UCI Division of Continuing Education

SYSTEMS ENGINEERING

CERTIFICATE PROGRAM • ONLINE

The expanding complexity of providing products and services in a worldwide marketplace with a global workforce has fueled an increase in demand for systems engineers. Systems engineers utilize a combination of product development and service delivery fundamentals including program & project management techniques and keen business skills. Systems engineers plan, coordinate, and manage team efforts that translate customer requirements and operational needs into effective solutions that meet cost, schedule, and performance goals.

This certificate prepares you to sit for the Associate and Certified levels of the Systems Engineering Professional exams (ASEP & CSEP) given by the International Council on Systems Engineering (INCOSE). Recognized internationally, these certifications have set the standard for excellence in systems engineering.

WHO SHOULD ENROLL

This program benefits program managers, project managers, and those in technical and non-technical disciplines who are involved in any aspect of the development and deployment of products or services. This includes development, design, operations, manufacturing, testing, implementation, procurement, cost, scheduling, training and support. Those who are involved with project or program management or enterprise-level process improvement will also benefit from this program.

PROGRAM BENEFITS

- Acquire useful and practical skills to improve operational efficiency
- Reduce project and program risks while keeping on schedule and under budget
- Analyze customer needs and develop clear requirements that translate into optimal products and services
- Develop innovative approaches for systems design and integration
- Utilize simulation-based engineering to optimize development and deployment efforts
- Prepare for CSEP industry certification

CERTIFICATE ELIGIBILITY AND REQUIREMENTS

A certificate is awarded upon completion of 15 required credit units, with a grade of "B" or better in each course. All requirements must be completed within 5 years after the student enrolls in his/her first course. Students not pursuing a certificate are welcome to take as many individual courses as they wish.

IEEE Members receive
15% off
of one course per quarter.
IEEE computer society

PROGRAM FEES

The total cost of the program varies depending on the electives chosen. Actual fees may differ from the estimate below. Fees are subject to change without prior notice.

Course Fees	$4,470
Candidacy fee	$125
Textbooks and Materials	$600
Total Estimated Cost	**$5,195**

TO ENROLL

Visit ce.uci.edu/systemseng for full course descriptions, instructor biographies, and enrollment information.

FOR MORE INFORMATION:

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SYSTEMS ENGINEERING CERTIFICATE PROGRAM

COURSE#	REQUIRED COURSES	UNITS
EECS X491.81	Foundations of the Systems Engineering Process	2.5
EECS X491.71	Systems Requirements Engineering	2.5
EECS X491.94	System Design and Integration	2.5
EECS X491.93	System Validation and Verification	2.5
EECS X429.2	Simulation-Based Engineering of Complex Systems	2.5
EECS X491.98	Systems Engineering: Tools & Methods	2.5

ADVISORY COMMITTEE

Carlee Bishop, Ph.D., Executive Director, Professional Masters in System Engineering, Georgia Institute of Technology

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John C. Hsu, Ph.D., M.S., PE, Technical Director of Systems Management and Engineering Consulting Services; Adjunct Professor, California State University Long Beach; Fellow, American Institute of Aeronautics and Astronautics

Thomas V. Huynh, Ph.D., Associate Professor Systems Engineering, Naval Postgraduate School

Scott Jackson, M.S., CSET, Fellow of the International Council on Systems Engineering (INCOSE); Adjunct Faculty in Systems Engineering and Resilience Architecting, University of Southern California

Michael E. Krueger, President, ASE consulting, LLC, Co-author of INCOSE Systems Engineering Handbook

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