

Registration Form

Faculty Development Program

On

Image Processing and its Research Challenges

23rd -27th July 2018

1. Name. _____
2. Designation. _____
3. Department _____
4. Email-ID _____

The information provided by me is true to the best of my knowledge. I agree to abide by the rules and regulations governing the Faculty Development Training Program. If selected, I shall attend the program for the entire duration.

Date :

Place :

Signature of the Applicant

Mr./Ms./Dr. _____ is an

employee of our Institute and is hereby permitted for the above Faculty Development Training Program

Date :

Place :

Head of the Institution

Chief Patrons

Sri A S Vishwanatha, President NES
Sri T R Ashwathnarayana Setty, Vice President NES
Sri S N Nagaraja, Secretary NES
Sri Amarendra Kireeti, Joint Secretary NES
Sri C R Nagaraj, Treasurer, NES

Patrons

Dr. H R Mahadevaswamy Principal JNNCE, Shimoga
Dr. L K Sreepathi Vice Principal JNNCE, Shimoga

Organizing Chair

Dr. Manjunatha P, HOD, Dept. of ECE, JNNCE

Coordinator

Dr. S V Sathyanarayana Professor, Dept. of ECE, JNNCE

Conveners

Mrs. Sheela S, Asst. Professor Dept. of ECE, JNNCE
Mr. Abhijith N, Asst. Professor Dept. of ECE, JNNCE

Organizing Committee

All Teaching and non Teaching staff of Electronics & Communication Engineering Department

Resource Persons

1. **Dr. K V Suresh**
Professor and HOD, Dept of ECE, SIT, Tumkur
2. **Dr. Shreedhara K S**
Professor, Dept of CSE, UBDT College of Engineering, Davanagere
3. **Dr. M. Ashwatha Kumar**
Professor, Dept. of E & C, Faculty of Engineering, Christ – Deemed to be University, Bangalore
4. **Mr Rajath K S**
Technical Consultant

NES Education Society ®

Jawaharlal Nehru National College of Engineering, Shimoga – 577 204

[Affiliated to VTU Belagavi, Recognized by Govt. of Karnataka, Accredited by NAAC and Approved by AICTE, New Delhi]



Faculty Development Program

On

“Image Processing and its Research Challenges”

From

23rd July to 27th July- 2018

Organized by

Department of Electronics & Communication Engineering

Address for Communication:

Mrs. Sheela S. Asst. Professor Mob: 9844901125

Mr. Abhijith N Asst. Professor Mob :9620852497

E-mail: sheeladinesh@jnnce.ac.in

abhijithn@jnnce.ac.in

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Professor, Dept. of E & C, Faculty of Engineering, Christ – Deemed to be University, Bangalore

4. Mr Rajath K S

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**Department of Electronics & Communication
Engineering**

Address for Communication:

Mrs. Sheela S. Asst. Professor Mob: 9844901125

Mr. Abhijith N Asst. Professor Mob :9620852497

E-mail: sheeladinesh@jnnce.ac.in

abhijithn@jnnce.ac.in

About The College:

JNNCE was established in the year 1980 by the National Education Society. The college is affiliated to Visvesvaraya Technological University (VTU), Belgaum and recognized by AICTE, New Delhi. It offers 7 UG and 7 M.Tech program besides MBA and MCA. It has 9 Research Centers recognized by VTU. Spread over 39.4 acres, the campus has all the amenities to cater to the needs of about 3500 students and 400 faculty and staff. All the departments have good infrastructural facilities with highly qualified and experienced faculty, staff and well equipped laboratories. The college is regarded as one of the excellent centers for technical education and research. JNNCE is ranked 42nd among top Engineering colleges in India and 7th in Karnataka as per Outlook survey 2018. The Institution is NAAC accredited. The college is providing its fruitful services in the 38th year. The college organizes international and national workshops, conferences, seminars and short term courses on a regular basis. The institution has IEEE as well as ISTE members.

