

CE-INF PROGRAM OF WORK ADVISING (2018-2019 Catalog)
(This form must be filled out and submitted before 12 hours of course work is completed.)

Student Name: _____ Date: _____

Last First Middle

Address: _____ ID Number: _____

Degree Held and Fields: _____

Degree Sought: ME - Non-Thesis MS - Thesis Major: **Infrastructure System Engineering and Management (INF)**

Subject Prefix	Course Number	Required Construction Core Courses (12 Hours Required)	Check if applying to degree	Semester	Year 20__	Grade
CE	5345	Infrastructure Evaluation Maintenance & Renewal		F Su Sp		
CE	5380	Management of Infrastructure Assets		F Su Sp		
IE	5317	Intro to Statistics and Operations Research		F Su Sp		
CE	5698	Thesis (Only MS Students)				

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

Twenty-one (21) semester hours must be taken from the Elective Courses listed below. No more than nine (9) semester hours can be taken outside of Civil Engineering. Elective courses listed below are highly recommended but are not all inclusive. Course selection must result in a cohesive program that supports the degree plan.

Masters of Science Degree (MS) Elective Course Options

Fifteen (15) semester hours must be taken from the Elective Courses listed below. No more than nine (9) hours can be taken outside of Civil Engineering. Elective courses listed below are highly recommended but are not all inclusive. Course selection must result in a cohesive program that supports the degree plan and must receive the approval of the student's supervising committee.

Thesis: Once the student is enrolled in the thesis course(s), continuous enrollment is required. 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 degree requirements.

Elective Courses							
CE Elective Infrastructure	Check if applying to degree	Semester/Year	Grade	CE Elective Construction	Check if applying to degree	Semester/Year	Grade
CE 5336 Pavement Design				CE 5344 Construction Methods Field Operations			
CE 5341 Pavement Eval., Rehab. & Management.				CE 5377 Const. Project Management & Job Costing			
CE 5361 Design & Construction of Asphalt Concrete				CE 5388 Pipeline Const. & Trenchless Technology			
CE 5362 Rigid Pavements				CE 5389 Pipeline Infrastructure Asset. Management & Sustainability			
CE Elective Environmental	Check if applying to degree	Semester/Year	Grade	CE Elective Structures & Applied Mechanics	Check if applying to degree	Semester/Year	Grade
CE 5326 Water & Wastewater Treat. Facility Design				CE 5311 Advanced Steel Design I			
CE 5328 Fundamentals of Air Pollution				CE 5312 Advanced Concrete Design I			
CE Elective Transportation	Check if applying to degree	Semester/Year	Grade	CE Elective Water Resources	Check if applying to degree	Semester/Year	Grade
CE 5331 Traffic Operations				CE 5354 Water Resources Planning			
CE 5332 Highway Design				CE 5356 Surface Water Quality Modeling			
CE 5335 Airport Engineering				Electives Outside Civil Engineering	Check if applying to degree	Semester/Year	Grade
CE 5338 System Evaluation							
CE 6306 Public Transit Planning & Operation							
CE Elective Geotechnical	Check if applying to degree	Semester/Year	Grade	CIRP 5356 Intro to GIS Systems			
CE 5364 Foundation Analysis and Design				IE 5301 Advanced Operations Research			
CE 5367 Design of Earth Structures				IE 5304 Advanced Engineering Economy			
CE 5375 Geotechnical Aspects of Landfills				IE 5311 Decision Analysis			
CE 5376 Geosynthetics				IE 5318 Advanced Engineering Statistics			
				IE 5351 Intro to Systems Engineering			
Elective Courses Requiring Academic Advisor Approval							
CE 5191 Advanced Studies in Civil Engineering							

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–INF Course and Prerequisites List

COURSE	PREREQUISITES:
CORE COURSES (TAKE ALL)	
CE 5345 Infrastructure Evaluation Maintenance & Renewal	Consent of instructor.
CE 5380 Management of Infrastructure Assets	Consent of instructor.
IE 5317 Intro to Statistics	MATH 2326 or equivalent and permission of advisor.
CE Elective Infrastructure	
CE 5336 Pavement Design	CE 3302, CE 3261, and CE 3343.
CE 5341 Pavement Evaluation, Réhabilitations and & Management.	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 Elective Environmental	
CE 5326 Water & Wastewater Treat. Facility Design	CE 3131, CE 3142, and CE 3334. Credit not granted for both CE 4355 and CE 5326.
CE 5328 Fundamentals of 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 Elective Transportation	
CE 5331 Traffic Engineering Operations	CE 3302; and CE 3301 or concurrent registration therein. Credit will not be granted for both CE 4313 and CE 5331.
CE 5332 Highway Design	CE 3302. Credit will not be granted for both CE 4312 and CE 5332.
CE 5335 Airport Engineering	CE 3302
CE 5338 System Evaluation	IE 2308 and CE 3301 or IE 3301 or equivalents, or consent of instructor.
CE 6306 Public Transit Planning & Operation	CE 4311 or CE 5337 or equivalent.
CE Elective Geotechnical	
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 5375 Geotechnical Aspects of Landfills	CE 3343 or consent of instructor. Credit not granted for both CE 4323 and CE 5375.
CE 5376 GIS in Geotechnics	CE 3343 or consent of instructor.
CE Elective Construction	
CE 5344 Construction Methods Field Operations	Credit not granted for CE 4332 and CE 5344.
CE 5377 Const. Project Management & Job Costing	
CE 5388 Pipeline Const. & Trenchless Technology	Graduate standing and consent of instructor. Credit not granted for both CE 4305 and CE 5388.
CE 5389 Pipeline Infrastructure. Asset. Management and Sustainability.	Graduate standing and consent of instructor. Credit not granted for both CE 4306 and CE 5389.
CE Elective Structures and Applied Mechanics	
CE 5311 Advanced Steel Design I	CE 4348 or CE 5306.
CE 5312 Advanced Concrete Design I	CE 4347. Credit not granted for both CE 4361 and CE 5312.
CE Elective Water Resources	
CE 5354 Water Resources Planning	CE 3301, CE 3342, and IE 2308; or consent of instructor.
CE 5356 Surface Water Quality Modeling	CE 5346.
Electives Outside Civil Engineering	
CIRP 5356 Intro to GIS	Consent of instructor
IE 5301 Intro to Operations Research	IE 3301 or IE 5317 or equivalent.
IE 5304 Advanced Engineering Economy	Graduate standing
IE 5311 Decision Analysis	IE 5301 or concurrent.
IE 5318 Applied Regression Analysis	IE 5317 or equivalent
IE 5351 Intro to Systems Engineering	Graduate standing, and permission of IMSE advisor
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