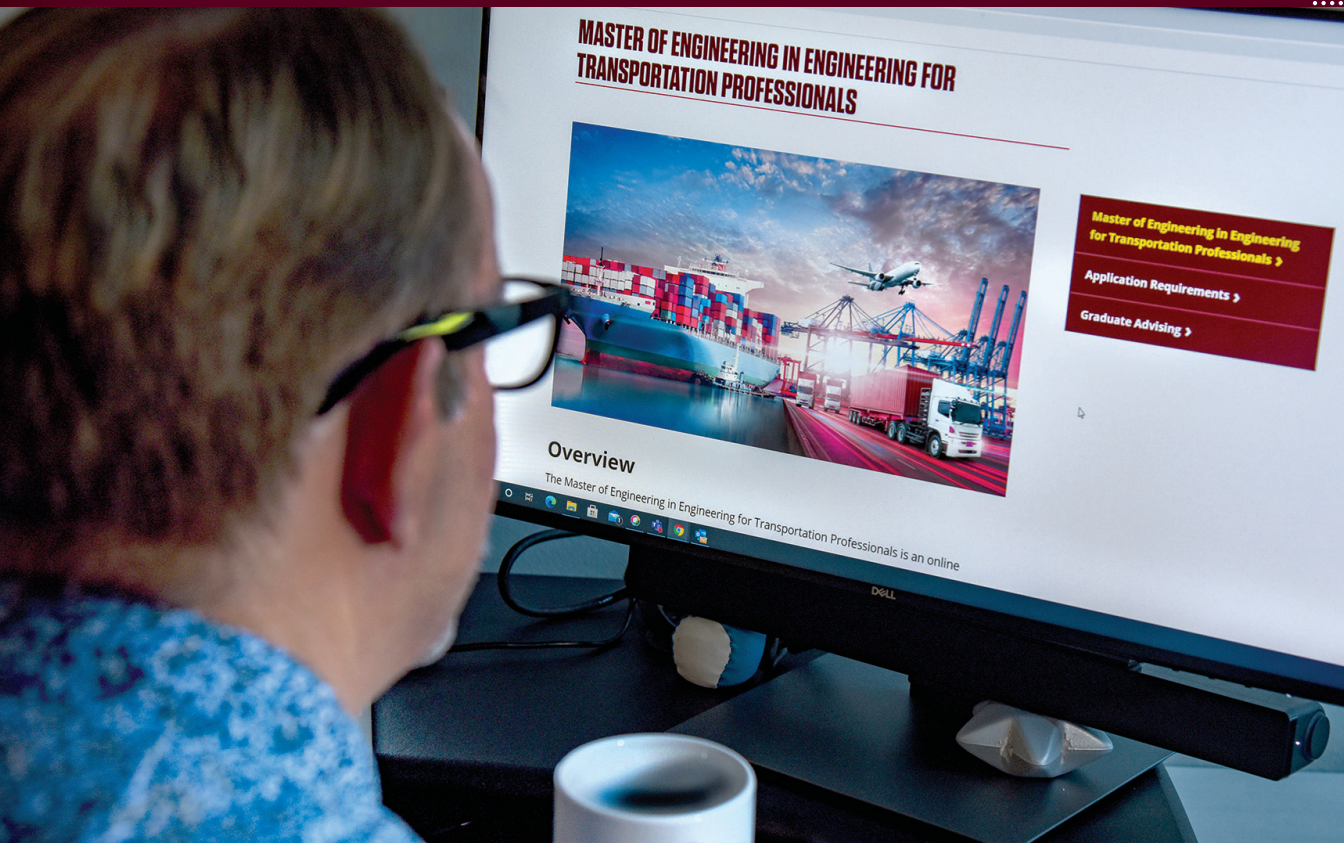


ONLINE MASTER
OF ENGINEERING
DEGREE FOR

Transportation Professionals



TEXAS A&M UNIVERSITY
Department of
Multidisciplinary Engineering



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Take your
CAREER to the
NEXT LEVEL

**ONLINE MASTER
OF ENGINEERING
DEGREE FOR**

Transportation Professionals

Introducing an online Master of Engineering degree in Engineering for transportation professionals. This groundbreaking program is presented to the transportation community by the Texas A&M University College of Engineering in collaboration with the Texas A&M Transportation Institute (TTI).

