OLD DOMINION UNIVERSITY

Department of Civil & Environmental Engineering
Bachelor of Science in Civil Engineering (BSCE) Curriculum

2024-2025 Catalog

Date of Admission: _____

UIN: _____ Name: _____ Freshman: _____; Transfer: _____; 2nd Degree: _____

FRESHMAN			SEM./YR.	Grade	Transfer Credit Course#	Transfer Credit C/U
CHEM 121N	Foundations of Chemistry I	(3)				
CHEM 122N	Foundations of Chemistry I Lab	(1)				
ENGN 121	Freshman Engineering & Tech. I	(4)				
Gen. Ed.	Human Creativity	(3)				
MATH 211	Calculus I	(4)				
ENGN 122	Computer Programming for Engr	(4)				
ENGL 110C	English Composition	(3)				
MATH 212	Calculus II	(4)				
PHYS 231N	University Physics	(4)				
		TOTAL (30)				

SOPHOMORE			SEM./YR.	Grade	Transfer Credit Course#	Transfer Credit C/U
CEE 204	Statics	(3)				
COMM 101R	Public Speaking	(3)				
MATH 312	Calculus III	(4)				
PHYS 232N	University Physics	(4)				
CEE 240	Geographic Info Sys in C & E Engr.	(2)				
CEE 205	Engineering Dynamics	(3)				
CEE 220	Mechanics of Deformable Bodies	(3)				
ENGL 211C	English Composition	(3)				
Gen. Ed.	Literature	(3)				
Science Elec.	BIOL 110N/111N or OEAS 111N	(4)				
		TOTAL (32)				

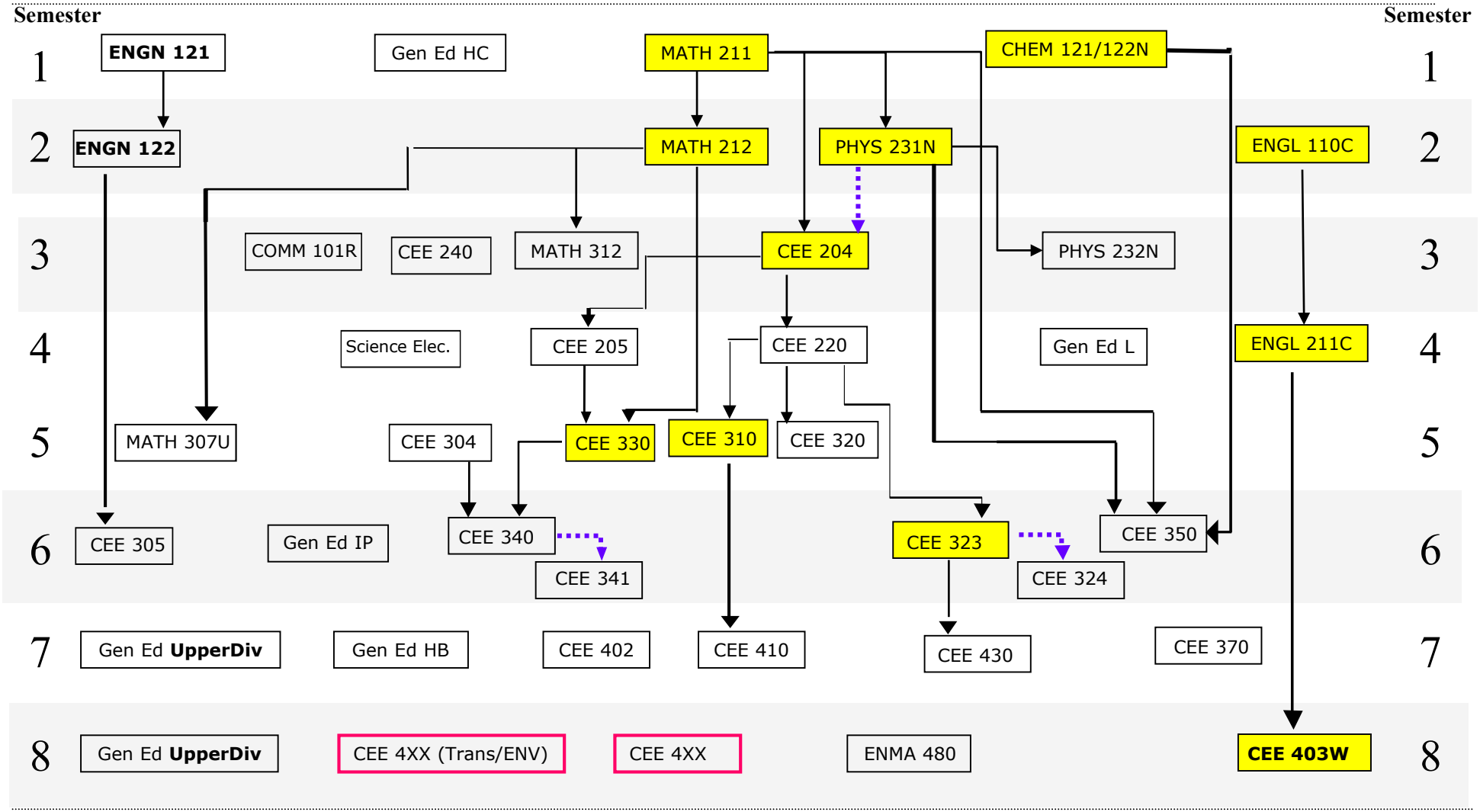
JUNIOR			SEM./YR.	Grade	Transfer Credit Course#	Transfer Credit C/U
MATH 307	Ordinary Differential Equations	(3)				
CEE 304	Probability and Stat. for Civil Infrastructure	(3)				
CEE 310	Structures I	(3)				
CEE 320	Civil Engineering Materials	(3)				
CEE 330	Hydromechanics	(3)				
CEE 305	Civil and Environmental Computations	(1)				
CEE 323/324	Soil Mechanics & Lab	(3) (1)				
CEE 340/341	Hydraulics & Water Resources & Lab	(3) (1)				
CEE 350	Environmental Pollution & Control	(3)				
Gen. Ed.	Interpreting the Past	(3)				
		TOTAL (30)				