About the Department:

The Department of Electronics & Communication Engineering was started in the year 1980. Department have well equipped laboratories, qualified and experienced staff to cater to the needs of students of UG program and PG program M.Tech in Digital Electronics and Communication Systems. The ECE department has been recognized as research center under which 16 research scholars are pursuing Ph.D under VTU Belgaum. UG and PG students are actively involved in carrying out their projects at New Age Incubation Network. The department has IETE and ISF forums. The Institute of Electronics and Telecommunication Engineers (IETE) center is the national apex body of professional engineers devoted to the advancements of Electronics, Telecommunications, IT and allied areas. The 56th center of IETE was inaugurated at Jawaharlal Nehru national College of Engineering Shivamogga on 1st March 2009. IETE serves more than 69,000 members

be individual and industrial organizations through 65 centers spread all over India including one abroad.

Department Vision

To be a premier centre of education and research in Electronics & Communication Engineering for producing competent engineers to cater to the needs of industry and society.

Department 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 & human values.
- Train the students and the faculty in state – of – the-art technologies and motivate them for higher studies & 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.

About the FDP

This FDP is being organized for Five days to provide a platform for faculties, researchers and technologists, to understand the concepts of Image Processing and its research challenges to solve complex engineering problems. With this in view the course would devote time talks on the topics cited below along with 'Hands-on Sessions'.

Topics:

- Introduction to fundamentals of Digital image processing and its Applications.
- Introduction to Image Enhancement
- Image Restoration with hands-on.
- Mathematics in Image Processing
- Machine Vision System with hands-on

- Research issues in Image processing

Who can attend

The interested academicians from Electronics, Telecommunication, Computer science, Information science, industry personnel, researchers and allied disciplines are invited to attend the five days FDP.

Resource Persons:

Resource persons from distinguished Research Institutes, industries and colleges will deliver expert lectures and practical sessions.

Registration details:

A registration fee of Rs. 1500 will be charged for each participant. The registration fee should be paid through online, the details of which are given below.

Bank : CANARA BANK
Branch : JNNCE Campus, Shimoga
SB A/c. No. : 6322201000004
IFSC code : CNRB0006322

Scanned copy of the application with dully forwarded by the HOD and Principal, must be sent along with online transaction to the conveners email id. The number of participants is limited to 45 on first come first serve basis.

Note: Registration fee does not include accommodation. However accommodation may be provided to the participant with a nominal fee in the college hostel. No TA/DA will be provided for the participants.

Important Dates

Submission of application forms by: 20th July 2018.
FDP Dates: 23rd July to 27th July -2018.

Venue:

MBA/MCA Block

Timings: 9.00 am to 5.30 pm



National Education Society
Jawaharlal Nehru National College of Engineering Shivamogga-577204
 Department of Electronics and Communication Engineering



Schedule for Five Days FDP on "Image Processing and its Research Challenges"

Day and Date	9.00 AM to 10.00AM	10.00AM-11.00 AM	11.15AM-1.30 PM	2.30 PM -3.45 PM	4.00 PM to 5.30 PM
23-07-2018 Monday	Inauguration (9:30 am to 11:00 am)		Digital Image Fundamentals- Introduction, Image Sensing and Acquisition Dr. H R Mahadevaswamy	Basic Intensity Transformation Functions Spatial Domain Transformations Dr. Poornima K M	Frequency Domain Transformations Dr. Poornima K M
24-07-2018 Tuesday	Image Restoration and Reconstruction Dr. K V Suresh		Image Restoration and Reconstruction Hands-on Dr. K V Suresh	Mathematics in Image Processing Dr. K S Shreedhara	Mathematics in Image Processing Dr. K S Shreedhara
25-07-2018 Wednesday	Image Smoothing and Image Sharpening Using Frequency Domain Filters Hands-on Dr. Manjunatha P	Color Image Processing Mr. Abhijith N	Morphological Image Processing Mrs. Sheela S	Edge Detection, Thresholding and Region Based Segmentation Dr. Ashwath Kumar	Introduction to Machine Vision System Dr. Ashwath Kumar
26-07-2018 Thursday	Research Topic:3-D reconstruction from 2-D images Dr. Jyothis K	Research challenges in Applications of Image Processing Dr. Nirmala Shivamand	Pattern Recognition Dr. Sanjeev Kunte	Machine Vision System Hands-on Mr. Rajath K S	Machine Vision System Hands-on Mr. Rajath K S
27-07-2018 Friday	Machine Vision System Mr. Rajath K S	Image compression- Challenges and Solution Dr. H R Mahadevaswamy	Research Topics Dr. H R Mahadevaswamy	Valedictory Function	

