GUJARAT TECHNOLOGICAL UNIVERSITY (GTU)

Competency-focused Outcome-based Green Curriculum-2021 (COGC-2021)
Semester-III

Course Title: Summer Internship-I
(Course Code: 4330001)

Diploma programme in which this course is offered	Semester in which offered
All Branches of Diploma Engineering	Third

1.   RATIONALE

Idea of Embedded Internships- AICTE has made 7-10 weeks summer internships mandatory in the new curriculum which will equip the students with practical understanding and training about industry practices in a suitable industry or organization. To make education holistic, sports, physical activities, values and ethics have been embedded in the curriculum. We strongly urge the institutions / universities / boards of technical education in India to adopt this Model Curriculum for various diploma disciplines. This is a suggestive curriculum and the concerned university / institution / board should build on and exercise flexibility in readjustment of courses / credits within the overall 120 credits in respective diploma programs.

We must agree that all Branches of Diploma Engineering are changing rapidly. New technologies are adding fast which effects can be seen in our society. Summer internship is a good option by which students to get flavor of such emerging technology and familiar with industry environment to identify scope and focus of their career development opportunities. Main objective of summer internship is hand-on practice to expose students for thinking about professional career by observing, understanding working mechanism of ongoing work of industry and to obtain various types of skills throughout internship program.

Two week mandatory internship is to equip the students with practical knowledge and provide them exposure to real time industrial environments. Further, this internships, option is provided to do internship in Government Agencies/ skill centers/ social sector/Govt. initiated social schemes/NGOs etc.

The duration of internship will be two weeks. It will be after completion of 2nd Semester and before the commencement of Semester 3rd. Any options from following can be chosen by the students:

1. **Offline internship in industry** - Student is supposed to produce joining letter and relieving letter once the internship is over in case of Offline internship in any industry.
2. **Online internships -** those are approved /supported / recommended by the All India Council of Technical education for Internship (like Internshala etc/NEAT/Gujarat Knowledge Society Initiative) or Approved by the state government or University approved
3. **A Mini Project** - On some suitable topic related to respective branch. It can be small fabrication / experimental results/ simulations/ Application development / Design and / or Analysis of System(s) etc. depending on the branch of the student. Preferably a single student should carry out a mini-project.

2.   COMPETENCY
The purpose of this course is to help the student to attain flavor of the following industry identified competency through summer internship experiences:

*   **Develop multiple types of skills such as planning, communication, collaboration, decision making / Problem solving and management skills along with selected technical knowledge.**

3.   COURSE OUTCOMES (COs)

The practical exercises, the underpinning knowledge and the relevant soft skills associated with the identified competency are to be developed in the student for the achievement of the following COs:

a) Learn and adopt the engineer's role and responsibilities with ethics.
b) Get exposure to the industrial environment for professional activities.
c) Get possible opportunities to learn, understand and sharpen the technical skills required for technical advancement.
d) Develop managerial skills required for professional career.
e) Attain skill for writing technical report and prepare poster for presentation.

4.   TEACHING AND EXAMINATION SCHEME

Teaching Scheme (In Hours)			Total Credits (L+T+P/2)	Examination Scheme				
				Theory Marks		Practical Marks		Total Marks
L	T	P	C	CA	ESE	CA	ESE	
0	0	0	1	0	0	25	25	50

1. **Offline internship in industry:** CA Assessment will be carried out based on submitted progress card by Industry resource person and ESE Assessment will be carried out by institute resources person.
2. **Online internships:** CA Assessment will be carried out based on submitted certificate and ESE Assessment will be carried out by institute resources person.
3. **A Mini Project:** CA and Assessment will be carried out based on project work by institute resources person.

*Legends: **L**-Lecture; **T** – Tutorial/Teacher Guided Theory Practice; **P** -Practical; **C** – Credit, **CA** - Continuous Assessment; **ESE** -End Semester Examination.*

List of Documents to be prepared for Submission:

- Detail report duly signed and approved by the internal/external mentor
- Presentation softcopy approved by the internal/external mentor
- Poster of summer internship activities approved by the internal/external mentor.

Summer Internship Registration Form

Note: Students needs to submit this registration form after finalizing mode of internship.

Student Details												
Enrollment Number												
Student Name												
Student Details	Mobile Number :											
	Email Address:											
Branch												
Code and Name of the Institute												
Mentor Details (Institute)	Name:											
	Designation:											
	Mobile No:											
	Email Address:											
Industry Details	Name:											
	Address:											
	Email:											
	Phone:											
	Website:											
Mentor Details (Industry)	Name:											
	Designation:											
	Mobile No:											
	Email Address											
Mode of Internship Carried Out	Online / Offline/ Mini Project											
Title of the Project/ Internship carried out												
Nature of Work Carried Out	Web Design / Application development (Web / Mobile), Experimental results/ simulations/ Analysis of System(s) etc… Other please Specify_____											

Student Signature   Faculty Signature

Suggested Letter for NOC

[Company or Institute
letterhead]

No: Date

TO WHOM SO EVER IT MAY CONCERN

This is to certify that, Mr./Mrs._____Enrollment No_____
Student of_____, has successfully completed a two week Internship in the field
of_____during the period of _____

During the period of his/her summer internship program with us, He / She were exposed to
following different processes and were found sincere and hardworking.

