



Lok Jagruti Kendra University
University with a Difference

Diploma in Mechanical Engineering



Course Code: 025060605

Project- II

Programme / Branch Name				Diploma in Mechanical Engineering		
Course Name	Project- II				Course Code	025060605
Course Type	HSSC	BSC	ESC	PCC	OEC	PEC

Legends: HSSC: Humanities and Social Sciences Courses BSC: Basic Science Courses
 ESC: Engineering Science Courses PCC: Program Core Courses
 OEC: Open Elective Courses PEC: Program Elective Courses

1. Teaching and Evaluation Scheme

Teaching Hours / Week				Evaluation Scheme			
L	T	P	Total Credit	CCE	SEE (Th)	SEE (Pr)	TOTAL
0	0	10	5	100	-	100	200

Legends:

L: Lectures T: Tutorial P: Practical
 CCE: Continuous & Comprehensive Evaluation
 SEE (Th): Semester End Evaluation (Theory)
 SEE (Pr): Semester End Evaluation (Practical)

2. Prerequisites

- ✓ Application learned concepts from the previous semester's studied courses.

3. Rationale

Project Work aims at developing innovative skills in the students whereby they apply in totality the knowledge and skills gained through the course work in the solution of a particular problem or by undertaking a project. In addition, the project work is intended to place students for project-oriented practical training in actual work situations for the stipulated period. Plan, use, monitor, and control resources optimally and economically. Identify the problem and apply innovative, creative, and logical approaches for problem solving.

4. Objectives

- ✓ Learn the objective of this project is to provide an opportunity for the students to implement skills acquired in the previous semesters to practical problems/problems faced by industry/development of new facilities
- ✓ Plan and identify materials, processes, and other resources optimally.
- ✓ Develop innovative and creative ideas.
- ✓ Develop leadership, interpersonal skills, and team work.
- ✓ Develop a sense of environmental responsibility.
- ✓ Purchase raw materials/standard parts.
- ✓ Interpret the drawings, manufacture, assemble, inspect & if necessary modify the parts/unit/assembly of the project work.
- ✓ Familiar with fast changes in technology.

5. List of Practicals / Exercises

The practicals/exercises have been properly designed and implemented in an attempt to develop different types of skills so that students can acquire the competencies/program outcomes. Following is the list of practicals/exercises.

Sr. No.	Practical / Exercises	Key Competency	Hours
1.	Preparatory activities: i. Keep project report of V semester course Project-I ii. Recall and strengthen know-how for engineering drawing fundamentals which includes: i. Most commonly used limits and fits with values. ii. Various machining processes and surface roughness symbols iii. Evaluate all the projects drawings and select feasible project for execution in batch. iv. Recheck and correct (Minor corrections) if necessary, project production drawings of selected projects (The project drawings of the student prepared in course Project –I)	<ul style="list-style-type: none"> Understand the learning objective of different processes, machines and materials. 	4
2.	Work allocation matrix: Prepare work allocation matrix along with provision of follow-up remarks and notes.	<ul style="list-style-type: none"> To prepare and maintain the work allocation matrix with notes and remarks. 	40
3.	Project execution: Execute project preparation activities as per work allocation matrix.(Option of flexi time based work can also be practiced. For this option,it may not be necessary to exactly follow the time table slots. This can be on continuous base also.)	<ul style="list-style-type: none"> To participate effectively in group work. To analyse and synthesise the data. To make appropriate decision. Manage human resources at the shop-floor Maintain books of accounts and take financial decisions. To execute final model working. 	40
4.	Documentation and presentation: Documentation of final project report which includes following in sequence. i. Title page ii. Certificate iii. Index. iv. Preface/Acknowledgement. v. Course outcomes. vi. Project title. vii. Assembly and detail production drawings. viii. List of activities and work allocation matrix.	<ul style="list-style-type: none"> To prepare the final report based on the different data. Detailed project report including technical, economic and market feasibility. Common errors in project report preparations. 	

	ix. Plant layout with dimensions. x. List and specifications of machineries, equipments and tools. xi. Bill of material with make or buy decision. xii. Specifications of bought out parts. xiii. Process sheets-As per format given in course Industrial engineering. xiv. Flow process charts. xv. Specification and consumption of consumables. xvi. Details of inspection / testing carried out. xvii. Details of rework / rectifications carried out. xviii. Cost estimation. xix. Monitoring and control report/sheet. xx. Notes on troubleshooting. xxi. Notes on individual achievement of skills / experience/problems / solutions. xxii. References. xxiii. Day to day logbook. xxiv. Presentation including moments at work- video/photographs in action		
Total Hours			84

6. Suggested Specification Table for Evalaution Scheme

Unit No.	Unit Name	Distribution of Topics According to Bloom's Taxonomy					
		R %	U %	Ap %	C %	E %	An %
1.	Introduction	-	-	-	-	-	-
2.	Work allocation matrix	-	-	-	-	-	-
3.	Project execution						
4.	Documentation and presentation	-	-	-	-	-	-

Legends: R: Remembering U: Understanding
 App: Applying C: Creating
 E: Evaluating An: Analyzing

7. Open Sources (Website, Video, Movie)

- 1) Use of Library
- 2) Reference books
- 3) Handbooks
- 4) Encyclopaedia
- 5) Magazines
- 6) Periodicals
- 7) Journals
- 8) Visits of industry, and organizations related as per the requirement
- 9) Internet