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| --- | --- | --- | --- | --- | --- | --- | --- | --- |
| Course No. | Course Name | Teaching Scheme (Hours) | | | Credits | Course Marks | | Total Marks |
| Theory | Tutorial | Practical | End Sem | In Sem |
| **Core Courses** | | | | | | | | |
| PT 101 | Petroleum Geology | 3 | 0 | 2 | 4 | 60 | 40 | 100 |
| PT 102 | Geophysical Exploration | 2 | 0 | 2 | 3 | 60 | 40 | 100 |
| PT 103 | Basic Drilling Technology | 2 | 1 | 2 | 4 | 60 | 40 | 100 |
| PT 104 | Reservoir Engineering- I | 3 | 0 | 0 | 3 | 60 | 40 | 100 |
| PT 105 | Petroleum Fluids | 2 | 0 | 2 | 3 | 60 | 40 | 100 |
| PT 106 | Flow through porous media | 2 | 1 | 0 | 3 | 60 | 40 | 100 |
| PT 107 | Production Technology | 3 | 1 | 0 | 4 | 60 | 40 | 100 |
| **Ability Enhancement Courses (AEC) [Any one course]** | | | | | | | | |
|  | Technical English & Professional Communication | Offered by English Department | | | 2 |  |  | 50 |
|  | Application of Remote Sensing UAV | Offered by Geography Department | | | 2 |  |  | 50 |
| PT1A1 | Geological/Industrial Field work |  | | | 2 | 30 | 20 | 50 |
|  | Any other inter-disciplinary Courses | | | |  |  |  |  |

**1st Semester M.Tech. (Petroleum Exploration & Production) Programme [Total Credits: 26, Total marks: 750]**

**2nd Semester M.Tech. (Petroleum Exploration & Production) Programme [Total Credits: 26, Total marks: 750]**

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| Course No. | Course Name | Teaching Scheme (Hours) | | | Credits | Marks | | Total Marks |
| Theory | Tutorial | Practical | End Sem | In Sem |
| **Core Courses** | | | | | | | | |
| PT 201 | Exploration &Development of oil & Gas fields | 2 | 1 | 0 | 3 | 60 | 40 | 100 |
| PT 202 | Advanced Drilling Technology | 3 | 1 | 0 | 4 | 60 | 40 | 100 |
| PT 203 | Reservoir Engineering -II | 2 | 0 | 2 | 3 | 60 | 40 | 100 |
| PT 204 | Advanced Reservoir Engineering | 2 | 1 | 0 | 3 | 60 | 40 | 100 |
| PT 205 | Surface Production Operations | 3 | 1 | 0 | 4 | 60 | 40 | 100 |
| PT 206 | Enhanced Oil Recovery | 2 | 1 | 2 | 4 | 60 | 40 | 100 |
| PT207 | Well logging | 2 | 0 | 2 | 3 | 60 | 40 | 100 |
| **Ability Enhancement Compulsory Courses (AECC)** | | | | | | | | |
| PT 2A1 | Industrial Visit | Visit in Oil industries (OIL, ONGC etc) | | | 2 | 30 | 20 | 50 |

**3rd Semester M.Tech. (Petroleum Exploration & Production) Programme [Total Credits: 24, Total marks: 600]**

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| Course No. | Course Name | | Teaching Scheme (Hours) | | | | Credits | Marks | | Total Marks |
| Theory | | Tutorial | Practical | End Sem | In Sem |
| **Core Courses** | | | | | | | | | | |
| PT 301 | Petroleum Refining Engineering | | 2 | | 1 | 2 | 4 | 60 | 40 | 100 |
| PT 302 | Drilling Fluids | | 2 | | 1 | 2 | 4 | 60 | 40 | 100 |
| PT 303 | Well Servicing | | 2 | | 1 | 2 | 4 | 60 | 40 | 100 |
| **Discipline Specific Elective (DSE)** | | | | | | | | | | |
| PT 3D1 | Minor Project | | **Intra- departmental** | | | | 4 | 60 | 40 | 100 |
| **Generic Elective (GE) [Offered by P.Tech. Department]** | | | | | | | | | | |
| PT 3G1 | Oil Well Production Technology | | 3 | | 1 | 0 | 4 | 60 | 40 | 100 |
| PT 3G2 | Environmental Technology & Management | | 3 | | 1 | 0 | 4 | 60 | 40 | 100 |
| PT 3G3 | Petroleum Geochemistry | | 3 | | 1 | 0 | 4 | 60 | 40 | 100 |
| PT 3G4 | Petroleum Reservoir Engineering | | 2 | | 2 | 0 | 4 | 60 | 40 | 100 |
| PT 3G5 | Basic Drilling Technology | | 2 | | 1 | 2 | 4 | 60 | 40 | 100 |
| **Generic Elective (GE, offered by Other Departments) [any one]** | | | | | | | | | | |
| AG3G1 | | Water Science, Policy & Governance | | offered by Applied Geology Department | | | 4 |  |  | 100 |
| AG3G2T | | Standard Field & Laboratory Techniques | | 4 |  |  | 100 |
| AG3G2P | |
| AG3G3T | | Geoscientific Data Analysis with Metlab & Petrel (Lab Based) | | 4 |  |  | 100 |
| AG3G3P | |
| GG3G1 | | Hydrology | | offered by Geography Department | | | 4 |  |  | 100 |
| GG3G2 | | Application of Geoinformatics in Petroleum Exploration | | 4 |  |  | 100 |
| GG3G3 | | Geography of Tribal Studies | | 4 |  |  | 100 |
| **Ability Enhancement Compulsory Courses (AECC)** | | | | | | | | | | |
| PT 3A1 | Industrial Training | | Training for minimum 3 weeks duration in Oil Industries | | | | 4 | 60 | 40 | 100 |

**4th Semester M.Tech. (Petroleum Exploration & Production) Programme [Total Credits: 20, Total marks: 300]**

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| --- | --- | --- | --- | --- | --- | --- | --- | --- |
| Course No. | Course Name | Teaching Scheme (Hours) | | | Credits | Marks | | Total Marks |
| Theory | Tutorial | Practical | End Sem | In Sem |
| **Core Courses** | | | | | | | | |
| PT 401 | Dissertation | Dissertation for 6 months in Oil industries | | | 20 | 180 | 120 | 300 |
|  |  |  |  |  |  |  |  |  |

***The CBCS Board of the Department may change the mode of examination and evaluation of the Dissertation from time to time as and when required.***