

<i>Tentative Course Offerings 2004-2006</i>	
Fall 2004	Spring 2005
CEMM 501 (Introduction to Urban Transportation)	CEMM 402 (Highway Geometric Design)
CEMM 508 (Urban Travel Forecasting)	CEMM 503 (Advanced Trans. Demand Analysis)
CEMM 580 (Infrastructure Management)	CEMM 507 (Transportation Energy and Air Quality)
CEMM 596 (Transportation Survey Methods)	UPP 561 (Urban Transportation Policy and Methods)
UPP 503 (Data Analysis for Planning and Management I)	UPP 562 (Urban Transportation Laboratory)
UPP 565 (Urban Transportation Policy Analysis)	UPP 563 (Public Transportation Management)
Fall 2005	Spring 2006
CEMM 501 (Introduction to Urban Transportation)	CEMM 402 (Highway Geometric Design)
CEMM 502/CEMM 408 (Traffic Engineering and Design)	CEMM 507 (Transport. Energy and Air Quality)
CEMM 508 (Urban Travel Forecasting)	UPP 561 (Urban Transportation Policy and Methods)
CEMM 509 (Transportation Network Analysis)	UPP 562 (Urban Transportation Laboratory)
CEMM 580 (Infrastructure Management)	UPP 563 (Public Transportation Management)

FACULTY

David Boyce, Ph.D. Professor Emeritus: Metropolitan transportation and land use planning, travel forecasting models, and network analysis and modeling.
www.uic.edu/depts/cme/people/faculty/dboyce

Jane Lin, Ph.D. Assistant Professor: Mobile emissions estimations, air quality, energy use, traffic characteristics in the network, and vehicle behavior modeling.
www.uic.edu/depts/cme/people/faculty/janelin

Sue McNeil, Ph.D., P.E. Professor and Director, Urban Transportation Center: Infrastructure condition assessment and modeling, automatic highway systems, and traffic engineering.
www.uic.edu/depts/cme/people/faculty/mcneil

Kouros Mohammadian, Ph.D. Assistant Professor: Transportation planning, travel demand modeling, microsimulation of urban activities, ITS, and applied econometrics.
www.uic.edu/depts/cme/people/faculty/kouros

For further information, please see:

www.uic.edu/depts/cme/

Or call (312) 996-3411



University of Illinois-Chicago
 Department of Civil and Materials Engineering
 2095 Engineering Research Facility
 842 West Taylor St., (M/C 246)
 Chicago, IL 60607-7023
www.uic.edu/depts/cme/

TRANSPORTATION ENGINEERING

DEPARTMENT OF CIVIL AND MATERIALS ENGINEERING



Part of Chicago Circle, where I90, I94 and I290 meet.

UIC UNIVERSITY OF ILLINOIS AT CHICAGO

DEGREE PROGRAMS

The Department of Civil and Materials Engineering offers **Master of Science (MS)** and **Doctor of Philosophy (PhD)** degrees in civil engineering with a specialization in transportation engineering and planning. The course of study leading to both degrees is highly interdisciplinary. In addition to courses in transportation and traffic engineering, students take courses in mathematics and statistics, optimization, air quality, computer science and economics. The curriculum includes a variety of fundamental and applied courses in the fields of urban transportation planning, traffic control systems, intelligent transportation systems, air quality, transportation facility design, and transportation system and infrastructure management.

Masters degrees require 36 credit hours. For thesis option, this typically comprises 6 courses (three at 500-level) plus 12 thesis credits. Ph.D. students are required to take 108 credit hours after a BS or 76 credit hours after a MS degree. This includes at least 6 courses (24 credit hours) and at least 52 Ph.D. thesis credits. Many courses are offered in the late afternoon/evening to accommodate working professionals in the Chicago area.

RESEARCH

The University of Illinois-Chicago is a Research I University with over \$230 million in annual research expenditures. The research facilities in Transportation Engineering at UIC are state of the art. All students doing a thesis option are required to perform research in their chosen areas under the supervision of their faculty advisor. Research programs of the faculty are outlined on their respective webpages.

FINANCIAL ASSISTANCE

Teaching and research assistantships are available. Full time graduate students are typically supported by external grants from transportation engineering faculty.

CURRICULUM

Transportation courses offered in the department of Civil and Materials Engineering:

1. [CEMM 402](#) (Highway Geometric Design)
2. [CEMM 501](#) (Introduction to Urban Transportation)
3. [CEMM 502/CEMM 408](#) (Traffic Engineering and Design)
4. [CEMM 503](#) (Advanced Transportation Demand Analysis)
5. [CEMM 507](#) (Transportation Energy and Air Quality)
6. [CEMM 508](#) (Urban Travel Forecasting)
7. [CEMM 509](#) (Transportation Network Analysis)
8. [CEMM 580](#) (Infrastructure Management)
9. [CEMM 594/CEMM 596](#) (Advanced Special Topics or Independent Study in Transportation Engineering)

The following courses are offered in different fields of transportation:

TRANSPORTATION PLANNING

- [CEMM 501](#) (Introduction to Urban Transportation)
- [CEMM 503](#) (Advanced Transportation Demand Analysis)
- [CEMM 508](#) (Urban Travel Forecasting)
- [UPP 508](#) (Geographic Information Systems for Planning)

TRAFFIC ENGINEERING AND NETWORK ANALYSIS

- [CEMM 502/CEMM 408](#) (Traffic Engineering and Design)
- [CEMM 509](#) (Transportation Network Analysis)
- [IE 472](#) (Operations Research)

ENVIRONMENTAL IMPACTS OF TRANSPORTATION

- [CEMM 419](#) (Air Quality Management I)
- [CEMM 507](#) (Transportation Energy and Air Quality)
- [CEMM 526](#) (Air Quality Management II)

TRANSPORTATION DESIGN

- [CEMM 402](#) (Highway Geometric Design)

TRANSPORTATION MANAGEMENT AND SYSTEM ANALYSIS

- [CEMM 580](#) (Infrastructure Management)
- [UPP 503](#) (Data Analysis for Planning and Management I)
- [UPP 513](#) (Data Analysis for Planning and Management II)
- [UPP 561](#) (Urban Transportation Policy and Methods)
- [UPP 562](#) (Urban Transportation Laboratory)
- [UPP 563](#) (Public Transportation Management)

