banking in Malnad Region	9788191023041	Rural org for Appropriate Development Trust	2017
Dr. M.G Krishnamurthy	Accounting for Managers	9789351429788	Himalaya Publishing House, Bangalore	2016
Mrs. Aishwarya Hittanagi	Managerial Communication	978935429692	Himalaya Publishing House, Bangalore	2014

Dr. Santhosha	Strategic Brand Management	9789351630937	Takur Publications Bangalore	2014
Dr. M.G Krishnamurthy	Accounting for Managers	9789351429788	Himalaya Publishing House, Bangalore	2014
Dr. C. Srikant	Recruitment and Selection	9789383130962 +	Takur Publications Bangalore	2014
Dr. M.G Krishnamurthy	A Text Book of Cost Management	9789382163336	Paramount Publishing House, New Delhi	2013
Dr. C. Srikant	Marketing Management	9789350975213	Himalaya Publishing House, Bangalore	2013
Dr. K S Habeebur Ur Rahman	Rural Marketing	9788178667645	Himalaya Publishing House, Bangalore	2012

20. Areas of consultancy and income generated:

Table – MBA-10 : Consultancy		
Sl. No.	Area	Fund generated in Rs.
1	MDP on Business Accounting-MAMCOS	10,000=00

21. Faculty as members in

a) National Committees: (BOE/BOS/etc)

Table –MBA-11: Memberships		
Sl. No.	Faculty Name	Committee
1.	Dr. K S Habeebur Ur Rahman	Member –Board of Examiner VTU-2013
2	Dr. C. Srikant	Member-Board of Examiner VTU-2014
3	Dr. M.G Krishnamurthy	<ul style="list-style-type: none"> • Member-Board of Examiners-2001-02,2004-05, 2007-08 • Member-Board of Studies for MBA for 2010-2013 and 2013-2016 • Member of Ph.D. Admission Committee for Business

		<p>Administration for 2012-2014</p> <ul style="list-style-type: none"> • Empanelled Guide/Examiner for MBA courses of: Karnataka State Open University (KSOU), Mysore (Karnataka); MAHE-Deemed University, Manipal (Karnataka); Indira Gandhi National Open University (IGNOU), New Delhi and Indian Institute of Materials Management (IIMM), New Delhi; M.Phil. Course of Kuvempu University, Shimoga & Sri Venkateshwara University, Tirupati. • Accredited Examiner for Adjudication of Ph.D. theses for Bharathidasan University, Tiruchirapalli (TN) and Gandhigram Rural Institute-Deemed University, Dindigul (TN). • Member of Board of Studies /Board of Examiners for MBA (Autonomous) Courses of MSRIT, Bangalore (II Term - as VTU Nominee), SIT, Tumkur and NMAMIT, Nitte (Karnataka). • Member of Board of Studies for B.Com. & B.B.M. Courses & Visiting Faculty for M.Com. Course of Lal Bahadur College (Autonomous), Sagar, Shimoga Dist. (Karnataka). • Member on Policyholders' Council of Shimoga Division of LIC (appointed by Board of LIC) for a two-year period, up to 31.3.2018. • Member-Governing Council, N.E.S. Institute of Advanced Studies, Shimoga.
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b) International Committees: ---Nil----

c) Editorial boards:

Table –MBA-12: Editorial board		
Sl. No.	Faculty Name	Editorial Board
1	Dr. M.G Krishnamurthy	Member-Editorial Advisory Board/Associate Editor/ Reviewer for: <ul style="list-style-type: none"> • Asia-Pacific Journal of Research in Business Management, • International Journal of Marketing Management & Research , • Asian Journal of Development Matters • RVIM Journal of Management Research • Sahyadri Journal of Management (SJOM) • Member of Scientific Committee & Review Board for Edited Volumes of College of Banking & Finance-Sulthanate of Oman

22. Student projects

- a) Percentage of students who have done in-house projects including interdepartmental programme
- b) Percentage of students placed for projects in organizations outside the institution, i.e., in Research laboratories/Industry/ other agencies

Student projects PG:

Table– MBA-13: Students projects			
Sl. No.	Year	Percentage of (a)	Percentage of (b)
1	2016-2017	0	100
2	2015-2016	0	100
3	2014-2015	0	100
4	2013-2014	0	100

23. Awards / Recognitions received by faculty and student Awards / Recognitions received by faculty

a) Awards / Recognitions received by faculty

Table – MBA-14(a): Faculty achievements				
Sl.No.	Name	Award	Venue	Date
1	Dr. C. Srikant	Outstanding Paper Award	BMS College of Engineering, Bangalore	25/10/2015
2	Dr. M.G. Krishnamurthy	Best Paper Award	Research Development Association, Jaipur	26-27 March, 2016

3	Dr. M.G. Krishnamurthy	Best Paper Award	Research Development Association, Jaipur At Kochi (Kerala)	7-8 November, 2016
4	Dr. M.G. Krishnamurthy	Distinguished Academician Award	Thrimurthy Nagar Residents' Welfare Association, Shimoga	1 May, 2016

b) Awards / Recognitions received by student

Table – MBA-14 (b): Faculty achievements				
Sl.No.	Name	Award	Venue	Date
1	Praveen Kumar B H	8th Rank	MBA Examination VTU, Belgaum	2016

