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# COURSE FOCUS

## COMPUTING, TECHNOLOGY, ARTS & DESIGN

THE Internet of Things, augmented reality, artificial intelligence (AI) and automation are some developments that have shaped advancements in global technology and the economy.

Building on the previous industrial revolution that changed the world's digital landscape, the Fourth Industrial Revolution combines the physical, digital and biological worlds – creating a new range of technologies that are human-friendly.

Tunku Abdul Rahman University College (TAR UC) is embracing the Fourth Industrial Revolution by continuing to adapt its programmes to ensure students will be able to keep abreast of the latest developments and technologies.

TAR UC aims to prepare students for the digital economy of the future so that they remain highly sought-after across industries upon graduation.

Last year, TAR UC was recognised as a Premier Digital Tech University by the Malaysia Digital Economy Corporation and the Higher Education Ministry.

Realising the significance of robotics and AI in future industries, TAR UC's Faculty of Computing and Information Technology (FOCS) revisits and enhances its curricula periodically so that computing students are equipped with the skills and knowledge required by the industries of tomorrow.

A new development to the curricula involves a robot named Nao. Studying Nao in classes allows

# Leading the revolution



Yap Kok Hau (in black) and Yap Jin Zhe configuring software that controls Nao's movements.



According to Dr Tang, interactive robots such as Nao can potentially be commercialised across various industries.

students to learn about state-of-the-art humanoid robot development at FOCS' computational intelligence research laboratory.

"Nao and other interactive robots can potentially be commercialised in many industries across Malaysia," says Dr Tang Tiong Yew, senior lecturer from the Department of Computer Science and Mathematics in FOCS.

"Students use Nao as a medium through which advanced AI software components can be

leveraged and programmed to simulate natural conversations between robots and humans."

The opportunity to work on their final-year project with Nao was beyond exciting for third-year Bachelor of Information Technology (Hons) in Software Systems Development students, Yap Jin Zhe and Yap Kok Hau.

"In the future, industries will rely on software and digital technology. Working on Nao gives me a deeper insight into robotics,

which will make me more employable as I possess the basic knowledge and sought-after skills that employers look for," says Kok Hau.

"TAR UC's comprehensive facilities fully support the completion of our final-year project with Nao. Our project supervisor, Dr Tang, is also highly knowledgeable in the field of robotics and has been guiding us throughout the process."

Agreeing with his teammate, Jin Zhe says, "Working on Nao lets me master a new programming language and other skills that I believe will benefit me in the future when more industries start adopting robotics technology.

"We have been getting hands-on exposure on robotics and process automation. It gives us in-depth knowledge of how the robot itself functions and how to configure the software that controls it."

TAR UC's FOCS offers diploma and degree programmes in computer science, information systems and information technology.

FOCS programmes are dual-award thanks to the faculty's academic collaboration with Campbell University in the United States. Students of these programmes receive two certifications upon graduation – one from TAR UC and the other from Campbell University.

Attractive scholarships such as academic merit and sibling discounts are available from TAR UC for eligible students.

TAR UC representatives will be present at major education fairs to meet prospective students who want to know more about the institution and its programmes.

■ For more information, visit [www.tarc.edu.my](http://www.tarc.edu.my)