INSTITUTE	**FACULTY OF TECHNOLOGY**
PROGRAM	**MASTER OF TECHNOLOGY in CHEMICAL ENGINEERING**
SEMESTER	**3**
COURSE TITLE	**PROJECT-I**
COURSE CODE	**01CM1306**
COURSE CREDITS	**10**

Objective:

1 This course will impart knowledge on the applied part of various chemical engineering principles for solving a chemical engineering domain specific problem.

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

1 Identify and define chemical engineering problems
2 Apply chemical engineering concepts in project work
3 Demonstrate independent project management and teamwork skills
4 Communicate technical findings clearly and critically.

Pre-requisite of course: This course will impart knowledge on the applied part of various chemical engineering principles for solving a chemical engineering domain specific problem.

Teaching and Examination Scheme

Theory Hours	Tutorial Hours	Practical Hours	ESE	IA	CSE	Viva	Term Work
0	0	20	0	0	0	100	50

Contents : Unit	Topics	Contact Hours
Total Hours		

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Suggested List of Experiments:

Contents : Unit	Topics	Contact Hours
1	**PROJECT-I** 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.	280
Total Hours		**280**

Textbook :

1 Project management for business, engineering and technology, , Nicholas, J. M., Nicholas, J., & Steyn, H., Routledge., 2010

References:

1 Chemical engineering design project: a case study approach, Chemical engineering design project: a case study approach, Ray, M. S., CRC Press, , 2020

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://www.coursera.org/learn/introduction-experimental-design-basics

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