BUET launches new undergraduate program in Nanomaterials and Ceramic Engineering

The Bangladesh University of Engineering and Technology (BUET) is going to start the Bachelor of Science in Nanomaterials and Ceramic Engineering program from the 2022-23 session. This is the first undergraduate degree program of its kind in the country.

In addition to nanomaterials of different categories such as metals, polymers, electronic materials, and biomaterials, the new undergraduate program emphasises ceramic materials – both traditional and advanced ceramics. In the recent past, Bangladesh has established itself as an important global player in traditional ceramic manufacturing. Moving into the future, the ceramic industry of Bangladesh is poised to adopt IR4.0, energy efficient and environmentally friendly technologies to keep pace with the global trend and remain competitive. Most recently, this industry is also coming up with nanotechnology-enabled products, such as germ resistant tiles which are already in the market. The industry also needs to diversify and venture into advanced ceramics for engineering applications in order to create more value addition. Advanced ceramics – made from oxides, nitrides, carbides and their composites – have unique combinations of engineering properties and are indispensable in many high-tech applications. The ceramic industry of Bangladesh is in need of qualified engineers with specialised knowledge to embrace the future.

In this context, the program offered by BUET has been designed in consultation with relevant stakeholders and industry players of the country. There is enthusiasm about this new undergraduate program among industry leaders representing ceramics, glass, cement industry as well as those adopting

nanomaterial-enabled products, such as the pharmaceutical and textile industries.

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