

FOR IMMEDIATE RELEASE

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Cal Poly Launches Online Printed Electronics and Functional Imaging Professional Certificate

SAN LUIS OBISPO — Cal Poly will launch an online Printed Electronics and Functional Imaging Professional Certificate Program beginning Sept. 22.

Designed for working professionals, the program is comprised of five courses to be offered in a sequence that allows the entire certificate program to be completed in 12 months. Courses can also be taken on an individual basis to cater to student interest.

More than a webinar, the instructor-led, graduate-level courses are fully accredited and involve interactions with classmates, instruction, assignments and exams — similar to a traditional class but in a virtual environment.

“These are university-level graduate courses using a modern delivery system,” said graphic communication Professor Malcolm Keif, graduate coordinator for the program.

The program includes a four-week foundations course (prerequisite to other courses) and four, eight-week topics courses. Two courses will be offered in the fall, with one course to follow in the winter, spring and summer quarters.

The courses include:

GrC 501 — Survey of Functional Printing: Foundations for emerging functional printing fields, including printed electronics, active packaging, and security printing. Emphasis on processes, materials, electrical characterization, sensing, barrier properties, and anti-counterfeiting. Focus on applications including lighting, displays, novel electronics, energy harvesting, energy storage, sensors, scavengers, and brand security.

GrC 510 — Materials for Functional Printing: Study of functional materials including substrates, coatings and inks. Focus on barrier and heat-stable substrates and conductive, semi-conductive, dielectric, transparent conductors, forensic, sensor, and other functional inks and coatings. Emphasis on rheology, morphology, sintering and annealing.

GrC 512 — Printing and Coating Technologies: Study of functional printing and coating technologies, including screen printing, flexography, gravure, ink jet, offset, slot die, blade coating, and conventional deposition techniques.

GrC 514 — Optical and Electrical Patterning: Imaging technologies and processes for security, electronic and active packaging printing. Focus on creating and evaluating images for applications in product security and electrical fabrication.

GrC 520 — Functional Printing Product and Business Development: Principles of business and product development for electronic and functional applications. Focus

on intellectual property rights, capital funding, entrepreneurship and management of a technology business.

"Cal Poly is at the forefront of education in the emerging printed electronics field," Keif said. "Printed electronics, active and intelligent packaging, and security printing are growing markets that are rapidly evolving. We are offering these courses so that industry can increase in our collective knowledge base and move the discipline forward."

The program is open to all individuals with a bachelor's degree. For additional information, including how to enroll, go to: printedelectronics.calpoly.edu/certificate.

Links

- Cal Poly Printed Electronics & Functional Imaging: printedelectronics.calpoly.edu
- Cal Poly Graphic Communication Department: www.grc.calpoly.edu
- Cal Poly College of Liberal Arts: www.cla.calpoly.edu/

About the Cal Poly Graphic Communication Department

The Graphic Communication Department at Cal Poly is one of the best-known and largest programs of its kind in the western U.S. The department is home to more than 33,000 square feet of laboratories filled with cutting-edge equipment donated in large part through industry partnerships. The department serves approximately 300 undergraduate students pursuing a degree in graphic communication with emphases in four focus areas. Cal Poly will begin offering a Master of Science degree program in printed electronics and functional imaging in 2015.

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