

COREN-Based Petroleum Engineering Professional Development Programme

This programme is designed to equip graduates with the necessary knowledge, leadership abilities, and lifelong learning mindset to ensure career progression, professional accreditation, and contributions to industry innovation and sustainability.

2. Programme Educational Objectives (PEOs)

- **PEO1:** Develop graduates with the knowledge and technical skills in petroleum engineering applications such as reservoir, field development planning, natural gas, drilling, petroleum production, petroleum economics, project management, and adherence to health, safety and environmental compliance with competencies in leadership, motivation, time management, prioritization, delegation, communication, critical and analytical thinking that drives innovation in the global energy sector, and related engineering disciplines to meet the society's need.
- **PEO2:** To collect, prepare, analyse, design and develop models using petroleum simulation software (Rock Flow Dynamics tNavigator, CMG Suites (IMEX, GEM and STARS), Schlumberger Eclipse Suite, Oliasoft, etc.) and research-based contents using leading cut-edge technologies in artificial intelligence and machine learning that will contribute to enhanced oil recovery (EOR) techniques and other advancements to address industry challenges effectively.
- **PEO3:** Provide hands-on training and certifications (Leadership Essentials for Energy Professionals, International Petroleum Management Certificate Program, E&P Project Development Workshop, The International Well Control Forum (IWCF) certification, etc.) that are internationally recognized and aligned with global accreditation standards such as COREN, ABET, the UK Engineering Council, and SPE (Society of Petroleum Engineers) certification requirements to meet all forms of career progression and professional development.
- **PEO4:** Understand multidisciplinary concepts and uphold professional ethics and environmental responsibility by implementing sustainable energy solutions and carbon management strategies, ensuring ethical considerations in engineering decision-making and operations while complying with national and international petroleum industry regulations for self-development and employability.
- **PEO5:** To raise creative, effective, efficient and innovative petroleum engineering leaders to reinstate the engineering profession with the leading technical skills and learning methods in research and according to the Covenant University Vision 7:20:2030 business plans, following the University's policies and procedures and conforming to the relevant sections of the Quality and Academic Standards (QAS) guidelines.