## 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 social science and humanities requirements.

### 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
    - **Title**
      - Civil and Environmental Engineering Systems Analysis
      - Introduction to Transportation Planning and Analysis
      - Transportation System Operations
      - Microeconomics
      - Transportation Economics and Public Policy
      - Operations Research
      - Foundations of Optimization
      - Supply Chain Modeling and Analysis
      - 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 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
    - **Title**
      - Economics and Finance for Engineers
      - Corporate Finance
      - Foundations of Corporate Finance Theory
      - Principles of Finance
      - Engineering Project Management
      - Sustainability: The City
      - Design of Sustainable Urban Developments
      - Public Finance
      - Economics of State and Local Governments
      - Industrial Economics
      - Monopoly Competition & Public Policy
      - Issues in Urban and Regional Economics
      - International Trade
      - Economics of Energy
      - Environmental Economics
      - Environmental & Natural Resource Economics
      - Natural Resource Economics
  - 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.