UCI Samueli School of Engineering
Department of Civil and Environmental Engineering

AY 2024-25
MASTER'S DEGREE PLAN OF STUDY
TRANSPORTATION SYSTEMS

Name:	Student ID Number:
Qtr./Year Expected to Advance to Candidacy:	Email Address:
Qtr./Year Expected to Graduate:	GPA:
Thesis or Non-Thesis Option:	Thesis Advisor:

COURSE TITLE	COURSE NUMBER	UNITS	GRADE	QTR/YR
Travel Demand Analysis I	**CEE 220A**	**4**		
Transportation Systems Analysis I	**CEE 221A**	**4**		
Urban Transportation Networks I	**CEE 228A**	**4**		
TOTAL UNITS FOR **THIS SECTION:**				

NON-THESIS OPTION
48 UNITS TOTAL

Core Courses
28 out of 48 units

Students must fulfill a minimum of **28** units made up of the core courses listed to the left and below:
The remaining core courses (at least 4) may be chosen from the following:
CEE 223
CEE 224A
CEE 226A or 226B (not both)
CEE 229A or 229B (not both)
CEE 283**
**Required for students without Differential Equations and Linear Algebra on prior transcript(s)

THESIS OPTION
48 UNITS TOTAL

Core Courses
28 out of 48 units

Students must fulfill a minimum of **28** units made up of the core courses listed to the left and below:
The remaining core courses (at least 4) may be chosen from the following:
CEE 223
CEE 224A
CEE 226A or 226B (not both)
CEE 229A or 229B (not both)
CEE 283**
**Required for students without Differential Equations and Linear Algebra on prior transcript(s)

COURSE TITLE	COURSE NUMBER	UNITS	GRADE	QTR/YR
TOTAL UNITS FOR **THIS SECTION:**				

Electives
12 out of 48 units

Students must fulfill a minimum of **12** elective units from graduate courses listed on page 2.

MS Thesis Research
10 out of 48 units

Students can fulfill a maximum of **10** units of CEE 296: MS Thesis Research.

COURSE TITLE	COURSE NUMBER	UNITS	GRADE	QTR/YR
TOTAL UNITS FOR **THIS SECTION:**				
TOTAL UNITS FOR **ALL SECTIONS:**				

Seminars/Other
8 out of 48 units

Required: 3 units of CEE 295: Seminars in CEE. **Max. of 3 units** apply to degree requirements.

Options for the remaining 5 units:
- Approved graduate-level courses *see page 2*
- CEE 299 Individual Research units
- Approved upper-division undergraduate units. **10 units max**

Seminars/Other
10 out of 48 units

Required: 3 units of CEE 295: Seminars in CEE. **Max. of 3 units** apply to degree requirements.

Options for the remaining **7** units:
- Approved graduate-level courses *see page 2*
- CEE 299 Individual Research units
- Approved upper-division undergraduate units. **10 units max**

SIGNATURES:

MS THESIS COMMITTEE MEMBERS:

STUDENT: **DATE:** **CHAIR:**

TRANSPORTATION FOCUS AREA ADVISOR: **DATE:** **MEMBER:**

CEE GRADUATE ADVISOR: **DATE:** **MEMBER:**

This form must be submitted to the Grad. Coordinator by the end of the **FIRST** quarter of enrollment. Changes to this form **MUST** be approved by the Transportation Focus Area Advisor, Professor Michael Hyland, hylandm@uci.edu

CEE Courses:

ENGRCEE 214 GIS for CEE (F) [1]
ENGRCEE 220A Travel Demand Analysis I (F)
ENGRCEE 220B Travel Demand Analysis II (*)
ENGRCEE 220C Travel Demand Analysis III (*)
ENGRCEE 221A Transportation Systems Analysis I (W)
ENGRCEE 221B Transportation Systems Analysis II (*)
ENGRCEE 222 Transit Systems Planning (*)
ENGRCEE 223 Transportation Systems Planning (S)
ENGRCEE 224A Transportation Data Analysis I (S)
ENGRCEE 225A Transportation Planning Models I (*)
ENGRCEE 225B Transportation Planning Models II (*)
ENGRCEE 226A Traffic Flow Theory I (*)
ENGRCEE 226B Traffic Flow Theory II (*)
ENGRCEE 228A Urban Transportation Networks I (F)
ENGRCEE 228B Urban Transportation Networks II (S)
ENGRCEE 229A Traffic Systems Operations & Control I (W)
ENGRCEE 229B Traffic Systems Operations & Control II (W)
ENGRCEE 283 Mathematical Methods in Eng. Analysis (F)
ENGRCEE 296 MS Thesis Research (F, W, S)
ENGRCEE 298 Smart Cities (S)
ENGRCEE 298 Infrastructure Eqty (F)
ENGRCEE 298 Energy Data & Model (F)
ENGRCEE 298 Trans Data Anlys II
ENGRCEE 298 Sim for Moblty Dsgn
ENGRCEE 299 Individual Research (F, W, S)

Non-CEE Courses (Electives): Please check individual Department schedules to confirm course offerings.

CRM/LAW C207 Land Use Law
BANA 212 Data and Programming for Analytics
BANA 295 Big Data Management Systems
COMPSCI 206 Principles of Scientific Computing
COMPSCI 244P Introduction to the Internet of Things
COMPSCI 261 Data Structures
COMPSCI 268 Introduction to Optimization Modeling
COMPSCI 273A Machine Learning
COMPSCI 274C Neural Networks and Deep Learning
EARTHSS 212 Geoscience Modeling and Data Analysis

Non-CEE Courses (Electives Cont.): Please check individual Department schedules to confirm course offerings.

ECON 243A Game Theory
ECON 243B Advanced Game Theory
ECON 281A Urban Economics
ECON 281B Urban Economics II
ECON 282A Transportation Economics I
ECON 282B Transportation Economics II (S18)
EECS 215 Design and Analysis of Algorithms
EECS 227 Cyber-Physical System Design
EECS 240 Random Processes
EECS 242 Information Theory
EECS 260A Linear Systems I
ENGR 280 Entrepreneurship for Scientists and Engineers
MGMTMBA 208 Operations Management
MGMTMBA 285 Supply Chain Management
MGMTPHD 297Q Game-Theoretic Models for Mgmt. Res.
MGMTPHD 297T Decision Theory
MATH 225B Intro to Numerical Anal. & Scientific Computing
ENGRMAE 206 Nonlinear Optimization Methods
ENGRMAE 214A Fuel Cell Fundamentals and Technologies
UPPP 202 History of Urban Planning
UPPP 207 Land-Use Law
UPPP 231 Transportation and Environmental Health
UPPP 235 GIS Problem Solving in Planning[1]
UPPP 244 Land-Use Policy
PUBHLTH 260 Human Exposure Modeling
SOCECOL 272A Structural Equation Modeling I
STATS 245 Time Series Analysis
STATS 260 Inference with Missing Data
STATS 262 Theory and Practice of Sample Surveys
STATS 270 Stochastic Processes

(F): Fall Quarter; (W): Winter Quarter; (S): Spring Quarter; (*): Not offered in 2024-25
[1]: Students can count either CEE 214 (GIS) or UPPP 235 (GIS) toward degree requirement, BUT NOT BOTH.

The following can **ONLY** be included with **prior** approval of the Transportation Focus Area Advisor, Professor Michael Hyland: hylandm@uci.edu

- Upper-division undergraduate courses and/or non-CEE graduate courses (outside of those listed above). Include a description of the course in your email request to Professor Michael Hyland.
- MS Thesis Research units can be extended to 16 units. You must email your request to Professor Michael Hyland.