VENUE: MBA/MCA Auditorium & Computer Center 1 (MBA Block)

Annexure - 2

List of Participants

SL No.	Name
1	Dr. A P Jagadeesh Chandra
2	Amrutha Pai
3	Syed Waseem Tabraiz
4	Gururaja S
5	Sumithra C V
6	Bhuvaneshwari K V
7	Dr. Manjunatha P
8	Dr. S V Sathyanarayana
9	Kamamma G C
10	Sunil M D
11	Ujwala B S
12	Nalina S B
13	Ajay Betur P
14	Sharath S M
15	Abhijith N
16	Darshan K V
17	Anil Kumar J
18	Sheela S
19	Roopa B S
20	Pradeepa S C
21	Prema K N
22	Smitha S M
23	Sumathi K
24	Shwetha H R

SL No.	Name
25	Prashanth G S
26	Madhusudhan G
27	Rashmi M Hullamani
28	Arun Kumar K L
29	Manjunatha H T
30	Shashi Kiran S
31	Ayesha Siddiqa
32	Madhukar C S
33	Raghavendra R K
34	Dr. Manjula G R
35	Dr. K M Poornima
36	C V Suresh
37	Pavan M
38	Akshay M J
39	Chethan G S
40	Benak Patel M P
41	Harish T S
42	Harish S B
43	Pavan Kumar M P
44	Arun Kumar P
45	Vishwas C G M
46	Aparna
47	H K Pradeep

Annexure - 3

Schedule for Five Days FDP on "Image Processing and its Research Challenges"

Day and Date	9.00 AM to 10.00AM	10.00AM to 11.00 AM	11.15AM to 1.30 PM	2.30 PM to 3.45 PM	4.00 PM to 5.30 PM
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26-07-2018 Thursday	Research Topic:3-D reconstruction from 2-D images Dr. Jyothis K	Research challenges in Applications of Image processing Dr. Nirmala Shivanand	Pattern Recognition Dr. Sanjeev Kunte	Machine Vision System Hands-on Mr. Rajath K S	Machine Vision System Hands-on Mr. Rajath K S
27-07-2018 Friday	Machine Vision System Mr. Rajath K S	Image compression- Challenges and Solution Dr. H R M	Research Topics Dr. H R M	Valedictory Function	

VENUE: MBA/MCA Auditorium & Computer Center 1

Annexure - 4

List of Speakers / Guests

SL No	Name	Address	Contact Number	Email ID
1	Dr. H R Mahadevaswamy	Principal, JNNCE, Shimoga	7899478990	principal@jnnce.ac.in
2	Dr. Poornima K M	Professor, Dept. of CSE, JNNCE, Shimoga	9844528218	kmpoornima@jnnce.ac.in
3	Dr. K V Suresh	Professor and HOD, Dept. of ECE, SIT, Tumkur	9480408091	sureshkvsit@yahoo.com
4	Dr. K S Shreedhara	Professor, Dept. of CSE,		ks.shreedihara@gmail.com
5	Dr. Manjunatha P	Professor and Head, Dept. of ECE, JNNCE, Shimoga	8310036042	hod_ece@jnnce.ac.in
6	Mr. Abhijith N	Asst. Professor, Dept. of ECE, JNNCE, Shimoga	8197180949	abhijithn@jnnce.ac.in
7	Mrs. Sheela S	Asst. Professor, Dept. of ECE, JNNCE, Shimoga	9844901125	sheeladinesh@jnnce.ac.in
8	Dr. Ashwath Kumar	Professor, Dept. of ECE, Faculty of Engineering, CHRIST (Deemed to be University), Bengaluru		
9	Dr. Jyothi K	Professor and Head, Dept. of ISE, JNNCE, Shimoga	8722723730	hod_ise@jnnce.ac.in
10	Dr. Nirmala Shivanand	Professor and Head, Dept. of CSE, JNNCE, Shimoga	9448977026	hod_cse@jnnce.ac.in
11	Dr. Sanjeev Kunte	Professor, Dept. of ECE, JNNCE, Shimoga	9880496262	sanjeevkunte@jnnce.ac.in
12	Mr. Rajath K S	Founder Director Curio Systems Private limited, Bangalore	9535335835	rajath1383@gmail.com

