

# TRANSPORTATION AND LOGISTICS MINOR

Students are required to complete 7 courses, of which 1 is a required course. The other 6 courses must include at least 3 core courses, at least 2 of which must be outside the school in which the student is majoring.

Students in the McCormick School may double-count a maximum of 2 courses from their major program toward the minor. Students from other schools are not allowed to double-count courses that are part of their major but may count courses that fulfill related course, distribution, or social science and humanities requirements.

## Prerequisites

In preparation for pursuing the minor, students should take courses in calculus and in probability and statistics.

## Minor Requirements (7 units)

- TRANS 310-0 Seminar in Transportation and Logistics
- 3 or more core courses
- Chosen from the following:

Course	Title
CIV_ENV 304-0	Civil and Environmental Engineering Systems Analysis
CIV_ENV 371-0	Introduction to Transportation Planning and Analysis
CIV_ENV 376-0	Transportation System Operations
ECON 310-1	Microeconomics
ECON 355-0	Transportation Economics and Public Policy
IEMS 310-0	Operations Research
or IEMS 313-0	Foundations of Optimization
IEMS 381-0	Supply Chain Modeling and Analysis
IEMS 383-0	Service Operations Management

- 2 must be outside the student's major program.
- No substitutions are allowed.
- 3 additional courses selected from core courses or approved electives:
- Approved electives include the following:

Course	Title
CIV_ENV 205-0	Economics and Finance for Engineers
or BUS_INST 304-0	Corporate Finance
or ECON 360-1	Foundations of Corporate Finance Theory
or KELLG_FE 310-0	Principles of Finance
CIV_ENV 330-0	Engineering Project Management
CIV_ENV 368-0	Sustainability: The City
CIV_ENV 387-0	Design of Sustainable Urban Developments
ECON 309-0	Public Finance
ECON 337-0	Economics of State and Local Governments
ECON 349-0	Industrial Economics
ECON 350-0	Monopoly Competition & Public Policy
ECON 354-0	Issues in Urban and Regional Economics
ECON 361-0	International Trade
ECON 371-0	Economics of Energy
ECON 372-0	Environmental Economics
or ECON 370-0	Environmental & Natural Resource Economics
ECON 373-0	Natural Resource Economics

or ECON 370-0	Environmental & Natural Resource Economics
ECON 381-1	Econometrics
ECON 381-2	Econometrics
GEOG 312-0	Geography of Chicago & Its Region
GEOG 341-0	Principles of Cartography
GEOG 343-0	Geographic Information Systems (or other approved GIS course)
HISTORY 322-2	Development of the Modern American City: 1880-Present
IEMS 315-0	Stochastic Models
IEMS 317-0	Discrete Event Systems Simulation
IEMS 365-0	Analytics for Social Good
IEMS 382-0	Production Planning and Scheduling
POLI_SCI 321-0	Urban Politics
POLI_SCI 322-0	Ideas and Institutions in Urban Politics
POLI_SCI 329-0	U.S. Environmental Politics
SOCIOL 301-0	The City: Urbanization and Urbanism
SOCIOL 312-0	Social Change and the Environment
or SOCIOL 336-0	The Climate Crisis, Policies, and Society

1 unit of approved independent study

### Graduate Level Courses

CIV_ENV 471-1	Transportation Systems Analysis 1
CIV_ENV 471-2	Transportation Systems Analysis 2
CIV_ENV 472-1	Transportation System Operations and Control 1: Urban Networks
CIV_ENV 472-2	Transportation System Operations and Control 2: Scheduled Modes and Real-Time
CIV_ENV 473-0	Survey methods, data and analysis
CIV_ENV 480-1	Travel Demand Analysis & Forecasting 1
CIV_ENV 480-2	Advances in Travel Demand Analysis and Forecasting
CIV_ENV 482-0	Evaluation and Decision Making for Infrastructure Systems
CIV_ENV 483-0	Infrastructure Systems Analysis
CIV_ENV 484-0	Advanced Theories of Traffic Flow
IEMS 481-0	Logistics

- At least 2 of the core or elective courses must be outside the school in which the student is registered.
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- Students from other schools are not allowed to double-count courses that are part of their major but may count courses that fulfill related course, distribution, or social science and humanities requirements.
- 4XX level courses require consent of the instructor and the Director of the Transportation and Logistics Program.

**TRANS 310-0 Seminar in Transportation and Logistics (1 Unit)** Yearlong senior seminar on the structure of the transportation and supply-chain industries and evaluation of relevant public policy. Students receive 1 credit in the spring quarter of their senior year.

**TRANS 399-0 Independent Study (1 Unit)** Advanced work chosen by mutual agreement with a faculty member. Only 1 unit may count toward the minor. Consent of faculty required.