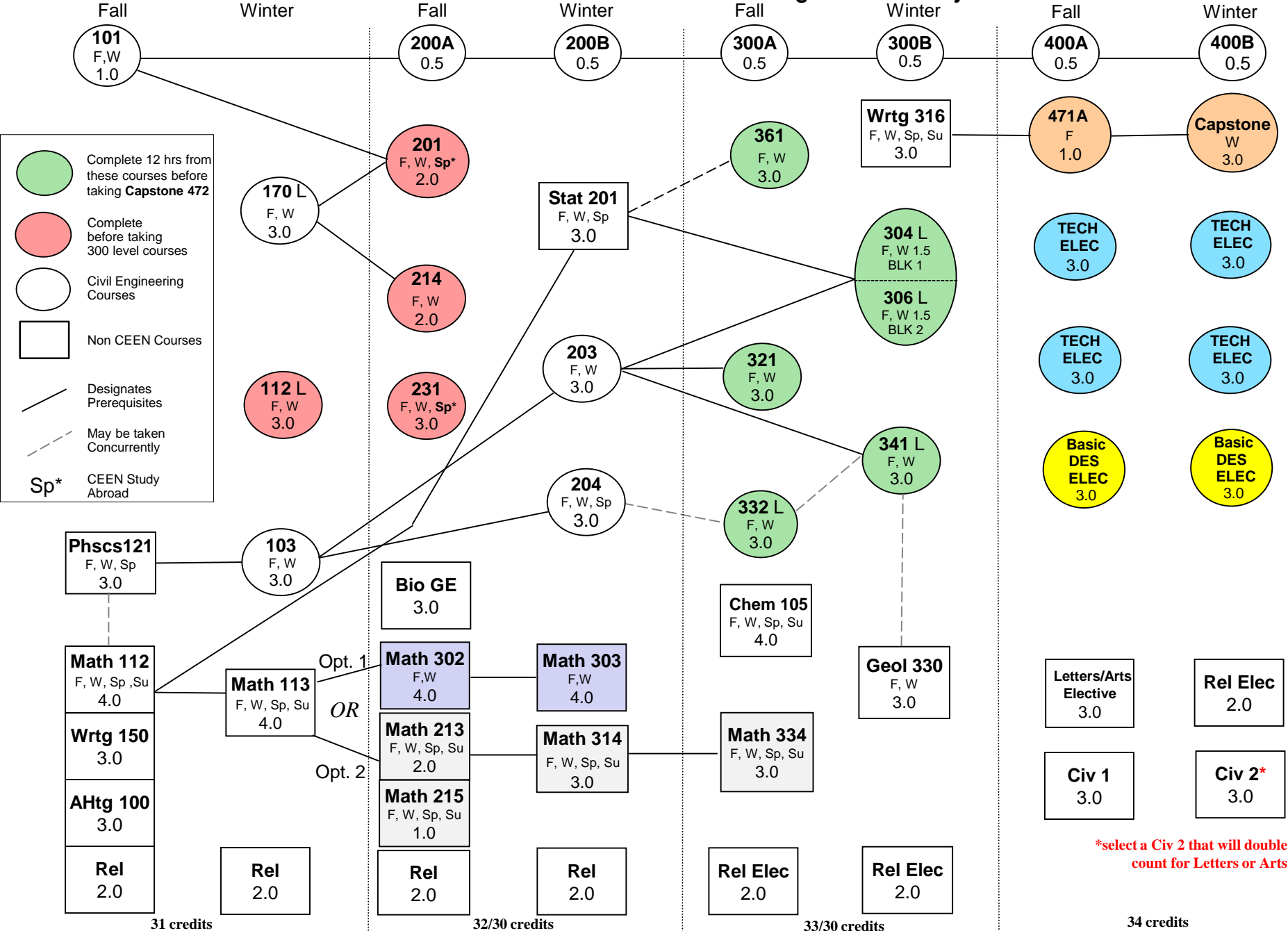


Department of Civil and Environmental Engineering 2020-21

Recommended Schedule for the Bachelor's Program – 127.0 Mjr Cr Hrs



*select a Civ 2 that will double count for Letters or Arts

Department of Civil & Environmental Engineering
2020-2021 Recommended Schedule for the Bachelor's Program

Students must be enrolled in a seminar course each semester from the time the major is declared until graduation, beginning with CE En 200A/B and continue in order with 300A, 300B, 400A, 400B (maximum of 6 seminars is required). Transfer students or students joining the program from another department should see the department Undergraduate Advisor for placement. Students may not take two seminars at one time.