Annexure – 5

Event Report

One week Faculty development programme on “Image Processing and its Research Challenges” was held at JNNCE from 23rd July to 27th July 2018. The FDP aimed to provide opportunities to faculty members, Researchers and Technologists to enhance their skills in the area of Image Processing. The FDP was attended by 48 participants from Engineering Colleges including 6 participants from outside. The organizing chair was Dr. Manjunatha P, HOD, of Dept. of ECE and the event was coordinated by Dr. S V Sathyanarayana, Professor Dept. of ECE. Abhijith N Asst.Prof of ECE and Mrs. Sheela S Asst.Prof, of ECE were the Conveners.

The esteemed personalities were present on the inauguration of the programme on 23/07/2018 were,

1. Sri S Rudregowda, Honorable MLC, Karnataka.
2. Sri A S Vishwanatha, President NES.
3. Dr. H R Mahadevasamy Principal, JNNCE
4. Dr. L K Sreepathi, Vice principal JNNCE
5. Dr. Manjunatha P, HOD, of Dept. of ECE
6. Dr. Rajendra Khatavkar , HOD, of Dept. of Civil Engineering.

The Chief Guest Sri S Rudregowda, Honorable MLC, Karnataka in inauguration speech pointed out that the technology is expanding rapidly and that students with Faculty members need to adapt to the new challenges in this regard.

Technical Sessions

1st Day (23/07/2018)

Dr. H R Mahadevasamy Principal of JNNCE took the first session and gave an insight regarding Basics of Image Processing, Image Acquisition followed with post lunch session by Dr.Poornima K M, Professor, Dept. of CSE, JNNCE Shimoga on Spatial and Frequency domain Image enhancement.

2nd Day (24/07/2018)

Dr. K V Suresh, Professor and HOD of ECE, S I T Tumkur, has delivered an interactive sessions on Image Restoration and Image denoising with MATLAB programs in Spatial and frequency domain followed with post lunch session by Dr. K S Sreedhara, Professor DOS, in CSE, UBDTCE Davanagere, about the Mathematical concepts in Image Processing with continuous space, Discrete space and Set space with introduction to Image Segmentation, computational tools inspired by nature.

3rd Day (25/07/2018)

Abhijith N, Asst .Prof, Dept of ECE, gave an introductory talk on Color Image Processing followed by a session on Morphological Image Processing by Mrs. Sheela S, Asst .Prof, Dept of ECE. Then a Hands-On session was conducted by Dr. Manjunatha P, HOD, of Dept. of ECE, JNNCE on Spatial and Frequency domain filters. Dr. Ashwatha Kumar M, Professor, Dept. of ECE, Faculty of Engineering, Christ University, Bengaluru delivered post lunch sessions on Edge detection with different Edge detector operators, Gradient magnitude, Thinning Non-maxima suppression with different thresholding techniques and Image Segmentation followed by introduction to Machine Vision System.

4th Day (26/07/2018)

Dr. Jyothi K, HOD, Dept. of ISE, JNNCE gave a talk on 3-D reconstruction using 2-D images and compared with one image method, Stereo Method and Three or more images method.

Dr. Nirmala Shivanand, HOD, Dept. of CSE, JNNCE delivered a talk on Research Challenges in Image Processing, which included Document Authentication, Challenge of Effective Watermarking, Test line separation in Hand Written documents, conversion of handwritten text to printed text etc.

Post lunch session was handled by Mr. Rajath K S, Founder Director of Curio Systems Private Limited. A hands-on session was taken by assigning the programming task on Machine Vision to the participants who actually did the programming to obtain desired results.

