

NDSU

Department of Transportation,
Logistics & Finance
College of Business
Upper Great Plains Transportation Institute

ONLINE graduate program

Master's Transportation & Urban Systems

Master Transportation & Urban Systems

The Department of Transportation, Logistics & Finance offers a Master's degree and Certificate option in Transportation and Urban Systems. The degree is awarded through the College of Business in collaboration with the Upper Great Plains Transportation Institute to provide high quality graduate programs for students. The program takes an interdisciplinary approach to transportation and logistics and attracts students with backgrounds in transportation and logistics, as well as agribusiness, applied economics, civil engineering, construction management, emergency management, finance, geosciences, industrial/manufacturing engineering, and supply chain management.

Master of Science in Transportation & Urban Systems (MS)

This degree focuses on:

1. urban transportation systems
2. relationships between transportation, land use, environment, emergency response, and logistical delivery systems
3. coordinated planning, operations, and security
4. the spatial dimensions of urban systems

The curriculum is built around the topics of public transportation systems, geographic information systems, freight transportation and logistical delivery systems, urban geography and land use, the environmental impacts of transportation systems, transportation systems security, and the sustainability of transportation and urban systems. The MS degree **requires a thesis** and is targeted at students with strong research interests.

Master of Transportation & Urban Systems (MTUS)

This **non-disquisition degree (no thesis)** is primarily intended for professional planners and engineers. This degree offers opportunities in synthesis of practice, additional course work, and less emphasis on research. Students are required to complete a creative component such as a paper, journal article, presentation, or poster as coordinated with their advisor.

Certificate in Transportation & Urban Systems

This program is primarily targeted at practicing professionals who wish to gain additional knowledge in the emerging fields of transportation and urban systems. The certificate requires a minimum of nine credits to be awarded.

Admission Requirements

The Transportation and Urban Systems master's program is open to qualified graduates of universities and colleges of recognized standing. To be admitted with full standing, the applicant must:

1. Hold a baccalaureate degree from an educational institution of recognized learning with a minimum grade point average (GPA) of 3.0 or equivalent to attain full standing.
2. Have adequate preparation in one or more of the disciplines comprising transportation and logistics and must have professional experience or interests in community practice.
3. Have shown the potential to undertake advanced study as evidenced by prior academic performance and have a stated interest in transportation and the capability to conduct transportation research.
4. Submit official transcripts.
5. Submit a two-page resume.
6. Submit a one-page "Letter of Intent" outlining your reasons for pursuing the Master of Transportation and Urban Systems.
7. Submit three-letters of recommendation (NA for Certificate Option).
8. Applications deadlines: July 1 for fall semester, December 1 for spring semester, and April 1 for summer semester.

International applicants whose first language is not English and who do not possess a U.S. bachelor's degree must meet the minimum language requirements TOEFL iBT 71 and IELTS 6.

Students who do not meet all requirements for admission but show satisfactory potential for graduate study, may be admitted conditionally. The conditional status may be changed to full graduate standing after the first or second semester of study based on the student's performance.

Degree Requirements

Program Courses (C=Core, E=Elective)

- TL 789 Leadership, Ethics, and Academic Conduct in Transportation (3) (C)
- TL 751 Transportation Systems Security (3) (E)
- TL 752 Transportation Planning and Environmental Compliance (3) (E)
- TL 753 Transportation System Modeling (3) (E)
- TL 754 Urban Transportation Systems Analysis (3) (E)
- TL 755 Context Sensitive Solutions (3) (E)
- TL 756 Transportation and Land Use Integration (3) (E)
- TL 757 Intelligent Transportation Solutions (3) (E)

Master of Science in Transportation & Urban Systems (MS)

Minimum 30 credits:

- 21 credits must be core courses
- 3 credits of elective courses
- 6-10 credits for master's paper (thesis)

*All students will be administered a final exam which will cover all core courses and the thesis topic.

Thesis topics will contribute to one of the following and be of sufficient depth and quality:

- New models – may be achieved through the synthesis of several techniques, the modification of existing models, or new applications of analytical techniques to transportation/urban problems.
- Knowledge – may be accomplished through the collection and analysis of original data or the development of innovative planning techniques.

Master of Transportation & Urban Systems (MTUS)

Minimum 30 credits:

- 21 credits must be core courses
- 7 credits of elective courses
- 2-4 credits for the creative component

*MTUS is a non-thesis degree.

Every student must complete a creative component, which can be a case study, journal article, practicum, presentation, or paper. The creative component is developed and approved by the student's advisor.

Examples of the creative component may include a study on a metropolitan region, transit system, or public program, and may also include the following:

1. Comprehensive transportation planning processes in metropolitan areas
2. Urban transit systems or operations
3. Emergency or disaster response case studies or plans
4. Security programs or issues
5. Integrated transportation/environmental plans

Certificate in Transportation & Urban Systems

Minimum 9 credits:

- Courses must be from the core courses of the program.

Apply for Admission

To apply for admission: https://www.ndsu.edu/gradschool/prospective_students/domestic_applicants/how_to_apply/

Visit with Us

Contact us at jody.bohn.baldock@ndsu.edu or 701.231.7767.

Go Online - Find Us Here

NDSU Graduate School

<https://www.ndsu.edu/gradschool/>

Transportation & Logistics

<https://www.ndsu.edu/business/departments/tl/>

Meet Fellow Transportation Students

<https://www.ndsu.edu/business/departments/tl/student-spotlight-archives/>

Top 5 benefits of earning your Master's Degree:

1. More in-depth knowledge of the field of study
2. More career opportunities and advancements
3. Opportunities for increased responsibility
4. Employees with a master's degree typically earn 30% more than employees that don't
5. Industry tend to favor applicants with a higher level of education over those with lower degrees

The Transportation, Logistics & Finance department is accredited through the College of Business by the Association to Advance Collegiate Schools of Business, which places it in the top 5 percent of business schools worldwide.