24. List of eminent academicians and scientists / visitors to the department

Table– MBA-15: Eminent Academicians and Scientists / Visitors				
Sl.No.	Name	Designation	Company	Date
1	Capt. Ganesh Karnik	MLC	Govt. of Karnataka	29/07/2015
2	Dr. B N Sridhar	Former Professor & Dean	IIT-Kharagpur	09/04/2015
3	Dr. S M Kantikar	Member	National Consumer Disputes Redressal Commission, New Delhi	02/03/2015
4	Sri. D.H.Shankara Murthy	Hon'ble Chairman	Legislative Council, Govt. of Karnataka	28/12/2014
5	Sri. Chikkananjaiah	Managing Director	MESCOM, Mangalore	16/12/2014
6	Dr. S Y Kulkarni	Principal,	MSRIT, Bangalore	20/09/2014
7	Dr. M K Banga	General Manager-Talent Acquisition	Wipro Technologies, Bangalore	20/09/2014
8	Mr. Justice Nag Mohan Das	Retd. Judge of High Court of Karnataka	High Court of Karnataka	02/08/2014

9	Mr. Joachim Blackstein	Senior Project Manager	Commerz Bank, Germany	08/07/2014
10	Sri Koushalendra Kumar	IPS, SP, Shimoga	Karnataka Police	23/11/2013
11	Sri Indires h	Govt. Advocate, Hon'ble High Court of Karnataka	Court of Karnataka	23/11/2013
12	Dr. Parashivamurthy	IPS, IGP (Eastern Raga)	Karnataka Police	23/11/2013
13	Mr. Justice P. Padmaraj	former Acting Chief Justice of Hon'ble High Court of Karnataka	High Court of Karnataka	23/11/2013
14	Sri P Govindappa	Managing Director	MESCOM, Mangalore	08/10/2013
15	Smt. Sherifa	Noted poet	-	08/03/2013
16	Dr. H.S.Venkatesh Murthy	Noted poet	-	08/03/2013
17	Prof. Vikram Sarabhai	Professor & Dean-Faculty Affairs	JNCASR, Bangalore	01/03/2013
18	Prof. Kalyan B Sinha	Former Director	Indian Statistical Institute (ISI), Kolkata	01/03/2013
19	Fr. Dr. Oscar Mascarenas	Former Chairman of Dept. of Marketing	University of Michigan	18/02/2013
20	Sri K S Eshwarappa	Hon'ble Deputy Chief Minister	Karnataka Government	09/11/2012
21	Sri Mohan Alva	President	Alva's Foundation, Mudabidare	03/11/2012
22	Mr. Justice S Rajendra Babu	former Chief Justice of India	Supreme Court	07/10/2012
23	Dr. Chandrashekar	Chief Manager	IOB, Bangalore	28/05/2012

24	Dr. M.S.Mudithaya	Director-Global Initiatives,	Nitte University	28/05/2012
25	Dr. N.K.Thingalaya	Former Chairman & Managing Director	Syndicate Bank	28/05/2012
26	Dr. C.R. Chandrashekar	Doctor	Psychiatrist from NIMHANS, Bangalore	19/05/2012

25. Seminars/ Conferences/Workshops organized & the source of funding

a) National

Details of Conferences and Workshops conducted:

Table – MBA-16: Conferences and Workshops conducted				
Sl. No.	Course/ Programme	Duration	Month / Year	Source of funding
2.	Research Methodology in Management and Social Sciences: A Skill Building Approach	1 Week	2013	ING Vysya Bank

b) International: ---Nil----

26. Student profile programme/course wise:

Table– MBA-17: Student profile						
Year	Name of the Course/ programme	Applications received	Selected	Enrolled		Pass percentage
				M	F	
2014-16	MBA	101	101	55	46	80
2013-15	MBA	116	116	61	55	68.96
2012-14	MBA	113	113	56	57	58.40
2011-13	MBA	120	120	79	41	70.68

*M = Male *F = Female

27. Diversity of Students:

Table- MBA-18 Diversity of PG Students				
Year	Name of the Course	% of students from the same state	% of students from other States	% of students from abroad
2016-17	MBA	100	0	0
2015-16	MBA	100	0	0
2014-15	MBA	98	2	0
2013-14	MBA	99	1	0

28. How many students have cleared national and state competitive examinations such as NET, SLET, GATE, Civil services, Defense services, etc.?

Table – MBA-19: Exam qualified		
Sl. No.	Competitive Exam	No. of students qualified
1	NET	03
2	SLET	03

29. Student progression:

Table –MBA-20: Student progression				
Student Progression	Percentage against enrolled			
	2015-2016	2014-2015	2013-2014	2012-2013
UG to PG	NA	NA	NA	NA
PG to M. Phil	Nil	Nil	Nil	Nil
PG to Ph. D	Nil	01	01	Nil
Employed Campus Selection	In Progress	30	28	35
Other than Campus Selection	In Progress	30	32	40
Entrepreneurship / Self-Employment	In Progress	10	8	7

30. Details of Infrastructural facilities

a) Library

Table - MBA-21: Library	
Details	Number
Books	11,129 (Single Titles: 4,230)
E-BOOKS	Nil
Reports	360
Syllabus	VTU (2005, 2008, 2010,2012, 2014,2016 Scheme)
Question Papers	VTU (All years since 2010)

b) Internet facilities for staff and students:

- The department has Internet connectivity of 16 Mbps leased line and OFC enabled connectivity. Internet facility is provided for both students and staff. HOD's and staff are provided with JNNCE email ID to access their account.
- Department has 6 wireless access/LAN points which helps students and faculties access internet through Wi-Fi

c) Classrooms with ICT facility:

Department has 5 class rooms and all class room are equipped with ICT facilities like LCD Projectors, Screen, and PC.

d) Laboratories:

Table – MBA-22: Laboratory			
Sl.No.	Laboratory Name	Equipped with	Area in m ²
1	MBA Lab	<ul style="list-style-type: none"> • Number of Computer terminals-56 {P-IV/Dual Core/Pentium Core 2 Duo/Core I3/Core i5-56} • No. of Terminals on LAN/WAN-35 • Printers -3 • UPS (10KV 	138

