Electrical and Electronics Engineering

Vallurupalli Nageswara Rao Vignana Jyothi Institute of Engineering and Technology

TAMASOMA JYOTIRGAMAYA

Estd. 1995

- ✓ UGC Autonomous
- ✓ Accredited by NAAC with "A" grade
- ✓ Accredited by NBA
- ✓ Awarded as " College with Potential for Excellence" by UGC
- ✓ Ranked in 101-150 Band in NIRF

Contact Information
Ph. No. 040-23042575
Email Id. eeehead@vnrvjiet.in
Dr. K Veeresham
Associate Professor & Member IIIC
Ph.No. 9603441666
Email Id. veeresham_k@vnrvjiet.in

Key Statistics

- Established: 1995
- UG intake: 120
  PG intake: 12 (Power Electronics)
  12 (Power Systems)
- Faculty: 37
- Publications: 343+
- Citations: 1200+
- Patents: 11
- Research grant : ₹66.81 Lakh
- Research centres: Centre for Sustainable Energy Technologies
- MoUs with industry: 7

Faculty profile

Average experience of faculty : 12.08 years

PhD holders : 70%

Pursuing PhD: 30%

Faculty guiding PhD scholars: 7

Visiting Professor: Dr. M. Rama Moorthy, former Director General, CPRI

Adjunct faculty: Prof. M. Sydulu, Retd. Professor, NIT Warangal

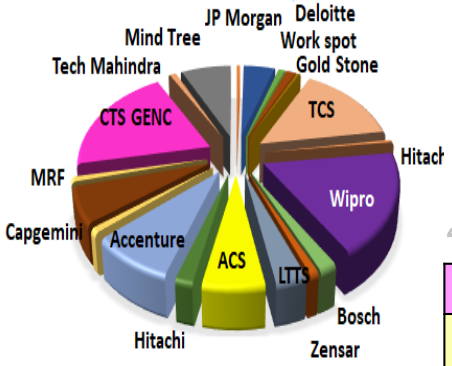
Minor degrees offered

- ❖ AI & ML
- ❖ IOT
- ❖ CYBER SECURITY
- ❖ DATA SCIENCE
- ❖ INNOVATION & ENTERPREUERSHIP

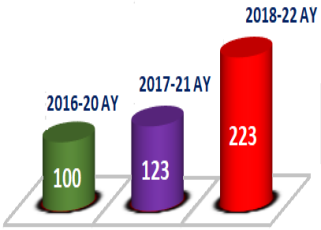
Laboratory courses offered

We believe in laboratory based teaching. Laboratory experience and projects are an integral part of the program in each semester. Core laboratories like circuits, Devices, Machines, Power, Control and Instrumentation provides a high quality visualization and strengthen Electrical Engineering fundamentals to students at both UG & PG levels. Advanced research organizations sponsored state of the art laboratories like Digital signal processing based control of Power electronic drives, Advanced computer applications to power system provide hands-on experience to make students industry ready.

PLACEMENT PROFILE



TOTAL NUMBER OF OFFERS



Average Package	5.6 Lakhs

Highest Placement	
Software	21 Lakhs
Core	7.5 Lakhs

Internships

Students undergo a mandatory 45 days internship programme after 6th semester. Students go as intern to companies like Schnieder, DRDO, BHEL, AP GENCO, TRANSCO and to premiere institutions like IIT's.

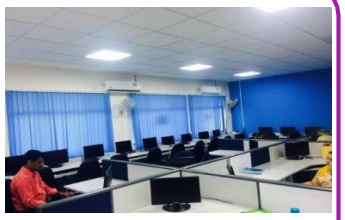
Campus recruitment

Past recruitment record of the students is impressive with 85% placement record in MNC's. Few of our past recruiters include following.

Programmes offered:
B. Tech in Electrical & Electronics
M. Tech in Power systems
M. Tech in Power electronics
Ph.D

Certification and Bridge courses

Students undergo minimum two Certification and Bridge courses apart from curriculum include training on technologies like Embedded control, Drives and Industrial Automation, Oracle SQL, Solar PV Technologies, Internet of Things etc. This also helps student to become eligible for inter disciplinary company's requirement.



