ROBERT GORDON UNIVERSITY, ABERDEEN (RGU)

Advanced Exploration Technologies:	Enhanced Oil Recovery (EOR):	Digitalization and Data Analytics:	Automation and Robotics:	Environmental Impact and Sustainability:	Unconventional Resources:	Deepwater Exploration and Production:
Subsea resource mapping for offshore energy repurposing	Low-Salinity and Smart Water Flooding for Carbon-Neutral EOR	Optimisation of offshore oil and gas production using digital twins	Advanced subsea robotics for pipeline inspection and maintenance	AI based leak detection systems for offshore oil spills	Nanotechnology-Based Solutions for Improving Gas Hydrate Extraction Efficiency	Enhanced subsea power transmission for deepwater oil fields
Autonomous Robotics for Deep-Sea Hydrocarbon Prospecting	AI-Driven Optimization of Chemical Enhanced Oil Recovery (CEOR) Techniques	Information Management Systems: Digital transformation in the upstream oil and gas industry	AI based leak detection systems for offshore oil spills	Sustainable decommissioning of aging offshore oil platforms in Nigeria	Carbon Dioxide (CO_2) Injection for Enhanced Heavy Oil Recovery in Oil Sands	Predictive Maintenance for Deepwater Offshore Platforms
Quantum Sensing for High-Resolution Subsurface Imaging	CO_2 Foam and Hybrid Gas Injection for Enhanced Oil Recovery and Carbon Sequestration	Information Management Systems: Digital skills development and adoption in exploration and production companies	AI enabled oil spill containment and remediation in the Niger Delta	Converting offshore oil platforms into renewable energy hubs	Optimization of Hydraulic Fracturing in Shale Gas Reservoirs	Advanced Flow Assurance Strategies for Deepwater Subsea Pipelines
AI-Powered Seismic Interpretation for Ultra-Deep Oil and Gas Exploration	Nanotechnology-Enhanced Water Flooding for Heavy Oil Recovery	Information Management Systems: Discovering dark knowledge in data repositories	Subsea biodiversity monitoring using autonomous underwater vehicles	Eco friendly oil spill dispersants for Nigeria's marine ecosystem	Development of Self-Healing Coatings for Pipeline Integrity in Harsh Environments	Autonomous Underwater Vehicles (AUVs) for Deepwater Reservoir Characterization
		Information Management Systems: Information Literacy and Decision making in the upstream oil and gas industry	Robotics and Autonomous Systems: intelligent robotics	Waste drilling fluids management and novel solutions	Self-Healing Materials for Wellbore Integrity in Unconventional Reservoirs	Hydrate and Wax Deposition Control in Subsea Pipelines Using Smart Thermal Management

			Robotics and Autonomous Systems: network robotics	AI enabled oil spill containment and remediation in the Niger Delta	Advanced Materials for High-Temperature, High-Pressure (HTHP) Casing Integrity	Predictive Modelling for HTHP Casing Failure Prevention
			Robotics and Autonomous Systems: computational intelligence	Multi-Criteria Decision Analysis (MCDA) for Sustainable Energy Transition in the Oil and Gas Industry	Thermal Stress and Fatigue Analysis of HTHP Well Casing Under Cyclic Loading	Corrosion Prediction and Prevention in Oil and Gas Pipelines
			Robotics and Autonomous Systems: virtual instrumentation	Legal and Regulatory Protection of the Environment—Addressing the impact of extractive industries		
			Robotics and Autonomous Systems: embedded systems			
			Robotics and Autonomous Systems: wireless/optical/acoustic communications			
			Robotics and Autonomous Systems: electrical power systems			
			Robotics and Autonomous Systems: wireless sensing			
			Robotics and Autonomous Systems: lasers			

Carbon Capture, Utilization, and Storage (CCUS):	Safety and Risk Management	Hydrogen Production	Supply Chain Optimisation	Geopolitical and Regulatory Analysis		
	Corrosion resistant materials for onshore and subsea infrastructure			Energy Accounting, Finance & Management: IFRS Sustainability Standards' adoption in Oil & Gas		
				Energy Accounting, Finance & Management: Climate-related Financial Disclosure in Oil & Gas		
				Energy Accounting, Finance & Management: Environmental management accounting		
				Energy Accounting, Finance & Management: Carbon Trading/Taxation		
				Energy Accounting, Finance & Management: Energy/Carbon Accounting & Finance		
				Energy Accounting, Finance & Management: Energy Life Cycle Costing and Modelling/Monte Carlo Simulation		
				Energy Accounting, Finance & Management: Energy Project Risk Management		
				Energy Accounting, Finance & Management: Energy		

				Transition and Project Management		
				Energy Accounting, Finance & Management: Stakeholder Engagement in Energy Projects		
				Energy Accounting, Finance & Management: Energy Policy and Project Decision-Making		
				Energy Accounting, Finance & Management: Energy Project Resilience		
				Energy Accounting, Finance & Management: Corporate social responsibility and environmental management in Niger Delta		
				Energy Accounting, Finance & Management: SDG and PTDF Impact Analysis		
				Energy Accounting, Finance & Management: Transparency & accountability in energy subsidy/CNG adoption, Decarbonization		
				Social Science: Exploring the Psychological Wellbeing of Communities Transitioning		
				Social Science: Colonial and postcolonial impact on		

				structures of governance and finance		
				Social Science: Harnessing community approaches to move away from colonial capitalist infrastructure developments towards localised networks		