Shaping the products of tomorrow

TAR UMT's work-based learning courses let students apply what they learn in theory and gain experience by working with professionals in the industry.

Students pursuing the diploma or degree in product development and manufacturing technology at TAR UMT will undergo various practical sessions.

IMAGINE a world where your wildest ideas can come to life, where creativity meets technology to shape the products of tomorrow.

This is the fascinating realm of product development and manufacturing technology, where innovation knows no bounds and possibilities are endless.

Product developers have never been more important in today's economy as technology has paved the way for creativity and innovativeness to flourish abundantly.

This is rightfully supported by manufacturing technology where advanced tools such as 3D printing, virtual reality, and computer-aided design (CAD) software transform your ideas into tangible products.

It is against this backdrop that Tunku Abdul Rahman University of Management and Technology (TAR UMT) is offering new degree and diploma programmes in these two areas, namely the Bachelor of Materials and Manufacturing Technology (Hons), Bachelor of Manufacturing and Industrial Technology (Hons), Diploma in Product Development Technology and Diploma in Manufacturing Technology.

Specifically, the Diploma in Product Development Technology focuses on developing product development technologists who have the skill sets and know-how to creatively utilise technology to transform ideas into practical products.

Additionally, the programme also focuses on developing students' competencies in identifying market opportunities to develop products that are in demand in the market.

Furthermore, courses in the programme syllabus such as Creativity and Innovation, Product Planning and Control and Industrial Automation ensure students can build a strong and holistic foundation in relevant knowledge and hone important skills and competencies.

On the other hand, the Diploma in Manufacturing Technology aims to hone students to be well versed in technologies that shape or influence the process of transforming raw materials into finished goods.

Beyond this, students will also have the expertise to identify, formulate and solve well-defined technical problems in manufacturing technology through scientific investigation, experimentation or even application of digital and numeracy skills.

On top of this, the programme's courses such as Project Management and Finance, Quality and Safety as well as Ethics and Professionalism will ensure students have a comprehensive foundation in manufacturing technology.

Upon completing either the Diploma in Product Development Technology or Diploma in Manufacturing Technology, students can either pursue the Bachelor of Materials and Manufacturing Technology (Hons) or the Bachelor of Manufacturing and Industrial Technology (Hons).

Both degree programmes take students deeper into their respective fields.

For instance, the Degree in Manufacturing and Industrial Technology further strengthens one's understanding of industrial and manufacturing processes, technologies and practices.

As for the degree in materials and manufacturing technology, emphasis is placed on the study of materials science and engineering principles, as well as manufacturing processes and technologies.

In addition, both degree programmes will require students to undertake work-based learning (WBL) courses with one of TAR UMT's industrial partners on top of the usual Industrial Training course.

WBL is important because students not only can utilise their theoretical knowledge but also have exposure to working with industry professionals and developing other important employment skills at the same time.

The experience will also add more value to their portfolios for future employment.

"The programme outline for both the diploma and degree programmes is carefully designed along the breakthroughs of IR 4.0, taking into account the trends in the industries as well as the sharing of experience and inputs by our industry partners," said the Faculty of Engineering and Technology's Department of Manufacturing Technology associate dean Ong Thai Kiat.

"Technological advancements have not only enabled enhancements in the processes of product development, manufacturing and materials, but have also paved the way for engineers and technologists to harness the power of creativity and innovation to explore more possibilities and discoveries in these areas."

■ For more information about TAR UMT's engineering programmes, visit TAR UMT's Open Day from May 18-19 and May 25-26, 10am to 5pm. You can also call 011-1082 5613 / 011-1059 7120 or log on to *www.tarc.edu.my* for information about TAR UMT and to apply online. Various financial aid and merit scholarships are available for qualified students.