

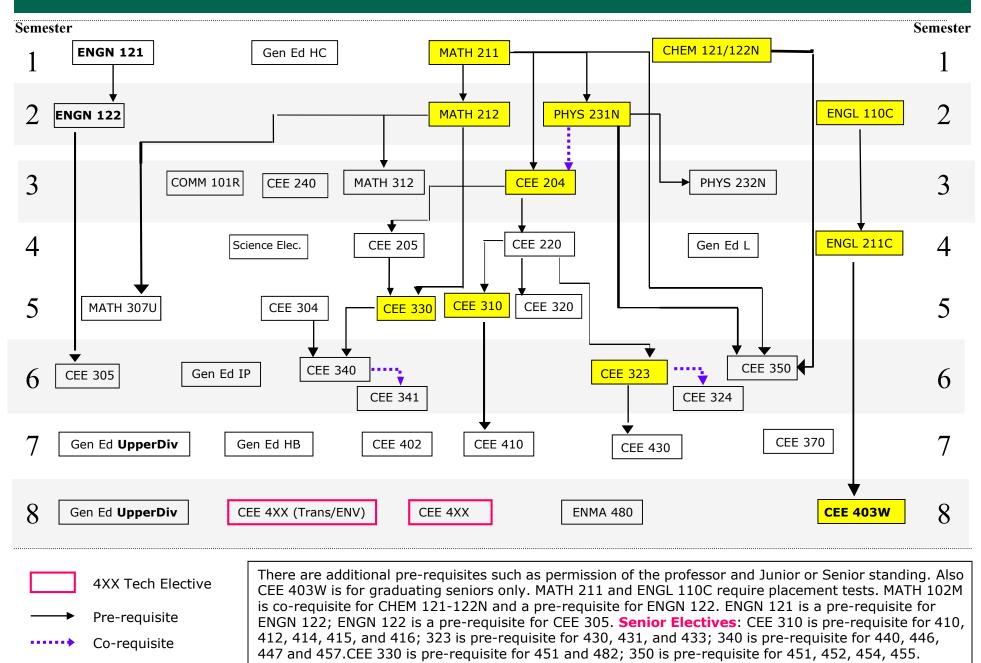
Department of Civil & Environmental Engineering Bachelor of Science in Civil Engineering (BSCE) Curriculum

