

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 the 6 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, foundation, 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 (For WCAS students entering after Spring 2023, this class fulfills the WCAS Advanced Expression requirement.)
- 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
CIV_ENV 377-0	Choice Modelling in Engineering
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 Engineering and 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
ECON 373-0	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	Operations Engineering and Management
POLI_SCI 321-0	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 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
IEMS 482-0	Operations

- 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. *Advanced Expression*

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.