

MASTER OF SCIENCE IN SYSTEMS & ENGINEERING MANAGEMENT



TEXAS TECH UNIVERSITY

Department of Industrial, Manufacturing,
& Systems Engineering™

ONLINE OR ON CAMPUS



The Department of Industrial, Manufacturing, & Systems Engineering at Texas Tech University enjoys a well-deserved reputation for its national recognition and prominence. Renowned for its commitment to excellence, the department offers a diverse range of engineering courses and activities, all while ensuring small class sizes that promote personalized attention and engagement. The esteemed faculty excel in their fields and are deeply committed to students' success, going the extra mile to prepare them for thriving engineering careers.



With a rich history in advanced education, the department has been granting Master of Science degrees since 1961 and doctorate degrees since 1965. Over the years, the department has enrolled over 200 undergraduate students and 160 graduate students, serving as a thriving academic hub for aspiring engineers. The department's dedication to shaping future leaders in the field is evident in the conferral of over 1,600 Bachelor of Science degrees, 1,000 Master of Science degrees, and 200 Doctorate degrees to date.



IE CURRICULUM

- ☐ IE 5320 Systems Theory
- ☐ IE 5321 Decision Theory and Management Science,
☐ IE 5322 Industrial Cost Analysis,
☐ IE 5324 Advanced Economics of Systems,
or IE 5325 Productivity and Performance
Improvement in Organizations
- ☐ IE 5323 the Engineering Management Environment
or IE 5329 Project Management
- ☐ IE 5311 Principles of Optimization or IE 5318
Principles of Operations Research Modeling with
Spreadsheets
- ☐ IE 5316 Simulation Models for Operations Analysis,
☐ IE 5319 Risk Modeling and Assessment, or IE 5346
Total Quality Systems

Potential Careers:

Manufacturing Engineer
Industrial Engineer
Mechanical Engineer

Production Engineer
Facilities Engineer
Project Manager

Average Starting Salary:

\$148,907 Salary.com

HOW TO APPLY:

Students interested can apply online at www.depts.ttu.edu/imse/ for the application.

Application Deadlines: Interested students can apply at www.applytexas.org up to 14 days before the semester for scholarship consideration. Please submit your applications by:

Fall Semester: March 1 (Domestic); January 15 (International)
Spring Semester: October 1 (Domestic); June 15 (International)

Required Documents:

- * Official Transcripts
- * 1 Letters of Recommendation
- * GRE Scores (Optional)
- * TOEFL or IELTS Scores
(International Students Only)

**APPLY
HERE**



Detailed information concerning admission and online application is available at: <http://www.depts.ttu.edu/gradschool/admissions/>

PROGRAM OVERVIEW

Our pioneering program seamlessly integrates engineering principles with effective management, empowering engineers to be adept leaders navigating intricate technical and business landscapes. The Master of Science in Systems and Engineering Management program is meticulously crafted to equip engineers with the expertise and acumen needed for excellence in leadership roles. Through a holistic curriculum, students develop a profound grasp of systems thinking, engineering principles, and management practices enabling them to drive organizational success and lead interdisciplinary teams with precision.



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SYSTEMS ENGINEER

Graduates apply their knowledge to design, analyze, and optimize complex systems, while working on projects that involve integrating various components, technologies, and processes to efficiently achieve desired outcomes.

PROJECT MANAGER

Can lead multidisciplinary teams, oversee project planning, budgeting, scheduling, and ensure successful project execution within set parameters.

OPERATIONS MANAGER

Graduates focus on optimizing processes, improving productivity, managing resources, and ensuring efficient production or service delivery.

QUALITY ASSURANCE MANAGER

Develop and implement quality control processes, perform audits, and drive continuous improvement initiatives to enhance overall quality and customer satisfaction.

SUPPLY CHAIN MANAGER

Can optimize the flow of materials, manage inventory, streamline logistics, and ensure smooth operations within the supply chain.

ENGINEERING CONSULTANT:

Provide guidance on improving operational efficiency, implementing quality management systems, or optimizing engineering processes for client organizations.

EMPLOYMENT OPPORTUNITIES

TEXAS TECH UNIVERSITY

Established in 1923, Texas Tech University is the flagship institution of the Texas Tech University System. It boasts a notable student body, with 40,542 individuals during the Fall 2021 semester, making it the second largest campus in the nation, spread across 1,839 acres. It stands out for housing a major university, law school, and medical school on a single campus—a distinction unique to Texas.

Comprising ten esteemed colleges, Texas Tech offers a diverse array of academic disciplines with 150 undergraduate degrees, 100 master's degrees, and 50 doctoral degrees. This provides students with ample educational opportunities. The university holds a tier one designation and is recognized as a "Highest Research Activity" institution by the Carnegie Classification of Institutions of Higher Learning, emphasizing its commitment to scholarly advancement.

ADVANCED STUDY AND RESEARCH

The college has a rich history of internationally recognized research coupled with high quality, well-developed research programs. Our faculty members are committed to research, and pride themselves on cultivating future research areas and future engineers who will contribute to new scientific discoveries. They also build on that knowledge to integrate decision support systems. In addition the department is developing research and coursework in the emerging areas of advanced and additive manufacturing utilizing a systems approach.

The program is widely recognized for its distinctive interdisciplinary and experiential approach, setting it apart from conventional academic programs. In order to empower students in achieving their self-defined objectives, the program offers two elective degree plans:

30-Hour Thesis Program:

15 Credit Hours for 5 Core Courses
9 Credit Hours for Elective Courses (1 Must Be Within IE)
6 Credit Hours of Master's Thesis

30-Hour Non-Thesis Program:

15 Credit Hours for 5 Core Courses
15 Credit Hours for Elective Courses (3 Must Be Within IE)

PROGRAM OVERVIEW

From Here, It's Possible™



CONTACT US

RM 232 | 905 Canton Ave.
Box 43061 | Lubbock,
Texas 79409-3061
O 806.742.3543
Grad.Imse@ttu.edu

FINANCIAL AID:

Financial aid will be provided dependent on the qualifications. Merit scholarships, which are based on academic performance, will be awarded by the Graduate School and the Department. Detailed information about financial aid is available at:

depts.ttu.edu/gradschool/funding/
depts.ttu.edu/imse/graduate/graduate_scholarships_imse.php