2024-2025 Catalog

Date of Admission: _____

SBM./Th. Grade Counted Current SBM./Th. Grade Counted Counted SBM./Th. Grade Counted CHEM 122N Foundations of Chemistry I (a) (1) (2) (2) (3) (2) (3) (2) (3) (2) (3) (2) (2) (3) (2) (2) (3) (2) (2) (3) (3) (2) (2) (3) (2) (3) (2) (3) (2) (2) (3) (2) (3) (2) (2) (2) (2) (2) (2) (2) (2) (2) (2) (2) (2) (2) (2) (2) (2) (2) (2) (2) (2) (2) (2) (2) (2) (2) (2) (2) (2) (2) (2) (2) (2) (2) (2) (2) (2) (2) (2) (2) (2) (2) (2) (2) (2) (2) (2) (2) <t< th=""><th>UIN:</th><th colspan="7">Name:</th><th colspan="7">Freshman:; Transfer:; 2nd Degree:</th></t<>	UIN:	Name:							Freshman:; Transfer:; 2 nd Degree:						
CHEM 121N Foundations of Chemistry I (3) MATH 307 Ordinary Differential Equations (3) C CHEM 122N Foundations of Chemistry I Lab (1) CEE 304 Probability and Stat. for Civil Infrastructure (3) C ENGN 121 Freshman Engineering & Toch. I (4) CEE 304 Probability and Stat. for Civil Infrastructure (3) C ENGN 122 Calculus I (4) CEE 304 Probability and Stat. for Civil Infrastructure (3) C ENGN 122 Camputer Programming for Engr (4) CEE 304 Probability and Environmental Computations (1) C ENGL 110C English Composition (3) CEE 304 Hydromechanics (3) C MATH 317 Calculus II (4) CEE 304 Invironmental Computations (3) C SOPHOMORE TortaL (30) Tortal (30 C C C SEN/R. Grade C CEE 204 Statics (3) C C C C Transfor Crodit C C	FRESHMAN					Transfer	Credit	JUNIOR					Transfer Credit		
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ENGN 121 Freshman Engineering & Tech. 1 (1) (1) (1) (1) (1) (1) (1) (1) (1) (1) (1) (1) (1) (1) (1) (1) (1) (1) (1) (1) (1) (1) (1) (1) (1) (1) (1) (1) (1) (1) (1) (1) (1) (1) (1) (1) (1) (1) (1) (1) (1) (1) (1) (1) (1) (1) (1) (1) (1) (1) (1) (1) (1) (1) (1) (1) (1) (1) (1) (1) (1) (1) (1) (1) (1) (1) (1) (1) (1) (1) (1) (1) (1) (1) (1) (1) (1) (1) (1) (1) (1) (1) (1) (1) (1) (1) (1) (1) (1) (1) (1) (1) (1)	CHEM 121N	Foundations of Chemistry I	(3)					MATH 307	Ordinary Differential Equations	(3)					
Litter for the international registronma (b) (b) (c)	CHEM 122N	Foundations of Chemistry I Lab	(1)					CEE 304	Probability and Stat. for Civil Infrastructure	(3)					
Gen. Ed. Human Creativity (3) CEE 320 Civil Engineering Materials (3) CEE 300 MATH 211 Calculus I (4) CEE 300 Hydromechanics (3) CEE 300 ENOR 122 Computer Programming for Engr (4) CEE 300 Hydromechanics (3) CEE 300 ENOR 122 Calculus II (4) CEE 300 CEE 300 CEE 300 (3) CEE 300 MATH 212 Calculus II (4) CEE 300 Externation & Control (3) CEE 300 PHYS 231N University Physics (4) CEE 300 Externation & Control (3) CEE 300 SOPHOMORE TOTAL (30) Total CEE 300 TotAl (30) CEE 300 SEM/YR Grade Courset SEM/YR Grade	ENGN 121	Freshman Engineering & Tech. I	(4)					CEE 310	Structures I	(3)					
ENGN 122 Computer Programming for Engr (4) CEE 305 Civil and Environmental Computations (1) Computer Programming for Engr (4) MATH 212 Calculus II (4) Computer Programming for Engr (4) CEE 305 Civil and Environmental Pollution & Control (3) CEE 303 (3) CEE 306 Control (3) CEE 305 CEE 305 Control (3) CEE 305 Control (3) CEE 402<	Gen. Ed.	Human Creativity	(3)					CEE 320	Civil Engineering Materials	(3)					
English Composition (3) CEE 33/324 Soli Mechanics & Lab (3) Cee 30/3 Cee 33/324 <	MATH 211	Calculus I	(4)					CEE 330	Hydromechanics	(3)					
MATH 212 Calculus II (4) (4) (4) (4) (4) (4) (4) (4) (4) (4) (4) (4) (4) (4) (4) (4) (4) (4) (4) (4) (4) (4) (4) (4) (4) (4) (4) (4) (4) (4) (4) (4) (4) (4) (4) (4) (4) (4) (4) (4) (4) (4) (4) (4) (4) (4) (4) (4) (4) (4) (4) (4) (4) (4) (4) (4) (4) (4) (4) (4) (4) (4) (4) (4) (4) (4) (4) (4) (4) (4) (4) (4) (4) (4) (4) (4) (4) (4) (4) (4) (4) (4) (4) (4) (4) (4) (4) (4) (4) (4) (4) (4) (4) (4) (4) (4) (4) (4) (4) (4) (4) (4) (4) (4) <td>ENGN 122</td> <td>Computer Programming for Engr</td> <td>(4)</td> <td></td> <td></td> <td></td> <td></td> <td>CEE 305</td> <td>Civil and Environmental Computations</td> <td>(1)</td> <td></td> <td></td> <td></td> <td></td>	ENGN 122	Computer Programming for Engr	(4)					CEE 305	Civil and Environmental Computations	(1)					
