

Water and hydropower education

FOR more than a century, hydropower developments and technological advancements around the world have been growing and greening the world's electricity supplies by generating clean, reliable and cost-effective power from rivers. Additionally, hydropower contributes 75% of total global renewable electricity production.

Universiti Kuala Lumpur (UniKL) and the IHE Delft Institute for Water Education (IHE Delft) has struck a partnership to integrate the strong electrical and hydropower energy system expertise at UniKL with the robust hydraulic engineering and vast international water management experience of IHE Delft.

The Water and Hydropower Engineering is a double degree programme jointly offered by UniKL and IHE Delft. Postgraduate candidates who have successfully completed this programme will be awarded two master's degrees, one from UniKL and IHE Delft respectively. The certificate that will be awarded by the Netherlands' IHE Delft is the Master of Science Degree in Water Science and Engineering with specialisation in Hydraulic Engineering and River Basin

Development while Malaysia's UniKL will confer the Master of Science Degree in Water and Hydropower Engineering.

This interdisciplinary programme combines expertise from the fields of mechanical, electrical and civil engineering and offers students the possibility to experience study and cultural experience at both UniKL and IHE Delft.

IHE Delft is well known for its ability to produce skilled international water education graduates. It operates under the strategic auspices of UNESCO as a Category 2 centre providing water education and training to 23,000 professionals from over 190 countries since 1957.

The institute cooperates closely with the UNESCO secretariat, the Science Sector and the International Hydrological Programme. During their education experience at IHE Delft, students will benefit from the professional contacts the institute has made throughout its existence as well as the opportunity to meet leading figures from the international water arena.

The academic journey starts with a 100% opportunity to go to the Netherlands in October for IHE Delft's Water Science and Engineering programme, undertaking nine modules including an international field trip in Europe.

The first batch of the joint UniKL MFI-IHE Delft programme, batch of 2020/2022.

The experience continues when students return to Malaysia in July the following year to enhance their technical and on-site hydrological skills through several courses in UniKL including the completion of an individual thesis research work.

The double degree programme aims at providing education at the highest level, emphasising the total scope of knowledge required by the hydropower industry. Postgraduate candidates will not only gain deep knowledge on how to create, design, construct, operate and evaluate hydropower plants of any kind, but also learn the context of the hydropower engineering process and development.

Topics including the ecological and social environment and economic considerations are covered in the comprehensive water knowledge programme. In several subjects, candidates will work on practical examples and apply theoretical content. Field assignments and multi-purpose group projects will be carried out under supervision including hydrological and hydraulic calculations, drawings and technical reports. – **By Ts Dr Ahmad Shakir Mohd Saudi, professional technologist and senior lecturer of Universiti Kuala Lumpur**

To be a part of the new intake in the upcoming semester, register before July 1 at <https://www.unikl.edu.my/apply/postgraduate-admission>. The quota is limited to 15 students.

■ For more information about the course, email ahmadshakir@unikl.edu.my.

