

Transportation and Logistics

Department Information

- **Department Chair:**
Tim Peterson, Ph.D.
- **Academic Coordinator:**
Jody Bohn Baldock
- **Email:**
jody.bohn.baldock@ndsu.edu
- **Department Location:**
Upper Great Plains Transportation Institute, Quentin Burdick Building 418
- **Department Phone:**
(701) 231-7767
- **Department Web Site:**
www.ndsu.edu/business/programs/graduate/phd/ (<http://www.ndsu.edu/business/programs/graduate/phd/>)
- **Application Deadline:**
See Admission Requirements
- **Credential Offered:**
Ph.D.
- **English Proficiency Requirements:**
TOEFL iBT 71; IELTS 6; Duolingo 100

Degree Requirements

The Ph.D. program requires the completion of a minimum of 90 credits of graduate study beyond the baccalaureate degree. Thirty credits will be automatically considered completed if the student completed one of the Master's degree from the TLF Department. If the student already has a master's degree in a related discipline, the student is eligible to transfer a maximum of 30 credits from the master's degree towards the 90 credits. The credits are required to consist of the following:

- 18 credits of core Transportation & Logistics courses.
- 2 credits of required graduate teaching experience course.
- Out of 10 elective course credits needed, a minimum of 6 credits must be transportation and logistics elective courses.
- A minimum of 30 credits of research-based dissertation credits.

Each student must develop a plan of study under the guidance of a faculty adviser and a supervisory committee. Students must take a total of three different examinations to successfully complete their Ph.D. degree in Transportation and Logistics: 1) the qualifying examination, 2) the proposal defense examination, and 3) the dissertation defense examination. The qualifying examination is a written examination that will be required of each student after the qualifying courses have been completed. After passing the qualifying examination, the student will be formally admitted to candidacy for the Doctor of Philosophy degree. Students who pass the qualifying examination are expected to take the proposal defense examination by the end of their third year in the program. For the proposal defense and dissertation defense examinations, the supervisory committee shall serve as the examining committee and the major advisor shall serve as chair. The proposal defense examination is an oral exam and is concerned primarily with the student's detailed research proposal for the dissertation. Upon completion of the proposal defense examination, a student will be considered a doctoral candidate. The dissertation defense will be taken after the candidate has completed the course work and proposal defense examination. The dissertation defense examination, which is an oral examination, will be concerned primarily with the dissertation; but it may also cover material from course work, especially those courses fundamental to the dissertation. The Ph.D. program requires students to present at least one original transportation and/or logistics research paper at a national or international conference, and submit at least one paper to a referred transportation and/or logistics journal.

| Code | Title | Credits |
|----------------------------------|---|---------|
| Core Courses (18 credits) | | |
| TL 831 | Modeling for Transportation and Logistics Decision Analysis | 3 |
| TL 881 | Mixed Methods in Transportation Research | 3 |
| TL 882 | Highway Planning and Logistics | 3 |
| TL 883 | Introduction to Rail Transportation | 3 |
| TL 885 | Spatial Analysis in Transportation & Logistics | 3 |
| TL 888 | Research in Transportation and Logistics | 3 |

| Required Courses | | |
|---|--|------|
| TL 892 | Graduate Teaching Experience | 2 |
| Transportation and Logistics (TL) Elective Courses (≥ 6 credits) | | |
| TL 811 | Modeling for Logistics Research | 4 |
| TL 823 | Contemporary Supply Chain Research | 3 |
| TL 829 | Supply Chain Risk Management | 3 |
| TL 751 | Transportation Cyber-Physical Security | 3 |
| TL 752 | Transportation Planning and Environmental Compliance | 3 |
| TL 754 | Urban Transportation Systems Analysis | 3 |
| TL 755 | Context Sensitive Solutions | 3 |
| TL 756 | Transportation and Land Use Integration | 3 |
| TL 757 | Intelligent Transportation Solutions | |
| TL 786 | Public Transportation | 3 |
| TL 787 | Public Transportation II | 3 |
| TL 789 | Leadership, Ethics, and Academic Conduct in Transportation | 3 |
| TL 715 | Introduction to ERP | 3 |
| TL 719 | Crisis Analysis and Homeland Security | 3 |
| TL 721 | International Logistics Management | 3 |
| TL 725 | ERP Configuration | 3 |
| TL 729 | Adaptive Planning in Logistics Systems | 3 |
| TL 731 | Logistics Decision Analysis | 3 |
| TL 733 | Case Studies in Logistics | 3 |
| TL 735 | Practical Data Analytics | 3 |
| Dissertation (≥ 30 credits) | | |
| TL 899 | Doctoral Dissertation | 1-15 |