Research Facilities in the Department

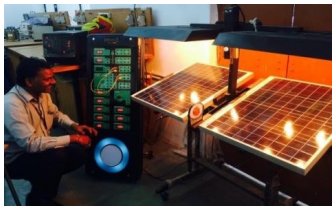
State of Art Laboratory infrastructure at the department gives learning by doing to student.

1. Four advanced computer labs provides advanced softwares like MATLAB, PSCAD, LabVIew, Mi Power, Power World, Ansys and CAD tools etc.
2. Advanced Digital Signal Processing Laboratory enables students to work on DSP Controllers like TMS 320F28335, 6748, Blakfin 609, ARM Micro controllers.
3. LabVIew -cRIO enables to realize real time monitoring and control of systems. Few industries can use for their Models validation
4. Solar PV Emulator enables student to test converters developed. Solar PV research & Training system is a plug and play training and research system industries can use for training their employees and for testing low power applications.
5. Power Monitoring SCADA system Developed in Control systems laboratory is equipped with advanced relay coordination systems to test and implement WAMS

Career Vision Approach

- Project–Based Learning
- Certificate Courses
- Online Courses
- Training Programmes
- Industry Internships
- Hardware Hackathons
- Software Hackathons
- Design Competitions
- Entrepreneurship Summits
- Technical Symposia
- Professional Societies

25 kWp PV Plant installed by Alumni



PV Training and research Experimentation facility

NI cRIO & TI DSP controllers for WAMS & Motor control Applications

FPGA based Permanent Magnet synchronous machine control

Student and Faculty Team with Tesla Coil Experiment

Student team at ZF Innovations Finals conducted by ZF India

Eminent Alumni

Mrs. Chandini Veeramachineni Guntulli graduted from Department in 2003 now presently working in NASA on cassini Space craft Project. Distinguished *alumni* of the department across the globe is one of the core strengths of department.

Student Projects with Societal Impact

It is mandatory that outcome of the research project completed by student should have direct or indirect societal impact. Few of the projects appreciated by industry and rural society are:

1. Autonomous drone for agricultural applications
2. Green transportation through e bike
3. Solar car
4. Smart spy cam ball for military surveillance

Research and development

UG and PG students has to complete research project (Hardware) in their ultimate and penultimate semester. Research areas in the department Broadly classified into:

1. Embedded control (DSP, ARM, FPGA controllers) of Power electronic converters for static and dynamic loads.
2. Control and Instrumentation
3. Power system monitoring and Control (WAMS, WACS and Reliability)
4. Renewable Energy Technologies

Sponsored projects: from various funding organizations like Department of Science and Technology (DST), UGC, AICTE.

1. "Development of AI based efficient and storage independent water pump for agricultural applications" **worth Rs. 12 Lakhs**
2. "Development of hierarchical structures for Solar desalination" **worth Rs. 40.72 Lakhs**
3. "Development of low-cost efficient charging station for EV charging applications" **worth Rs. 9 Lakhs**
4. "Design and Implementation of MPPT DC Link and Static converter for Smart and Micro grid Application" **worth Rs 2.85 Lakhs**

Student Achievements

Students excelled on various National and International platforms: Few of them are

1. Student team got 2nd Prize in Shodhana, competition held by NIRD for Autonomous drone for agricultural applications
2. Student got 2nd Prize in in robotics stream of N Vision competition held by IIT Hyderabad.

Faculty Achievements

Faculty excelled on various National and International platforms: Few of them are

1. Dr.N.Krishna Kumari, and Dr. D.Ravi Kumar of EEE Department have received Best Paper Award in "ICIEES'17" Springer Conference held in PSG College of Technology, Coimbatore
2. Dr.N.Krishna Kumari, Associate Professor and Mr. D.S.G. Krishna, Assistant Professor, EEE Department have received Best Paper Award in Conference in VIT, Vellore
3. Mr. P Ramesh , Assistant Professor Received Best Paper award for his contribution in Adaptive control of first order systems.
4. Dr. T. Nireekshana, Dr. J. Bhavani received Young Engineer award for their contributions in Power systems De regulation and Power electronic Drives
5. Research grants of Rs. 70 Lakh awarded to various faculty members of the department till now by various research organizations.

Dr.N.Krishna Kumari receiving Best Paper Award

Student team at final round in Rural Innovations competition at National Institute for Rural Development

Dr.D. Ravikumar representing department in International conference at Singapore