



National Education Society (R.)
Jawaharlal Nehru New College of Engineering,
Shivamogga



(Approved by AICTE, New Delhi, Certified by UGC 2f & 12B, Accredited by NAAC – 'B', UG programs: CE, ME, EEE, ECE, CSE, ISE, ETE PG Programs: MBA, accredited by NBA: 1.7.2022 to 30.6.2025, Recognized by Govt. of Karnataka and Affiliated to VTU, Belagavi)

INTERNAL QUALITY ASSURANCE CELL (IQAC)

7.1.2 The Institution has facilities and initiatives for

1. Alternate source of energy and Energy Conservative Measures
2. Management of the Various types of degradable and non-degradable waste
3. Water Conservation
4. Green Campus Initiatives
5. Disabled friendly, Barriers free environment

1) Alternate source of energy and Energy Conservative Measures

A. Solar Energy

- JNNCE has invested about two crore rupees to install 400 KW solar PV system. TATA Power Solar Company, Bengaluru provided the equipment for it. 1250 solar panels, 9 inverters of 20/25/50 KW rating are installed on roof of all buildings of JNNCE. The installation and commissioning of the project was completed in March 2020. This solar plant is synchronized to grid for import as well as for export of electric power. By June 2023, total of 17,79,687 units of electrical energy is generated resulting in a revenue of Rs. 1.45.00.000 with reduced carbon emission of 1440 Tonnes in a span of 3 years.

Year	Generation (Units)	Consumption (Units)	Energy bill (Amount in Rs.)
June 2020 May 2021	5,23,823	2,69,066	4,75,776
June 2021 May 2022	5,14,119	5,25,344	20,25,754
June 2022 April 2023	5,37,180	6,04,230	20,07,755
Total	15,75,122	13,98,640	44,89,285




Principal
J N N College of Engineering
Shivamogga.



National Education Society (R.)
Jawaharlal Nehru New College of Engineering,
Shivamogga



(Approved by AICTE, New Delhi, Certified by UGC 2f & 12B, Accredited by NAAC – 'B', UG programs: CE, ME, EEE, ECE, CSE, ISE, ETE PG Programs: MBA, accredited by NBA: 1.7.2022 to 30.6.2025, Recognized by Govt. of Karnataka and Affiliated to VTU, Belagavi)

INTERNAL QUALITY ASSURANCE CELL (IQAC)

B. Biofuel Plant

- The institute has a bio diesel production unit funded by Karnataka State Bio Energy Development Board. The center produces bio diesel using pongamia seeds and used cooking oil. The bio diesel is blended with diesel and is used in a few college buses. The excess quantity of bio diesel and its byproducts i.e., Pongamia cake, glycerin soaps are sold in the local market. A study on performance of biomass gasifier for power generation using wood and wood agro residue mixtures was carried out.

C. Use Of LED Bulbs/ Power Efficient Equipment

- Institute has Solar and LED based streetlights and indoor lighting systems. 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. Optimization of the college bus trips so as to minimize the fuel consumption. New purchases which are made keeping in mind the energy efficiency of the equipment viz. Air Conditioners LED Displays, Computers, Printers, Lab. equipment etc.

2) Management of the Various types of degradable and non-degradable waste

A. Solid Waste Management

- JNNCE Management has devised a system of segregation of the solid waste other than the food and organic waste. It includes the setting up of color-coded bins which differentiate between different types of wastes.
- The institute has a solid waste management system. The biodegradable waste from the campus and college hostel is converted to high grade organic manure and is used in the campus garden.

B. Liquid waste management

- Sewage Treatment Plant (STP) of capacity 1.5 lakhs liters per day is fully functional. The treated water is regularly tested in laboratories and is used for gardening there by saving huge fresh water for other purposes.




Principal
J N N College of Engineering
Shivamogga.



National Education Society (R.)

Jawaharlal Nehru New College of Engineering, Shivamogga



(Approved by AICTE, New Delhi, Certified by UGC 2f & 12B, Accredited by NAAC – 'B', UG programs: CE, ME, EEE, ECE, CSE, ISE, ETE PG Programs: MBA, accredited by NBA: 1.7.2022 to 30.6.2025, Recognized by Govt. of Karnataka and Affiliated to VTU, Belagavi)

INTERNAL QUALITY ASSURANCE CELL (IQAC)

3) Water Conservation

A. Rainwater Harvesting

The Institution has the facility of 10-million-liter capacity rainwater collection system. The water is collected from all the buildings in the campus and stored in a natural pond.

4) Green Campus Initiatives

The institutional initiatives for greening the campus are as follows:

A. Restricted Entry of Automobiles

Students Vehicles are restricted to a certain point in the campus. A cost-efficient safe transportation system existing in JNNCE discourages the students to bring their own vehicles.

B. Pedestrian Friendly Pathways

- Pedestrian Friendly pathways provided in the campus for easy access to all buildings.

C. Ban on use of Plastics.

- Institute has banned use of plastic in the campus. 'Awareness programs on 'litter-free campuses' are regularly created for students and staff.

D. Landscaping with Trees and Plants

- The college campus is spread over 39 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 College lawns have been brought under planned landscaping. The College now sports an enviable green lawn and gardens, maintained by a dedicated team of employees that enhance the beauty of the campus and the social experience of students.
- Plantation of saplings exercises are undertaken regularly where students and staff are involved in plantation of diverse species of plants. The College NSS wing conducts tree plantation of regular varieties of trees, as part of 'Vanmahotsav' every July.

5) Disabled friendly, Barriers free environment

- Institution Built building with ramps for easy access to classrooms in each block. Campus tour is supported by the Signage including tactile path, lights, display boards and signposts.




Principal
J N N College of Engineering
Shivamogga.