

NORTH DAKOTA STATE UNIVERSITY
TECHNICAL ELECTIVES OFFERED BY CIVIL ENGINEERING

Area	Fall 18	CR	DS	Spring 19	CR	DS
Structures	CE 441/641 Finite Element Analysis	3	1.0	CE 411/611 Prestressed Concrete	2	1.0
	CE 446/646 Basic Dynamics of Structures	3	1.0	CE 425/625 Bridge Evaluation & Rehabilitation	3	1.5
				CE 447/647 Stability of Structures	3	1.5
				CE 445/645 Advanced Steel Design	2	1.0
Water Resources	CE 477/677 Applied Hydrology	3	1.5	CE 476/676 Watershed Modeling	3	1.5
Environmental	CE 410/610 Water & Wastewater Engineering	3	1.5	CE 494/793 Environmental Engineering Design	3	2.0
	ENGR 491/690 Small Community Water Supply and Sanitation	3	1.5			
Transportation	CE 452/652 Fundamentals of Oil & Gas Pipeline Design	3	1.0	CE 419/619 Pavement Design	3	1.5
	CE 454/654 Geometric Highway Design	3	2.0	CE 456/656 Railroad Planning & Design	3	1.5
	CE 455/655 Airport Planning & Design	2	1.0			
Geotechnical	CE 461/661 Foundation Engineering	3	1.5	CE 417/617 Slope Stability & Retaining Walls	3	1.5
				CE 462/662 Designing w/ Geosynthetics	2	1.0
Advanced Materials	CE 725 Biomaterials	3	0.0	CE 486/686 Fundamentals of Nanotechnology	3	0.0

NOTES:

DS indicate design credits. Six of the 12 credits of technical 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 student and staff availability.

Updated 3-16-18

ABOVE SUBJECT TO MINOR CHANGES!!!