PHYS 231N University Physics (4) CEE 350 Environmental Pollution & Control (3) CEE 370 Transfor Crotit SEMI/R. Grade Coursed Cou	ENGL 110C	English Composition	(3)					CEE 323/324	Soil Mechanics & Lab (3) (1)					
CHAVENERS (P) CEE 300 ENVRONMENTAL POLICION & CENTON (1) C Gen. Ed. Interpreting the Past (3) C TOTAL (30) Tansfer Credit Gen. Ed. Interpreting the Past (3) C SOPHOMORE Transfer Credit Transfer Credit SENIOR Transfer Credit SENIOR EMUYR. Grade Course C CEE 204 Statics (3) C CEE 300 SENIOR Transfor Credit SENIOR Transfor Credit Gen. Ed. Interpreting the Past (3) C C CEE 204 Statics (3) C C CEE 300 Transportation Fundamentals (3) C C Gen. Ed. Interpreting the Past C C C C C C C C C C C C C C C C C C C C C C C C C C C C C C C C C C C C C C C C C C C <td></td> <td>Calculus II</td> <td>(4)</td> <td></td> <td></td> <td></td> <td></td> <td>CEE 340/341</td> <td>Hydraulics & Water Resources & Lab (</td> <td>3) (1)</td> <td></td> <td></td> <td></td> <td></td>		Calculus II	(4)					CEE 340/341	Hydraulics & Water Resources & Lab (3) (1)					
Image: Control of the system of the	PHYS 231N	University Physics	(4)					CEE 350	Environmental Pollution & Control	(3)					
SOPHOMORE Transfer Credit SENIOR Transfer Credit SEM.VR. Grade Course# CU SENIOR Transportation Fundamentals (3) Course# Cu CEE 204 Statics (3) CE CE Statics (3) CE SEM.VR. Grade Course# Cu SEM.VR. Grade Course# Cu CEE SEM.VR. Grade Course# Cu CEE Calculus III (4) Cu CEE CEE 410 Concrete Design (3) Cu CEE CEE 410 Concrete Design (3) Cu CEE CEE 430 Foundation Engineering (3) Cu Cu CEE 430 Foundation Engineering (1) Cu Cu CEE 430 Cu CeE 430 Cu CEE 430 Cu <td< td=""><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td>Gen. Ed.</td><td>Interpreting the Past</td><td>(3)</td><td></td><td></td><td></td><td></td></td<>								Gen. Ed.	Interpreting the Past	(3)					
SOPHOMORE Transfer Credit SENIOR Transfer Credit CEE 204 Statics (3) Cu SENIOR SENIOR Transportation Fundamentals (3) Cu SENIOR Transportation Fundamentals (3) Cu SENIOR SENIOR Transportation Fundamentals (3) Cu SENIOR SENIOR SENIOR Transportation Fundamentals (3) Cu SENIOR SENIOR SENIOR SENIOR SENIOR Cu SENIOR SENIOR SENIOR SENIOR Seniore Cu SENIOR SENIOR Seniore Senior															
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CEE 204 Statics (3) CEE 370 Transportation Fundamentals (3) CEE 410 Concrete Design Cee 402	SOPHOMORE					Transfer	Credit	SENIOR					Transfer Credit		
COMM 101R Public Speaking (3) CEE 410 Concrete Design (3) CEE 410 MATH 312 Calculus III (4) CEE 430 Foundation Engineering (3) CEE 430 PHYS 232N University Physics (4) CEE 430 Foundation Engineering (3) CEE 430 CEE 240 Geographic Info Sys in C & E Engr. (2) Gen. Ed. Human Behavior (3) CEE 402 CEE 205 Engineering Dynamics (3) CEE 402 Professional Practice of Engineering (1) CEE 402 CEE 220 Mechanics of Deformable Bodies (3) CEE 402 Professional Practice of Engineering (1) CEE 403W Civil Engr. Design Project and Prof. Prac (3) CEE 403W Civil Engr. Technical Elective (3) CEE 4xx Civil Engr. Technical Elective (3) CEE 4xx Civil Engr. Technical Elective (3) CEE 4xx Civil Engr. Applications			S	SEM./YR.	Grade	Course#	C/U				SEM./YR.	Grade	Course#	C/U	
MATH 312 Calculus III (4) CEE 430 Foundation Engineering (3) CEE 430 PHYS 232N University Physics (4) Gen. Ed. Human Behavior (3) CEE 430 CEE 240 Geographic Info Sys in C & E Engr. (2) Gen. Ed. Human Behavior (3) CEE 430 CEE 240 Geographic Info Sys in C & E Engr. (2) Gen. Ed. Human Behavior (3) CEE 430 CEE 205 Engineering Dynamics (3) CEE 402 Professional Practice of Engineering (1) CEE 430 CEE 200 Mechanics of Deformable Bodies (3) CEE 402 Professional Practice of Engineering (1) CEE 430 CEE 402 Professional Practice of Engineering (1) CEE 430 CEE 402 Professional Practice of Engineering (1) CEE 430 CEE 430 <td>CEE 204</td> <td>Statics</td> <td>(3)</td> <td></td> <td></td> <td></td> <td></td> <td>CEE 370</td> <td>Transportation Fundamentals</td> <td>(3)</td> <td></td> <td></td> <td></td> <td></td>	CEE 204	Statics	(3)					CEE 370	Transportation Fundamentals	(3)					
