Students compete in RoboCup Games

Morning Star Nov 12

When they gather Tuesday at Okanagan College's Kelowna campus, more than 40 students will be vying for the chance to represent Canada in the World RoboCup Games.

Those international games will be held in Atlanta in July 2007.

Hosted by Okanagan College, the Western Canada RoboCup Junior is an internationally accredited educational competition which includes teams of students ranging from Grade 1 to Grade 12 working together to develop solutions to one of three specific challenges (soccer, rescue and dance) using robots. This year, 17 teams have signed up.

"This is the first time RoboCup has been offered in Western Canada and the appetite for the competition is greater than I expected," said Nadir Ould-Khessal, assistant professor of electronic engineering technology.

The events get underway at 10 a.m. in the Okanagan College Pit area with the soccer and rescue challenges. In soccer, teams comprised of two autonomous mobile robots track a special light-emitting ball in an enclosed field and attempt to score goals. In rescue, robots follow a course, negotiate uneven terrain and identify victims within re-created disaster scenarios.

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The dance competition begins at 1 p.m. in the college's lecture theatre. Teams competing in dance perform with their robots in choreographed routines set to music and will be judged in a range of areas including robot programming, design, costume, use of stage and entertainment value.

Ould-Khessal has been involved with the International RoboCup Federation for the past 10 years both as a team leader and participant. He designed teams while teaching at Temasek Polytechnic in Singapore and later at VAASA University of Applied Science in Finland.

His involvement stems from a belief that the games are an excellent way to promote learning in a challenging and creative environment.

"RoboCup is a project that integrates many technologies at the same time," says Ould-Khessal.

"Students have to develop skill in construction, programming and most importantly, problem-solving. We stress education over competition. That is why the three challenges remain the same from year to year – so students can build on their previous success. The potential for learning is great but more than that - the best thing about RoboCup is that it is fun."