31. Number of students receiving financial assistance from college, university, government or other agencies:

Table –MBA-23 : Scholarship							
Sl no	Year	Central Government Scholarship for SC/ST	Fee Concession OBC	Ex-Defense Scholarship	Defense Scholarship	Municipal	Management
1	2015-2016	22	29	Nil	Nil	06	Nil
2	2014-2015	17	24	Nil	Nil	01	Nil

32. Details on student enrichment programs (special lectures / workshops / seminar) with external experts

Table – MBA-24: Student Enrichment Programs			
Sl. No	Topic	Guest name/Resource person	Date
1	A Workshop on “Orientation for IAS Exams”	Pearson-ETEN IAS & Khan Study Group, New Delhi	20/10/2016
2	Workshop on “Mutual Funds”	SBI Mutual Fund	19/10/2016
3	Workshop on “Neuro-Linguistic Programming”	Mr. Ramani Venkat, Varnaaz Leaders Factory, Bangalore	17/10/2016
4	Session on Emotional Fitness Gym	Mr. Shivaprasad Kumaraswamy, Bangalore	29/7/2016
5	Training on ‘Corporate Etiquettes’	Mr. Ramani Venkat, M/s Varnaaz Leaders Factory, Bangalore	01/04/2016
6	Workshop on “Arivu” financial assistance scheme	Karnataka State Minority Development Corporation, Shimoga	31/12/2015
7	Workshop on “Shimoga-Smart City”	Municipal Corporation, Shimoga	17/11/2015
8	SEBI-sponsored Workshop on “Financial Education for Young Investors	Sri B V Krishnamurthy, Asst. General Manager (Retd.), RBI, Bangalore	31/10/2015
9	Awareness programme on “Silk Mark	Silk Mark Organization of India and Shimoga District Consumer Forum	11/08/2015
10	Personal Grooming & Well-being of Girl Students of Professional Courses	Dr. Usha Ramesh, Shimoga	10/03/2015
11	Business Experience Sharing	Sri Basheer Ahmed, Prop. M/s Coastal Feeds, Bhadravathi	19/03/2015
12	Business Experience Sharing	Sri Rajarao, Prop. M/s Lakshmi Agencies, Shimoga	12/03/2015

13	Workshop on “General & Health Insurance”	Karnataka Bank, Regional Office, Shimoga and Universal Sompo General Insurance Company Ltd.	27/01/2015
14	Soft Skills	Sri Vishwanath, Partner, M/s Mahat Consultants, Bangalore	09/10/2014
15	Business-to-Business Networking	Sri Manjunath, Data Lifecycle.com Pvt. Ltd., Bangalore	01/10/2014
16	Careers in Media	Sri Oliver Lesly, DGM, Deccan Herald, Bangalore	21/08/2014
17	Role of Mothers in moulding character & Competence of children pursuing professional education	Dr. Sandhya Kaveri, Family Counsellor & Faculty, Kuvempu University, Shankaraghatta	08/03/2014
18	Building Competitive Attitude & Cracking Competitive Exams Successfully	Dr. Deepak, Kuvempu Competitive Academy, Shimoga	05/02/2014
19	Motivation	Prof. T M Prasanna Kumar, CIT, Gubbi	17/02/2014
20	Building English Language Competency	Prof. Gowrishankar, DVS College, Shimoga	10/02/2014
21	Entrepreneurial Opportunities & Challenges	Sri Tejaswi Acharya & Sri Vikram Rai RUBEN Entrepreneurship Network (REN), Bangalore	17/1/2014
22	Jeevana Moulyagalalu	Prof. Kiran Desai, Kamala Nehru Women’s College, Shimoga	23/01/2014
23	Yoga & Meditation	Sri B N Suresh Kumar, Vivekananda Yoga Centre, Shimoga	16/01/2014
24	Sense of Humour & Stress Busting	Prof. Kavitha Kashappanavar, Social Activist, Gadag	11/01/2014
25	Communication Skills in Career Development	Sri Ramachandra Gunari, The New Indian Express, Shimoga	02/01/2014

33. Teaching methods adopted to improve student learning:

The following normal practices adopted by faculty:

- Role Play, Case Study, Business Quiz, Industrial Visit, Workshops, Seminars, Audio-Visuals, Debate, Practical assignments, etc.
- These methods are used make class environments more interactive and leaning. These methods help students to learn different subjects in different perspectives.

34. Participation in Institutional Social Responsibility (ISR) and extension Activities

Table –MBA-25: Institutional Social Responsibility (ISR) and Extension Activities		
Sl. No.	Program	Date
1	40 chairs were donated to “Thayi-mane”, an orphanage	13/08/2016
2	Contributed Rs. 6,500-00 to Sri Sharadadevi Andhara Vikasa Kendra, Shimoga	24/09/2015
3	Fixing of Eureka Forbs Water filter in Gurkula School - Rs. 18,000	04/06/2015
4	A sum of Rs. 1,000-00 was contributed towards expenses of neuro-surgery for one Sri Manjunath, Shangere village, Arasikere taluk, who has been admitted to Sahyadri Narayana Hrudayalaya, Shimoga.	22/01/2015
5	A sum of Rs. 2,000-00 was contributed to Navajyothi Welfare Trust for Disabled, Shimoga towards a state-level programme being organized by the organization.	03/12/2014
6	Almirahs (3 Nos.), library books and sports goods worth about Rs. 25,000-00 were donated to Gurukul High School, Shimoga	24/04/2014
7	Set of 28 water bottles, 28 steel cups and 100 mtr water pipe, costing about Rs.3,000-00 were donated to Govt. Primary School, Shanthinagar Extn., Shimoga	20/02/2014
8	Donated note books and uniform clothes, worth about Rs. 31,435-00, to about 80 students of National ITI and National High School, both in Kumsi village.	02/07/2013

