CE TRA PROGRAM OF WORK ADVISING (2018-2019 Catalog)

(Fill this form out and update each semester before enrolling in course work.)

Student Name: _____ Date: _____
Last First Middle

Address: _____ ID.Number: _____

Degree Held and Fields: _____

Degree Sought: ME - Non-Thesis ☐ MS - Thesis ☐ Major: Transportation Engineering (TRA)

Subject Prefix	Course Number	Required Transportation Core Courses	Check if applying to degree.	Semester Year 20___	Grade
3 Courses Required (9 Hours)					
CE	5330	Characteristics of Traffic		F Su Sp	
CE	5332	Highway Design		F Su Sp	
CE	5337	Urban Transportation Planning		F Su Sp	
1 Course Required (Either IE 5318 or ECON 5336 but not both) (3 hours)					
IE	5318	Applied Regression Analysis		F Su Sp	
ECON	5336	Applied Business and Economics Data Analysis I		F Su Sp	
CE	5698	Thesis (Only MS Students)		F Su Sp	

Student must earn an average GPA of 3.0 or higher in their core courses. If final core course GPA is below a 3.0, student must pass a comprehensive exam over the Core Courses.

Note: No course used as a Required Core Course can be used for an Elective Course.

Masters of Engineering Degree (ME) Elective Course Options

Eighteen (18) semester hours of Elective Courses is required. At least twelve (12) semester hours are to be taken from the CE Transportation Elective Courses. Up to six (6) semester hours of Other Electives are required. Course selection must result in a cohesive program that supports the major area degree plan.

Masters of Science Degree (MS) Elective Course Options

A minimum of Twelve (12) semester hours of Elective Courses are required. At least six (6) semester hours must be from CE Transportation Elective Classes. Up to Six (6) semester hours may be from the Other Electives or from Supportive Areas. Course selection must result in a cohesive program that supports the thesis and must receive the approval of the student's supervising committee. Supportive Areas: Courses in City and Regional Planning, Mathematics and additional areas may be approved by petition to Transportation faculty.

Thesis: Once the student is enrolled, continuous enrollment is required in the thesis course(s). The student must be enrolled in six (6) hours of thesis during the semester the student finishes the thesis requirements and files for graduation.

FINAL DEGREE REQUIREMENTS vary depending upon a student's background and experience. Student's supervising committee establishes individual final degree requirements.

Elective Courses

CE Transportation Elective Courses	Check if applying to degree	Semester Year 20___	Grade	Other Electives	Check if applying to degree	Semester Year 20___	Grade
CE 5331 Traffic Engineering Operations		F Su Sp		CE 5328 Air Pollution		F Su Sp	
CE 5333 Traffic Control Systems		F Su Sp		CE 5346 Open Channel Flow		F Su Sp	
CE 5334 Intro.to Railroad Engineering		F Su Sp		CE 5347 Advanced Hydrology		F Su Sp	
CE 5335 Airport Engineering		F Su Sp		CE 5364 Foundation Analysis and Design		F Su Sp	
CE 5336 Pavement Design		F Su Sp		CE 5367 Design of Earth Structures		F Su Sp	
CE 5338 System Evaluation		F Su Sp		CE 5349 Advanced GIS and Hydrologic and Hydraulic Modeling		F Su Sp	
CE 5341 Pavement Eval., Rehab. & Maint. System		F Su Sp					
CE 5361 Design & Construct. of Asphalt Concrete		F Su Sp		ECON 5336 Applied Business and Economics Data Analysis I		F Su Sp	
CE 5362 Rigid Pavements		F Su Sp					
CE 6306 Public Transit Planning and Operations		F Su Sp		ECON 5339 Applied Business and Economics Data Analysis I Econometrics II		F Su Sp	
CE 6308 Analytical Models in Transportation		F Su Sp					
CE 6309 Traffic Flow Theory		F Su Sp					
Elective Courses Requiring Academic Advisor Approval							
CE 5191 Advanced Studies in Civil Engineering		F Su Sp					

Admission Requirements	
Deficiency Courses	

Examination Requirement(s)	
Language Requirements(s)	
List any other Requirements(s) by the Committee	

APPROVALS AND DATES (Signatures Required)