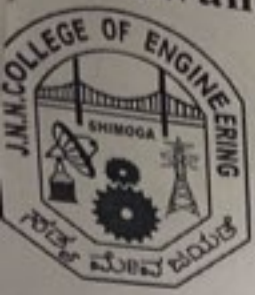
5th Day (27/07/2018)

Mr. Rajath K S continued with hands-on session by assigning programming tasks. This session was followed by a hands-on session on Morphological Image processing by Mrs. Sheela S Asst. Prof Dept of ECE. A session on 3D Point cloud to 3D printable objects with point cloud library, tools and LiDAR by Dr. H R Mahadevasamy Principal of JNNCE was delivered.

The Valedictory session

The honorable personalities present on this occasion were Sri. Ashwathnarayana Setty, Vice president NES, Sri C R Nagaraj, Treasurer NES, Abhinav Khare, Superintendent of Police, Shivamogga, Dr. H R Mahadevasamy Principal, JNNCE, Dr. L K Sreepathi, Vice principal JNNCE, Dr. Manjunatha P, HOD, of Dept. of ECE, Dr. Rajendra Khatawkar , HOD, of Dept. of Civil Engineering.

Head of the Department
Electronics and Communication
J.N.N. College of Engineering
SHIMOGA-577 204.



Department of Electronics and Communication Engineering
in Association with IETE and ISTE

