

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	5 th semester

1. RATIONALE

Computer Engineering is emerging field that changes rapidly. New technologies are replacing older one very quickly whose effects can be seen in our society. Internship Project is a opportunity for the students to get flavor of such emerging technology and familiar with industry environment to identify scope as well as focus of their career development path. The main objective of the internship is to get hands-on practice. In turn it will help students to lay down a path for their further professional career by observing, understanding, adopting mechanism of working in the industry. Students will also develop various types of skills by pursuing the internship project programme.

The duration of internship will be six weeks. It will be after completion of 4th Semester and in the beginning of the commencement of Semester 5th. Any options from following can be chosen by the students:

1. Internship in the industry - The student is suggested to select branch-specific training in the IT or relevant Industry where they learn the skills. The student shall produce a joining letter in the beginning and relieving letter after the completion of the internship. It is desirable to do the internship offline. In the case of the online conduction mode, the student has to submit supporting evidence in the form of a screenshot and activity log report of the conducted session along with other necessary documents.

2. Project – If student is not able to carry internship in the industry, student may develop a project on 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. It can be fabrication / experimental results/ simulations/ Application development / Design and / or Analysis of System(s) etc. related to the emerging technologies of the Computer/IT.

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 solve challenge innovatively while 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 tools and technologies to attain the following course outcomes.

- Apply acquired knowledge to solve domain related societal problems.
- Develop effective communication within academic and industrial environments.
- Utilize industry-standard tools as well as technologies to design, develop, and test the systems.
- Apply problem-solving skills to resolve technical issues encountered in IT Industry.
- 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				Total Marks
				Theory Marks		Practical Marks		
L	T	P	C	CA	ESE	CA	ESE	
0	0	6	3	0	0	50	50	100

- Internship in industry:** CA Assessment will be carried out based on submitted progress card by Industry resource person, Institute resource person and ESE Assessment will be carried out by Examiner.
- Project:** CA and ESE Assessment will be carried out based on project work by institute resource person(s) and Examiner.

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:

- Student has to submit Work Report Sheet duly signed by industry resource person and internal guide fortnightly (suggested format given in syllabus).
- Student Attendance Sheet Report (suggested format given in syllabus) duly signed by industry resource person. In the case of the online internship, student has to take screenshot of daily attended session in softcopy and submit to institute resource person by email for every 15 days.
- Detailed report of said work approved and duly signed by the institute and/or industry resource person.
- A softcopy of Presentation approved by the institute and/or industry resource person.

5. A Poster showing overall work carries out during the Internship project approved by institute and/or industry resource person.

Note: Faculty should counsel as well as inform students in advance about the internship or project. Student needs to finalize training from industry or project at institute before commencement of 5th semester and report at institute.

Internship Project Registration Form

Note: Students needs to submit this registration form after finalize mode of internship and before starting of 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	Internship in industry (offline/online mode) / 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 internship project with us, He / She were exposed to following different processes and were found sincere and hardworking.

1. _____

2. _____

3. _____

4. _____

**Resource Person 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 Industry Person

[TO BE FILLED BY INTERNAL GUIDE/FACULTY ONLY]

Any Suggestion/Remarks:

Signature of Institute Resource/Faculty

<u>SUGGESTED STUDENT ATTENDANCE SHEET REPORT</u>								
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 Industry resource person with Industry stamp/seal :								
Name of Industry internship person:								
Contact No of Industry resource 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 internship project.
- b) Perform various tasks required to complete project work under guidance of faculty member.
- c) Internship project interns are required to give a presentation to 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 Internship project 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 Internship project interns only after the completion of internship tenure.

7. REFERENCE/LEARNING WEBSITES

- [AICTE Internship Policy.pdf \(aicte-india.org\)](#)
- <https://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>

8. PO-COMPETENCY-CO MAPPING

Semester V	Internship/Project (Course Code: 4350706)						
	POs and PSOs						
Competency & Course Outcomes	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 solve challenge innovatively while 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