9	School bags, story books, writing stationery and sports goods worth Rs. 25,000/- were distributed to about 160 students of National High School and Indian High school, Shimoga	11/06/2012
10	Donated a collection of Children's Story Books to the children of National Primary School, Shimoga	12/04/2012

35. SWOC analysis of the department and future Plans.

Strengths

- well-known institutional brand name in Malnad region of Karnataka
- Experienced faculty -teaching, academic research & industry; Average experience of faculty is 15.5 years.
- Good infrastructure
- Supportive alumni network

Weaknesses

- Limited preference by meritorious, high-ranking, up-country students.
- Poor academic results in first two semesters.
- Placement is confined to few sectors of the industry.
- Limited research & consultancy projects
- Minimal participation in institutional rating/ranking

Opportunities

- Scope for improvement in admissions, through UG-focused students activities.
- Scope for enhancing utility of the Course, by introducing industry-related, add-on courses
- Scope for improvement in placements, by better training of students and networking with alumni & industry.
- Applying for more funded projects

Challenges

- Scaling up of Teaching-learning process
- Fluctuating/dwindling interest in the course
- High cost, inhibiting prospective candidates
- Competition from other courses (M.Com., CS, CA)
- Competition from other institutions

Future Plans

- To improve students profile in terms of geographical diversity, and educational background by taking part in national level admission tests and attracting meritorious students from different parts of the country, from engineering, humanities and other non-commerce/business backgrounds.
- To further leverage technology and innovative/best practices to improve teaching learning process.
- To further enhance employability of students through better training, skill development, practical exposure and industry networking.
- To augment research and consultancy in the department through research publications by the faculty funded projects, workshops and conferences (National and International), launching of a research journal, consultancy for private and government agencies etc.
- To augment infrastructure amenities for and welfare of students and staff.
- To introduce new/additional courses, short term/certificate courses, encouraging students for enrollment for MOOCs.
- To constitute a dedicated governing council exclusively for the institute, comprising of noted entrepreneurs, business executives, professionals, and academicians.
- To secure NBA and other accreditations for the programme; to participate and secure better rating and ranking in B-school surveys, NIRF etc.

Basic Science

Physics

1. Name of the department: Physics



Dr. B N Anandaram
Professor & Head



Prof. R K Baliga
Co-ordinator

2. Year of Establishment: 1980

3. Names of Programmes / Courses offered (UG, PG, M.Phil., Ph.D., Integrated Masters, Integrated Ph.D., etc.)

Table – PHY-1: Name of Program		
Sl. No.	Name of the Program	Intake
1.	Research: Ph. D in Physics	

4. Names of Interdisciplinary courses and the departments/units involved: ----Nil-----

5. Annual/ semester/choice based credit system (programme wise)

Table - PHY- 2: System Followed			
Sl. No.	Degree	Courses offered	System followed
1.	B E		• CBCS Scheme
2.	Ph. D.		-----

6. Participation of the department in the courses offered by other departments

Table –PHY-3: Subject supported			
Sl. No.	Semester	To Department	Course taught
1.	I/II	To all branches of Engineering	Engineering Physics
2.	I/II	To all branches of Engineering	Engineering Physics Lab

7. Courses in collaboration with other universities, industries, foreign institutions, etc.: ---Nil---

8. Details of courses/programmes discontinued (if any) with reasons ---Nil---

9. Number of Teaching posts

Table –PHY-4: Sanctioned and Filled Position		
Teaching post	Sanctioned	Filled
Professors	01	01
Associate Professors	01	01
Asst. Professors	02	02

10. Faculty profile with name, qualification, designation, specialization, (D.Sc./D.Litt. /Ph.D. / M. Phil. etc.,)

Table– PHY-5: Faculty Specialization						
Sl. no.	Name	Qualification	Designation	Specialization	No. of Years of Experience No. of Ph.D.	Students Guided/Guiding for the
1	Dr B N Anandaram	M.Sc., Ph.D	Professor	Radiation Physics, Environmental Radioactivity	25	3 (Still working for Ph.D)
2	Ramachandra Baliga K	M.Sc.	AssociateProfessor	Solid State Physics	34	Nil
3	Dr Rajprakash H G	M.Sc., Ph.D	Asst. Professor	Nuclear Physics, Radiation Physics	10	5 (still working for Ph.D)
4	Nagarathna	M.Sc.	Asst. Professor	Solid State Physics	5	Nil

11. List of senior visiting faculty: ---Nil---

12. Percentage of lectures delivered and practical classes handled (programme wise) by temporary faculty: ---Nil---

13. Student -Teacher Ratio (programme wise): ---Not Applicable ---

14. Number of academic support staff (technical) and administrative staff sanctioned and filled

Table– PHY-6: Academic and Administrative Staff Sanctioned and		
Staff	Sanctioned	Filled
Administrative staff	02	02
Academic support staff	01	01

15. Qualifications of teaching faculty with DSc/ D.Litt/ Ph.D/ MPhil/ PG.

Table– PHY-7: Qualification of Faculty	
Qualification	Number of Staff
Ph. D	02
P G	02

16. Number of faculty with ongoing projects from

a) National: ----Nil -----

b) International funding agencies and grants received: ---Nil----

17. Departmental projects funded by DST - FIST; UGC, DBT, ICSSR, etc. and total grants received

Table – PHY-8: Funded projects					
Sl. No	Name of the Funding Agency	Name of the Scheme	Programme Title	Year of Funding	Amount Sanctioned
1.	VGST, Govt. of Karnataka	KFIST (L2)	Establishing the facility for : Environmental Radioactivity Measurements Lab	2013-2015	Rs.40 lakhs

18. Research Centre /facility recognized by the University

Table – PHY-9: Research Centre/facility	
Research Centre	Physics
Year of establishment	2016
Recognized by	VTU, Belgaum
Total number of Research Guides	02
Total number of Research Scholars	03