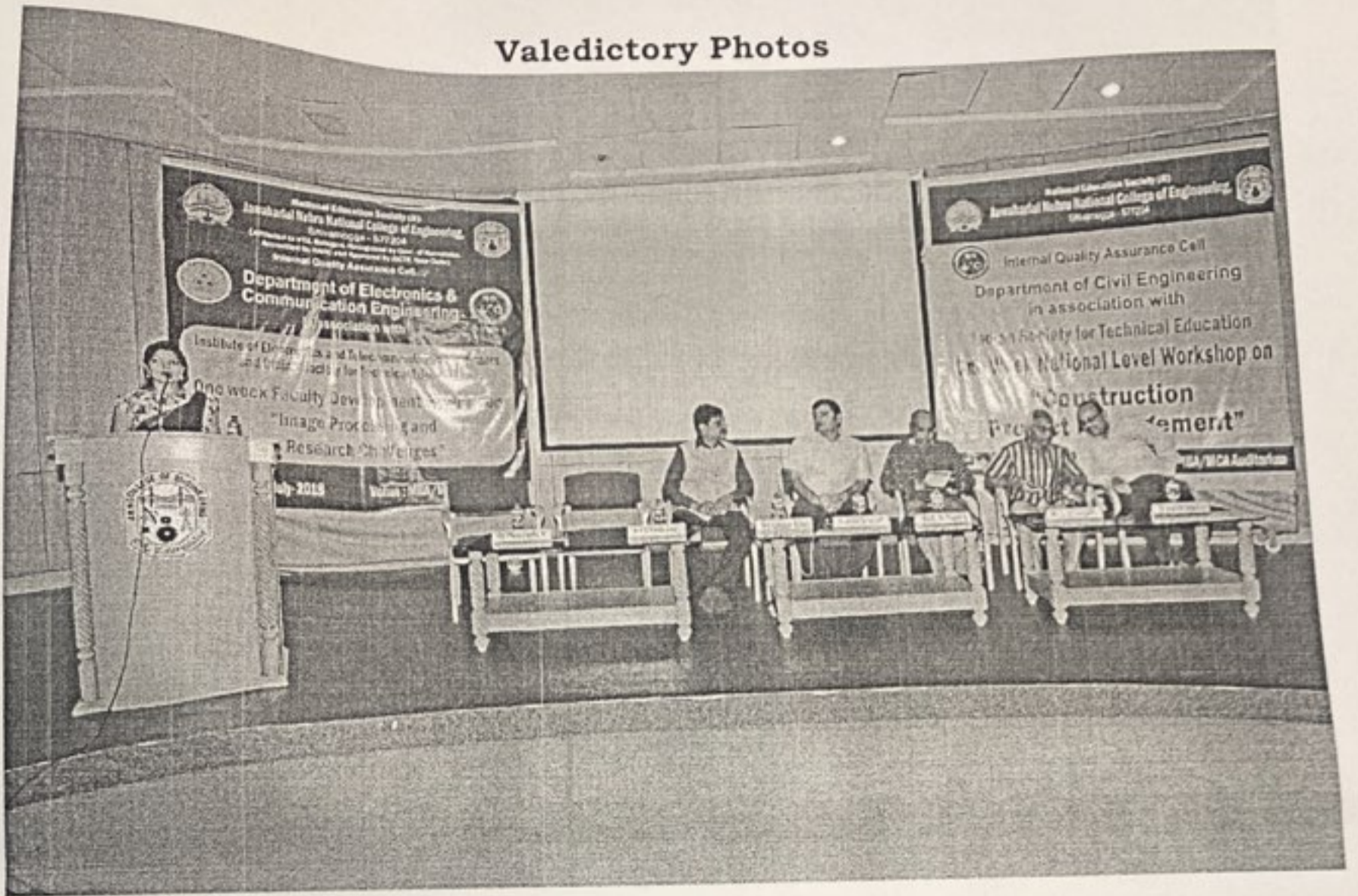
Attendance
Day2

Date:12.12.2017

JNNCE Faculty

Sl.No	Name of the Participant	Dept	Session1	Session2
1	Dr R Srinivas Rao Kunte	ECE	Ab	Ab
2	Dr S V Sathyanarayana	ECE	S.V.S	S.V.S
3	Shwetha B	ECE	Shwetha B	Shwetha B
4	Darshan K V	ECE		
5	Smitha S M	ECE	SM	SM
6	Pradeep H K	ISE		
7	Sathyanarayana K B	ISE	S.K.B	S.K.B
8	Benak Patel M P	TCE	M.P.	M.P.
9	Harish T S	TCE	H.T.S	H.T.S
10	Prashanth G S	ECE	P.G.S	P.G.S
11	Bhuvana Khare	TCE	B.Kh	B.Kh
12	Nalina S B	ECE	Nalina	Nalina
13	Roopa B S	ECE	R.B.S	R.B.S
14	Radhika S N	CSE	R.S.N	R.S.N
15	Chaitora K V	CSE	C.K.V	C.K.V
16	Pradeep S C	ECE	P.S.C	P.S.C
17	Abhijith N	ECE	Ab	Ab
18	Ajay Betur P	ECE	A.B.P	A.B.P
19	Madhukar C S	TCE	M.C.S	M.C.S
20	Anil Kumar J	ECE	Ab	Ab
21	Harisha S B	TCE	H.S.B	H.S.B
22	Aparna	TCE	Aparna	Aparna
23	G C Kamalamma	ECE	G.C.K	G.C.K
24	Sunil M D	ECE	S.M.D	S.M.D

Valedictory Photos





National Education Society ©
**JAWAHARLAL NEHRU NATIONAL COLLEGE
OF ENGINEERING SHIVAMOGGA**
KARNATAKA, INDIA



Internal Quality Assurance Cell

Invitation

*You are cordially invited to the Inauguration of one week Faculty
development program on*

Image Processing and its Research Challenges

Organized by Dept. of E & C Engineering

Construction Project Management

Organized by Dept. of Civil Engineering

On 23rd July 2018

Chief Guests : **Sri S. Rudre Gowda**
MLC, Karnataka

Sri M. Mutturaj
Additional Superintendent of Police, Shivamogga

Guests of Honor : **Sri A. S. Vishwanatha**
President, National Education Society, Shivamogga

Sri S. N. Nagaraja
Secretary, National Education Society, Shivamogga

Honorable Presence : **Dr. L. K. Sreepathi**
Vice principal, JNNCE, Shivamogga

Presided By : **Dr. H. R. Mahadevaswamy**
Principal, JNNCE, Shivamogga

Venue : MBA/MCA Auditorium

Time : 9.30 AM

HOD and Staff Dept. of Civil Engg. & E&C Engg.
Jawaharlal Nehru National College of Engineering, Shivamogga