Online Architectural Lighting Courses

Created for building-design and lighting-industry professionals who need or desire more formal lighting education, such as lighting designers and engineers, lighting manufacturers, sales representatives, architects, interior designers, engineers, and utility personnel. Others who can benefit from these courses include landscape architects and electrical engineers.

Excellence
What sets Penn State apart from other online educators? Faculty expertise. An associate professor of architectural engineering in the College of Engineering, Richard Mistrick, P.E., FIES, IESNA, holds a Ph.D. in illuminating engineering from Penn State. Additional degrees include a bachelor of science in architectural engineering and a master of science in civil engineering (building energy). Before coming to Penn State in 1986, he worked with Lighting Technologies, Inc., on the development of the first version of Lumen-Micro and other PC-based lighting analysis software.

An assistant professor of architectural engineering in the College of Engineering, Martin Moeck, IESNA, IALD, holds a Ph.D. in Architecture from the University of Stuttgart, Germany, and a master of science in architectural engineering from the University of Kansas. Before coming to Penn State in 2001, he was assistant professor at the University of Kansas in the Department of Architectural Engineering. From 1993–1995, Dr. Moeck was an invited scientist at Lawrence Berkeley National Laboratory in the Windows and Daylighting Group. He also served as project engineer at Siemens Lighting in Germany.

Advancement
The recently instituted National Council on Qualifications for the Lighting Professions (NCQLP) certification program has created a need for formal training in lighting design, as well as a need to meet continuing education requirements for recertification. Penn State’s architectural lighting courses can help prepare you to meet these professional goals.

Convenience
These architectural lighting courses provide you with the opportunity to study at convenient times—you have global access to a Penn State education with the flexibility to complete assignments at times and places that suit your busy schedule.

Student Services
As a Penn State World Campus student, you will have access to our team of academic advisers and other learner support resources, including registration assistance, technical support, and our vast University Libraries system.

To apply, or for more information, please call 800-252-3592 (toll free within the United States) or 814-865-5403 (local and international calls); or visit our Web site: www.worldcampus.psu.edu
Architectural Lighting Courses

These 3-credit postbaccalaureate courses are designed for professionals who are working in, or hope to be working in, the lighting and building design industries. The courses have been chosen as those that best meet the needs of practicing professionals and provide a coordinated package to enable those already in the lighting industry to enhance their job performance. Admission is open to anyone with a baccalaureate degree in a building- or lighting-related field—including architecture, interior design, architectural engineering, engineering, and facilities management—or a position or work experience in the lighting industry, with a baccalaureate degree in business or science. No prior course work in lighting design is required for admission into A E 461.

Although students will complete a course as a group, and interaction with faculty and other students is expected, instruction will be delivered through a combination of Internet-based and CD-ROM activities that can be completed independent of time and location (between assignment deadlines), to accommodate student schedules. Since these are upper-division courses, they require the time commitment of a typical college course, which is approximately seven to ten hours per week, on average.

Benefits

• These courses help prepare you for the National Council on Qualifications for the Lighting Professions (NCQLP) examination.

• Earn Continuing Education Units (CEUs) toward recertification with the National Council on Qualifications for the Lighting Professions and the American Institute of Architects.

• Use the courses to help you prepare for the examinations for Certification in Interior Design and Certification for Facilities Management (CFM).

• Gain credits that can transfer and apply toward a master’s degree in architectural engineering.

Program Outline

Theory of Building Illumination
(A E 461, 3 credits) Tuition:* $1,118
Comprehensive coverage of fundamental architectural lighting design practices. Provides a basic understanding of terminology, including basic units and photometry; lamp, luminaire, and control technologies; the use of the lumen method, inverse square law, and computer analysis methods. Also considers multiple fundamental design criteria for architectural lighting systems design.

Computer-Aided Lighting Design and Analysis
(A E 466, 3 credits) Tuition:* $1,118
Design and analysis of lighting for exterior and interior applications; economic analysis of lighting systems, modeling algorithms, visualization/rendering of lighting systems, and the evaluation of design performance relative to established design criteria using computer software.
Prerequisite: A E 461 or approval of the department

Architectural Daylighting
(A E 565, 3 credits) Tuition:* $1,118
A comprehensive study of the design and analysis of daylighting elements for buildings, including basic parameters of daylighting design, predicting daylight availability, applying daylight analysis techniques, and designing daylight-responsive control systems.
Prerequisite: A E 461 or approval of the department

*Other fees and materials costs may apply. Tuition listed is for the 2001–02 fiscal year and is subject to change.

For More Information
For the most up-to-date information about World Campus courses, admission requirements, and tuition and fees, contact us:

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University Park PA 16802-3601

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