19. Publications:

Number of publications listed in International database (for E.g: Web of science and Scopus)

Total No. of papers published in international Journals : **14**

Total no. of papers published in National Journals : **02**

Monographs : ---- Nil ---

Citations : **55**

Table –PHY-10 (a): Journal Details					
Sl. No.	Faculty name	National	International	Citations	H - index
1	Dr B N Anandaram	--	02	3	1
2	Dr H G Rajprakash	02	12	52	4

Table – PHY-10(b): Books				
Author	Title	ISBN	Publisher	Year
Dr H G Rajprakash	Photofission of Some actinide targets, Lambert Academy of Publications,	978-3-8433-9465-9	Lambert Academy	2011

20. Areas of consultancy and income generated: ----Nil-----

21. Faculty as members in

a) National Committees:

Table –PHY-11(a): Memberships		
Sl. No.	Faculty Name	Committee
1.	Dr B N Anandaram	Currently BOE member for the Kuvempu University since 2013, BOE member for Bangalore University 2006-2007

b) International Committees: ---Nil----

c) Editorial boards:

Table –PHY-11(b): Editorial board		
Sl. No.	Faculty Name	Editorial Board
1	Dr B N Anandaram	Refree for - Journal of Radiation Research and Applied Sciences (Elsevier journals)
2	Dr Rajprakash H G	Refree for - Annals of nuclear energy, Radiation measurements (Elsevier journals)

22. Student projects

- a) Percentage of students who have done in-house projects including interdepartmental programme: ---Nil---
- b) Percentage of students placed for projects in organizations outside the institution i.e.in Research laboratories/Industry/ other agencies: --Nil--

23. Awards / Recognitions received by faculty and student Awards / Recognitions received by faculty

a) Awards / Recognitions received by faculty

Table –PHY-12(a): Faculty achievements				
Sl. No.	Name	Award	Venue	Date
1	Dr B N Anandaram	Best paper	NUCAR - International Symposium organised by DAE, held at Mithibhai college, Mumbai	7/1/2009 to 9/1/2009

24. List of eminent academicians and scientists / visitors to the department

Table– PHY-13: Eminent Academicians and Scientists / Visitors				
Sl.No.	Name	Designation	Company	Date
1.	Dr K P J Reddy	Professor	IISc, Bangalore	18/02/2017

25. Seminars/ Conferences/Workshops organized & the source of funding

- a) National : ---Nil---
- b) International: ---Nil---

26. Student profile programme/course wise: ---Nil---

27. Diversity of Students: ---Nil---

28. How many students have cleared national and state competitive examinations such as NET, SLET, GATE, Civil services, Defense services, etc.?: ---Nil---

29. Student progression: ---Nil---

30. Details of Infrastructural facilities

a) Library

Table - PHY-14: Library	
Details	Number
Department Library	292
E-BOOKS	-NIL-
Reports	- 2-
Syllabus	VTU -CBCS scheme
Question Papers	Old question papers of VTU and Kuvempu Univeristy

b) Internet facilities for staff and students:

The Institution has provided Internet connectivity of 16 Mbps leased line and OFC enabled connectivity. Internet facility is provided for both students and staff. HOD's and staff are provided with JNNCE email ID to access their account.

c) Classrooms with ICT facility: ---Nil---

d) Laboratories:

Table-PHY-15: Laboratory			
Sl.No.	Laboratory Name	Equipped with	Area in m ²
1	Engg Physics Lab	Coordinate microscope, Direct vision spectroscope, Deflection magnetometer, Lap top, Digital multimeter, Laser printer, Polirimeter, Searls double bar, Stop clock, Telescope, Vernier calipers Spectrometer, LCD projector, Computer, Ultrasonic interferometer	153.61
2	Research Lab	Gamma Radiation Survey meter, Low Background alpha counting system with accessories, NaI (TI) gamma spectrometer with accessories, SSNTD Setup with accessories , Digital electronic balance Hot air oven, Magnetic stirrer with hot plate, Lab stirrer, Fume hood, Online Radon monitoring system with accessories, CZT gamma spectrometer, Alpha Beta counting system.	50

31. Number of students receiving financial assistance from college, university, government or other agencies: ---Not Applicable---

32. Details on student enrichment programs (special lectures / workshops / seminar) with external experts: ----Nil---

33. Teaching methods adopted to improve student learning:

The following normal practices adopted by faculty:

Apart from Conventional black board teaching, PPT, Animations and some experimental demonstrations developed for some concepts for better learning. Student level of learning will be identified through frequent test and assignments.

34. Participation in Institutional Social Responsibility (ISR) and extension Activities: ---Nil---

Mathematics

1. Name of the department: Mathematics



Shridhar Adiga
Professor & Head



Dr. Gurupadavva Ingalahalli
Co-ordinator

2. Year of Establishment: 1980

3. Names of Programmes/Courses offered (UG, PG, M.Phil., Ph.D., Integrated Masters; Integrated Ph.D., etc.): ---Nil---

4. Names of Interdisciplinary courses and the departments/units involved: ---Not Applicable---

5. Annual/semester/choice based credit system (programme wise):
---Not Applicable---

6. Participation of the department in the courses offered by other departments:

Table EM – 2: Participation of the department			
Sl. No.	Degree	Courses offered	To Departments
1.	B.E.	Engineering Mathematics I, II, III, IV, MATDIP	All Departments
2.	PG: M.Tech in Design and CIM	Applied Mathematics(I Sem)	Mechanical Engineering
3.	PG: M.Tech. in Power Electronics	Applied Mathematics (I Sem)	Electrical and Electronics Engg.
4.	PG: M.Tech. in Digital Electronics & Communication Systems	Advanced Mathematics (I Sem)	Electronics and Communication Engg.