PHYS 232N University Physics (4) Image: (6 Cr. Hrs/9 Cr. Hrs	COMM 101R	Public Speaking	(3)					CEE 410	Concrete Design	(3)					
CEE 240 Geographic Info Sys in C & E Engr. (2) Gen. Ed Upper Level Requirement 1 (3) (3) CEE 205 CEE 205 Engineering Dynamics (3) (3) CEE 402 Professional Practice of Engineering (1) CEE 402 CEE 220 Mechanics of Deformable Bodies (3) CEE 402 Professional Practice of Engineering (1) CEE 402 ENGL 211C English Composition (3) CEE 402 CEE 403W Civil Engr. Technical Elective (3) CEE 403 Gen. Ed. Literature (3) CEE 402 CEE 402 Professional Practice of Engineering (1) CEE 402 Science Elec. BIOL 110N/111N or OEAS 111N (4) CEE 402 CEE 403W Civil Engr. Technical Elective (3) CEE 402 CEE 402 Professional Practice 2 (3) CEE 402 CEE 403W Civil Engr. Technical Elective (3) CEE 402 Science Elec. BIOL 110N/111N or OEAS 111N (4) CEE 402 CEE 402 Upper Level Requirement 2 (3) CEE 402 CEE 402 TOTAL (32) CE CEE 403W Civil Engr. Technical Elective (3) CEE 402 CEE 402 CEE 402 Upper Level Requirement 2 (3) CEE 402 CEE 402 CEE 402 CEE 402 <	MATH 312	Calculus III	(4)					CEE 430	Foundation Engineering	(3)					
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CEE 220 Mechanics of Deformable Bodies (3) CEE 403W Civil Engr. Design Project and Prof. Prac (3) CEE 403W Civil Engr. Technical Elective CEE 403W Civil Engr. Technical Elective	CEE 240	Geographic Info Sys in C & E Engr.	(2)					Gen. Ed	Upper Level Requirement 1	(3)					
ENGL 211C English Composition (3) Image: (6 Cr. Hrs/9 Cr. Hrs@HS) (4) Image: (6 Cr. Hrs/9 Cr. Hrs@HS) (5) (4) Image: (6 Cr. Hrs/9 Cr. Hrs@HS) (5) (5) (5) (5) (5) (5) (5) (5) (5) (5) (5) (5) (5) (5) (5) (5) (5) (5) (5) (5) (5) (5) (5) (5) (5) (5) (5) (5) (5) (5) (5) (5) (5) (5) (5) (5) (5) (5) (5) (5) (5) (5) (5) (5) (5) (5) (5) (5) (5) (5) (5) (5) (5) (5) (5) (5) (5) (5) (5) (5) (5) (5) (5) (5) (5) (5) (5) (5) (5) (5) (5)	CEE 205	Engineering Dynamics	(3)					CEE 402	Professional Practice of Engineering	(1)					
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Science Elec. BIOL 110N/111N or OEAS 111N (4) Image: Contract (3) Image: Contract (3) <th< td=""><td>ENGL 211C</td><td>English Composition</td><td>(3)</td><td></td><td></td><td></td><td></td><td>CEE 4xx</td><td>Civil Engr. Technical Elective</td><td>(3)</td><td></td><td></td><td></td><td></td></th<>	ENGL 211C	English Composition	(3)					CEE 4xx	Civil Engr. Technical Elective	(3)					
Image: <td>Gen. Ed.</td> <td>Literature</td> <td>(3)</td> <td></td> <td></td> <td></td> <td></td> <td>CEE 4xx</td> <td>Civil Engr. Technical Elective</td> <td>(3)</td> <td></td> <td></td> <td></td> <td></td>	Gen. Ed.	Literature	(3)					CEE 4xx	Civil Engr. Technical Elective	(3)					
TOTAL (32) TOTAL (32) TOTAL (31) Foreign Language: (6 Cr. Hrs/9 Cr. Hrs@HS) A.S. Degree VACC: (Yes No)	Science Elec.	. BIOL 110N/111N or OEAS 111N	(4)					ENMA 480	Ethics & Philosophy in Engr. Applications	(3)					
Foreign Language: (6 Cr. Hrs/9 Cr. Hrs@HS) A.S. Degree VACC: (Yes No) 123								Gen. Ed.	Upper Level Requirement 2	(3)					
Foreign Language: (6 Cr. Hrs/9 Cr. Hrs@HS) A.S. Degree VACC: (Yes No) TOTAL PROGRAM HOURS 123															
Foreign Language: (6 Cr. Hrs/9 Cr. Hrs@HS) A.S. Degree VACC: (Yes No)		TOTAL (3	2)						TOTAL	(31)					
								TOTAL PROG	RAM HOURS	123					
UpperDiv ConFid. (Minor LOntion D.) Weived by 2nd degree)	Foreign Language: (6 Cr. Hrs/9 Cr. Hrs@HS) A.S. Degree VAC				C: (Yes	No)									
opperbry Genza. (minor option b Walved by 2 degree)	UpperDiv GenEd: (Minor Option D Waived by 2 nd degree)					Courses requ	ire Grade C or better to Pass		Certified	Date:	•				
BS/Master: (Yes No), If Yes, Master in (Civil Env.) Major GPA:	BS/Master: (Yes No), If Yes, Master in (Civil Env.)						Major GPA:				PA:				
F.E. Exam (Exam Date and Result): Grad. Date: May/Aug/Dec 20 Overall GPA:	F.E. Exam (Exam Date and Result): Grad. Date				te: May/	Aug/Dec 2	0				Overall (GPA:			

BS CIVIL ENGINEERING COURSE PRE-REQUISITE CHAIN



Grade C or better to pass

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).