2025 – 2029 batch BTech in Petroleum Engineering

| 1s ¹ | 1st sem | | | | | | |
|-----------------|---------|--------------------------------|----|---------|----|--|--|
| 1 | PY111 | Classical Physics | IS | 3-1-0 | 11 | | |
| 2 | CY121 | Inorganic & Physical Chemistry | IS | 3-1-0 | 11 | | |
| 3 | MA123 | Applied Mathematics - I | IS | 3-1-0 | 11 | | |
| 4 | CH161 | Engineering Thermodynamics | IE | 3-1-0 | 11 | | |
| 5 | ME131 | Workshop | EP | 0-0-3 | 3 | | |
| 6 | PY101L | Physics Lab | IS | 0-0-2/2 | 1 | | |
| 7 | CY101L | Chemistry Lab | IS | 0-0-2/2 | 1 | | |
| | | Total Credits | | | 49 | | |
| | LM101 | Basic English* | LM | 1-2-0 | 7 | | |
| | HU101 | Universal Human Value | HU | 1-1-0 | 5 | | |

^{*}Basic English course is taken by a student on a recommendation after Diagnostic test.

| 2nd | 2nd sem | | | | | |
|-----|---------|---------------------------------|----|---------|----|--|
| 1 | PY121 | Modern Physics | IS | 2-1-0 | 8 | |
| 2 | MA124 | Applied Mathematics - II | IS | 3-1-0 | 11 | |
| 3 | CY111 | Organic & Hydrocarbon Chemistry | IS | 3-1-0 | 11 | |
| 4 | CS101 | Computer Programming | IE | 3-1-0 | 11 | |
| 5 | CH121 | Fluid Mechanics | IE | 3-1-0 | 11 | |
| 6 | PE101 | Petroleum Engineering Practices | EP | 1-0-2 | 5 | |
| 7 | PY121L | Physics Lab | IS | 0-0-2/2 | 1 | |
| 8 | CY121L | Chemistry Lab | IS | 0-0-2/2 | 1 | |
| 9 | ME121 | Engineering Visualization | EP | 0-1-3 | 5 | |
| 10 | CS101L | Computer Programming Lab | IE | 0-0-2 | 2 | |
| | | Total Credits | | | 66 | |
| | HU102 | Community Internship | HU | 1-1-0 | 5 | |

| 3rd | 3rd sem | | | | |
|-----|---------|---------------------------------------------|----|-------|----|
| 1 | PE202 | Fundamentals of Mechanical Engineering | IE | 3-0-0 | 9 |
| 2 | PE241 | Reservoir Engineering-I | DC | 3-1-0 | 11 |
| 3 | PE221 | Introductory Geosciences | DC | 2-0-0 | 6 |
| 4 | MA222 | Applied Mathematics - III | IS | 3-1-0 | 11 |
| 5 | ME211 | Fluid Machinery | DC | 3-0-0 | 9 |
| 6 | ECE102 | Fundamentals of Electronics Engineering | IE | 3-1-0 | 11 |
| 7 | ECE102L | Fundamentals of Electronics Engineering Lab | IE | 0-0-2 | 2 |
| 8 | ME216L | Fluid Mechanics and Machinery Lab | DC | 0-0-2 | 2 |
| 9 | PE221L | Geology Lab | DC | 0-0-2 | 2 |
| | | Total Credits | | | 63 |

| 4tł | 4th sem | | | | | |
|-----|---------|--------------------------------------|----|-------|----|--|
| 1 | PE222 | Petroleum Geology | DC | 3-0-0 | 9 | |
| 2 | PE231 | Production Engineering | DC | 3-0-0 | 9 | |
| 3 | PE242 | Reservoir Engineering - II | DC | 3-1-0 | 11 | |
| 4 | PE211 | Drilling Technology | DC | 3-0-0 | 9 | |
| 5 | CH232 | Heat and Mass Transfer | IE | 3-1-0 | 11 | |
| 6 | PE321 | Formation Evaluation | DC | 3-0-0 | 9 | |
| 7 | PE211L | Drilling Technology Lab | DC | 0-0-2 | 2 | |
| 8 | PE242L | Reservoir Engineering Lab | DC | 0-0-2 | 2 | |
| 9 | PE321L | Formation Evaluation Lab | DC | 0-0-2 | 2 | |
| | | Total Credits | | | 64 | |
| | PE250 | Field excursion and Industrial Visit | DP | 0-0-2 | 2 | |

| 5tl | 5th sem | | | | | |
|-----|---------|-------------------------------------------|----|-------|----|--|
| 1 | PE322 | Petroleum Exploration and Prospecting | DC | 2-0-0 | 6 | |
| 2 | PE331 | Offshore Oil and Gas Technology | DC | 3-0-0 | 9 | |
| 3 | PE311 | Petroleum Facilities Design & Operation | DC | 3-1-0 | 11 | |
| 4 | PE312 | Advanced Drilling Technology | DC | 3-0-0 | 9 | |
| 5 | PE402 | Health Safety and Environment | DC | 2-0-0 | 6 | |
| 6 | | DE 1 | DE | 3-0-0 | 9 | |
| 7 | | DE 2 | DE | 2-0-0 | 6 | |
| 8 | PE322L | Petroleum Exploration and Prospecting Lab | DC | 0-0-2 | 2 | |
| 9 | PE341L | Well Test Analysis Lab | DC | 0-0-2 | 2 | |
| | | Total Credits | | | 60 | |

| 6th | 6th sem | | | | | |
|-----|---------|------------------------------------------|----|-------|----|--|
| 1 | PE443 | Petroleum Field Resource Management | DC | 3-0-0 | 9 | |
| 2 | PE442 | Reservoir Modelling and Simulation | DC | 2-0-0 | 6 | |
| 3 | PE351 | Pipeline Engineering | DC | 3-0-0 | 9 | |
| 4 | PE421 | Unconventional Hydrocarbon Resources | DC | 2-0-0 | 6 | |
| 5 | ME225 | Measurement, Metrollogy & Control System | DC | 3-0-0 | 9 | |
| 6 | | DE 3 | DE | 3-0-0 | 9 | |
| 7 | | DE 4 | DE | 2-0-0 | 6 | |
| 8 | PE442L | Reservoir Modelling and Simulation Lab | DC | 0-0-2 | 2 | |
| 9 | PE411L | Production Engineering Lab | DC | 0-0-2 | 2 | |
| | | Total Credits | | | 58 | |

| Sur | mmer Term | | | |
|-----|-----------|-------------------|----|---|
| | | Summer Internship | DP | 5 |

| 7tl | h sem | | | | |
|-----|--------|----------------------------------------|----|-------|----|
| 1 | | Open Elective - I | OE | 3-0-0 | 9 |
| 2 | | Open Elective - II | OE | 3-0-0 | 9 |
| 3 | MT5405 | Foundations of Management | LM | 2-0-0 | 6 |
| 4 | MT5100 | Principles of Economics | LM | 2-0-0 | 6 |
| 5 | HU313 | Sociology of Industry and Work Culture | HU | 2-0-0 | 6 |
| 6 | HU331 | Organizational Psychology | HU | 2-0-0 | 6 |
| | PC111 | Professional Communications | LM | 2-1-0 | 8 |
| | | Total Credits | | | 50 |
| | | Seminar | EP | 0-0-2 | 2 |
| | GD111 | Group Discussion | EP | 0-0-2 | 2 |

| 8th | sem | | | |
|-----|-----|--------------------|----|----|
| 1 | | BTech Dissertation | DP | 40 |
| | | Total Credits | | 40 |