5.	PG :M.Tech inTransportation Engineering and Management	Applied Statistics (I Sem)	Civil Department
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7. Courses in collaboration with other universities, industries, foreign institutions, etc.: ----Nil ----

8. Details of courses/programmes discontinued (if any) with reasons:
----Nil ----

9. Number of Teaching posts

Table EM – 3: Teaching posts		
	Sanctioned	Filled
Professors	01	Nil
Associate Professors	02	02
Asst. Professors	06	06

10. Faculty profile with name, qualification, designation, specialization, (D.Sc./ D.Litt./ Ph.D./ M.Phil.etc.,)

Table EM – 4: Faculty profile					
Name	Qualification	Designation	Specialization	No. Years of Experience	No. of Ph.D.Students Guided for thelast4years
Mr. ShridharAdiga	M.Sc.	Associate Professor	Mathematics	29	Nil
Dr. Nirmala T.	M.Sc. Ph.D.	Associate Professor	Fluid Mechanics	24	Nil
Ms. Shaila S. Bhat	M.Sc.	Asst. Professor	Mathematics	24	Nil

Mr. Anil S.C.	M.Sc.	Asst. Professor	Mathematics	20	Nil
Mrs. Bhagyalakshmi K.	M.Sc.	Asst. Professor	Mathematics	13	Nil
Mr. PanditGiri Mohan Das	M.Sc. M. Phil.	Asst. Professor	Mathematics	10	Nil
Dr.GurupadavvaIngala halli	M.Sc. Ph.D.	Asst. Professor	Differential Geometry/ Contact Manifolds	06	Nil
Mr. M.R. Krishnamurthy	M.Sc. (Ph.D)	Asst. Professor	Fluid Mechanics	04	Nil

11. List of senior visiting faculty: ---Nil ----

12. Percentage of lectures delivered and practical classes handled (programme wise) by temporary faculty: ----Nil ----

13. Student-Teacher Ratio (programme wise): ---Not Applicable---

14. Number of academic support staff (technical) and administrative staff; sanctioned and filled:

Table EM – 5: Academic and Administrative Staff		
Staff	Sanctioned	Filled
Academic support staff	01	01

15. Qualifications of teaching faculty with DSc/D.Litt/Ph.D/MPhil/PG.

TableEM – 6: Qualification of Faculty	
Qualification	Number of Staff
Ph. D	02
M. Phil	01
PG	05

16. Number of faculty with ongoing projects from a) National b)International funding agencies and grants received: ---Nil ----

17. Departmental projects funded by DST-FIST; UGC, DBT, CSSR, etc. and total grants received: ---Nil ---

18. Research Centre/facility recognized by the University: ---Nil---

19. Publications:

Number of publications listed in International database (for E.g: Web of science and Scopus)

Total No. of papers published in international Journals : **38**

Total no. of papers published in National Journals : **09**

Citations : **127**

Table EM – 7: Journal Details					
Sl. No.	Faculty name	National	International	Citations	H - index
1	Dr.Nirmala T	1	8	1	--
2	Dr.Gurupadavva Ingalahalli	6	19	46	3
3	M.R.Krishnamurthy	2	11	80	5

20. Areas of consultancy and income generated: ---Nil----

21. Faculty as members in a) National committees b) International Committees c)Editorial Boards....

Table EM - 8: Editorial board		
Sl. No.	Faculty Name	Editorial Board
1.	Dr.GurupadavvaIngalahalli	Reviewer of the“American Mathematical Review”.

22. Student projects:

a) Percentage of students who have done in-house projects including interdepartmental/programme: **---Not Applicable ----**

b) Percentage of students placed for projects in organizations outside the institution i.e. in Research laboratories/Industry/ other agencies:

---Not Applicable ----

23. Awards/Recognitions received by faculty and students:

Table EM –9 : Faculty achievements				
Sl. No.	Name	Award	Venue	Date
1	Dr.Gurupadavva Ingalahalli	`Best Paper'	3rd annual conference of the Tensor Society on Differential Geometry and its applications, Department of	27/05/2011 to 28/11/2011

			Mathematics, Kuvempu University, Shankaraghatta	
--	--	--	---	--

24. List of eminent academicians and scientists/visitors to the department:

Table EM – 10: Eminent Academicians and Scientists / Visitors				
Sl. No.	Name	Designation	Company	Date
1	Ashok Rao	Former Professor	IISC, Bangalore	22/10/2016

25. Seminars/ Conferences/ Workshops organized & the source of funding

a) National:

Table EM -11: Seminars/ Conferences/workshops				
Sl. No.	Course/ Programme	Duration	Month / Year	Source of funding
1.	Workshop on “A Pedagogy for effective use of Mathematics for research in Science and Technology” at JNNCE, Shimoga	1 week	27/07/2015 to 31/07/2015	JNNCE, IETE

b) International: ---Nil---

26. Student profile programme/course wise: ---Not Applicable ----

27. Diversity of Students: ---Not Applicable ----

28. How many students have cleared national and state competitive examinations such as NET, SLET, GATE, Civil services, Defense services , etc.?: ---Not Applicable ----

29. Student progression: ---Not Applicable ----

30. Details of infrastructural facilities

a) Library: ---Nil----

b) Internet facilities for Staff & Students:

Our college has provided Internet connectivity of 16 Mbps leased line and OFC enabled connectivity for both students and staff.

c) Classrooms with ICT facility: ---Nil----

d) Laboratories: ---Not Applicable ----

31. Number of students receiving financial assistance from college, university, Government or other agencies: ---Nil---

32. Details on student enrichment programmes (special lectures/ workshops/ seminar) with external experts: ---Nil---

33. Teaching methods adopted to improve student learning:

In order to improve the student learning, regular assessment of students has been practicing through assignments, seminars and extra classes. We provide model question papers and question bank to the students which give them better idea of the examination. This is helpful for the students to prepare for the final examination.

