GUJARAT TECHNOLOGICAL UNIVERSITY

BRANCH NAME: B.E.(PLASTIC TECHNOLOGY)
Subject Code: 3182301
Semester – VIII
Subject Name: Internship/Project

Type of course: Professional Core Course

Prerequisite: Plastics Material Science, Thermoset Plastics: Materials and Processing Techniques, Hydraulics & Pneumatics in Plastic Industry, Thermoplastic Materials, Injection Molding Technology, Plastics Testing I & II, Plastics Extrusion Technology, Plastic Mold & Die Design, Processing techniques for Thermoplastics, Kinetics and Rheology of Plastics, Fiber Reinforced Plastics and Composites, Speciality Plastics and Applications, Plastic Additives, Compounding and Blends, Plastic Recycling & Waste Management

Rationale: To enhance employability skills of the students, In-Plant Training is required. It provides practical experience in a field of Plastic Technology and help to reinforce the theoretical knowledge gained in different courses to solve real life challenges. The students are given exposure to explore the new technology and developments, which can lead them to self-employment or even employment generation.

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

The following guidelines are required to be followed for the in-plant training …
General Guidelines for In-plant Training
Content:

During 8th semester of Plastic Technology, every student of Plastic Technology branch will have to undergo in-plant training. The in-plant training would be of 12 credits. The in-plant training would be assigned to the students with the approval of Head, Plastic Technology department.

The total duration of the in-plant training would be for a period equal to the 16 calendar weeks. The duration will be divided into 2 phases of equal duration (8 weeks / phase).

A student can complete the entire 16 weeks duration in a single organization or can take in two different organizations for each of the phase.

The in-plant training could be of the following forms:

1. In-plant training in a company (Within state or out state) involved in R&D / Process design / Product Design /Manufacturing (QA / QC / Plant engineering / Production / Consultancy / Technical services / Engineering Projects)
2. At the end of 1st phase and 2nd Phase of in-plant training, each student needs to submit written report based on the work carried out during in-plant training with weekly diary. The report and weekly diary will be counter signed by the supervisor / in charge of company.

3. During 1st & 2nd phase of in-plant training, faculty from the institute need to visit the specific organization / industry to have the update regarding the progress of the student from the industry representative as well as to have interaction with the industry representative.
4. The performance of the student will be assessed based on the written report, weekly diary & a presentation to the committee consisting of two expert faculty members assigned from the University.
5. Generalized points need to be taken care by the students during the report preparation of in-plant training are:

- Company Profile, List of Raw Materials/Products, etc. of the industry & production capacity
- Process Flow Diagram
- Manufacturing operations & processes Involved
- Formulations/ raw materials and product testing
- Specifications of equipment & process parameters
- Trouble Shooting for product quality
- Safety measures of the plant /process/storage/machines.

Students will be assigned a grade based on the written report, weekly diary & a presentation evaluated by the committee of the expert faculty members.

Distribution of Marks					
R Level	U Level	A Level	N Level	E Level	C Level
5	10	30	30	10	15

Course Outcomes:

Sr. No.	**CO statement**	**Marks % weightage**
	At the end of this course, student will be able to	
CO-1	Explain the importance of raw materials / process / formulation for manufacturing of Plastic product.	20%
CO-2	Evaluate the process diagram; control/safety system implemented and use it for trouble shooting purpose.	30%
CO-3	Analyse process equipment performance and propose appropriate modification/better control action/optimized operational methods including flow sequences to enhance the economic output.	30%
CO-4	Design the product and testing the products as per standards.	20%

Reference:

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