



Pursue your interests

Employment of civil engineers is projected to grow by 11 percent between 2016 and 2026, according to the Bureau of Labor Statistics. Our civil engineering program prepares students with foundations in math, science, and engineering through required courses. Then, students take technical electives in the focus areas of structural, geotechnical, environmental, water resources, transportation, railroad, or ocean and coastal engineering. Minors in civil engineering, environmental engineering, sustainable infrastructure, and environmental sustainability are also offered.

Our faculty are active researchers, ensuring that the content of the undergraduate program is constantly renewed and maintained at a challenging technical level and integrates discovery learning. Opportunities abound for undergraduates to work with faculty and graduate students as research assistants, either for pay or independent study credit. Research in the department covers a broad range of topics with particular strengths in bridge design, construction, evaluation and rehabilitation; applications of composite materials to concrete, steel, and earth structures; computer modeling of wave/shoreline interactions; intelligent transportation systems; management and operation of civil infrastructure systems; remediation of contaminated soil and groundwater; and biodegradation of wastes.

CAREER PATHS:

Structural Engineer
Geotechnical Engineer
Transportation Engineer
Project Engineer
County/City Engineer
Director of Public Works
Airport or Railway Engineer **and more!**

GRADUATE SCHOOL FOR:

MS or PhD in Engineering
Engineering Management
Engineering Mechanics
Public Policy & Administration
MBA
Law School
Medical School **and more!**

CE.UDEL.EDU



Two degrees at once

Well-qualified civil engineering majors may apply to the 4+1 program to earn a bachelor's degree in Civil Engineering (BCE) and a Master of Civil Engineering (MCE) degree within 5 years.

Real-world experience

An optional co-op program provides students the opportunity to gain valuable experience working in the profession while completing their degree. With careful planning and proper selection of courses, students can work full-time for up to 26 weeks and still graduate in four years.

Course topics you may explore:

- Structural engineering
- Geotechnical engineering
- Environmental engineering
- Water resources
- Transportation
- Railroad engineering
- Ocean & coastal engineering *and more!*

Civil Engineering Curriculum:

To earn a bachelor's degree, students must complete 126 credits and meet specific requirements as outlined in the online catalog. See UD Catalog for additional details.

FIRST YEAR

FALL	Credits	SPRING	Credits
EGGG 101 - Introduction to Engineering (FYE)	2	CIEG 161 - Freshman Design	3
CHEM 103 - General Chemistry	4	Science Elective	4
MATH 241 - Analytic Geometry & Calculus A	4	MATH 242 - Analytic Geometry & Calculus B	4
CISC 106 - General Computer Science for Engineers	3	ENGL 110 - Seminar in Composition	3
Breadth Requirement Elective 1	3	Breadth Requirement Elective 2	3
Total Credits: 16		Total Credits: 17	

SECOND YEAR

FALL	Credits	SPRING	Credits
CIEG 211 - Statics	3	CIEG 212 - Solid Mechanics	3
PHYS 207 - Fundamentals of Physics I	4	CIEG 213 - Civil Engineering Materials Lab	1
MATH 243 - Analytic Geometry & Calculus C	4	CIEG 311 - Dynamics	3
COMM 212 - Oral Communication in Business	3	MSEG 302 - Materials Science for Engineers	3
Breadth Requirement Elective 3	3	MATH 351 - Engineering Mathematics I	3
Total Credits: 17		Breadth Requirement Elective 4	3
		Total Credits: 16	

THIRD YEAR

FALL	Credits	SPRING	Credits
CIEG 301 - Structural Analysis	4	CIEG 302 - Structural Design	4
CIEG 320 - Soil Mechanics	3	CIEG 321 - Geotechnical Engineering	3
CIEG 323 - Soil Mechanics Laboratory	1	CIEG 331 - Environmental Engineering	3
CIEG 305 - Fluid Mechanics	3	CIEG 351 - Transportation Engineering	3
CIEG 306 - Fluid Mechanics Laboratory	1	CIEG 451 - Transportation Engineering Lab	1
MATH 353 - Engineering Mathematics III	3	CIEG 315 - Probability and Statistics for Engineers	3
Total Credits: 15		Total Credits: 17	

FOURTH YEAR

FALL	Credits	SPRING	Credits
CIEG 461 - Senior Design Project (DLE & Capstone)	2	CIEG 461 - Senior Design Project (DLE)	2
CIEG 486 - Engineering Project Management	3	Technical Elective 2	3
CIEG 440 - Water Resources Engineering	3	Technical Elective 3	3
ENGL 410 - Technical Writing	3	Technical Elective 4	3
(Breadth Requirement Elective 5)	3	Breadth Requirement Elective 6	3
Technical Elective 1	3		
Total Credits: 14		Total Credits: 14	

CONTACT US:

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