



# CIVIL FOCUS AREA: Pre-Architecture

Department of Civil and Environmental Engineering

### General Education (19 sh) sh

ALL	RHET:1030 Rhetoric	4
F/S	Diversity & Inclusion	3
F/S	ARTS:1510 Basic Drawing (satisfies Be Creative course requirement)	3
F/S	ARTS:1520 Design Fundamentals	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: Pre-Architecture (6 sh) sh

F	CEE:4506 Design of Concrete Structures (P: CEE:3533)	3
F/S	TDSN:2210 Problems in 3-D Design I: Form and Structure (P: ARTS:1510, ARTS:1520)	3

### Electives: Pre-Architecture (21 sh) sh

#### CEE Design Course\* sh

select 1 course from this list

F	CEE:4157 Environmental Engineering Design (P: CEE:3155)	3
F	CEE:4374 Water Resource Design (P: CEE:3371)	3
F	CEE:4762 Design of Transportation Systems (P: CEE:3763)	3

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

select 1 course from the list below

	ANIM:2125 Introduction to Animation (P: ARTS:1510 & ARTS:1520)	3
F/S	DRAW:2310 Life Drawing I (P: ARTS:1510 & ARTS:1520)	3
F/S	PHOTO:2600 Photography I (P: ARTS:1510 & ARTS:1520)	3
F/S	PNTG:2410 Painting I (P: ARTS:1510 & ARTS:1520)	3
F/S	PRNT:2610 Introduction to Printmaking (P: ARTS:1510 & ARTS:1520)	3

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

select 2 courses from the list below

F/S	TDSN:2240 3D Computer Aided Design (P: CERM:2010 or SCLP:2810 or TDSN:2210 or MTLs:2910)	3
F/S	TDSN:2250 Digital Prototyping (C: ANIM:2125 or CERM:2010 or DSGN:2500 or DRAW:2310 or INTM:2710 or MTLs:2910 or PHTO:2600 or PNTG:2410 or PRNT:2610 or SCLP:2810 or TDSN:2240)	3

Other courses that satisfy Arts minor requirements (see Minor in Studio Arts page on the School of Art and Art History web site)

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

select 2 courses from the list below

F	CEE:4164 Design of Wood Structures (P: CEE:3533)	3
S	CEE:4535 Design of Steel Structures (P: CEE:3533)	3
F	CEE:4539 Foundations of Structures (P: CEE:3530)	3

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

select 1 course from the list below

Any additional CEE Design Course listed above  
Any additional 3000 level or above elective course(s) in CEE

Total Semester Hour Requirements: 129

Students in the Focus Area will receive an Art Minor. Students must enroll in the minor through the School of Art and Art History.