

Nirma University
School of Technology, Institute of Technology
B. Tech (Instrumentation and Control Engineering)

Semester VIII

L	T	P	C
0	0	22	11

Course Code	2IC801
Course Title	Major Project/ Internship

Major Project / Internship

Major Project

Course Outcomes (CO):

At the end of the course, students will be able to -

1. make use of acquired knowledge for the problem identification and definition related to industry / research / societal need,
2. analyze the technical aspects of the project with a comprehensive and systematic approach,
3. select the appropriate modern tool(s) and technique(s) for problem solving,
4. propose and select the appropriate and cost effective solution,
5. appraise the importance of an individual / team for effective execution,
6. value the health, environment, safety and ethical practices during the project,
7. perceive the possibility of scalability and scope of intellectual property rights,
8. develop life-long learning skills for productive,
9. compile and conclude the project with effective communication amongst peers, mentors and society career.

Syllabus:

The major project will be aligned with the aims of the engineering program and its areas of specialization and shall be based on the recent trends in technology, computational techniques, system / process analysis, construction / fabrication / production techniques, design methodologies, analytical formulation and solution, etc. The student(s) shall carry out a comprehensive project at relevant Academic / R&D / Construction sites / Industrial & Consultancy organization based on one or more of the following aspects :- Prototype Design, Product Preparation / Development, Working Model, Fabrication of Set up, Laboratory Experiments, Process Modification / Development, Simulation, Software Application / Development, Integration of Software and Hardware, Data Analysis, Survey etc.

The student is required to submit a project report based on the work carried out.

Internship

Course Outcomes (CO):

At the end of the course, students will be able to -

1. support the theoretical learning with practice and integrate knowledge for engineering applications,
2. adapt to real time industry exposure and experience,
3. develop work habits, interpersonal skills and attitudes necessary for professional success,
4. evaluate the interests and abilities in the field of study,
5. appraise the importance of an individual and multidisciplinary team for effective execution,
6. build the career alternatives prior to graduation,
7. value the health, environment, safety and ethical practices during the internship,
8. develop lifelong learning skills for productive career / entrepreneurship,
9. compile and conclude the learning during internship with effective communication amongst peers, mentors and society.

Syllabus:

The aim of this course is to use the industrial internship experience to enable students to develop their engineering skills and practice. The students will be placed in industry / Construction site / Consultancy / research organization and assessed for academic credit. The internship will be aligned with the aims of the engineering program and its areas of specialization. Students are expected to experience a real-life engineering workplace and understand how their engineering and professional skills and knowledge can be utilized in industry. The internship focuses upon the demonstration of functioning engineering knowledge, both new and existing, and identification of areas of further development for future careers.

The student is required to submit a project report based on the work carried out.

L= Lecture, T= Tutorial, P= Practical, C = Credit