GUJARAT TECHNOLOGICAL UNIVERSITY

Bachelor of Engineering
Subject Code : 3180701
Semester – VIII
Subject Name: Internship/ Project

Type of course: Project work, seminar and internship in industry

Prerequisite: Computer Engineering courses (Basic science, Engineering Science and core courses), Effective Technical Communication and Design Engineering

Rationale: Industrial Training or Project work is required to enhance employability skills of the students. It provides practical experience in a field of Information Technology and help to reinforce theoretical knowledge gained in different courses to solve real life challenges. The students are given exposure to explore the new developments and techniques, which can lead them to self-employment or even employment generation through extension of the work done in project

Teaching and Examination Scheme:

Teaching Scheme			Credits	Examination Marks				Total Marks
L	T	P	C	Theory Marks		Practical Marks		
				ESE (E)	PA (M)	ESE (V)	PA (I)	
0	0	24	12	0	0	100	100	200

Content:

Final semester of Information Technology branch is dedicated to Major project work or Industrial Training
In a major project work, students are expected to:

Industrial Training:

Minimum twelve weeks in an Industry to get exposure to the practical aspects in the field Information Technology. In addition, the student may also work on a specified task or project which may be assigned to him/her by industry mentor or faculty. The outcome of the Industrial Training should be presented in the form of a report.

Objectives of Industrial Training:
- To expose students to the industrial environment
- To create competent professionals for the industry.
- To provide possible opportunities to learn, understand and sharpen the real time technical / managerial skills required at the job
- To work on a problem assigned by a mentor at industry, prepare action plan and complete within time limit
- Exposure to the current technological developments relevant to the subject area of training.
- Learn to apply the Technical knowledge in real industrial situations
- To learn, create/prepare report for Project/Framework/research as used in industry with productive (Data in a concise form) and efficient way (with action resolution).
- To explore possibilities of patent or research paper publications
- Expose students to the engineer's responsibilities and ethics.

- To become familiarize with various materials, processes, products and their applications along with relevant aspects of quality control.
- 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
- To strengthen industry-institute linkage and increase employability of the students

Guideline for Industrial Training:
- A student shall submit a brief proposal about the work to be carried out in the internship, to a committee formed by head of department within 3 weeks, after starting the internship.
- The internship shall be a full time for the whole duration.
- A detailed daily diary is supposed to be maintained by student. It shall be signed duly by the concerned supervisor of industry. It shall be submitted to the department.
- A comprehensive report is required to be prepared and submit to the department at the end of the semester. A certificate shall be attached with this report duly signed by the competent authority of the industry for the successful completion of the internship. An attendance report shall also be attached with this report.
- The internal evaluation shall be done at the start of the semester, at the mid of the semester and at the end of the semester. The internal marks shall be divided as decided by the head.
- An attendance report shall be sent to the department after every four weeks.
- A plan for the whole internship duration shall be prepared after joining the industry after consultation with the supervisor/mentor/guide of industry. It shall contain the activities/ visits to different sections etc with appropriate timelines.
- The project report shall be submitted to the institute which may include the objective of training, about the industry, process, product line, equipment/machineries involved, divisions/sections in the industry, any competitor, scope of some improvement in the process/product/efficiency, benefit by the training etc.
- The industry supervisor may be invited at the time of external examination of the internship, if possible. It can be an online presence.
- The evaluation by external examiner shall be made considering the all guidelines.

OR

Project
- To provide detailed and extensive explanation of the purpose and need of the project
- A Significant review of the previous work published in the literature pertaining to the topic of the investigation
- Perform proper analysis of technical, operational and economic aspects of the proposed work
- Identify methodology for the proposed work.
- Decide implementation method and list components or parts required.
- Point out practical difficulties faced during implementations and devise mechanism to solve them.
- Iterate design if feasible to obtain better results.
- Optimize the project design in terms of cost, area, power, computation complexity etc.
- Compare results of projects with other similar design specifications.

- Prepare project report and do presentation before department project committee.
- Conclude the project work and suggest future work.
- Intermediate and final seminar in presence of department project committee for review of the work done
- To explore possibilities of patent or research paper publications

Course Outcomes:

Sr. No.	CO statement	Marks % weightage
CO-1	Undertake problem identification, formulation and solution	20%
CO-2	Design engineering solutions to complex problems utilising a systematic approach and team work	30%
CO-3	Communicate with engineers and the community at large in written and oral forms	20%
CO-4	Demonstrate the knowledge and understanding of engineering and management principle and apply it to assigned project	30%

Reference:

- AICTE Model curriculum

- AICTE Internship Policy:

  https://www.aicte-india.org/sites/default/files/AICTE%20Internship%20Policy.pdf