

Grams: "TECHNOLOGY"
E Mail: dajntuh@gmail.com



Phone: Off: +91-40-2315115
Fax: +91-40-23158665

JAWAHARLAL NEHRU TECHNOLOGICAL UNIVERSITY HYDERABAD
(Established by Andhra Pradesh Act No.30 of 2008)
Kukatpally, Hyderabad – 500 085, Andhra Pradesh (India)

B.TECH. PETROLEUM ENGINEERING

I YEAR

| Code | Subject | L | T/P/D | Credits |
|------|---|-----------|-----------|-----------|
| | English | 2 | - | 4 |
| | Mathematics – I | 3 | 1 | 6 |
| | Engineering Mechanics | 3 | - | 6 |
| | Engineering Physics | 3 | - | 6 |
| | Engineering Chemistry | 3 | -- | 6 |
| | Computer Programming | 3 | - | 6 |
| | Engineering Drawing | 2 | 3 | 6 |
| | Computer Programming Lab. | - | 3 | 4 |
| | Engineering Physics & Engineering Chemistry Lab | - | 3 | 4 |
| | English Language Communication Skills Lab. | - | 3 | 4 |
| | Engineering Workshop / IT Workshop | - | 3 | 4 |
| | Total | 19 | 16 | 56 |

II YEAR I SEMESTER

| Code | Subject | L | T/P/D | C |
|------|--|-----------|----------|-----------|
| | Mathematics – II | 4 | - | 4 |
| | General Geology | 4 | - | 4 |
| | Principles of Civil & Structural Engineering | 4 | - | 4 |
| | Elements of Mechanical Engineering | 4 | - | 4 |
| | Electrical & Electronics Engineering | 4 | - | 4 |
| | Chemical Process Calculations | 4 | - | 4 |
| | Basic Engineering (Mech + Elec) Lab | - | 3 | 2 |
| | Geology Lab & Surveying Lab | - | 3 | 2 |
| | Total | 24 | 6 | 28 |

II YEAR II SEMESTER

| Code | Subject | L | T/P/D | C |
|------|---|-----------|----------|-----------|
| | Managerial Economics & Financial Analysis | 4 | - | 4 |
| | Mathematics – III | 4 | - | 4 |
| | Chemical Engineering Fluid Mechanics | 4 | - | 4 |
| | Petroleum Geology | 4 | - | 4 |
| | Process Heat Transfer | 4 | - | 4 |
| | Environmental Studies | 4 | - | 4 |
| | Fluid Mechanics Lab | - | 3 | 2 |
| | Process Heat Transfer Lab | - | 3 | 2 |
| | Total | 24 | 6 | 28 |

III YEAR I SEMESTER

| Code | Subject | L | T/P/D | C |
|------|--|-----------|----------|-----------|
| | Instrumentation and Process Control | 4 | - | 4 |
| | Thermodynamics for Petroleum Engineers | 4 | - | 4 |
| | Petroleum Exploration Methods | 4 | - | 4 |
| | Well Logging | 4 | - | 4 |
| | Drilling Technology | 4 | - | 4 |
| | Probability, Statistics and Stochastic Process | 4 | - | 4 |
| | Advanced Communication Skills Lab | - | 3 | 2 |
| | Instrumentation and Process Control Lab | - | 3 | 2 |
| | Total | 24 | 6 | 28 |

III YEAR II SEMESTER

| Code | Subject | L | T/P/D | C |
|------|---|-----------|----------|-----------|
| | Well Completions | 4 | - | 4 |
| | Petroleum Reservoir Engineering | 4 | - | 4 |
| | Petroleum Production Engineering & Design | 4 | - | 4 |
| | Pipeline Engineering | 4 | - | 4 |
| | Surface Production Operations | 4 | - | 4 |
| | Open Elective | 4 | - | 4 |
| | Human Values and Professional Ethics | | | |
| | Intellectual Property Rights | | | |
| | Disaster Management | | | |
| | Drilling Fluids Lab | - | 3 | 2 |
| | Reservoir Engineering Lab | - | 3 | 2 |
| | Total | 24 | 6 | 28 |

IV YEAR I SEMESTER

| Code | Subject | L | T/P/D | C |
|------|---|-----------|----------|-----------|
| | Enhanced oil Recovery Techniques | 4 | - | 4 |
| | Petroleum Refinery Engineering | 4 | - | 4 |
| | Health, Safety & Environment in Petroleum Industry | 4 | - | 4 |
| | Petroleum Management, Marketing & Finance | 4 | - | 4 |
| | Elective-I | 4 | - | 4 |
| | Natural Gas Processing | | | |
| | Coal Bed Methane Engineering | | | |
| | Petro Chemical Engineering | | | |
| | Mass Transfer Operations | | | |
| | Material Science | | | |
| | Elective-II | 4 | - | 4 |
| | Offshore Engineering | | | |
| | Horizontal Well Technology | | | |
| | Optimization of Upstream Processes | | | |
| | Chemical Reaction Engineering-1 | | | |
| | Oil & Gas Equipment Design & Drawing and Simulation Lab | - | 3 | 2 |
| | Petroleum Product Testing Lab | - | 3 | 2 |
| | Total | 24 | 6 | 28 |

IV YEAR II SEMESTER

| Code | Subject | L | T/P/D | C |
|------|--|-----------|-----------|-----------|
| | Petroleum Engineering Economics, Policies & Laws | 4 | - | 4 |
| | Elective-III | 4 | - | 4 |
| | Reservoir Modeling & Simulation | | | |
| | Multi-phase Flow in Porous Media | | | |
| | Reservoir Stimulation | | | |
| | Membrane Technology | | | |
| | Elective-IV | 4 | - | 4 |
| | Natural Gas Hydrates | | | |
| | Green Fuel Technologies | | | |
| | Advanced Natural Gas Engineering | | | |
| | Transport Phenomena | | | |
| | Industry Oriented Mini Project | - | - | 2 |
| | Seminar | - | 6 | 2 |
| | Project work | - | 15 | 10 |
| | Comprehensive Viva | - | - | 2 |
| | Total | 12 | 21 | 28 |

Note:All End Examinations (Theory and Practical) are of three hours duration.

T-Tutorial L – Theory P – Practical/Drawing C – Credits