Insights into Tonsley and the ‘magic’ of STEM

Secondary teachers from across Adelaide are gaining insights into Flinders at Tonsley by previewing the high-tech learning spaces and equipment.

The $120 million facility at Tonsley launched last year as the new campus for the School of Computer Science, Engineering and Mathematics (CSEM) at Flinders, regularly hosts visits by business and industry leaders – along with future students and teachers from around South Australia.

The Teacher in Residence program, to continue in 2016, is part of the Advanced Technology Project coordinated by the Department of Education and Child Development (DECD).

It gives both academics and teachers insights into their respective curricula which can enhance the transition of primary and secondary students into science, technology, engineering and math (STEM) tertiary courses.

Lisa Fowler, from local high school Hamilton Secondary College, was impressed by her tour of Tonsley – including industrial product design and development and a demonstration by the Baxter humanoid manufacturing robot in the ground floor Robotics and Automation Laboratory at Flinders at Tonsley.

The secondary arts, design and technology teacher says an understanding of the courses offered by Flinders University will shape the study and career information she shares with her students.

Ms Fowler said the residency program can help streamline the continuity of teaching between secondary and university.

“As a teacher, with a number of years’ experience, it is often difficult to keep abreast of industry developments and cutting edge technologies,” she says.

“By meeting with lecturers, tutors and marketers at Tonsley, I have not only built professional working relationships but also links to industry, training and research, in a business and tertiary setting – essential for 21st century teaching.

“The Teacher in Residency program has highlighted the importance of cross-curricular projects and undertakings; particularly in a South Australian economy where innovation is needed in order to create jobs, in the wake of the wind-down of the many companies within the manufacturing industry,” Ms Fowler says.

Dr Nasser Asgari, the Course Coordinator and Director of Studies for Electrical and Electronics Engineering, said hands-on and practical project work at Flinders and a close link with industry made the University a great place to study.

“Visitors love to see Baxter and find out that it comes from an American company founded by a former Flinders graduate (Professor Rodney Brooks) who now heads Rethink Robotics, a global leader in the robotic industry,” Dr Asgari says.

“These facilities at CSEM showcase the kinds of study and research which have links to great technological breakthroughs of our times.”

The facilities include a state-of-the-art Design Studio, 3D printing and laser cutting facilities in the FAB (fabrication) lab, biomedical research areas and many other modern and specialised laboratories in electronics and control, mechanics and material, networking, maritime, civil, and other areas of study.

“This gives visitors a great insights into the breadth of STEM study and career options at Flinders,” Dr Asgari says.

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- See more at: http://blogs.flinders.edu.au/flinders-news/2016/01/18/insights-into-tonsley-and-stem-magic/#sthash.vsphYfs0.dpuf