

INSTITUTE	FACULTY OF TECHNOLOGY
PROGRAM	MASTER OF TECHNOLOGY in CHEMICAL ENGINEERING
SEMESTER	4
COURSE TITLE	PROJECT-II
COURSE CODE	01CM1401
COURSE CREDITS	16

Objective:

- 1 This course aims at providing opportunity to chemical engineering students for conducting their project work via industrial training or university based experimental/mathematical problems.

Course Outcomes: After completion of this course, student will be able to:

- 1 Understand the project methodology in a through manner
- 2 Analyze the available technical solutions for a particular chemical engineering problem
- 3 Formulate the methodology and experimental investigations for effective execution of their chosen project
- 4 Document and publish their research finding for wide publicity and acceptance to scientific communities

Pre-requisite of course: This course aims at providing opportunity to chemical engineering students for conducting their project work via industrial training or university based experimental/mathematical problems.

Teaching and Examination Scheme

Theory Hours	Tutorial Hours	Practical Hours	ESE	IA	CSE	Viva	Term Work
0	0	32	0	0	0	200	100

Contents : Unit	Topics	Contact Hours
Total Hours		

Suggested List of Experiments:

Contents : Unit	Topics	Contact Hours
1	PROJECT-II Topics (Any one) 1. Research Work Student-led investigation under faculty supervision on recent chemical engineering challenges or innovations. 2. Industry Defined Problems (IDP) Problem statement provided by industry partners. Students propose and validate feasible solutions. 3. User Defined Problems (UDP) Problems selected by students from areas of interest including labs, society, or academics. 4. Social Impact Problems Projects that apply chemical engineering principles to improve society, environment, or public health.	448
Total Hours		448

Textbook :

- 1 How to Do Your Research Project: A Guide for Students, , Gary Thomas,, SAGE Publications Ltd,, 2017

References:

- 1 Doing your research project: a guide for first-time researchers., Doing your research project: a guide for first-time researchers., Bell, J., & Waters, S. , McGraw-hill education,, 2018

Suggested Theory Distribution:

The suggested theory distribution as per Bloom's taxonomy is as follows. This distribution serves as guidelines for teachers and students to achieve effective teaching-learning process

Distribution of Theory for course delivery and evaluation					
Remember / Knowledge	Understand	Apply	Analyze	Evaluate	Higher order Thinking / Creative
10.00	20.00	25.00	25.00	10.00	10.00

Instructional Method:

- 1 The internal evaluation will be done on the basis of continuous evaluation of students in the project work as review and laboratory work.
- 2 Students will use supplementary resources such as online videos, NPTEL videos, ecourses, Virtual Laboratory

Supplementary Resources:

- 1 <https://archive.nptel.ac.in/courses/110/105/110105087/>