

Civil & Environmental Engineering
Non-Thesis Master's Degree Requirements (2016)
Transportation Engineering

Students may choose from this list of courses and may also take classes outside the CEE department as long as they meet the degree requirements, and the program plan has been approved by their faculty advisor.

This course list is subject to change. Please refer to the UW Time Schedule as it becomes available for up-to-date information.

REQUIRED COURSES

- IND E 315 or STAT 390 (or equivalent), 3/4 CR (AUT, WIN, SPR)
- CEE 500 Seminar, 3 CR to include
2 credits CEE 500 Transportation Seminar (Aut & Win), and
1 credit CEE 500 Departmental Seminar

- CEE 584—Analytical Methods in Transportation (WIN) is required. This requirement may be satisfied by an alternative quantitative course, approved by the transportation faculty listed below:
 - ECON 482 Econometric Theory and Practice
 - GEOG 426 Advanced Quantitative Methods
 - INDE 424 Simulation
 - INDE 521 Quality Control in Manufacturing
 - STAT 421 Applied Statistics and Experimental Design
 - STAT 423 Applied Regression and Analysis of Variance
 - STAT 486 Experimental Design

- CEE 600 Independent Study (Research Report), 3 CR (AUT, WIN, SPR)
- CEE 601 Internship, 6 CR total (AUT, WIN, SPR) - PacTrans Interns only

One course from each of the following key areas:

- Planning:** CEE 581 Travel Demand Forecasting (SPR)
- Operations and ITS:** CEE 590 Traffic Systems Operations (AUT) or CEE 599 Transportation Data Management and Analysis (WIN)
- Freight and Logistics:** CEE 591 Freight Transportation (AUT) or CEE 587 Freight Transportation and Logistics (SPR)

DETAILED DEGREE REQUIREMENTS (See Transportation Master's Degree Requirements form for more details)

Non-Thesis Track

- 36 coursework credits
- 3 credits CEE 600 (Research Report)
- 3 credits CEE 500 Seminar

PacTrans Internship Track

- 30 coursework credits
- 3 credits CEE 600 (Research)
- 3 credits CEE 500 Seminar

42 TOTAL CREDITS REQUIRED

ADDITIONAL REQUIREMENTS

- 18 credits of 500 level coursework (not counting seminars)
- Minimum 18 credits 400-500 level coursework taken for a numeric grade
- All CEE classes (except Seminars) taken for a numeric grade
- 3 credits of CEE 600 Independent Study (3 credits maximum)
- 3.0 minimum grade for research report (CEE 600)
- Minimum 3 coursework credits outside CEE (IND E 315 or STAT 390 can meet this requirement)
- 499 credits do not count toward a graduate degree
- 3.0 minimum cumulative GPA
- 2.7 minimum grade for a class to count

OPTIONAL COURSES (Course list subject to change, refer to the UW Time Schedule)

- CEE 404 Infrastructure Construction, 4 CR (WIN)
- CEE 410 Traffic Engineering Fundamentals, 3 CR (WIN)
- CEE 421 Pavement Design, 3 CR (SPR)
- CEE 424 GIS for Civil Engineers, 3 CR (AUT)
- CEE 441 Transportation & Construction Capstone, 4 CR (SPR)
- CEE 498 Roadway Geometric Design, 4CR (WIN)
- CEE 498 Traffic Simulation, 3CR (SPR)
- CEE 580 Urban Transportation Planning & Design, 4 CR (AUT)
- CEE 582 Intelligent Transportation Systems, 3 CR (AUT)
- CEE 583 Transportation Energy and Sustainability, 3 CR (SPR)
- CEE 585 Analytical Methods in Transportation II, 3 CR (SPR)
- CEE 586 Pedestrian Travel, Land Use and Urban Form, 3 CR (SPR)
- CEE 588 Energy Infrastructure & the Environment, 3 CR (AUT)
- CEE 589 Transit Systems Planning, 3 CR (SPR)