GUJARAT TECHNOLOGICAL UNIVERSITY (GTU)

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

Course Title: Internship Project
(Course Code: 4350704)

Diploma programme in which this course is offered	Semester in which offered
Computer Engineering	5th semester

1.   RATIONALE

Computer Engineering is emerging field that changes rapidly. New technologies are adding fastly which effects can be seen in our society. Summer internship is a good options 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, adopting mechanism of ongoing work of industry and to obtain various types of skills under internship programme.

The duration of internship will be six weeks. It will be started with commencement of 5th Semester. Any options from following can be opted by the students:

1. **Offline internship in industry** - Student is suggested to select branch specific training in IT Industry. Students are supposed to produce joining letter and relieving letter once the internship is over in case of Offline internship in any industry.
2. **Project** – In case student not able to find offline internship at industry students can develop project on some suitable topic related to respective computer engineering branch under faculty guidance. Additionally, Institute/ department may arrange technical sessions/ workshops from industry experts to give exposure to students about recent technologies and tools.

Students needs to report at institute every 15 days about progress to internal guide in suggested reporting format which is given in syllabus and represent his/her work carried out for monitoring and evaluation purpose.

2.   COMPETENCY
The purpose of this course is to help the student to attain the following industry identified competency through various teaching-learning experiences:

- **Develop effective programming skills, problem-solving abilities, and technical knowledge to design and develop innovative solutions during gaining hands-on experience for professional development opportunities.**

3.   COURSE OUTCOMES (COs)
The practical exercises, the underpinning knowledge, and the relevant soft skills associated with this competency are to be developed in the student to display the following COs:

The student will develop underpinning knowledge, adequate programming skills of competency for implementing various applications using python programming language to attain the following course outcomes.

a) Apply acquired knowledge to solve domain related societal problems.
b) Develop effective communication within academic and industrial environments.
c) Utilize industry-standard tools and technologies to design, develop, and test systems.
d) Apply problem-solving skills to resolve technical issues encountered in IT Industry.
e) Develop life-long learning skills for a successful professional career.

4.   TEACHING AND EXAMINATION SCHEME

Teaching Scheme (In Hours)			Total Credits (L+T/2+P/2)	Examination Scheme				
				Theory Marks		Practical Marks		Total Marks
L	T	P	C	CA	ESE	CA	ESE	
0	0	6	3	0	0	50	50	100

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. **Project:** CA and ESE 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:

1. All 15 Days Work Report Sheet signed by internal guide (suggested format given in syllabus).
2. Student Attendance Sheet Report for summer internship (suggested format given in syllabus).
3. Detail report duly signed and approved by the internal/external mentor.
4. Presentation softcopy approved by the internal/external mentor.
5. Poster of summer internship activities approved by the internal/external mentor.

Note: Faculty should inform students in advance about summer internship or project as First six weeks will be as summer internship project. So students

needs to finalize offline training from industry or project at institute before commencement of 5ᵗʰ semester and report at institute.

Summer Internship Project Registration Form

Note: Students needs to submit this registration form after finalize mode of internship and before starting Internship project.

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	Offline internship in industry / Project at institute											
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

Internship/ Project -Suggested Letter for Completion

[Company /Institute/
Department letter head]

No: Date

TO WHOM SO EVER IT MAY CONCERN

This is to certify that, Mr. / Mrs. _____

Enrollment No._____ Student of _____

Has successfully completed a six-week Internship in the field of_____

From the date:_____ to date: _____

[90% Attendance is mandatory for completion of Internship]

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. _____

4. _____

Mentor Signature with stamp

SUGGESTED 15 DAYS WORK SHEET REPORT	
Student Name :	
Enrollment No:	
Internship/Project Title	
Tools and Technologies	
Company/ Organization Name	

Student's Activity Details:

Week Number	Start Date to End Date	Tasks to be assigned	Tasks to be completed	Remarks

Signature of Company Person

[TO BE FILLED BY INTERNAL GUIDE/FACULTY ONLY]
Any Suggestion/Remarks:

Signature of Internal Guide/Faculty

SUGGESTED STUDENT ATTENDANCE SHEET REPORT

ORGANIZATION INFORMATION

Organization Name	
Organization Address	
Organization Email ID	

STUDENT INFORMATION

Name of Student :			
Enrollment NO :		Name of Course:	
Date of Commencement of training:		Date of Completion of Training	
Internship/ Project Title			

Student's Attendance Sheet

Week No	Day of week (- >)	Day1	Day2	Day3	Day4	Day5	Day6	COUNT (present day)
Week 1	Date							
	PR/AB							
Week 2	Date							
	PR/AB							
Week 3	Date							
	PR/AB							
Week 4	Date							
	PR/AB							
Week 5	Date							
	PR/AB							
Week 6	Date							
	PR/AB							
Total Count of student's presents during internship								
Total Working days of company during internship								
Student's percentage present during internship								

NOTE :
1. Attendance sheet should be submitted after completion of training to internal guide of institute/department.
2. Holidays should be marked in RED INK.
3. Absent should be marked as "AB" in RED INK.

| Signature of Company internship person with company stamp/seal : |
| Name of Company internship person: |
| Contact No of Company internship person : |

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.

6.   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 tasks given by industry resources person during offline internship.
b) Perform various tasks required to complete project work under guidance of faculty member.
c) Summer Internship program Interns are required to give a presentation before the review committee consisting of a group of academic staff members.
d) The review committee gives feedback and suggests possible improvements in the work.
e) 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.
f) A completion certificate will be issued to all Summer Internship program Interns only after the completion of internship tenure.

7.   REFERENCE

- AICTE Internship Policy.pdf (aicte-india.org)

8.   PO-COMPETENCY-CO MAPPING

| **Semester V** | **Internship/Project (Course Code: 4350706)** |

Competency & Course Outcomes	POs and PSOs						
	PO 1 Basic & Discipline specific knowledge	PO 2 Problem Analysis	PO 3 Design/ development of solutions	PO 4 Engineering Tools, Experimentation &Testing	PO 5 Engineering practices for society, sustainability & environment	PO 6 Project Management	PO 7 Life-long learning
Competency Develop effective programming skills, problem-solving abilities, and technical knowledge to design and develop innovative solutions during gaining hands-on experience for professional development opportunities.							
Course Outcomes a) Apply acquired knowledge to solve domain related societal problems.	2	2	1	2	1	1	1
b) Develop effective communication within academic and industrial environments.	1	1	1	1	1	1	1
c) Utilize industry-standard tools and technologies to design, develop and test systems.	2	2	2	3		1	1
d) Apply problem-solving skills to resolve technical issues encountered in IT Industry.	2	3	2	1	1		1
e) Develop life-long learning skills for a successful professional career.	1	1	1	1			2

Legend: '**3**' for high, '**2**' for medium, '**1**' for low or '**-**' for the relevant correlation of each competency, CO, with PO/ PSO

9.   COURSE CURRICULUM DEVELOPMENT COMMITTEE

GTU Resource Persons

Sr. No.	Name and Designation	Institute	Email
1	Alpeshkumar R. Thaker	GP, Ahmedabad	alpeshrthaker@gmail.com
2	Umang D. Shah	GP, Ahmedabad	umang.shah111gp@gmail.com