ONE YEAR CERTIFICATION COURSE / PG DIPLOMA IN
EMBEDDED SYSTEM DESIGN AND INTERNET OF THINGS
(2018-2019)
Organised by
Department of Electrical and Electronics Engineering
PSG College of Technology

COURSE PREAMBLE
The rapid growth in Semiconductor Technology and Software has fuelled the revolution of Embedded Systems, which has touched all sectors of economy. This course “PG Diploma in Embedded Systems and Internet of Things” provides a strong skill set in the areas of Embedded System Design, Real-Time Operating System based Embedded Software Development, Internet of Things, etc. Students will learn applications as diverse as Automotive Electronics, Robotics, Medical Electronics, Automation in Textile, Agriculture and Power Sectors to prepare them for a range of careers, where the skills they gain here will be in high demand. A substantial element of practical work given here will provide confidence for students in the development process of Embedded Hardware and Software Systems. This course offers a range of topics that are of immediate relevance to Industry 4.0 Revolution.

COURSE OBJECTIVES
The objectives of this course are
• To provide necessary skills to develop Embedded Systems for Real-Time Applications in various application domains.
• To provide hands-on training on various hardware and software platforms that are popularly being used in industrial applications.
• To provide an exposure to the concepts of Internet of Things, Cloud Computing, and Data Analytics.

COURSE OUTCOMES
On completing the course, the students will have
• Expertise to choose necessary hardware and software tools to design, implement, and test Embedded Systems.
• Expertise to design and implement Embedded System Networks using various Wired & Wireless Networking Protocols.
• Expertise to make everything smart by involving appropriate Sensors, Actuators, Processing Elements, Internet Gateways, and Cloud Computing Techniques.

COURSE STRUCTURE
PG Diploma in Embedded Systems and Internet of Things contains Four Theory Courses and Two Laboratory Courses. After completing all the six courses, the students have to do a project based on a topic that is relevant to industries.

1. Embedded Software Development (30 Hours)
2. Embedded Controllers and Applications (30 Hours)
3. Embedded System Networking (30 Hours)
4. Internet of Things (30 Hours)
5. Embedded System Design Lab (30 Hours)
6. Internet of Things Lab (30 Hours)
7. Project Work

COURSE FEES: Rs. 30,000 + Service Tax

ELIGIBILITY:
• M.E./M.Tech or B.E./B.Tech/Diploma in Electronics/ Electronics & Communication / Electrical / Electrical and Electronics/Instrumentation/ Biomedical /Computer Science/ Information Technology or M.Sc./B.Sc. in Electronics/ Instrumentation/ Computer Science/Information Technology.
• Candidates who have appeared in the qualifying examination and awaiting results may also apply.
• On the date of counseling/admission, the candidate must produce the original mark lists up to the last semester/year of examination

SCHEDULE:
Classes will be conducted during weekends or evenings based on the candidate’s convenience.

COURSE CO-ORDINATORS
• Dr. A. Soundarrajian
  Professor, Department of EEE
• Mr. M. Kathiresh
  Assistant Professor (Senior Grade), Department of EEE

For Admissions, Contact the Admission Counsellor, PSG CNCE, 0422-4344448, psgcnce@gmail.com
For Detailed Syllabi, Contact Mr. Kathiresh, 9843610033, mkh.eee@psgtech.ac.in