

DREXEL UNIVERSITY'S ONLINE MS IN SYSTEMS ENGINEERING



The online Master's degree in Systems Engineering prepares students to become effective systems engineers, leaders, managers and future executives. With a systems engineering background, students are able to tackle a wide array of engineering challenges from the entire systems life cycle, including concept development, technology assessment, architecture selection, and proposal development.

TRANSFER AGREEMENT FOR UNIVERSITY OF CALIFORNIA IRVINE STUDENTS AND ALUMNI

Through a transfer agreement with Drexel University's College of Engineering, students who complete the Systems Engineering Certificate Program at UCI DCE may receive academic credit and transfer all six courses (with a grade of B or higher) into Drexel's online MS in Systems Engineering.

This means you will already have completed 1/3 of the master's degree.

PROGRAM AT A GLANCE
Total Quarter Credits: 45

ADMISSIONS REQUIREMENTS

A bachelor's degree in an Engineering discipline from an ABET-accredited college or university

A bachelor's degree in science (Physics, Mathematics, Computer Science, etc.) is also acceptable, but you may be required to take extra undergraduate or graduate courses

A minimum undergraduate GPA of 3.0 as well as any subsequent graduate-level work



Tuition savings available for employees or members of partner organizations, alumni and their immediate family members



No application fee, deferred billing options available



Additional benefits for military servicemembers, veterans and their immediate family

LEARN MORE

[ONLINE.DREXEL.EDU/MSSE-UCI](https://online.drexel.edu/msse-uci)

Questions? Contact:
877.215.0009 | DUonline@drexel.edu

REQUIRED COURSES**30.0**

EGMT 572	Statistical Data Analysis	3.0
EGMT 573	Operations Research	3.0
SYSE 520	Global Sustainment and Integrated Logistics	3.0
SYSE 533	Systems Integration and Test	3.0
SYSE 598	Capstone in Systems Engineering	3.0
SYSE 640	Model Based Systems Engineering	3.0
SYSE 682	Introduction to Systems Science	3.0
SYSE 685	Systems Engineering Management	3.0
SYSE 688	Systems Engineering Analysis	3.0
SYSE 690	Modeling and Simulation	3.0

ELECTIVES**15.0**

*Complete five of the following:**

ECEP 501	Power System Analysis
ECEP 502	Computer Analysis of Power Systems
ECEP 503	Synchronous Machine Modeling
ECEP 610	Power System Dynamics
ECEP 611	Power System Security
ECEP 612	Economic Operation of Power Systems
ECES 511	Fundamentals of Systems I
ECES 512	Fundamentals of Systems II
ECES 513	Fundamentals of Systems III
ECES 521	Probability & Random Variables
ECES 522	Random Process & Spectral Analysis
ECES 523	Detection & Estimation Theory
ECES 811	Optimization Methods for Engineering Design
EGMT 501	Leading and Managing Technical Workers
EGMT 502	Analysis and Decision Methods for Technical Managers
EGMT 531	Engineering Economic Evaluation & Analysis
EGMT 535	Financial Management
EGMT 615	New Product Conceptualization, Justification, and Implementation
EGMT 616	Value Creation through New Product Development
EGMT 620	Engineering Project Management
EGMT 625	Project Planning, Scheduling and Control
EGMT 630	Global Engineering Project Management
EGMT 635	Visual System Mapping
EGMT 645	Managing Engineering Disasters
EGMT 650	Systems Thinking for Leaders
EGMT 652	Engineering Law
SYSE 521	Integrated Risk Management
SYSE 522	Engineering Supply Chain Systems
SYSE 523	Systems Reliability Engineering
SYSE 524	Systems Reliability, Availability & Maintainability Analysis
SYSE 525	Statistical Modeling & Experimental Design
SYSE 530	Systems Engineering Design
SYSE 531	Systems Architecture Development
SYSE 532	Software Systems Engineering
SYSE 898	Master's Thesis in Systems Engineering**

TOTAL CREDITS**45.0**

**Electives from other engineering disciplines and/or Drexel colleges may be considered with review and approval by the advisor.*

***If a student decides to pursue the Master's Thesis option, the student will complete the 30 core credits, 6 elective credits, and nine thesis credits. Advisor/Director consultation and approval is required if a student is interested in waiving core courses when pursuing the Master's Thesis option.*