



CIVIL FOCUS AREA: Urban Studies

Department of Civil and Environmental Engineering

General Education (19 sh) sh

ALL	RHET:1030 Rhetoric	4
F/S	Diversity & Inclusion	3
ALL	Be Creative	3
ALL	Approved Gen Ed Course	3
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Math & Basic Science Core (24 sh) sh

F/S	MATH:1550 Math I: Single Variable Calculus (P: ALEKS score ≥ 75 or MPT Level 3 score ≥ 9)	4
ALL	MATH:1560 Math II: Multivariable Calculus (P: MATH:1550)	4
ALL	MATH:2550 Math III: Matrix Algebra (P: MATH:1550)	2
ALL	MATH:2560 Math IV: Differential Equations (P: MATH:1560 & MATH:2550)	3
F/S	STAT:2020 Probability & Statistics For Engr & Phys Sci (P: MATH:1560)	3
ALL	CHEM:1110 Principles of Chemistry I (P: ALEKS score ≥ 55 or MPT Level 3 score ≥ 9)	4
ALL	PHYS:1611 Introductory Physics I / Lab (C: MATH:1550)	4

Engineering Core (7 sh) sh

F	ENGR:1000 Engineering Success for First-Year Students (First semester standing)	1
F	ENGR:1100 Intro to Engineering Problem Solving	3
F/S	ENGR:1300 Intro to Engineering Computing (C: MATH:1550)	3

Civil Engineering Requirements (45 sh) sh

ALL	CHEM:1120 Principles of Chemistry II (P: CHEM:1110)	4	OR
F/S	PHYS:1612 Introductory Physics II / Lab (P: PHYS:1611; C: MATH:1560)	4	
ALL	ENGR:2110 Statics (P: MATH:1550; C: MATH:1560 & PHYS:1611)	2	
ALL	ENGR:2130 Thermodynamics (P: CHEM:1110 & PHYS:1611; C: MATH:1560)	3	
F/S	ENGR:2510 Fluid Mechanics (P: MATH:2560 & ENGR:2710; C: ENGR:2130)	4	
ALL*	ENGR:2710 Dynamics (P: ENGR:2110 & MATH:1550)	3	
ALL*	ENGR:2750 Mechanics of Deformable Bodies (P: ENGR:2110; C: MATH:2560)	3	
ALL	CEE:1030 Intro to Earth Science (no lab required)	3	
F	CEE:2015 Civil Engineering Tools	2	
S	CEE:3155 Principles of Environmental Engineering (P: CHEM:1110)	4	
S	CEE:3371 Principles of Hydraulics and Hydrology (P: ENGR:2510)	3	
F	CEE:3530 Geomechanics (P: ENGR:2750)	4	
F	CEE:3533 Principles of Structural Engineering (P: ENGR:2750)	4	
S	CEE:3586 Civil Engineering Materials (P: ENGR:2750)	3	
S	CEE:3763 Principles of Transportation Engineering (C: ENGR:1100)	3	

Capstone Design Courses (3 sh) sh

F/S	CEE:4850 Project Design & Management in CEE (P: final semester; C: CEE:3003)	3
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CEE Professional Skills (4 sh) sh

S	CEE:2010 Professional Practice and Ethics	1
F	CEE:3001 Leadership Skills for Engineers (junior standing)	1
S	CEE:3002 Technical Communication in CEE (junior standing)	1
F	CEE:3003 Project Management Skills (senior standing)	1

Required: Urban Studies (3 sh) sh

F	URP:3001 Planning Livable Cities	3
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Electives: Urban Studies (24 sh) sh

CEE Design Course* sh

select 2 courses from the list below

F	CEE:4157 Environmental Engineering Design (P: CEE:3155)	3
F	CEE:4374 Water Resource Design (P: CEE:3371)	3
F	CEE:4506 Design of Concrete Structures (P: CEE:3533)	3
OR S	CEE:4535 Design of Steel Structures (P: CEE:3533)	3
F	CEE:4762 Design of Transportation Systems (P: CEE:3763)	3

Electives: Focus Area, Minor, Certificate, etc. sh

select 4 courses from the list below

F	PBAF:3560 Public Policy and Persuasion (P: RHET:1030 or RHET:1040 or RHET:1060)	3
F	PBAF:3570 Poverty Policy	3
F	URP:2020 Environment and Society: Sustainability, Policy, and Politics	3
S	URP:4170 Megacities Seminar	3
S	URP:4225 Applied GIS for Planning and Policy Making	3
S	URP:4253 Designing Sustainable and Healthy Cities	3
S	URP:4260 Transportation Policy and Planning	3
F	URP:4266 Transportation and Land Use Planning	3
S	URP:4273 Community Development Through Creative Placemaking	3
F	URP:4280 Planning for Disaster Mitigation and Recovery	3
S	URP:4295 Economic Development Policy	3
S	URP:4752 Eight Generation Planning: Envisioning Cities for Year 2228	3
F	CRIM:4120 Environmental Criminology (P: CRIM:1410)	3
	Any other course approved for the Urban Studies Minor	

Electives: Focus Area, Minor, Certificate, etc. sh

select 2 courses from the list below

	Any additional CEE Design Course(s) listed above	
S	CEE:3783 Surveying & Remote Sensing (P: ENGR:1100)	3
S	CEE:3790 Resilient Infrastructure and Emergency Response	3
F	CEE:4102 Groundwater	3
F	CEE:4158 Solid and Hazardous Wastes	3
S	CEE:4159 Air Pollution Control Technology	3
F	CEE:4119 Hydrology (P: ENGR:2510)	3
S	CEE:4371 Water Resources Engineering (C: CEE:3371)	3
F	CEE:4539 Foundations of Structures (P: CEE:3530)	3
F	CEE:4763 Traffic Engineering (P: CEE:3763)	3
	Any additional 3000 level or above elective course(s) in CEE	

Students in the Focus Area will receive a Minor in Urban Studies. Students must enroll in the minor through the School of Planning and Public Affairs.