GUJARAT TECHNOLOGICAL UNIVERSITY (GTU)

Competency-focused Outcome-based Green Curriculum-2023 (COGC-2023)
Semester-V

Course Title: Summer Internship-II
(Course Code: 4352205)

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

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.

Mining Engineering Branch of Diploma Engineering is constantly evolving and new technologies are emerging in our mining industry. Summer internship is a good option by which students get exposure 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 to provide hands-on practice to students to bridge the gap between academics and industrial environment and to obtain various types of skills throughout internship program.

This four-week mandatory internship is to equip the students with practical knowledge and provide them exposure to real time industrial environments. Further, in these internships, the option is provided to do internship in Industries/ Consultancies/ Government Agencies/ skill development centres / social sector/ Govt. initiated social schemes/ NGOs etc. The duration of internship will be four weeks after completion of 4th Semester and before the commencement of 5th Semester.

1. **Offline internship in industry** - Student is supposed to produce joining letter for starting and relieving letter once the internship is over in case of Offline internship in any industry.
2. **Online internships –** Student can select from any of approved /supported / recommended by the All-India Council of Technical education for Internship (like Internshala / NEAT/ Gujarat Knowledge Society Initiative etc.) 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 flavour of the following industry identified competency through summer internship experiences:

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

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 their 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 reports and presentations.

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	6	3	0	0	50	50	100

1. **Offline internship in industry:** CA 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 will be carried out based on submitted certificate and ESE/ Assessment will be carried out by institute resources person.
3. **A Mini Project:** CA 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:

- Student has to prepare a detailed report duly signed and approved by the internal/external mentor. A copy of report can be kept in the departments for record.
- The presentation of softcopy by student for Internship/ Mini project.
- Student should produce successful completion certificate in case of summer internship in industry.

Sample forms for Registration and Evaluation of Summer Internship-II –SI-II are given below:

1) Both forms are mandatory to be filled at the commencement and completion of SI respectively.
2) Mapping will be done to ease CA and ESE Evaluations.

3) A Seminar / Webinar can be arranged so that students coming from different industry / institute / project background can share experiences and learnings to their peers / all students of the same department.

4) Attached formats for Registration, Completion and Evaluation are suggestive. But, adhering to these formats is anticipated.

REQUEST LETTER FROM INSTITUTE TO INTERNSHIP PROVIDER

To,   Date: ……./……./………
The General Manager (HR)
…………………………………
…………………………………
 Subject: Request for 04 Weeks Industrial Internship for Diploma Programme Students.
Dear Sir,
You must be aware that AICTE has made internship mandatory for all technical education students.
In view of the above, I request your good self to allow our following students of Diploma Mining Engineering for practical training in your esteemed organization. Kindly accord your permission and give at least one-week time for students to join training after confirmation.

S. No.	Enrolment number	Name

A line of confirmation will be highly appreciated.

With warm regards,
…………………………………
…………………………………

Summer Internship-II Registration Form

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

Student Details											
Enrolment Number											
Student Name											
Student Details	Mobile Number:										
	Email Address:										
Branch											
Code of the Institute	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	Online / Offline/ Mini Project										

Out	
Title of the Project/ Internship carried out	
Nature of Work Carried Out	As per the industrial visit diary given by the department. Other please Specify_____

Student Signature   Faculty Signature

Summer Internship-II -Suggested Letter for Completion

[Company or Institute letter head]

No: Date

TO WHOM SO EVER IT MAY CONCERN

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

Enrolment No.   Student of

███████████████   ████████████████████

Has successfully completed a four-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   **Head of Department**

Stamp   Stamp

Summer Internship-II -Evaluation Rubrics for Institute

Evaluation Rubrics (Institute)

Enrolment No:					
Name of the Students:					
Date of Evaluation:					
Internal Evaluation – 50 Marks CA **(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	**8-10**	**6-7**	**4-5**	**Below 4**	
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 (10 Marks)					

Quality of the presentation. (10 Marks)					
Total Marks Obtained Out of 50 PA(I)					

Signature: _____Institute Resource Examiner Name: _____

Suggested Evaluation Rubrics for Industry

Evaluation Rubrics (Industry)

Enrolment No:
Name of the Students:
Date of Evaluation:

External Evaluation – 50 Marks ESE(V)
(To be carried out by the Industry Supervisor) Minimum Passing Marks: 25

Parameter	Excellent	Good	Average	Not up the level of satisfaction	Obtained marks
Mark range	**8-10**	**6-7**	**4-5**	**Below 4**	
Student regularity during the Internship period and proactiveness/responsivenes towards the given tasks (10 Marks)					
Work Plan, Execution & quality of work in forms of Outcome achieved (10 Marks)					
Engineering Tools & Techniques (10 Marks)					
Quality of Presentation & viva voce. (10 Marks)					
Quality of the report & Skill (10 Marks)					
Total Marks Obtained Out of 50 ESE					

Signature: _____Industry resource/ Examiner Name: _____
Common Note:

1. For Summer Internship / Projects / Seminar etc. Evaluation is based on work done, quality of report, performance in viva-voce, presentation etc. The internal / external assessment is based on the student's performance in viva-voce /work record respectively.

2. In case Industry Supervisor is not available / Institute Mentor/ Faculty can fill up both.

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 team leader or as a team member.
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 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) A completion certificate will be issued to all Summer Internship program Interns only after the completion of internship tenure.

7. SOFTWARE / LEARNING WEBSITES

An internship is a short-term work program usually offered to students by companies and institutes who require staff for assistance at junior levels. Thus, for the students undergoing internship a professional learning experience is provided to benefit them in their skills as well as career. It will brush existing skills and provide exposure to new skills. Generally, it is provided at an entry level in the industry.
Here is a suggestive list for reference only.
i.   http://www.gksgujarat.org/
ii.   https://anubandham.gujarat.gov.in/home
iii.   https://kaushalyaskilluniversity.ac.in/
iv.   https://www.internshala.com
v.   https://swayam.gov.in
vi.   https://nptel.ac.in/
vii.   https://neat.aicte-india.org/
viii. https://www.edx.org/
ix.   https://www.coursera.org/
x.   https://www.udemy.com/

xi.   https://www.linkedIn.com
xii.   https://www.stumags.com
xiii.   https://www.letsintern.com
xiv.   https://www.internship.com
xv.   https://www.glassdoor.com

8. PO-COMPETENCY-CO MAPPING

Semester V	Summer Internship II (Course Code:4355105)						
	POs						
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 mining engineering skills, problem-solving abilities, and technical knowledge to design and develop innovative solutions during gaining hands-on experience for professional development opportunities.						
CO1) Learn and adopt their role & responsibilities with ethics.	3	2	2	2	2	2	3
CO2) Get exposure to the industrial environment for professional activities.	3	2	2	2	2	2	3
CO3) Get possible opportunities to learn understand &sharpen the technical skills required for technical advancement.	3	2	2	2	2	2	3
CO4) Develop							

managerial skills required for professional career.	3	2	2	2	2	2	3
CO5) Attain skill for writing technical report and presentation.	3	2	2	2	2	2	3

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

9. COURSE CURRICULUM DEVELOPMENT COMMITTEE
GTU Resource Persons

Sr. No.	Name and Designation	Institute	Contact No.	Email
1	Mr. S. G. Srivastav	I/C HOD, Mining Engineering Dept., GP, Bhuj	9998131511	shivkumarsrivastav11@gmail.com