Take Your Career to the Next Level

The Master of Engineering degree for transportation professionals is an online degree **designed specifically for transportation professionals** that are currently in management or desire to progress into management positions. This degree will provide these professionals with the background and skills to become better managers or launch their management careers.



FIRST-YEAR CORE COURSES

MTDE 660 | Leadership for Transportation Professionals

Overview of theories and best practices of leadership at all levels of an organization; five core practices of exemplary leadership: model the way, inspire a shared vision, challenge the process, enable others to act, and encourage the heart; adoption of an outward mindset to improve performance, spark collaboration and accelerate innovation.

MTDE 661 | Transportation Organizational Management

Current practice and practical tools for leaders and aspirational leaders of transportation organizations; practices and processes for mission-critical areas; managing flow of work products/projects; decision-making processes; interdisciplinary interaction with planners, property owners, developers and government agencies; project development and execution; organizational performance metrics and transportation system performance.

Learn from Experts in the Field

The faculty for this degree program in the Department of Multidisciplinary Engineering have been selected from TTI's subject matter experts in the course topics.

About Our Program

Students will engage in this program as part of a two-year cohort. The core of the degree is an array of courses in nontechnical areas that are not taught as part of Bachelor of Science or Master of Science degrees. **Students interested in Texas A&M University's Master of Engineering in engineering for transportation professionals degree must have a Bachelor of Science or Master of Science in an engineering discipline.**

Earn Your Aggie Ring

Each new cohort will begin the fall of the academic year, taking two core courses per semester with one course during the summer semester and the additional capstone courses in the second academic year, graduating in the spring semester of the second year.



MTDE 662 | Transportation and the Economy

Relationship between transportation modes and local, regional, national and international economic systems; history of the relationship between economic growth and development and the transportation system; role of different modes and intermodal facilities and transportation development; vulnerabilities in transportation and economic systems; trends in financing transportation systems; application of blockchain and other technologies to the movement of goods.

MTDE 663 | Communication for Transportation Professionals

Exploration of effective communication fundamentals; the concepts of strategic thinking and storytelling; use of verbal, printed and electronic media in communicating transportation information; the set of modern professional behavior for excelling in the workforce among peers and clients.

LEARN MORE

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SECOND-YEAR CORE COURSES

MTDE 664 | Selection and Adoption of New Transportation Technologies

Innovative transportation solutions and societal impacts; connected and automated vehicles; demise of the internal combustion engine and rise of electrification; communication with travelers and vehicles; intelligent roadway infrastructure; smart sensor data fusion with artificial intelligence; cybersecurity and communications spectrum; tools for public agencies building the future of transportation.

MTDE 665 | Sustainable Transportation and the Environment

Sustainable transportation as the nexus of transportation and the environment; human environment and socioeconomic issues relevant to transportation and the natural environment of ecological issues relevant to transportation; environmental legislation affecting the transportation infrastructure development process; emerging environmental topics, such as resilience and public health.

MTDE 666 | Transportation Policy

Fundamentals of policy tools in transportation; strategic policy development; transportation governance, laws and regulations; transportation policy in relation to economics, funding, finance and modal usage; linkages between urban development, transportation systems and policy levers; policy issues associated with the relationship between transportation and global drivers of change; role of the transportation leader in strategic policy development.

MTDE 667 | Regulatory and Legal Topics in Transportation

Legal and regulatory matters relevant to planning, developing, constructing and maintaining transportation facilities; local, state, and federal transportation laws and regulations; legal matters, types of unforeseen questions and dispute resolution options arising in the life cycle of a transportation project; role of legal counsel and effective interactions with counsel.

MTDE 668 | Innovation in Transportation Funding and Finance

Transportation funding and finance at the federal and state levels for all modes of transportation; funding process, financing strategies, innovative funding options and associated risks; role of funding in project planning and prioritization; measuring return on transportation investment; role of various governmental agencies in the funding process; shifting policies and issues that impact funding.

SECOND-YEAR CAPSTONE COURSES

MTDE 669 | Transportation Capstone I

First-semester course in a two-semester capstone project sequence; project selection; development of problem statement; review of literature relevant to problem; proposal to address problem including analysis methodology and data collection plan; mid-project presentation at end of semester.

MTDE 670 | Transportation Capstone II

Second-semester course in a two-semester capstone project sequence; continuation of project started in first semester; project scoping; data analysis; development of options, recommendations and implementation approaches; formal presentation of final results to stakeholder audience at end of semester.

Contact Information

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