

## **Diploma in Mechanical Engineering**

#### Semester - III

#### **Scheme of Studies:**

| S.  | Board of                                   | Course       | Course Titles                                     | Scheme of Studies<br>(Hours/Week) |   |    |                     |  |
|-----|--|--------------|---|-----------------------------------|---|----|---------------------|--|
| No. | Study                                      | Code         |   | L                                 | Р | Т  | Credit<br>L+T+(P/2) |  |
| 1   | Electrical &<br>Electronics<br>Engineering | 2037351(025) | Basic Electrical and Electronics                  | 2                                 | - | 1  | 3                   |  |
| 2   | Mechanical<br>Engineering                  | 2037352(037) | Strength of Material                              | 2                                 | - | 1  | 3                   |  |
| 3   | Mechanical<br>Engineering                  | 2037353(037) | Thermal Engineering                               | 2                                 | - | 1  | 3                   |  |
| 4   | Mechanical<br>Engineering                  | 2037354(037) | Machine Drawing and Computer Aided Drafting       | 2                                 | - | 1  | 3                   |  |
| 5   | Mechanical<br>Engineering                  | 2037355(037) | Material Technology                               | 2                                 | - | 1  | 3                   |  |
| 6   | Electrical &<br>Electronics<br>Engineering | 2037361(025) | Basic Electrical and Electronics (Lab)            | -                                 | 2 | -  | 1                   |  |
| 7   | Mechanical<br>Engineering                  | 2037362(037) | Strength of Material (Lab)                        | -                                 | 2 | -  | 1                   |  |
| 8   | Mechanical<br>Engineering                  | 2037363(037) | Thermal Engineering (Lab)                         | -                                 | 2 | -  | 1                   |  |
| 9   | Mechanical<br>Engineering                  | 2037364(037) | Machine Drawing and Computer Aided Drafting (Lab) | ı                                 | 4 | -  | 2                   |  |
| 10  | Mechanical<br>Engineering                  | 2037365(037) | Material Technology (Lab)                         | -                                 | 2 | -  | 1                   |  |
| 11  | Humanities                                 | -            | Health, Hygiene and Yoga                          | -                                 | 2 | -  | -                   |  |
| 12  | -  | -            | Library   | -                                 | 2 | -  | -                   |  |
|     | Total                                      |              |   |                                   |   | 05 | 21                  |  |

L- Lecture,

**T-** Tutorial,

P- Practical,

Lecture (L)→ CI Classroom Instruction (Includes different instructional strategies i.e Lecture and others).

Practical (P)→LI Laboratory Instruction (Includes practical performances in Laboratory workshop, field or other locations using different instructional strategies).

Tutorial (T)→ Includes sessional work (SW) (assignment, seminar, mini project etc), Self Learning (SL).



## **Diploma in Mechanical Engineering**

## Semester - III

### **Scheme of Examination:**

| S.  | Board of                                   | Course       | Course Titles   | Scheme of Examination |     |     |     |       |       |  |
|-----|--|--------------|---|-----------------------|-----|-----|-----|-------|-------|--|
| No. | Study                                      | Code         | oourse rides  | Theory                |     |     | Pra | Total |       |  |
|     | -  |              |   | ESE                   | СТ  | TA  | ESE | TA    | Marks |  |
| 1   | Electrical &<br>Electronics<br>Engineering | 2037351(025) | Basic Electrical and Electronics                        | 70                    | 20  | 30  | -   | -     | 120   |  |
| 2   | Mechanical<br>Engineering                  | 2037352(037) | Strength of Material                                    | 70                    | 20  | 30  | -   | -     | 120   |  |
| 3   | Mechanical<br>Engineering                  | 2037353(037) | Thermal Engineering                                     | 70                    | 20  | 30  | -   | -     | 120   |  |
| 4   | Mechanical<br>Engineering                  | 2037354(037) | Machine Drawing and<br>Computer Aided<br>Drafting       | 70                    | 20  | 30  | -   | -     | 120   |  |
| 5   | Mechanical<br>Engineering                  | 2037355(037) | Material Technology                                     | 70                    | 20  | 30  | -   | -     | 120   |  |
| 6   | Electrical &<br>Electronics<br>Engineering | 2037361(025) | Basic Electrical and Electronics (Lab)                  | -                     | -   | -   | 30  | 50    | 80    |  |
| 7   | Mechanical<br>Engineering                  | 2037362(037) | Strength of Material (Lab)                              | -                     | -   | -   | 30  | 50    | 80    |  |
| 8   | Mechanical<br>Engineering                  | 2037363(037) | Thermal Engineering (Lab)                               | -                     | -   | ı   | 30  | 50    | 80    |  |
| 9   | Mechanical<br>Engineering                  | 2037364(037) | Machine Drawing and<br>Computer Aided<br>Drafting (Lab) | -                     | -   | -   | 30  | 50    | 80    |  |
| 10  | Mechanical<br>Engineering                  | 2037365(037) | Material Technology<br>(Lab)                            | -                     | -   | -   | 30  | 50    | 80    |  |
|     |  | Total        |   | 350                   | 100 | 150 | 150 | 250   | 1000  |  |

**Note**: - i. TA in Theory includes Sessional work (SW) and Attendance (ATT) with weightage of 70% and 30% weightage of total respectively.

iii. 85% attendance is essential in theory & Practical classes to appear in examination.

Legend: - PRA: Process Assessment, PDA: Product Assessment

ii. TA in Practical includes performance of PRA, PDA and Viva-voce with weightage of 50%, 40% and 10% weightage of total respectively .



