

"IT WAS EXTREMELY HELPFUL TO SIT AND FOCUS ON HOW THE MAJOR COMPONENTS OF ENERGY MANAGEMENT INTERACT WITH EACH OTHER....INTRODUCTION TO ENERGY RESOURCE MANAGEMENT FORCED ME TO CONSIDER ALL THE MOVING PARTS FROM A HIGHER LEVEL, WHICH HELPED REMIND ME OF THE IMPORTANCE AND INTER-RELATIONSHIP OF THE ERM WORLD."

—Chris Pilek, program manager, Ag Team Lead, Resource Solutions Group

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Find out how UC Davis Extension's convenient, online *Energy Resource Management* program can help you make a difference in your community, and take control of your career.

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ENERGY RESOURCE MANAGEMENT CERTIFICATE

The Environmental Protection Agency estimates that 30 percent of all energy in industrial and commercial buildings is wasted or used inefficiently. In today's complex and volatile economic environment, energy resource management is a top concern for any business hoping to maintain its competitive edge. Pursuing sustainable energy management strategies is a powerful tool for achieving energy efficiency, cost savings and risk reduction, and will help chart a course toward a sustainable future.

The UC Davis Extension *Energy Resource Management Certificate Program* is designed specifically for those leaders who wish to expand their expertise in this critical area. This online certificate program addresses the entire range of issues involved with understanding and managing energy in any industry and will provide the information you need to distinguish yourself as an expert in the energy resource management field.

This program is an approved educational provider for the Association of Energy Engineers and receives technical support from the California Energy Commission. These courses meet the continuing educational requirements for renewing your AEE Certified Energy Manager® Certification.



Introduction to Energy Resource Management

3 quarter units academic credit, X445.1.

Examine the four major components of energy management—supply, demand, regulation and environment—and the concepts and principles behind successful energy management. Topics explored include: auditing and economic analysis, management control and maintenance systems, sustainability and high performance green buildings, alternative energy systems, thermal storage, codes and standards, utility deregulation and energy systems outsourcing, energy security risk analysis methods, and financing energy management projects.

Plant energy managers, utility energy auditors and analysts, consulting energy managers and engineers, demand-side managers, architects, construction planners and designers will benefit from this overview and prerequisite for the *Energy Resource Management Certificate Program*.

Recommended prerequisite: General manufacturing operations, engineering, environmental management or building facilities management experience.

- Enroll now through April 13 and complete by June 17. Passwords issued starting April 2.
- Technical requirements: Enroll anytime between the dates noted above. You must provide your email address when enrolling to receive your password. If you do not receive your password in the time frame noted, please visit the Online Learning Campus Support Center at extensiondlc.net/helpdesk. Open a new ticket, and select "Password Issues" from the Help Topics.
- \$1,495 (\$1,645 if postmarked after 03/19/2012). Enroll in section 114ERM100.

Groups of three or more and members of AEE, BIA and AICP may enroll in Energy Resource Management courses at a 10 percent discount.

Energy Resource Management: Demand

3 quarter units academic credit, X445.4.

Gain real solutions to real-world energy problems by learning to conduct energy audits, a function in a conservation-conscious energy community. The audits integrate: energy economics, metering, performance contracting and financing with demand response, measurement, verification, equipment applications and systems. Discover the quantitative analysis of WAGES and familiarize yourself with an overview of LEED. Explore optimization and analysis of performance for new and existing buildings. Topics include: the latest lighting technologies and products, project management, fleet operation and maintenance, verification of energy savings, and best practices and benchmarking.

Prerequisite: *Introduction to Energy Resource Management*.

- Enroll now through April 13 and complete by June 10. Passwords issued starting April 2.
- See technical requirements at left.
- \$1,495 (\$1,645 if postmarked after 03/19/2012). Enroll in section 114ERM101.

Energy Resource Management: Leadership

3 quarter units academic credit, X445.6.

Examine the leadership issues involved in managing energy from organizational behavior and change management to project management and communication skills. Find out how to develop your own leadership style. Learn how to successfully move your organization ahead by creating effective strategies for energy management, including your most important asset—people.

Prerequisite: *Introduction to Energy Resource Management* and one other *Energy Resource Management* course.

- Enroll now through April 13 and complete by June 10. Passwords issued starting April 2.
- See technical requirements at left.
- \$1,495 (\$1,645 if postmarked after 03/19/2012). Enroll in section 114ERM105.

Energy Resource Management: Supply

3 quarter units academic credit, X445.2.

Learn to conduct market assessments and to develop sourcing and procurement strategies. Topics include: energy management control systems, natural gas purchasing opportunities in the spot market, thermal energy storage, alternative energy supplies, energy security and energy trading. Explore reliability and risk analysis methods, financing projects and tax considerations as well as strategic planning, cogeneration and the options, costs, benefits and constraints of "green sourcing."

Prerequisite: *Introduction to Energy Resource Management*.

- Enroll now through April 13 and complete by June 10. Passwords issued starting April 2.
- See technical requirements at left.
- \$1,495 (\$1,645 if postmarked after 03/19/2012). Enroll in section 114ERM102.



Energy Resource Management: Regulatory

3 quarter units academic credit, X445.3.

Examine the difference between regulations and tariffs pertaining to electrical generation, transmission and distribution and those pertaining to gas production, transmission and distribution. You will also survey indoor air quality standards, rate structures and learn how to conduct a load study. Explore emerging state and federal regulations and codes, as well as codes and standards for commercial and industrial uses and applications. **Offered summer and winter quarters.**

Prerequisite: *Introduction to Energy Resource Management*.

Contact Us

Visit us online to watch a short video about the program, sample course content and for detailed course information, including textbooks and instructors.

For general information or to enroll, call (800) 752-0881, email extension@ucdavis.edu or visit our website.

extension.ucdavis.edu/engineering

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Textbooks. Please note textbook information can change. Before purchasing your textbooks, please check the class information page on our website (extension.ucdavis.edu) for the most up-to-date information.

Tax deductibility of educational expenses. Educational expenses—including registration fees, travel, meals and lodging—may be deductible if they maintain or improve professional skills or meet the express requirement of an individual's employer.

If your plans change. Requests to withdraw from a course must be received before the last meeting of the course. Following the proper withdrawal procedure will ensure an appropriate grade assignment.

Energy Resource Management: Environment

2 quarter units academic credit, X445.5.

Explore the range of environmental issues affected by energy use. Gain perspectives on current trends and technologies. Examine the environmental fundamentals—planning, development and implementation—of WAGES (water, air, gas, electricity and steam) and renewable energy systems, purchasing/trading carbon offsets, the Climatic Change Action Plan and best practices and methodologies for financing "green" investments. **Offered summer and winter quarters.**

Prerequisite: *Introduction to Energy Resource Management*.

Refund requests for short courses (five or fewer meetings) will be approved, less a \$30 processing fee, if the request is received *seven calendar days before* the course begins. For quarter-long courses (more than five meetings), refunds will be approved, less a \$30 processing fee, if the request is received *before the second meeting* of the course.

Requests for withdrawals or refunds may be made by phone, fax or in writing. Please include the student's name, course title and course section number. For information about other alternatives (e.g., transferring to another course or sending a substitute), call UC Davis Extension at (800) 752-0881. UC Davis Extension reserves the right to cancel or reschedule courses and to change instructors. If a course is canceled or rescheduled, you may request an official transfer to another course or a refund. Every reasonable effort will be made to notify enrollees of changes or cancellations.



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