

NORTH DAKOTA STATE UNIVERSITY								
CIVIL ENGINEERING TECHNICAL ELECTIVES OFFERED								
Area	Fall 24 (Tentative)		CR	DS	Spring 24		CR	DS
Structures	CE 446/646	Basic Dynamics of Structures	3	1.0	CE 411/611	Prestressed Concrete	2	1.0
	CE 493*	Undergraduate Research	TBD	TBD	CE 425/625	Bridge Evaluation and Rehabilitation	3	1.5
					CE 430/630	Timber and Form Design	3	1.5
					CE 493*	Undergraduate Research	TBD	TBD
Water Resources	CE 477/677	Applied Hydrology	3	1.5	CE 421/621	Open Channel Flow	3	1.5
	CE 493*	Undergraduate Research	TBD	TBD	CE 476/676	Watershed Modeling	3	1.5
					CE 493*	Undergraduate Research	TBD	TBD
Environmental	CE 410/610	Water and Wastewater Engineering	3	1.5	ENVE 468	Plastic Pollution to Solution	3	0.5
	CE 472/672	Solid and Hazardous Waste	3	1.5	CE 493*	Undergraduate Research	TBD	TBD
	CE 493*	Undergraduate Research	TBD	TBD				
Transportation	CE 454/654	Geometric Highway Design	3	2.0	CE 419/619	Pavement Design	3	1.5
	CE 456/656	Railroad Planning and Design	3	1.5	CE 493*	Undergraduate Research	TBD	TBD
	CE 493*	Undergraduate Research	TBD	TBD				
Geotechnical	CE 461/661	Foundation Engineering	3	1.5	CE 462/662	Designing with Geosynthetics	2	1.0
	CE 464/664	Advanced Soil Mechanics	2	1.0	CE 417/617	Slope Stability and Retaining Walls	3	1.5
	CE 493*	Undergraduate Research	TBD	TBD	CE 493*	Undergraduate Research	TBD	TBD
Advanced Materials	CE 725	Biomaterials	3	0.0	CE 486/686	Fundamentals of Nanotechnology	3	1.0
	CE 493*	Undergraduate Research	TBD	TBD	CE 493*	Undergraduate Research	TBD	TBD

NOTES:

DS indicate design credits. Six of the 12 credits of technical electives must be design credits.

Of the 12 credits in technical electives, at least one course each must be selected from 3 of the six areas shown above.

Course offering listed are subject to change based on student enrolled and instructor/staff availability.

*CE 493 requires prior approval by the faculty mentor and the Department (The technical elective approval form must be approved).

Updated 10/24/2023

ABOVE LIST IS SUBJECT TO CHANGES!!!