Cal Poly Announces New Graduate Degree Program in Fire Protection Engineering

SAN LUIS OBISPO – The Cal Poly Academic Senate recently approved a new master’s degree program in Fire Protection Engineering (FPE) – one of only three such programs in the nation and the only one on the West Coast.

Based in the College of Engineering, the multidisciplinary program will be administered by Cal Poly Continuing Education and University Outreach. The FPE program will be open to students starting Fall 2010 both on campus and online, in order to accommodate working professionals. “Full-time students should be able to complete the 45-credit degree in one-and-a-half to two years,” says Fred Mowrer, FPE acting director and visiting professor.

A former president of the Society of Fire Protection Engineers who taught fire protection engineering at the University of Maryland for 21 years, Mowrer explains that the program will focus on the built environment and include courses taught by professors in mechanical engineering, construction management, architecture and civil engineering.

“The job of fire protection engineers is to analyze how buildings are used, how fires start and grow, and how fire and smoke affects people, buildings and property,” he says. “Professionals in this field find innovative ways to lower costs and increase safety.” Their work includes designing sprinkler and alarm systems, evaluating buildings for fire risk and prevention, and conducting fire safety research on consumer products and construction materials.

“Fire protection engineers are in high demand; through surveys and our initial outreach, we encountered a lot of enthusiasm for this new program,” Mowrer notes. “We intend to take advantage of this support by calling on professionals to serve as mentors for student projects.”

Mowrer spearheaded the Cal Poly FPE program along with mechanical engineering professor Chris Pascual; Skip Parks, dean of Continuing Education and University Outreach; and William Durgin, professor of Engineering and University Executive for Research and External Support. The start-up team also called on the expertise of Dave Lucht, former deputy director of the U.S. Fire Administration and founding director of the Center for Fire Safety Studies at Worcester Polytechnic Institute (WPI).

“As a colleague of Dave’s at WPI, I came to know about fire protection engineering,” says Durgin. “When I came to Cal Poly, I
realized that there is an acute shortage of fire protection engineers in California. This seemed to me to be both a perfect opportunity and a responsibility for Cal Poly."

By generating "home grown" California Fire Protection Engineers, Durgin and Mowrer anticipate that Cal Poly's FPE program will build a stronger Fire Protection Engineering industry in California.

"California has a special responsibility to address fires at the interface of wildlands and urban areas," notes Durgin. "There is a critical need for engineers who can develop the knowledge and design principles to mitigate the losses we experience each year."

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