Student: _____ Date _____

Academic Advisor: _____ Date _____

Graduate Advisor/Chair: _____ Date _____

2018-2019 CE TRA Course and Prerequisite List

COURSE	PREREQUISITE:
CORE COURSES	
CE 5330 CHARACTERISTICS OF TRAFFIC	CE 3302; and CE 3301 or concurrent registration therein.
CE 5332 HIGHWAY DESIGN	CE 3302 - Credit will not be granted for both CE 4312 and CE 5332.
CE 5337 URBAN TRANSPORTATION PLANNING	CE 3301 and CE 3302; or consent of instructor - Credit not granted for both CE 4311 and CE 5337.
Select either IE 5318 or ECON 5336 as one (1) Required Core Course but not both.	
IE 5318 APPLIED REGRESSION ANALYSIS	IE 5317 or equivalent
ECON 5336 APPLIED BUSINESS AND ECONOMICS DATA ANALYSIS I	Graduate standing.
CE TRANSPORTATION COURSES	
CE 5331 TRAFFIC ENGINEERING OPERATIONS	CE 3302 and CE 3301 or concurrent registration therein - Credit not be granted for both CE 4313 and CE 5331.
CE 5333 TRAFFIC CONTROL SYSTEMS	CE 4313 or CE 5331 or Equivalent or consent of Instructor.
CE 5334 INTRODUCTION TO RAILROAD ENGINEERING	CE 3302 - Credit not granted for CE 4314 and CE 5334.
CE 5335 AIRPORT ENGINEERING	CE 3302.
CE 5336 PAVEMENT DESIGN	CE 3302, CE 3261, and CE 3343.
CE 5338 SYSTEM EVALUATION	IE 2308 and CE 3301 or IE 3301 or consent of instructor.
CE 5341 PAVEMENT EVALUATION, REHABILITATION AND MANAGEMENT SYSTEMS	CE 5336 or equivalent.
CE 5361 DESIGN & CONSTRUCTION OF ASPHALT CONCRETE	CE 3261 or equivalent - Credit not granted for both CE 4336 and CE 5361.
CE 5362 RIGID PAVEMENTS	CE 3261 or equivalent - Credit not granted for both CE 4337 and CE 5362.
CE 6306 PUBLIC TRANSIT PLANNING AND OPERATION	CE 4311 or CE 5337 or equivalent.
CE 6308 ANALYTICAL MODELS IN TRANSPORTATION	CE 4311 or CE 5337.
CE 6309TRAFFIC FLOW THEORY	CE 5330 or equivalent
OTHER ELECTIVES	
CE 5328 AIR POLLUTION	Concurrent enrollment in CE 3334 or CE 5321 or consent of instructor - Credit not granted for both CE 4350 and CE 5328.
CE 5346 OPEN CHANNEL FLOW	CE 3305 and CE 4328; or consent of instructor - Credit not granted for both CE 4358 and CE 5346.
CE 5347 ADVANCED HYDROLOGY	CE 3342 and CE 4328 or equivalent.
CE 5364 FOUNDATION ANALYSIS AND DESIGN	CE 3343 - Credit not granted for both CE 4321 and CE 5364.
CE 5367 DESIGN OF EARTH STRUCTURES	CE 3343 or consent of instructor - Credit not granted for both CE 4320 and CE 5367.
CE 5349 ADVANCED GIS AND HYDROLOGIC AND HYDRAULIC MODELING	
ECON 5336 APPLIED BUSINESS AND ECONOMICS DATA ANALYSIS I	Graduate standing.
ECON 5339 APPLIED BUSINESS AND ECONOMICS DATA ANALYSIS II	ECON 5336 .
IE 5318 APPLIED REGRESSION ANALYSIS	IE 5317or equivalent.
Elective Courses Requiring Academic Advisor Approval.	
CE 5191 ADVANCED STUDIES IN CIVIL ENGINEERING	Consent of instructor.
CE 5391 ADVANCED STUDIES IN CIVIL ENGINEERING	Consent of instructor.
CE 5395 MASTER'S PROJECT	Non-thesis. Consent of instructor and approval of Supervising Committee Chair.
CE 5695 MASTER'S PROJECT	Non-thesis. Consent of instructor and approval of Supervising Committee Chair.
CE 5398 THESIS	Approval of Supervising Committee and Chair.
CE 5698 THESIS	Approval of Supervising Committee and Chair.