NOTE: A minimum of 7 **DIFFERENT** elective courses is required; 4 Technical Electives, 2 Basic Design Electives and 1 Culminating Design Elective

NO DOUBLE COUNTING of Technical Electives

Technical Electives

Course #	Hrs	Description
CE En 414	3.0	Engineering Applications of GIS
CE En 421	3.0	Structural Steel Design
CE En 424	3.0	Reinforced Concrete Design
CE En 427	3.0	International Megastructures / Not offered
CE En 431	3.0	Hydrology
CE En 433	3.0	Hydraulic Engineering
CE En 439	3.0	Water Resources Study Abroad
CE En 442	3.0	Foundation Engineering
CE En 451	3.0	Environmental Engineering Processes
CE En 461	3.0	Geometric Designs of Highways
CE En 467	3.0	International Megacities / Not offered
CE En 472	3.0	Civil Engineering Design
CE En 500	3.0	Design & Materials Applications
CE En 501	3.0	Stress Analysis & Design of Mech. Struct.
CE En 503	3.0	Plasticity & Fracture
CE En 504	3.0	Computer Structure Analysis/Optimization
CE En 505	3.0	Portland Cement Concrete Mixture
CE En 507	3.0	Linear Finite Element Methods
CE En 508	3.0	Structural Vibrations
CE En 514	3.0	Geospacial Software Development
CE En 521	3.0	Seismic-Resistant Steel Buildings
CE En 523	3.0	Aircraft Structures

Course #	Hrs	Description
CE En 525	3.0	Bridge Structures
CE En 528	3.0	Masonry Design
CE En 529	3.0	Structural Wood Design
CE En 531	3.0	Prin of Hydrologic Modeling
CE En 534	3.0	Hydroinformatics
CE En 535	3.0	Hydraulic Design of Channels & Cntrl Struc
CE En 540	3.0	Geo-Environmental Engineering
CE En 544	3.0	Seepage & Slope Stability Analysis
CE En 545	3.0	Geotechnical Anal. of Earthquake Phenom
CE En 547	3.0	Groundwater Modeling
CE En 551	3.0	Water Treatment Facilities Design
CE En 555	3.0	Environmental Chemistry
CE En 562	3.0	Traffic Engineering: Characteristics & Ops
CE En 563	3.0	Pavement Design
CE En 565	3.0	Urban Transportation Planning
CE En 570	3.0	Computer-Aided Engr Software Devepmnt
CE En 572	3.0	Computer-Aided Geometric Design
CE En 575	3.0	Optimization Techniques in Engineering
CE En 594R	3.0V	Selected Prob in Civil & Environm. Engr
CE EN 497R	3.0V	Global Engineering Outreach Projects
ME En 321	3.0	Thermodynamics

Culminating Design Electives (CAN NOT BE DOUBLE COUNTED AS ONE OF THE 4 REQUIRED TECHNICAL ELECTIVES)

Course #	Hrs	Description	Prerequisites
CE En 439	3.0	Water Resources Study Abroad (W, Sp)	CE En 471A (F); 431 or 433 / 414 (verify with instructor)
CE En 472	3.0	Civil Engineering Design (W)	CE En 471A (F)

Basic Design Electives (CAN NOT BE DOUBLE COUNTED AS ONE OF THE 4 REQUIRED TECHNICAL ELECTIVES)

Note: The 2 Basic Design Electives MUST come from DIFFERENT groups

Group 1:		
CE En 421	3.0	Structural Steel Design (W)
CE En 424	3.0	Reinforced Concrete Design (F)
Group 2:		
CE En 431	3.0	Hydrology (W)
CE En 433	3.0	Hydraulic Engineering (F) (Sp)
Group 3:		
CE En 442	3.0	Foundation Engineering (F)
Group 4:		
CE EN 461	3.0	Geometric Design of Highways (W)