

PROGRAM STRUCTURE

I SEMESTER

| S. No | Course Code | Name of the Course | Employability | Skill Development | Entrepreneurship | Remarks |
|-------|-------------|--|---------------|-------------------|------------------|--|
| 1 | 172PE1T01 | Advanced Numerical Methods & Applied Statistics | | ✓ | | Students are able to demonstrate problem solving skills by modelling physical phenomenon using Advanced Numerical Methods and Applied Statistics (MATLAB Based) in various engineering disciplines. |
| 2 | 172PE1T02 | Transportation of Oil & Gas | | ✓ | | Students are able to demonstrate technical skill of characterizing different drilling and production methods, modelling and analysis of subsurface exploration. |
| 3 | 172PE1T03 | Advanced EOR Techniques | | ✓ | | Students are able to demonstrate technical skill of characterizing different crude oils , modelling and analysis of reservoir for recovery. |
| 4 | 172PE1T04 | Project Management | | | ✓ | Students are able to apply the knowledge of Project management enabling them to become an entrepreneur in any domain of their choice |
| 5 | 172PE1T05 | PE Stream: Offshore Drilling | | ✓ | | Students are able to demonstrate technical skill of characterizing different crude oils , modelling and analysis of reservoir for recovery. |
| 6 | 172PE1T06 | Non-PE Stream: A. Fundamentals of Petroleum Geology & Reservoir Engineering | | ✓ | | Students are able to demonstrate technical skill of characterizing different offshore structures, modelling and analysis of drilling. |
| 7 | 172PE1T07 | PE Stream: Reservoir Stimulation | ✓ | | | Students are able to acquire skills related to design, synthesize and evaluate the performance of reservoir rocks enabling them to be employed for designing and evaluation of formation for treatment . |
| 8 | 172PE1T08 | Non-PE Stream: Petroleum Drilling & Production Engineering | | ✓ | | Students are able to demonstrate technical skill of characterizing different drilling and production methods, modelling and analysis of subsurface exploration. |

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| 9 | 172PE1L01 | Advanced Numerical Methods & Applied Statistics (MATLAB Based) Lab | | ✓ | | Students are able to demonstrate problem solving skills by modelling physical phenomenon using Advanced Numerical Methods and Applied Statistics (MATLAB Based) in various engineering disciplines. |
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II SEMESTER

| S. No | Course Code | Name of the Course | Employability | Skill Development | Entrepreneurship | Remarks |
|-------|-------------|--|---------------|-------------------|------------------|---|
| 10 | 172PE2T09 | Advanced Natural Gas Engineering | | | | |
| 11 | 172PE2T10 | Artificial Lift Techniques | | | | |
| 12 | 172PE2T11 | Operational Aspects of Well Testing | | | | |
| 13 | 172PE2T12 | Integrated Reservoir Management | | | | |
| 14 | 172PE2E01 | Practical Reservoir Modeling & Simulation | | ✓ | | Students are able to demonstrate problem solving skills by modelling physical phenomenon using Practical Reservoir Modelling and Simulation(MATLAB Based) in various engineering disciplines. |
| 15 | 172PE2E02 | Optimization of Oil & Gas Production | | ✓ | | Students are able to demonstrate technical skill of characterizing different fluid flow properties , modelling and analysis of production. |
| 16 | 172PE2E03 | Flow Assurance | | ✓ | | Students are able to demonstrate technical skill of characterizing different fluid flow properties , modelling and analysis of flow in wells. |
| 17 | 172PE2E04 | Process Safety & Environmental Aspects in Petroleum Industry | | | ✓ | Students are able to apply the knowledge of safety management enabling them to become an entrepreneur in any domain of their choice. |
| 18 | 172PE2E05 | Deep Water Technologies | | ✓ | | Students are able to demonstrate technical skill of characterizing different technologies , modelling and analysis of Deepwater beds . |
| 19 | 172PE2E06 | Characterization of Petroleum Oils | | ✓ | | Students are able to demonstrate technical skill of characterizing different oils , modelling and analysis of treatment . |

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| 20 | 172PE2L02 | Reservoir Simulation Lab | | ✓ | | -Students are able to acquire skills related to various aspects of different reservoirs enabling them to be employed as Reservoir Engineers. |
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III SEMESTER

| S. No | Course Code | Name of the Course | Employability | Skill Development | Entrepreneurship | Remarks |
|-------|-------------|-------------------------|---------------|-------------------|------------------|---|
| 21 | 172PE3C01 | Comprehensive Viva-Voce | ✓ | | | Students will be able to demonstrate problem identification, analysis, design solutions or applications in petroleum engineering domain through the acquired technical, cognitive, communication and creative skills to address societal needs. |
| 22 | 172PE3R01 | Seminar - I | ✓ | | | Students will be able to demonstrate problem identification, analysis, design solutions or applications in petroleum engineering domain through the acquired technical, cognitive, communication and creative skills to address societal needs. |

IV SEMESTER

| S. No | Course Code | Name of the Course | Employability | Skill Development | Entrepreneurship | Remarks |
|-------|-------------|-------------------------|---------------|-------------------|------------------|---|
| 23 | 172PE4R02 | Seminar - II | ✓ | | | Students will be able to demonstrate problem identification, analysis, design solutions or applications in petroleum engineering domain through the acquired technical, cognitive, communication and creative skills to address societal needs. |
| 24 | 172PE4R01 | Project Work Part- - II | ✓ | | | Students will be able to demonstrate problem identification, analysis, design solutions or applications in petroleum engineering domain through the acquired technical, cognitive, communication and creative skills to address societal needs. |
| | | Total | 5 | 13 | 2 | |



Program Coordinator



Head of the Department

Head of the Department
Department of Petroleum Technology
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