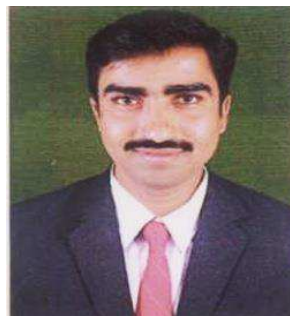
34. Participation in Institutional Social Responsibility (ISR) and Extensionactivities: ----Nil----

Chemistry

1. Name of the department: CHEMISTRY



Dr. M.H. MOINUDDIN KHAN
Associate Professor & Head



Dr. H.P. SACHIN
Coordinator

2. Year of Establishment: 1980

3. Names of Programmes / Courses offered (UG, PG, M.Phil., Ph.D., Integrated Masters, Integrated Ph.D., etc.):

Table 1 -: Name of Program		
Sl. No.	Name of the Program	Intake
1.	Research: Ph. D in Chemistry	

4. Names of Interdisciplinary courses and the departments/units involved: ---- Not Applicable ----

5. Annual/semester/choice based credit system (programme wise)

Table 2 -: System Followed			
Sl. No.	Degree	Courses offered	System followed
1.	B. E	Engineering Chemistry Course common to all branches in first year	• CBCS Scheme
2.	Ph. D.		• VTU Norms

6. Participation of the department in the courses offered by other departments

Table 3 -: Subject supported			
Sl. No.	Semester	To Department	Course taught
1.	I/II	To all branches of Engineering	Engineering Chemistry Theory
2.	I/II	To all branches of Engineering	Engineering Chemistry Lab

7. Courses in collaboration with other universities, industries, foreign institutions, etc.: ----Nil -----

8. Details of courses/programmes discontinued (if any) with reasons: ---Nil-----

9. Number of teaching posts

Table 4 - : Sanctioned and Filled Position		
Teaching post	Sanctioned	Filled
Professors	01	00
Associate Professors	01	01
Asst. Professors	03	03

10. Faculty profile with name, qualification, designation, specialization, (D.Sc./ D.Litt./ Ph.D./ M.Phil.etc.,)

Table 5-: Faculty Specialization						
Sl. no.	Name	Qualification	Designation	Specialization	No. of Years of Experience	No. of Ph.D. Students Guided/Guiding for the last 4 years
1	Dr. M.H. Moinuddin Khan	M.Sc., Ph.D.	Associate Professor & HOD	Ind. Chemistry, Coordination Chemistry	14	04
2	Dr. H.P. Sachin	M.Sc., Ph.D.	Asst. Professor	Electrochemistry, Materials Chemistry	13	03
3	Mrs. V. BinduPavan	M.Sc.,	Asst. Professor	Applied Chemistry	05	----
4	Mr. S.G.Chethan	M.Sc., (Ph.D.)	Asst. Professor	Organic Chemistry	01	----

11. List of senior visiting faculty: ----Nil-----

12. Percentage of lectures delivered and practical classes handled programmewise) by temporary faculty: ----Nil-----

13. Student-Teacher Ratio (programme wise): ----Not Applicable ---

14. Number of academic support staff (technical) and administrative staff sanctioned and filled

Table 6 -: Academic and Administrative Staff Sanctioned and Filled		
Staff	Sanctioned	Filled
Administrative staff	02	02
Academic support staff	01	01

15. Qualifications of teaching faculty with DSc/D.Litt/Ph.D/MPhil/PG.

Table 7-: Qualification of Faculty	
Qualification	Number of Staff
Ph. D	02
P G	02
U G	---

16. Number of faculty with ongoing projects from a) National b)International funding agencies and grants received : --- Nil---

17. Departmental projects funded by DST-FIST; UGC, DBT, ICSSR, etc. and total grants received

Table 8-: Funded projects					
Sl.No	Name of the Funding Agency	Name of the Scheme	Programme Title	Year of Funding	Amount Sanctioned
1.	AICTE, New Delhi	MODROB	Modernization of Chemistry/Environmental Science Laboratory	2009	Rs.6.00 lakhs
2.	AICTE, New Delhi	MODROB	Modernization of Chemistry/Environmental Science Laboratory	1999	Rs.10.00 lakhs

18. Research Centre/facility recognized by the University

Table 9-: Research Centre/facility	
Research Centre	Chemistry Research Centre
Year of establishment	2012
Recognized by	Recognized by VTU, Belagavi
Total number of Research Guides	02
Total number of Research Scholars	07

19. Publications:

Number of publications listed in International database (for E.g: Web of science and Scopus)

Total No. of papers published in international Journals : **39**

Total no. of papers published in National Journals : **08**

Monographs : ---

Citations : **298**

Table 10 (a): Journal Details					
Sl. No.	Faculty name	National	International	Citations	H - index
1.	Dr. M. H. Moinuddin Khan	04	22	75	03
2.	Dr. H.P. Sachin	04	17	138	

Table- 10 (b): Books				
Author	Title	ISBN	Publisher	Year
Dr. M. H. Moinuddin Khan	Engineering Chemistry	ISBN: 978-93-80408.	Acme Learning Private limited, New Delhi,	2010
Dr. M. H. Moinuddin Khan	Studies on Substituted Iminophthalocyanines	ISBN: 978-3-659-44733-4	LAMBERT Academic Publishing, Germany	2014,
Dr. H.P. Sachin	Electroorganic Synthesis and its Applications	ISBN: 978-3-659-92914-4	Lambert Academic Publishing, Germany	2016

20. Areas of consultancy and income generated: ----Nil----

21. Faculty as members in

a) National Committees: (BOE/BOS/etc)

