

CONCURRENT CE-MS/MCRP WITH SPECIALIZATION IN TRANSPORTATION PLANNING

City and Regional Planning
 Architecture & Environmental Design Bldg. (05), Room 313
 Phone: 805.756.1315
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Civil & Environmental Engineering
 Engineering Bldg. (13), Room 266
 Phone: 805.756.2947
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Program name	Program type
Specialization in Transportation Planning	Concurrent CE-MS/MCRP

The Concurrent CE-MS/MCRP with Specialization in Transportation Planning is a joint interdisciplinary program between the Civil and Environmental Engineering Department in the College of Engineering and the City and Regional Planning Department in the College of Architecture and Environmental Design. Participation in the program requires enrollment in both Colleges. Participants successfully completing the program are awarded both the Master of Science in Civil and Environmental Engineering (CE-MS) and the Master of City and Regional Planning (MCRP) with a Specialization in Transportation Planning.

Program Learning Objectives

After successfully completing the Concurrent CE-MS/MCRP with Specialization in Transportation Planning program, students will be able to:

Foundational skills

1. Demonstrate an understanding of the historical, theoretical, legal, and methodological foundations of planning and engineering
2. Effectively represent and communicate technical and policy information

Methodology

1. Gather, organize, analyze and present planning and engineering information
2. Transform data and information into knowledge for action
3. Critically assess and apply scientific research

Integrative skills

1. Integrate and apply the necessary skills and knowledge to address complex planning and engineering problems
2. Develop and manage a design and planning process
3. Work with a variety of audiences: multiple publics, officials, and decision-makers

Professional skills

1. Reflect upon, critique, and evolve the practice of planning and engineering

2. Address issues of sustainability, diversity, and environmental and social justice
3. Practice in accordance with the AICP Code of Ethics and the NSPE Code of Ethics for Engineers
4. Apply best practices and develop novel approaches to solving transportation planning and engineering problems

Degree Requirements and Curriculum

Total for Concurrent Degree: 90 units minimum

Total CRP units: 52
Total CE units: 30
 (not including thesis/project)

Double Counting of Units

This concurrent degree will allow for 27 units to be double-counted for students earning both CE-MS + MCRP (90 units total for both degrees) as a concurrent program.

Required Courses

First Year Core		
CRP 501	Foundations of Cities and Planning	4
CRP 504	Sustainable Communities	4
CRP 510	Planning Theory	4
CRP 513	Planning Research and Analysis	4
CRP 516	Demographic and Analytic Tools	4
CRP 525	Plan Implementation	4
CRP 553	Project Planning and Design Studio	4
Second Year		
CRP 518	Policy Development	4
CRP 530	Planning Agency Management	4
CRP 535	Land Use and Planning Law	4
CRP 552	Community and Regional Planning Studio I	4
CRP 554	Community and Regional Planning Studio II	4
Select one of the following options:		4-9
CRP 556	Community and Regional Planning Studio III (4)	
CRP 596	Professional Project (2, 2, 2)	
CRP 599	Thesis (2, 2, 2)	
CE/ENVE 599	Design Project (Thesis) (6-9)	
Specialization: Transportation Planning & Engineering		
CE 523 or CE 421	Transportation Systems Planning Traffic Engineering	4
CE 527	Sustainable Mobility	4
CRP 435	Transportation Theory	4
Concurrent CE-MS		
CE 422	Highway Geometrics and Design	4
CE 526	Transportation Safety	4
CE 591	Graduate Seminar I	1
CE 592	Graduate Seminar II	1
Select from the following (no double counting):		12-16
CE 423	Intelligent Transportation Systems	

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CE 424	Public Transportation
CE 429	Highway Pavement Designs
CE 525	Airport Planning and Design
CE 528	Transportation Economics and Analysis
CE 529	Modeling and Simulation in Transportation
CRP 470	Selected Advanced Topics
ENVE 411	Air Pollution Control
Total units	90