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**
      - 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 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**
          - 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 336-0: 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 381-2: 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
          - POLL_SCI 321-0: Urban Politics
          - POLL_SCI 322-0: Ideas and Institutions in Urban Politics
          - POLL_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
          - IEMS 482-0: Operations
      - At least 2 of the core or elective courses must be outside the school in which the student is registered.
      - 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.
      - 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.