Complexity in today's engineering projects requires integration for coherent effectiveness, and is driving increasing demand for systems engineers with interdisciplinary training. Technology-driven revolutions can only be comprehended with the systems thinking perspective that a systems engineering education provides. Learn how to ensure required capabilities and functional performance in demanding environments with an **online Master of Science in Systems Engineering from UTEP**. With our fully online degree, you will learn how to view complex systems as a whole during their lifecycles, and use systems engineering concepts to define, develop, implement and test them, while also considering engineering, technology, environmental, management, risk and economic factors.

The MSSE program partly consists of five (5) core courses, three (3) courses in a concentration area, and two (2) free elective(s). The fully online format and asynchronous classes provide a great deal of flexibility, so you can work on your degree while continuing to take care of family, work or other responsibilities. This, together with its high quality and affordability, makes it ideal for international students as well.

**Connect With Unique Skills and Knowledge**

The online MS in Systems Engineering from UTEP

- Develops “systems thinking” skills
- Teaches other skills that are applicable to a wide variety of careers
- Has a practicum focus

This program will give you a competitive advantage over others in the field. As a student in the online MS in Systems Engineering, you will

- Integrate studies in human factors, technology, process engineering and management into one multi-faceted discipline
- Understand the analysis, modeling and creation of systems
- Apply systems engineering concepts in your job and improve your work processes to deliver high quality products and services
- Develop a project from conception to completion
- Learn the concepts for the International Council on Systems Engineering (INCOSE) ASEP/CSEP certification and be better prepared to pass the exam
- Acquire the advanced interdisciplinary knowledge required for management-level positions
- Become a leader who knows how to manage teams throughout a system lifecycle

Ready to connect or have questions? Call 1-800-684-UTEP to speak with an enrollment counselor today or visit us at utepconnect.utep.edu
Online Master of Science in Systems Engineering

Admissions Requirements
To qualify for admission to the online Master of Science in Systems Engineering program, you must:

- Complete and submit a graduate admissions application
- Have a bachelor’s degree from an accredited university
- Submit official transcripts in accordance with the requirements of the Graduate School
- Demonstrate academic achievement and potential as indicated by the results of the Graduate Record Examination (GRE); this requirement is waived if you already possess an accredited graduate degree
- Write a brief statement of purpose
- Provide letters of recommendation from individuals who can evaluate your ability to succeed in a rigorous graduate program, including one from the company sponsoring you (if appropriate)
- Other evidence of relevant personal or professional experience

Recommendations for admission are made on the basis of the following:

- GPA in upper-division or graduate work, as appropriate
- Professional commitment and interest as demonstrated by the personal statement and other supporting materials as available
- Letters of recommendation
- Leveling courses

International students must also submit:

- Official TOEFL (Test of English as a Foreign Language) scores

Curriculum
UTEP’s College of Engineering created the master’s degree in systems engineering to serve industry partners like Lockheed Martin and to address specific skills needed by systems engineering professionals.

Core Coursework
Each student is expected to have core knowledge in key areas of systems engineering. The online Master of Science in System Engineering requires a minimum of 30 credit hours, and can be accomplished through the Project Practicum degree. All students are required to complete the following five core courses (15 SCH) with a B average or better and with no more than one C. A Graduate Certificate in Systems Engineering option is available for students who complete these five core courses.

SE 5341 Systems Engineering Fundamentals
SE 5342 Systems Engineering Management
SE 5343 Systems Requirements Analysis
SE 5344 Systems Integration, Verification & Validation
SE 5345 Systems Engineering Project Practicum

Concentration Track
SE 5346 Systems Architecture and Design
SE 5347 Systems Engineering Process
SE 5348 Systems Modeling & Simulation

Other Courses
Completion of the MSSE degree also requires 6 credit hours of graduate courses from the College of Engineering, Science or Business Administration.

Total Credits: 30
Note: Curriculum is subject to change.