

Complete Course Grid and Syllabus

Diploma in Mechanical Engineering Rajiv Gandhi Institute of Petroleum Technology RGIPT Sivasagar Campus

Course: Diploma in Mechanical Engineering

Total Number of Credits: 340

| SEMESTER I | | | | | | |
|------------------------------|--|--|---|---|---|---------|
| Course Code | Subjects | | L | Т | Р | Credits |
| MA101 | Mathematics-I | | 3 | 1 | 0 | 11 |
| PY101 | Physics-I | | 3 | 1 | 0 | 11 |
| CY101 | Chemistry-I | | 3 | 0 | 0 | 9 |
| ME101 | 101 Engineering Mechanics | | | | 0 | 8 |
| CS101 | Fundamentals of Computer Engineering | | 2 | 0 | 2 | 8 |
| ME102L | Engineering Drawing | | 0 | 0 | 3 | 3 |
| PY101L | Physics Laboratory | | 0 | 0 | 2 | 2 |
| | TOTAL | | | | | 52 |
| | | | | | | |
| HU101 | HU101Universal Human Values1105 | | | | | |
| L101Communication Skills*201 | | | | 7 | | |
| | *For selective students with less proficiency in English | | | | | |

| SEMESTER II | | | | | | |
|-------------|--|---|---|---|---------|--|
| Course Code | Subjects | L | Т | Р | Credits | |
| MA102 | Mathematics-II | 3 | 1 | 0 | 11 | |
| PY102 | Physics-II | 3 | 1 | 0 | 11 | |
| CY102 | Chemistry-II | 3 | 0 | 0 | 9 | |
| EE101 | Fundamentals of Electrical and Electronics Engineering | 3 | 1 | 0 | 11 | |
| CS102 | Computer Programming | 2 | 0 | 2 | 8 | |
| ME103L | Engineering Workshop Practices Laboratory | 0 | 0 | 3 | 3 | |
| CY101L | Chemistry Laboratory | 0 | 0 | 2 | 2 | |
| EE101L | Fundamentals of Electrical and Electronics Engineering Laboratory | 0 | 0 | 2 | 2 | |
| | TOTAL | | | | | |
| HU102 | Community Internship | 1 | 1 | 0 | 5 | |

| | SEMESTER III | | | | | | |
|----------------|---|---|---|---|---------|--|--|
| Course Code | Subjects | L | Т | Р | Credits | | |
| ME201 | Materials Science | 3 | 0 | 0 | 9 | | |
| ME204 | Fluid Mechanics | 3 | 1 | 0 | 11 | | |
| ME205 | Manufacturing Technology-I | 3 | 1 | 0 | 11 | | |
| ME206 | Engineering Thermodynamics | 3 | 0 | 0 | 9 | | |
| ME208 | Strength of Materials | 3 | 1 | 0 | 11 | | |
| ME209 | Renewable and Alternative Energy Sources | 3 | 1 | 0 | 11 | | |
| ME207L | Computer Aided Drafting Laboratory | 0 | 0 | 2 | 2 | | |
| CE201L | Unit Operations Laboratory-I | 0 | 0 | 2 | 2 | | |
| ME210 | Group Discussion | 0 | 0 | 2 | 2 | | |
| TOTAL | | | | | 68 | | |

| | SEMESTER IV | | | | | |
|----------------|--|---|---|---|---------|--|
| Course Code | Subjects | L | Т | Р | Credits | |
| ME211 | Theory of Machines | 3 | 1 | 0 | 11 | |
| ME212 | Heat and Mass Transfer | 3 | 1 | 0 | 11 | |
| ME213 | Applied Thermodynamics | 3 | 1 | 0 | 11 | |
| ME215 | Design of Machine Elements | 3 | 1 | 0 | 11 | |
| ME214 | Manufacturing Technology – II | 3 | 1 | 0 | 11 | |
| ME216 | Mechatronics and Industrial Automation | 3 | 0 | 0 | 9 | |
| ME218L | Workshop Technology Laboratory | 0 | 0 | 3 | 3 | |
| ME217 | Seminar | 0 | 0 | 2 | 2 | |
| TOTAL | | | | | 69 | |

| SEMESTER V | | | | | |
|----------------|--|---|---|---|---------|
| Course Code | Subjects | L | Т | Р | Credits |
| ME301 | Pipe Hydraulics and Hydraulic Machinery | 3 | 0 | 0 | 9 |
| HU301 | Humanities | 2 | 0 | 0 | 6 |
| MT301 | Engineering Economics | 2 | 1 | 0 | 8 |
| | Departmental Elective | 3 | 0 | 0 | 9 |
| | Open Elective | 3 | 0 | 0 | 9 |
| ME306L | Applied Mechanics Laboratory | 0 | 0 | 3 | 3 |
| ME307L | Advanced Workshop Technology Laboratory | 0 | 0 | 3 | 3 |
| TOTAL | | | | | 47 |

| | SEMESTER VI | | | | |
|----------------|--------------------------------------|---|---|------|---------|
| Course Code | Subjects | L | Т | Р | Credits |
| ME308 | Skill Development Certificate Course | | | x* | x* |
| ME309 | Project | | | 30-x | 30-x |
| | TOTAL | | | | |

| Subject Code | Departmental Elective/Open Elective |
|--------------|---------------------------------------|
| ME302 | Power Plant Engineering |
| ME303 | Quality Control and Metrology |
| ME304 | Offshore and Cross-Country Pipeline |
| ME305 | Industrial Engineering and Management |

| Component distribution for diploma in Mechanical Engineering | | | | | | | | |
|--|---|-------------------|-----|----------|--------------------------|------------|--|--|
| | | Approved Range | | • • | | Mechanical | | |
| Category | Program Components | Min | Max | Existing | Recommended (Revised) | | | |
| HU | Humanities and Social Science | 12 | 24 | 16 | 16 | | | |
| IS | Institute Science Courses | 50 | 80 | 66 | 66 | | | |
| IE | Institute Engineering Courses | 40 | 70 | 67 | 50 | | | |
| EP | Engineering Drawing, Manufacturing Practices, and Practice course of Department | 8 | 24 | 16 | 16 | | | |
| LM | Language and Management | 8 | 20 | 15 | 15 | | | |
| DC | Departmental Core | 125 | 160 | 136 | 129 | | | |
| DE | Departmental Elective | 8 | 20 | 9 | 9 | | | |
| OE | Open Elective | 8 | 20 | 9 | 9 | | | |
| DP | Project/ Industrial visit | 20 | 50 | 20 | 30 | | | |
| | Total | 340 | 360 | 354 | 340 | | | |

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