## **Diploma in Mechanical Engineering**

## Semester - IV

#### **Scheme of Studies:**

| S.  | Board of<br>Study         | Course<br>Code | Course                                   | Scheme of Studies<br>(Hours/Week) |   |   |                     |  |
|-----|---------------------------|----------------|--|-----------------------------------|---|---|---------------------|--|
| No. |                           |                | Titles                                   | L                                 | Р | Т | Credit<br>L+T+(P/2) |  |
| 1   | Mechanical<br>Engineering | 2000451(037)   | Theory of Machines                       | 2                                 | - | 1 | 3                   |  |
| 2   | Mechanical<br>Engineering | 2000452(037)   | Manufacturing Process                    | 2                                 | - | 1 | 3                   |  |
| 3   | Mechanical<br>Engineering | 2000453(037)   | Industrial Measurements and Controls     | 2                                 | - | 1 | 3                   |  |
| 4   | Mechanical<br>Engineering | 2000454(037)   | Fluid Mechanics and Machinery            | 2                                 | - | 1 | 3                   |  |
| 5   | Mechanical<br>Engineering | 2000455(037)   | Engineering Metrology                    | 2                                 | ı | 1 | 3                   |  |
| 6   | Mechanical<br>Engineering | 2000461(037)   | Theory of Machines (Lab)                 | -                                 | 2 | - | 1                   |  |
| 7   | Mechanical<br>Engineering | 2000462(037)   | Manufacturing Process (Lab)              | -                                 | 2 | - | 1                   |  |
| 8   | Mechanical<br>Engineering | 2000463(037)   | Industrial Measurement and Controls(Lab) | -                                 | 2 | - | 1                   |  |
| 9   | Mechanical<br>Engineering | 2000464(037)   | Fluid Mechanics and Machinery (Lab)      | -                                 | 2 | - | 1                   |  |
| 10  | Mechanical<br>Engineering | 2000465(037)   | Engineering Metrology (Lab)              | -                                 | 2 | - | 1                   |  |
| 11  |                           |                | Indian Constitution                      | 2                                 | - | - | -                   |  |
| 12  |                           |                | Library                                  | -                                 | 2 | - | -                   |  |
| 13  | Humanities                |                | Physical and Mental Fitness              | ı                                 | 2 | - | -                   |  |
|     | Total                     |                |  |                                   |   | 5 | 20                  |  |

L- Lecture,

T- Tutorial,

P- Practical,

Lecture (L)→ CI Classroom Instruction (Includes different instructional strategies i.e Lecture and others).

Practical (P)→ LI Laboratory Instruction (Includes practical performances in Laboratory workshop, field or other locations using different instructional strategies).

Tutorial (T)  $\rightarrow$  Includes sessional work (SW) (assignment, seminar, mini project etc), Self Learning (SL).



## **Diploma in Mechanical Engineering**

#### Semester - IV

## **Scheme of Examination:**

|           | Board of<br>Study         | Course<br>Code | Course Titles                              | Scheme of Examination |     |     |           |     |       |  |
|-----------|---------------------------|----------------|--|-----------------------|-----|-----|-----------|-----|-------|--|
| S.<br>No. |                           |                |  | Theory                |     |     | Practical |     | Total |  |
|           |                           |                |  | ESE                   | СТ  | TA  | ESE       | TA  | Marks |  |
| 1         | Mechanical<br>Engineering | 2000451(037)   | Theory of Machines                         | 70                    | 20  | 30  | -         | -   | 120   |  |
| 2         | Mechanical<br>Engineering | 2000452(037)   | Manufacturing Process                      | 70                    | 20  | 30  | -         | -   | 120   |  |
| 3         | Mechanical<br>Engineering | 2000453(037)   | Industrial Measurements and Controls       | 70                    | 20  | 30  | -         | -   | 120   |  |
| 4         | Mechanical<br>Engineering | 2000454(037)   | Fluid Mechanics and Machinery              | 70                    | 20  | 30  | -         | -   | 120   |  |
| 5         | Mechanical<br>Engineering | 2000455(037)   | Engineering Metrology                      | 70                    | 20  | 30  | -         | -   | 120   |  |
| 6         | Mechanical<br>Engineering | 2000461(037)   | Theory of Machines (Lab)                   | -                     | -   | 1   | 30        | 50  | 80    |  |
| 7         | Mechanical<br>Engineering | 2000462(037)   | Manufacturing Process (Lab)                | -                     | ı   | ı   | 30        | 50  | 80    |  |
| 8         | Mechanical<br>Engineering | 2000463(037)   | Industrial Measurements and Controls (Lab) | -                     | 1   | 1   | 30        | 50  | 80    |  |
| 9         | Mechanical<br>Engineering | 2000464(037)   | Fluid Mechanics and Machinery (Lab)        | -                     | -   | ı   | 30        | 50  | 80    |  |
| 10        | Mechanical<br>Engineering | 2000465(037)   | Engineering Metrology<br>(Lab)             | -                     | -   | -   | 30        | 50  | 80    |  |
|           | Total                     |                |  | 350                   | 100 | 150 | 150       | 250 | 1000  |  |

ESE: End semester exam

CT: Class Test

TA: Teachers Assessment

**Note**:- i. TA in Theory includes Sessional work (SW) and Attendance (ATT) with weightage of 70% and 30% weightage of total respectively.

- ii. TA in Practical includes performance of PRA, PDA and Viva-voce with weightage of 50%, 40% and 10% weightage of total respectively.
- iii. 85% attendance is essential in theory & Practical classes to appear in examination.
- iv. Industrial training of 4 weeks duration will be carried out after completion of IV semester and its evaluation will be done in V semester.

Legend: - PRA: Process Assessment, PDA: Product Assessment