SENIOR			SEM./YR.	Grade	Transfer Credit Course#	Transfer Credit C/U
CEE 370	Transportation Fundamentals	(3)				
CEE 410	Concrete Design	(3)				
CEE 430	Foundation Engineering	(3)				
Gen. Ed.	Human Behavior	(3)				
Gen. Ed	Upper Level Requirement 1	(3)				
CEE 402	Professional Practice of Engineering	(1)				
CEE 403W	Civil Engr. Design Project and Prof. Prac	(3)				
CEE 4xx	Civil Engr. Technical Elective	(3)				
CEE 4xx	Civil Engr. Technical Elective	(3)				
ENMA 480	Ethics & Philosophy in Engr. Applications	(3)				
Gen. Ed.	Upper Level Requirement 2	(3)				
		TOTAL (31)				
TOTAL PROGRAM HOURS		123				

Foreign Language: (6 Cr. Hrs/9 Cr. Hrs@HS)	A.S. Degree VACC: (Yes | No)
UpperDiv GenEd: (Minor | Option D | Waived by 2nd degree)	
BS/Master: (Yes | No), If Yes, Master in (Civil | Env.)	
F.E. Exam (Exam Date and Result):	Grad. Date: May/Aug/Dec 20____

Courses require Grade C or better to Pass	Certified Date:
	Major GPA:
	Overall GPA:

BS CIVIL ENGINEERING COURSE PRE-REQUISITE CHAIN



4XX Tech Elective

Pre-requisite

Co-requisite

Grade C or better to pass

There are additional pre-requisites such as permission of the professor and Junior or Senior standing. Also CEE 403W is for graduating seniors only. MATH 211 and ENGL 110C require placement tests. MATH 102M is co-requisite for CHEM 121-122N and a pre-requisite for ENGN 122. ENGN 121 is a pre-requisite for ENGN 122; ENGN 122 is a pre-requisite for CEE 305. **Senior Electives**: CEE 310 is pre-requisite for 410, 412, 414, 415, and 416; 323 is pre-requisite for 430, 431, and 433; 340 is pre-requisite for 440, 446, 447 and 457.CEE 330 is pre-requisite for 451 and 482; 350 is pre-requisite for 451, 452, 454, 455.

For more information on courses and curriculum, please visit CEE Departmental website at http://odu.edu/cee

Approved CEE Electives:

***CEE 410 Concrete Design** (CEE 310)
CEE 412 Computational Methods in Structures (CEE 310) CEE
414 Masonry Structures Design (CEE 310)
CEE 415 Steel Structures Design (CEE 310)
CEE 416 Wood Structures Design (CEE 310)
***CEE 430 Foundation Engineering** (CEE 323)
CEE 431 Earth Structures Design with Geosynthetics (CEE 323)
CEE 432 Introduction to Earthquake Engineering
CEE 433 Geomaterials Stabilization (CEE 323)
CEE 440 Hydraulic Engineering (CEE 340)
CEE 446 Urban Stormwater Hydrology (CEE 340)
CEE 447 Groundwater Hydraulics (CEE 340)
CEE 451 Water and Wastewater Treatment (CEE 330)
CEE 452 Air Quality (CEE 350)
CEE 454 Hazardous Waste Treatment (CEE 350)
CEE 455 Pollution Prevention and Green Engineering (CEE 350)
CEE 457 Adaptation to Sea Level Rise (CEE 340)
CEE 458 Sustainable Development
CEE 459 Biofuels Engineering
CEE 471 Transportation Operations I (CEE 370)
CEE 474 Transportation Data Analytics
CEE 475 Geometric Design of Highways (CEE 370)
CEE 482 Introduction to Coastal Engineering (CEE 330)
CEE 495 Topics in Civil and Environmental Engineering

***= Core Electives**

Important Notes:

1. One ENVE elective will be double counted as one (1) 4XX Elective as well as one (1) ENVE minor course. (New policy, CE Major-ENVE Minor credit sharing, starting in Fall 2021).