AOU Petroleum Engineering — Curriculum

5-year B.Eng. · 206 units · OSP option · CCMAS alignment · Draft

AKPAKIP ORO UNIVERSITY (AOU)
Faculty of Engineering — Department of Petroleum Engineering
CURRICULUM (Draft)
Petroleum Engineering (Offshore, Subsea and Pipeline option)

1. Preamble
Five-year B.Eng. Petroleum Engineering — Offshore, Subsea and Pipeline option. Meets NUC CCMAS and COREN requirements. Codes/units provisional until reconciled with official CCMAS.

2. Aims and Objectives
• Petroleum engineers who find, develop and produce oil and gas resources safely and efficiently.
• Offshore, Subsea and Pipeline option: offshore platforms, subsea production systems and pipeline transport.
• Strong foundations in geoscience, mechanics, fluid flow and thermodynamics.
• Preparation for COREN registration, employment or postgraduate study.

3. Graduate Competencies
Geoscience · Reservoir rock and fluids · Reservoir engineering · Drilling and completions · Production and flow assurance · Mechanics and thermo-fluids · Subsea and pipeline engineering · Offshore structures and risers · Field development and economics · Safety, environment and professional practice.

4. Programme Structure
80 courses · 206 units across 10 semesters.
Year 1: 34 · Year 2: 42 · Year 3: 44 · Year 4: 46 · Year 5: 40.

Track: Core · OSP (Offshore, Subsea and Pipeline).

5. Option Emphasis
OSP courses from Year 3 Sem 6: Pipeline Engineering Fundamentals · Offshore Engineering Fundamentals · Subsea Systems Engineering · Pipeline Design and Installation · Offshore Structures · Flow Assurance · Offshore Drilling Operations · Subsea Production Systems · Pipeline Integrity and Corrosion · Marine Risers and Mooring · Advanced Offshore/Subsea · Multiphase Flow · Integrated Offshore Field Development · Decommissioning · Risk-Based Inspection.

Core pathway: geoscience, reservoir engineering, drilling, production, EOR, reservoir simulation, HSE, economics.

6–9. Assessment framework · Industrial training & projects · Resource requirements · Quality assurance & CCMAS alignment
Companion documents: Students' Handbook (pending upload) and Lecturers' Handbook.

Draft for departmental, Faculty and Senate review.
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