

Advanced Lighting Technology



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Strong Workforce Investment Opportunity

Engage. Enroll. Employ.

**Customizable Solutions to Meet
Priority Workforce Needs**

Energy Construction & Utilities

California Community Colleges
Workforce & Economic Development



CALIFORNIA COMMUNITY COLLEGES

Doing What MATTERS™

FOR JOBS AND THE ECONOMY

Advanced Lighting Technology

Purpose: Provide curriculum, lab equipment, and faculty professional development to integrate the latest manufacturers' technology into Electrical, Architectural, Lighting Design, Sustainability, and Building Science programs. Market demand suggests that this initiative should scale to 20 or more colleges. More info at: <http://www.ECUSectorDWM.com/StrongWorkforce>

Customizable Solutions

Description:

Advanced Lighting Controls and Application Courses are available to California Community College System faculty and students, developed by the National Electrical Manufacturers Association (NEMA) and the Lighting Controls Association (LCA).

Lighting Technology Fundamentals Lab for Architectural, Lighting Design and related programs developed through a strategic partnership with the California Lighting Technology Center (CLTC) at UC Davis. May be suitable for Physics programs.

Course Outlines:

Controls Course: Over twenty (20) "on line" courses are available covering various lighting control and application topics.

Basic Course Outlines

These are leading edge and brand/technology agnostic courses and include; learning objectives, subject matter descriptions and presentations, quizzes and completion certificates. Courses are recognized as preparation for CALTCP and NLCAA training and certification in California, and the NALMCO CLCP certification internationally.

Fundamentals Lab: Material and lab experiences were developed by the CLTC covering light measurement and analysis, the visual perception of light, and how different light sources can render color, commercial and residential lamp types including the latest in light emitting diodes (LEDs), lamp power supply hardware including ballasts, drivers and locational applications for interior and exterior lighting. Other seminars, hosted meetings, technical updates and code/standards presentations often take place at the CLTC as part of the strategic partnership with the California Community College System.

Strong Workforce Investments

Customize Your Program and Contact Us

- LCA/NEMA certification for Lighting Controls
- Funding for faculty development, including stipends and travel costs
- Participation in a statewide Community of Practice
- Assistance with program integration at the college level
- Developing and executing strategies for increased enrollment
- Engaging industry and other colleges in regional collaboration
- Building employer awareness to support recruiting and employment

Strong Workforce Funding Estimates:

Faculty seminar attendance preceding commitment to the program	• \$1,000
Faculty participation in train-the-trainer session	• \$1,600
Enrollment outreach program (share of a regional budget)	• \$3,000
Regional collaboration and meetings (share of a regional budget)	• \$5,000
Participation in statewide Community of Practice (2 meetings/year)	• \$1,800
Industry engagement for student employment	• \$5,000
Implementation support and program refinement (CLTC)	• \$5,000

Lab Equipment:

Includes (3) portable storage boxes ~48"x36"x20" lab equipment trainer fitted with various types of LED fixtures, sensors, a controller and instruments for measuring and calibrating lighting sources.

Lab Demonstration Kit (per kit, based on availability)	• \$6,000
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LABOR MARKET

www.ECUSectorDWM.com/Lighting

Nearly 50% of the energy consumed in buildings and homes is from lighting systems that are outdated or not matched to occupancy requirements. The demand for Advanced Lighting Control Technicians is driven by California's Clean Energy and Pollution Reduction Act (SB 350), which calls for 5 billion square feet of commercial floor space to consume Zero Net Energy by 2030. See the SB 350 Workforce Challenge at www.ECUSectorDWM.com/Resources. Full implementation of SB 350 continues through the year 2050.

Also driving demand is the Commercial Real Estate industry's emphasis on clean energy technology upgrades in buildings as a means to increase value of their investment portfolios. The statewide advisory council for this Strong Workforce initiative includes IFMA, the Building Owners and Managers Association (BOMA) and major Commercial Real Estate firms.

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Engage. Enroll. Employ.



Student success is a priority for everyone. Many evidence-based models can be applied, not the least of which is a well-defined career pathway which enables students to build competencies that resonate with employers. External dimensions can enhance the career pathway model, integrating enrollment strategies, labor market insights, professional development for faculty, and employer engagement. The Customizable Solution described in this brochure includes ECU Sector Team services that align within a new framework to support faculty and administrators.

Here's how it works:

Engage. Creating the relationships necessary for successful initiatives. Key industry stakeholders and major employers. Other colleges in a regional collaborative. Workforce Development Boards. Economic Development Agencies. K-12 and Adult Education. Apprenticeship Training Centers. Expert Networks for faculty professional development.

Enroll. Filling classrooms with likely completers. Developing an enrollment strategy. Building career awareness. Targeting likely completers. Addressing special populations. Executing marketing and outreach programs.

Employ. Connecting students with jobs, launching careers. Building an "Employer Ecosystem". Identifying industry-valued credentials. Establishing work experience programs. Facilitating support for job placement. Assisting with student/employer linkages. Developing "branded channels".

Make the most of your Strong Workforce investment. Contact the ECU Sector Team today.