2011-13 Cal Poly Catalog

City and Regional Planning Department

Joint MCRP/MS Engineering with Specialization in TRANSPORTATION PLANNING

The Transportation Planning Specialization is a joint interdisciplinary program between the College of Engineering and the City and Regional Planning Department of 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 MCRP and the MS in Engineering, each with a Specialization in Transportation Planning.

The major objectives of this joint program are to:

- (a) Provide an interdisciplinary graduate program which combines elements of transportation planning with city and regional planning to address a need for professionals who understand the technology of transportation planning and the importance of transportation within the urban environment. The required master's project enables students to integrate their work through directed study applied to special areas of their choosing.
- (b) Provide planners with courses essential to understanding the technologies of transportation planning. Provide engineers with a broad background in urban studies and knowledge of contemporary environmental issues.
- (c) Take advantage of the backgrounds of program participants. The graduate students of both sponsoring departments include both mature professionals returning for advanced degrees and recent graduates with diversity of specializations.

Prerequisites. Applicants must have satisfactorily completed courses that cover the following or equivalent subject areas:

CE 321 Fundamentals of Transportation Engineering or CRP 435 Transportation Theory

COMS 101 Public Speaking

ECON 201 Survey of Economics *or* ECON 222 Macroeconomics

ENGL 148 Reasoning, Argumentation and Professional Writing *or* ENGL 149 Technical Writing for Engineers

MATH 142 Calculus

PHYS 141 General Physics IA

STAT 321 Probability and Statistics for Engineers and Scientists *or* STAT 221 Intro to Probability and Statistics *or* STAT 312 Statistical Methods for Engineers

Applicants for admission are expected to:

- 1. Have earned a bachelor's degree from an accredited university or college,
- 2. Have attained a grade point average of 3.0 in last 90 units of undergraduate work,
- 3. Provide results of the Graduate Record Examination (GRE) Aptitude Test to the Admissions Committee (GRE requirement may be waived for Cal Poly bachelor of science graduates and applicants with superior academic records),
- 4. Give indications of motivation, maturity, and high standards of academic involvement through work and references (three letters required) and submission of a project or paper demonstrating writing ability,
- 5. Provide a current résumé.

Applicants lacking prerequisites or other background requirements for classified standing may be admitted on a conditionally classified basis, depending on the results of an individual analysis of their applications.

Core Courses	64
CE 523 Transportation System Planning (4)	
CE 528 Transportation Analysis or	
CE 421 Traffic Engineering (4)	
CE 591 Graduate Seminar I (1)	
CE 599 Design Project (Thesis) (2,2,2) or	
CRP 599 Thesis (2)(2)(2) or	
CRP 596 Professional Project (2)(2)(2) or	
CRP 556 Community and Regional Planning	
Studio III (4) CRP 435 Transportation Theory (3)	
CRP 501 Foundations of Cities and Planning (4)	
9 . ,	
CRP 509 Professional Development (1-3)	
CRP 510 Planning Theory (4)	
CRP 513 Planning Research Methods (4)	
CRP 516 Methods of Data Analysis (4)	
CRP 518 Policy Analysis for Planners (4)	
CRP 525 Plan Implementation (4)	
CRP 530 Planning Agency Management (3)	
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) Advisor approved electives (4–8)	
Emphasis Area (select one of the following)	11
Urban Development and Design Emphasis	11
CRP 520 Feasibility Studies in Planning (4)	
•	
CRP 548 Principles of Urban Dev. and Design (4)	
Urban Development and Design elective (3)	
Environmental Planning Emphasis	
CRP 545 Principles of Env. Planning (4)	
Environmental Planning electives (7)	
Approved CE/ENVE electives:	15
Select from: CE 421, 422, 423, 424, 500, 521,	
522, 524, 525, 527, 528, 529, ENVE 411, or	
other advisor approved CE/ENVE courses	

90