1. _____

2. _____

3. _____

Mentor Signature   Head of Department

Suggested Evaluation Rubrics for Industry/Institute

Evaluation Rubrics (Industry /Institute)

Enrollment No:_____   Branch:_____

Name of the Students: _____

Date of Evaluation: _____

Internal Evaluation – 50 Marks PA(I) (To be carried out by the mentor in consultation with Industry) Minimum Passing Marks: 25					
Parameter	Excellent	Good	Average	Not up the level of Satisfaction	Obtained Marks
Mark range	10-09	08-07	06-05	Below 5	
Knowledge acquisition in specific domain. **10 marks**					
Skill and attitude attainment in specific domain. **10 marks**					
Feedback and suggestions given are incorporated? **10 marks**					
Quality of the prepared report and poster **10 marks**					
Quality of the presentation. **10 marks**					
Total Marks Obtained Out of 50 PA(I)					

Internal Examiner Name:_____

Signature:_____

Note: For Summer Internship / Projects / Seminar etc. Evaluation is based on work done, quality of report, performance in viva-voce, presentation etc. The internal assessment is based on the student's performance in mid semester tests (two best out of three), quizzes, assignments, class performance, attendance, viva-voce in practical, lab record etc.

Suggested Evaluation Rubrics for Industry/Institute

Evaluation Rubrics (Industry /Institute)

Enrollment No:_____   Branch:_____

Name of the Students: _____

Date of Evaluation: _____

Parameter	Excellent	Good	Average	Not up the level of Satisfaction	Obtained Marks
Mark range	10-09	08-07	06-05	Below 5	
Student regularity during the Internship period and proactiveness/responsiveness towards the given tasks (**10 Marks**)					
Work Plan, Execution and quality of work in forms of Outcome achieved (**10 Marks**)					
Engineering Tools and Techniques (**10 Marks**)					
Quality of poster design and preseesntation (**10 Marks**)					
Quality of the report and Skill (**10 Marks**)					
Total Marks Obtained Out of 50 ESE(V)					

External Examiner Name:_____

Signature:_____

Note: For Summer Internship / Projects / Seminar etc. Evaluation is based on work done, quality of report, performance in viva-voce, presentation etc. The internal assessment is based on the student's performance in mid semester tests (two best out of three), quizzes, assignments, class performance, attendance, viva-voce in practical, lab record etc.

5.   AFFECTIVE DOMAIN OUTCOMES

The following affective Domain Outcomes (ADOs) are embedded in many of the above mentioned COs. More could be added to fulfill the development of this course competency.

a) Work as a leader/a team member as role of Engineer.
b) Practice environmentally friendly methods and processes.
c) Follow safety precautions and ethical practices.

9.   SUGGESTED STUDENT ACTIVITIES

Following are the suggested student-related curricular, **co-curricular** activities which can be undertaken to accelerate the attainment of the various outcomes in this course: Students should perform following activities and prepare reports and give presentation in front of students and faculty members. They should also collect/record physical evidences for their (student's) portfolio which may be useful for their placement interviews:

a) Perform various task given by industry resources person during offline internship.
b) Perform various task given during online internship.
c) Perform various task required to complete mini project work under guidance of faculty member.
d) Summer Internship program Interns are required to give a presentation before review committee consisting of a group of academic staff members.
e) The review committee gives feedback and suggests possible improvements in the work.
f) At the end of the program all the Summer Internship program Interns make a poster presentation of the work carried out. The poster presentation is open to the public. It is also evaluated by faculty members.
g) A completion certificate will be issued to all Summer Internship program Interns only after the completion of internship tenure.

12.   SOFTWARE/LEARNING WEBSITES

- https://www.internshala.com
- https://swayam.gov.in
- https://nptel.ac.in/
- **https://neat.aicte-india.org/**
- **https://www.edx.org/**
- **https://www.coursera.org/**
- **https://www.udemy.com/**

p
13.   PO-COMPETENCY-CO MAPPING

Semester I	Summer Internship (Course Code:)
	POs

Competency & Course Outcomes	PO 1 Basic & Discipline specific knowledge	PO 2 Problem Analysis	PO 3 Design/ development of solutions	PO 4 Engineering Tools, Experimen- tation & Testing	PO 5 Engineering practices for society, sustainability & environment	PO 6 Project Management	PO 7 Life- long learning
Competency	Use principles of basic electronics to maintain various electronics circuits and equipment						
CO1) Learn and adopt the engineer's role and responsibilities with ethics.	2	1	1	1	1	1	1
CO2) Get exposure to the industrial environment for professional activities.	1	1	1	1	1	-	-
CO3) Get possible opportunities to learn, understand and sharpen the technical skills required for technical advancement.	2	1	1	1	1	1	1
CO4) Develop managerial skills required for professional career.	1	-	-	-	-	1	1
CO5) Attain skill for writing technical report and prepare poster for presentation.	1	-	-	1	-	-	1

*Legend: '**3**' for high, '**2**' for medium, '**1**' for low and '**-**' for no correlation of each CO with PO.*

16.   COURSE CURRICULUM DEVELOPMENT COMMITTEE

GTU Resource Persons

Sr. No.	Name and Designation	Institute	Contact No.	Email
1	Jiger P. Acharya	GP, Ahmedabad	9429462026	jigeracharya@gmail.com
2	Alpeshkumar R. Thaker	GP, Ahmedabad	9879709675	alpeshrthaker@gmail.com
3	Umang D. Shah	GP, Ahmedabad	9427686364	Umang.shah111gp@gmail
4	Shri U. V. Buch	Gp Ahmedabad	9825346992	uvbuch@gmail.com