

REBRANDING ENERGY ENGINEERING PROGRAMME

According to Brunei Darussalam Development Goals Annual Report 2021, Brunei Darussalam recognises the urgent action to combat climate change and its impacts. A whole-of-nation approach continues to be adopted in addressing climate change with several developments in this area including Awareness and Education.

From the perspective of education and in realising the importance of supporting Brunei's global ambition in implementing the Sustainable Development Goals (SDGs), Universiti Teknologi Brunei (UTB) takes a significant step in reviewing its Petroleum Engineering Degree Programme.

UTB's Undergraduate Degree Programme in Petroleum Engineering is now rebranded to Energy Engineering, expanding its scope to include renewable energy and sustainable production besides petroleum.

UTB – whose Petroleum Engineering programme was ranked the Top 10 among Southeast Asian universities for two consecutive years – said as energy transition and reducing carbon dioxide emissions dominates the global sustainability agenda, it became prudent to prepare students for the rapidly changing energy landscape.

"The rebranding of this programme is our effort as a technological institution of higher learning in the Sultanate, to continuously prepare our

students for the future. It is our aim to support the national and global agendas on clean energy,” said Pg Dr Seri Rahayu Pg Ya'akub, Acting Dean of the Faculty of Engineering.

The four-year Honours Degree, which will be offered to prospective students in the 2023/2024 academic year, is specialised in the production, storage, distribution, and use of renewable and sustainable sources, said programme leader Dr Mohammad Hazwan Azri.

This programme has been meticulously crafted to align with current trends and demands by benchmarking against top universities that offer comparable undergraduate programmes and have a proven track record of producing highly skilled graduates.

According to the Programme Leader, the restructuring of the curriculum to include other energy sources besides petroleum benefited from the input of both academic experts and industry professionals, who were actively engaged in the design process.

The course of study aims to provide students with a thorough range of interdisciplinary abilities that enable them to improve, augment, and broaden their understanding of energy utilisation.

The Programme Leader also added that industry engagement will play a critical role in the programme, with industry representatives contributing through sharing their experiences, delivering guest lectures, and providing training opportunities throughout the four-year course.

The BEng (Hons) in Energy Engineering is part of the Petroleum and Chemical Engineering (PCE) Programme Area at UTB. This programme area is staffed by a team of professionals, many of whom boast a wealth of experience in both teaching and research.

In 2022, about 30% of PCE staff were recognised as being among the world's Top 2% of scientists, and over 25% hold Chartered and/or Professional Engineer status recognised by international professional organisations.

With highly qualified staff, a wealth of learning resources, and a supportive learning environment, the Petroleum and Chemical Engineering Programme Area strives to offer an excellent quality of education to both current and prospect students.

Upon graduating the BEng (Hons) in Energy Engineering, students will gain the crucial abilities and knowledge required to be successful energy engineers in a variety of industries. The graduates can pursue careers in sectors like oil and gas, process, chemical, electricity, renewable energy, operations, management, and more.

Energy engineers will play a crucial role in Brunei's future, as the country develops its economic and environmental sustainability initiative, Pg Dr Seri Rahayu said.

"An advantage for our prospective energy engineering students will be the versatility to be employed almost anywhere within the energy sector due to our multidisciplinary and rigorous curriculum."

"This is in line with *Brunei Wawasan 2035*, ensuring our most valuable asset – which is its people – are educated, highly-skilled and capable to match the needs of the country."

She added: "UTB will hopefully be at the forefront in producing indispensable manpower resources to facilitate this endeavour."

More information about these new programmes and other degree courses offered by UTB can be obtained at the Higher Education Virtual Expo 2023 taking place from February 13-16, and during UTB's Open Day 2023 from February 15-16, at the Multi-purpose Hall, UTB.