

Complete Course Grid and Syllabus

Course Grid for Diploma in Petroleum Engineering Rajiv Gandhi Institute of Petroleum Technology RGIPT Sivasagar Campus

Course: Diploma in Petroleum Engineering

Total Number of Credits: 340

| | SEMESTER I | | | | | | | |
|--|--------------------------------------|---|---|---|---------|--|--|--|
| Course Code | Subjects | L | T | P | Credits | | | |
| MA101 | Mathematics-I | 3 | 1 | 0 | 11 | | | |
| PY101 | Physics-I | 3 | 1 | 0 | 11 | | | |
| CY101 | Chemistry-I | 3 | 0 | 0 | 9 | | | |
| ME101 | Engineering Mechanics | 2 | 1 | 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 | | | | | | | |
| HU101 | Universal Human Values | 1 | 1 | 0 | 5 | | | |
| L101 | Communication Skills* | 2 | 0 | 1 | 7 | | | |
| *For selective students with less proficiency in English | | | | | | | | |

| SEMESTER II | | | | | |
|-------------|--|---|---|---|---------|
| Course Code | Subjects | L | T | P | 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 | | | | | 57 |
| HU102 | Community Internship | 1 | 1 | 0 | 5 |

| | SEMESTER III | | | | | |
|--------------------|------------------------------|---|---|---|---------|--|
| Course Code | Subjects | L | T | P | Credits | |
| PE201 | Basics of Geological Science | 3 | 0 | 0 | 9 | |
| PE202 | Reservoir Engineering-I | 3 | 1 | 0 | 11 | |
| PE203 | Production Engineering-I | 3 | 0 | 0 | 9 | |
| PE204 | Drilling Engineering-I | 3 | 0 | 0 | 9 | |
| CE201 | Unit Operations -I | 3 | 1 | 0 | 11 | |
| ME206 | Engineering Thermodynamics | 3 | 0 | 0 | 9 | |
| CE201L | Unit Operations Laboratory-I | 0 | 0 | 2 | 2 | |
| PE201L | Geology Laboratory | 0 | 0 | 2 | 2 | |
| PE205 | Group Discussion | 0 | 0 | 2 | 2 | |
| | TOTAL | | | | | |

| SEMESTER IV | | | | | |
|--------------------|---|---|---|---|---------|
| Course Code | Subjects | L | T | P | Credits |
| PE206 | Reservoir Engineering-II | 3 | 1 | 0 | 11 |
| PE207 | Basics of Petroleum Refinery | 3 | 0 | 0 | 9 |
| PE208 | Drilling Engineering-II | 3 | 1 | 0 | 11 |
| PE209 | Production Engineering-II | 3 | 0 | 0 | 9 |
| PE210 | Health, Safety and Environment Management | 3 | 0 | 0 | 9 |
| PE204L | Drilling Fluid and Cementation Laboratory | 0 | 0 | 2 | 2 |
| PE202L | Reservoir Engineering Laboratory | 0 | 0 | 2 | 2 |
| PE211 | Seminar | 0 | 0 | 2 | 2 |
| TOTAL | | | | | 55 |

| | SEMESTER V | | | | | | |
|--------------------|--------------------------------------|---|---|---|---------|--|--|
| Course Code | Subjects | L | T | P | Credits | | |
| PE301 | Workover and Well Stimulation | 3 | 1 | 0 | 11 | | |
| PE302 | Petroleum Formation Evaluation | 3 | 1 | 0 | 11 | | |
| PE303 | Offshore Oil and Gas Operations | 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 | | |
| PE307L | Petroleum Product Testing Laboratory | 0 | 0 | 2 | 2 | | |
| TOTAL | | | | | 65 | | |

| | SEMESTER VI | | | | |
|-------------|--------------------------------------|---|---|------------|---------|
| Course Code | Subjects | L | T | P | Credits |
| PE308 | Skill Development Certificate Course | | | x * | х* |
| PE309 | Project | | | 30-x | 30-x |
| TOTAL | | | | | 30 |

| Subject Code | Departmental Elective/Open Elective |
|--------------|--------------------------------------|
| PE304 | City Gas Distribution |
| PE305 | Unconventional Oil and Gas Resources |
| PE306 | Pipeline Transportation of Oil & Gas |

| Component distribution for diploma in Petroleum Engineering Approved Range Petroleum | | | | | | | |
|---|-------------------------------|-----|-----|----------|--------------------------|--|--|
| 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 | | |
| ΙE | Institute Engineering Courses | 40 | 70 | 68 | 59 | | |
| EP | Engineering Drawing, Workshop | 8 | 24 | 10 | 10 | | |
| LM | Language and Management | 8 | 20 | 15 | 15 | | |
| DC | Departmental Core | 125 | 160 | 131 | 126 | | |
| 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 | 344 | 340 | | |