Table 11-: Memberships		
Sl. No.	Faculty Name	Committee
1.	Dr. M.H. Moinuddin Khan	BoS - Sahyadri Science College (Autonomous), Kuvempu University

b) International Committees: ---Nil---

c) Editorial boards: ----Nil----

22. Student projects: ----Not Applicable---

Student projects UG: ----Not Applicable---

Student projects PG: ----Not Applicable---

23. Awards / Recognitions received by faculty and student Awards /
Recognitions received by faculty
Awards / Recognitions received by faculty:

Table – 12: Faculty achievements				
Sl. No.	Name	Award	Venue	Date
1	Dr. H.P. Sachin	PuranikMatadaVeeraiah Memorial Gold Medal for securing First Rank at M.Sc., level.	Kuvempu University	2003

Awards / Recognitions received by student: ----Nil ----

24. List of eminent academicians and scientists / visitors to the department: ---Nil----

25. Seminars/ Conferences/Workshops organized & the source of funding

a) National: ----Nil----

b) International: ---Nil---

26. Student profile programme/course wise: ---Not Applicable ----

27. Diversity of Students: ---Not Applicable ----

28. How many students have cleared national and state competitive examinations such as NET, SLET, GATE, Civil services, Defense services, etc.?: ----Not Applicable ----

29. Student progression: ----Not Applicable ----

30. Details of Infrastructural facilities

a) Library

Table - 13: Library	
Details	Number
Department Library	Yes
BOOKS	200 Books
Reports	6 Journals
Syllabus	VTU (2014-2015 Scheme)
Question Papers	VTU (2010,2014,2015 Scheme)

b) Internet facilities for staff and students:

The department has Internet connectivity of 16 Mbps leased line and OFC enabled connectivity. Internet facility is provided for both students and staff. HOD's and staff are provided with JNNCE email ID to access their account.

c) Classrooms with ICT facility: ----Nil ----

d) Laboratories:

Table - 14: Laboratory			
Sl.No.	Laboratory Name	Equipped with	Area in m²
1	Engg. Chemistry Lab	Potentiometer, pH meter, Colorimeter, Conductivity Meter, Electronic Balance, Flame Photometer,	264
2	Chemistry Research Lab	Electrochemical Work station, AAS, UV-Vis Spectrophotometer, Water Analyser Kit,	50

31. Number of students receiving financial assistance from college, university, government or other agencies: ----Not Applicable ----

32. Details on student enrichment programs (special lectures / workshops / seminar) with external experts: ----Not Applicable ----

33. Teaching methods adopted to improve student learning:

- Regular teaching method use of Black Board and Chalk
- Use of Internet tool to avail additional information

34. Participation in Institutional Social Responsibility (ISR) and extension Activities: ----Nil----

35. SWOC analysis of the Basic Science departments and future Plans.

Strength

- Well Qualified, Experienced and Committed faculty
- Faculty Retention is high
- Well established laboratory with upto date syllabus coverage
- Consistently maintaining good academic results
- Well established research laboratory
- Effective Mentoring system

Weakness

- Paucity of time in a semester to teach beyond syllabus
- Lack of Consultancy services
- Academically weak students

Opportunity

- Collaboration with other universities / research organisations
- Research grants from various funding agencies

Challenges

- To train up academically weak students and to get excellent results
- Developing the research orientation among student community

Future plans

- Initiating the consultancy services in the area of Environmental Radioactivity
- Development of Science models
- Improving the teaching learning process using modern tools
- Encouraging the students to take up online courses



**JNNCE
Photo Gallery**



Infrastructure



Administrative Block



Computer Science Block



Silver Jubilee Building



STEP Building



MBA/MCA Block



New Library Block

Infrastructure



Krishna Hostel Block



Ladies Hostel Block



Mess Block



Students Amenity Centre



MBA/MCA Auditorium

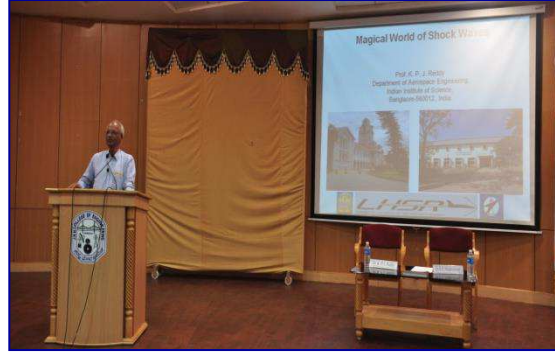


Seminar Hall

VIPs Visited



Prof. U R Rao
Former Chairman-ISRO



Dr. K P J Reddy
Professor, IISc, Bengaluru



Justice Rajendra Babu
Former CJI, Supreme Court



Bharatha Ratna Dr. C N R Rao
Renowned Scientist



Sri. N R Narayamurthy
Chief Mentor, Infosys



Sri. Anil Kumble
Former Cricketer

Faculty/Students Enrichments Activities



NWC-2016 Inauguration



NWC-2016 Valedictory



ISRO Outreach Program



Training Program for PWD Engineers



Robotic Lab Inauguration



Innovative Project Filed for Patent

Sports and Cultural Activities



VTU Athletic Meet-2014



Techzone-Annual Technical Fest



JNNCE Students @
VTU Youth Fest



JANVEY-Annual Cultural Fest



India-A V/s West Indies-A
Cricket Match



MBA Utthana Activities

Glimpses of Extra-Curricular Activities



Women's Day Celebration



**JNNCE Students @
National Conference**



**Winners of
Davana Cultural Fest**



**Winners of VTU
Inter-zone Handball**



Ethnic Day Celebration



MBA Students Internship

Glimpses of Activities



First Year Orientation-2016



Chief Guest addressing New Entrants



Orientation-2016 - Token of Gratitude to Chief Guest



Talk by Dr. Subramanya, Principal, RVCE, Bengaluru



Yaad Karo Qurbani



MBA – BSR Activity