Summer Internship

Course Code	20EC3581A	Year	III	Semester	I
Course Category	Internship	Branch	ECE	Course Type	Internship
Credits	1.5	L-T-P	--	Prerequisites	--
Continuous Internal Evaluation:	--	Semester End Evaluation:	50	Total Marks:	50

Course Outcomes	
Upon successful completion of the course, the student will be able to	
CO1	Apply principles of engineering and modern tools to solve real time problems
CO2	Integrate theoretical learning in practical applications
CO3	Update continuously with latest technological developments for lifelong learning
CO4	Demonstrate professional, ethical and social responsibilities
CO5	Meet timelines, quality standards and financial resources
CO6	Develop reports and present effectively for improvement

Mapping of course outcomes with Program outcomes (CO/ PO/PSO Matrix)

Note: 1- Weak correlation 2-Medium correlation 3-Strong correlation

* - Average value indicates course correlation strength with mapped PO

COs	PO1	PO2	PO3	PO4	PO5	PO6	PO7	PO8	PO9	PO10	PO11	PO12	PSO1	PSO2
CO1	3	3	3	3	3	3	3	3	1	1	1	3	3	3
CO2			2	2		2		2	3	1	1	1	3	3
CO3	3	2	3	3	3		3		1	1	1	3	3	3
CO4			2	3			3	3	1	1	3	2	3	3
CO5			2	2					1	1	3	2		3
CO6	2	1	2	3	2	3			3	3	2	3	2	3

Course content

An academic internship is a structured, supervised, professional work experience within an organization. Internships are educational and career development opportunities, providing practical experience in a field or discipline. They are structured, short-term, supervised placements often focused around particular tasks or projects with defined timescales. An internship may be compensated, non-compensated or some time may be paid. The internship has to be meaningful and mutually beneficial to the intern and the organization. It is important that the objectives and the activities of the internship program are clearly defined and understood. Following are the intended objectives of internship training:

- Will expose Technical students to the industrial environment, which cannot be simulated in the classroom and hence creating competent professionals for the industry
- Provide possible opportunities to learn understand and sharpen the real time technical / managerial skills required at the job

- ❖ Exposure to the current technological developments relevant to the subject area of training.
- ❖ Experience gained from the 'Industrial Internship' will be analysed in classroom discussions
- ❖ Apply the Technical knowledge to real industrial applications
- ❖ Gain experience in writing Technical /projects reports
- ❖ Expose students to the engineer's responsibilities to society and ethics
- ❖ Familiarize with various materials, processes, products and their applications along with relevant aspects of quality control
- ❖ Promote academic, professional and/or personal development
- ❖ Expose the students to future employers
- ❖ Understand the social, economic and administrative considerations that influence the working environment of industrial organizations
- ❖ Understand the psychology of the workers and their habits, attitudes and approach to problem solving.

Electronic and Communication Engineering is one of the most versatile streams of engineering branching out into hardware, software as well as embedded. It gives you the flexibility to enhance logical and problem-solving skills while learning the general concepts of electrical, electronic as well as communication. A student in this specialization can undertake internships in any of the following areas based on his/her interest.

Hardware

Hardware designing is one of the primary aspects of electronics research. You can intern with one of the various companies involved in IC design, PCB design and Components design. During the internship he/she will learn about deep sub-micron technologies, electromagnetic theory concepts and the working of ICs

Software

The software of semi-hardware designing involves the programming part of the electronic hardware such as FPGA programming, Micro-controller programming, Digital Signal Processing (DSP), and HDL verification. He/she will also be using languages C, C++, Matlab and LabVIEW

Embedded

In the embedded system, he/she will integrate both hardware and software areas of research

Guidelines

1. The student has to complete the internship for a period of 4 to 6 weeks during summer vacation between VI Semester & VII Semesters.
2. The internship can be carried out in any industry / R&D Organization / Research Institute / Premier Educational Institutes like IITs, NITs and IIITs etc.

3. The registration process of internship should be completed before the commencement of IV-semester end examinations.
4. The registration process for internship involves:
    a) Students have to approach respective course coordinator with name of proposed company / organization in which they wish to carry out internship
    b) The Department shall nominate guide to supervise the interns
    c) Student has to obtain a no objection certificate (NOC) in the prescribed format from the department and submit the same to the respective organization.
    d) Student has to submit acceptance letter issued by the respective organization to the course coordinator.

1) The internal guide has to visit place of internship at least once during student's internship.
2) The students shall report the progress of the internship to the guide in regular intervals and seek advice
3) After the completion of Internship, students shall submit a final report along with internship and attendance certificates to the course coordinator with the approval of internal guide
4) The evaluation of internship shall be done during VII-Semester.
5) The student has to give a PPT presentation for duration of 10 to15 minutes in the presence of departmental evaluation committee consists of Head of the
6) Department, Programme Coordinator and concerned Industry Representative/ Industry Institute Interaction Coordinator.
7) After the successful presentation by the student, the evaluation committee recommends the result as satisfactory for the internship.
8) In case of students who have not registered for internship / not submitted the internship certificate and report, the VII-Semester result will not be declared till completion for that student.