Technology Pathway





Wednesday, May 28, 2014 For immediate release

New opportunities for talent development address regional needs

KENOSHA – A new partnership between the University of Wisconsin-Parkside and Gateway Technical College creates the first post-baccalaureate teacher licensure program in the state of Wisconsin for professional educators specializing in career and technology education (CTE), and pre-engineering. The licensure program, approved recently by the Wisconsin Department of Public Instruction, addresses the shortage of CTE and pre-engineering teachers.

One example of the shortage is found in the Kenosha and Racine unified school districts where seven CTE and pre-engineering teachers are on emergency licenses this year. The districts expect vacancies of up to 15 over the next three years due to retirements and new programs at the middle school level.

In addition to the teacher licensure program, a guaranteed transfer for engineering students between UW-Parkside and the University of Wisconsin-Milwaukee was announced Tuesday at a community event hosted by Snap-on Incorporated.

Engineering students are able to complete the first two years of course work at UW-Parkside, then transfer to UW-Milwaukee and enter the College of Engineering and Applied Science with junior standing. Students are eligible to complete a degree in electrical engineering or mechanical engineering.

The emerging success model for business and industry is highly dependent on the availability of employees with technology and engineering skills. The new partnerships between the three institutions – *Technology Pathway Partners* – create links in learning and skills development from middle school through higher education.

At Tuesday's event, Snap-on Chairman and CEO Nick Pinchuk cited a National Association of Manufacturers report identifying the capability of the workforce as the number-one consideration in locating a factory or company headquarters.

"Ongoing prosperity in southeastern Wisconsin and across our nation depends on more career and technical education - more skills training," Pinchuk said. "To achieve this, industry, education and government must join in broadening support for technical education so that students learn the skills that get them jobs and create rewarding careers."

Wisconsin Workforce Development Secretary Reggie Newson told the group Tuesday that the state expects it will need to fill nearly one million replacement jobs over the next 15 to 25 years. "This type of partnership [Technology Partner Pathways] will be the way we manufacture talent and human capital," Newson said.

UW-Parkside Chancellor Debbie Ford emphasized the university's commitment to developing student-centered, highly relevant and affordable education pathways to address the short and long-term talent development needs of southeastern Wisconsin.

"The programs we are announcing today in technology education and engineering are true collaborative efforts – between public education and industry – designed to meet the current and growing need for highly skilled talent," she said. "Listening to and learning from each other and then acting together is our path forward."

New Teacher Licensure

According to the Wisconsin Standards for Technology and Engineering, K-12 students who participate in technology and engineering classes are exposed to increased academic, technical and employability knowledge and skills that are critical for students to be college and career ready.

However, a shortage of CTE and pre-engineering educators poses an obvious challenge. Gateway Technical College President and CEO Bryan Albrecht described the snowball effect of fewer teachers resulting in fewer CTE programs in K-12 schools, and fewer students interested in technology and engineering. "If you don't have inspired teachers, it's unlikely you will have an inspired cohort of students," Albrecht said.

The National Association of State Directors of Career Technical Education Consortium notes several factors contributing to the shortage in CTE teachers, including increased student demand for CTE courses; elimination of existing teacher education programs that license CTE teachers; and retirements affecting the current supply of teachers.

"Building the workforce for tomorrow begins in our classrooms today," Albrecht said. "The partnership between Gateway Technical College and UW-Parkside serves as a national model for addressing the critical need to align technology and engineering teachers with the needs of industry."

The partnership between Gateway and UW-Parkside is a post-baccalaureate program that leads to a technology and pre-engineering license to teach at the early childhood-adolescence level. It is the sole licensure-only program in the state of Wisconsin.

Engineering Opportunities

The new guaranteed-transfer agreement between UW-Milwaukee and UW-Parkside provides students with a seamless pathway to degree completion in the areas of mechanical or electrical engineering.

Mark Mone, interim chancellor at UW-Milwaukee, called the Technology Pathway Partnership a vital impact on the STEM-related careers. "This is a monumental moment in so many ways," Mone said. "This is truly one of the types of relationships we can hold up and say, 'we get it and we understand the different elements that have to occur for us to make the type of differences that we are all looking for."

Program Details

Alternative Route to Technology Educator Licensure (ARTEL) Technology Education and Pre-Engineering Licensure for Teachers

The University of Wisconsin-Parkside Institute of Professional Educator Development and Gateway Technical College will partner on the state's first licensure-only post-baccalaureate program. UW-Parkside will provide oversight of the licensure process including pedagogy coursework and required field experiences. Gateway will support candidates with content courses aligned with the Wisconsin State Standards. Representatives from regional school districts and corporate partners will join those from UW-Parkside and Gateway as members of an Advisory Council for the Technology Education program.

The new technology education licensure program answers the need for technology and preengineering teachers. Today, only UW-Stout and UW-Platteville prepare technology and preengineering educators with a bachelor of science or master's degree. Individuals looking for a licensure-only alternative were challenged to find a regional program to participate in without enrolling in a full program.

New Opportunities for Engineering Students

A partnership between the University of Wisconsin-Parkside College of Natural and Health Sciences (CNHS), and the University of Wisconsin-Milwaukee College of Engineering and Applied Sciences (CEAS) provides students in southeastern Wisconsin interested in engineering with a new opportunity to earn a degree in electrical or mechanical engineering.

Students complete the first two years of course work at UW-Parkside, then transfer to UW-Milwaukee and enter the CEAS with junior standing. Students are eligible to complete a degree in electrical engineering or mechanical engineering.

Since its establishment in 1964, the UW-Milwaukee CEAS has created a learning environment that forges a strong foundation of basic scientific and engineering principles with the practical application needs of industry.

Students enrolling at UW-Parkside in the fall of 2014 are eligible to participate in the program, as well as any current UW-Parkside students who meet the enrollment and academic program requirements.

The transfer is guaranteed for students who complete all of the articulated courses at UW-Parkside and meet the established admission requirements of CEAS and UW-Milwaukee.

###

Media contacts:

John Mielke, UW-Parkside at 262-902-9355; Lee Colony, Gateway Technical College at 262-564-2512; or Laura Hunt, UW-Milwaukee at 414-229-6447.