SOUTH DAKOTA STATE UNIVERSITY

Bachelor of Science
Major: Civil Engineering
2024-2025 Sample 4-Year Plan
Total Degree Requirements: 130 credits

Student _____ **Student ID#** _____ **Student Phone #** _____

Advisor _____ **Minimum GPA** _____ **Minor/Career Interest(s)** _____

Students are not limited to this plan; it is meant to be used as a guide for planning purposes in consultation with your advisor. The sample schedule is one possible path to completing your degree within four years. For official program requirements, please refer to the Undergraduate Catalog.

FIRST YEAR

Fall

Prefix + Number	Course Title	Prerequisites/Comments	Credits	Semester	Grade
CEE 106	Elementary Surveying	p. placement	3	F	
CEE 106L	Elementary Surveying Lab	c. CEE 106	1	F	
CHEM 112	General Chemistry I	p. MATH 114 or higher	3		
CHEM 112L	General Chemistry I lab	c. CHEM 112	1		
GE 101	Introduction to Engineering and Technical Professions		1		
MATH 123	Calculus I (SGR #5)	p. MATH 115 or MATH 120 or Placement, earn C or better	4		
SGR #1	Written Communication (SGR #1)	p. Placement	3		
		Total Credit Hours	16		

Spring

Prefix + Number	Course Title	Prerequisites/Comments	Credits	Semester	Grade
CEE 101	Introduction to Civil Engineering	Majors only	1		
CHEM 114	General Chemistry II	p. CHEM 112 and MATH 114 or higher	3		
MATH 125	Calculus II	p. MATH 123, earn C or better	4		
SGR #1	Written Communication (SGR #1)	p. ENGL 101	3		
SGR #2	Oral Communication (SGR #2)		3		
SGR #3	Social Science (SGR #3)		3		
		Total Credit Hours	17		

SECOND YEAR

Fall

Prefix + Number	Course Title	Prerequisites/Comments	Credits	Semester	Grade
CEE 282	Civil Engineering Computer Aided Design	p. CEE 101 and CEE 106L	3		
EM 214	Statics	p. MATH 123	3		
MATH 225	Calculus III	p. MATH 125	4		
PHYS 207	Fundamentals of Physics I (SGR #6)	p. MATH 123	3		
PHYS 207L	Fundamentals of Physics I Lab (SGR #6)	c. PHYS 207	1		
SGR #4	Arts & Humanities (SGR #4)		3		
		Total Credit Hours	17		

Spring

Prefix + Number	Course Title	Prerequisites/Comments	Credits	Semester	Grade
CEE 216	Civil Engineering Materials	p. CHEM 112	2	S	
CEE 216L	Civil Engineering Materials Lab	c. CEE 216	1	S	
CEE 225	Principles of Environmental Science and Engineering	p. CHEM 106 or 114	3		
EM 215	Dynamics	p. EM 214	3		
MATH 321	Differential Equations	p. MATH 125	3		
PHYS 209	Fundamentals of Physics II (SGR #6)	p. PHYS 207 and PHYS 207L	3		
PHYS 209L	Fundamentals of Physics II Lab (SGR #6)	c. PHYS 209	1		
		Total Credit Hours	16		

Information Subject to Change. This is not a contract.

p. = Course Prerequisite
Semester: F = Fall, S = Spring, SU = Summer

THIRD YEAR

Fall

Prefix + Number	Course Title	Prerequisites/Comments	Credits	Semester	Grade
CEE 311	Structural Materials Lab	p. CEE 216 and 216L, c. EM 321	1	F	
CEE 331	Fluid Mechanics Lab	c. EM 331	1	F	
CEE 340	Engineering Geology	p. CEE 216 and 216L	2	F	
CEE 340L	Engineering Geology Lab	c. CEE 340	1	F	
EM 321	Mechanics of Materials	p. EM 214	3		
EM 331	Fluid Mechanics	p. EM 215	3	F	
SGR #4	Arts & Humanities (SGR #4)		3		
STAT 381	Intro to Probability and Statistics	p. MATH 125	3		
		Total Credit Hours	17		

Spring

Prefix + Number	Course Title	Prerequisites/Comments	Credits	Semester	Grade
CEE 323	Water Supply and Wastewater Engineering	p. CEE 225	3	S	
CEE 346	Geotechnical Engineering	p. EM 321	3	S	
CEE 346L	Geotechnical Engineering Lab	c. CEE 346	1	S	
CEE 353	Structural Theory	p. EM 321	3	S	
CEE 363	Highway and Traffic Engineering	p. CEE 106	3	S	
CEE 432	Hydraulic Engineering	p. EM 331	3	S	
		Total Credit Hours	16		

FOURTH YEAR

Fall

Prefix + Number	Course Title	Prerequisites/Comments	Credits	Semester	Grade
CEE 456	Concrete Theory and Design	p. CEE 353	3	F	
CEE 464	Capstone Design I	Senior Standing, Department permission	1	F	
CEE 482	Engineering Administration	Senior Standing	3	F	
CEE 488	Professional Seminar	Senior Standing	1	F	
CEE	Technical Elective	See advisor for approved list	3		
CEE	Technical Elective	See advisor for approved list	3		
CEE	Technical Elective	See advisor for approved list	3		
		Total Credit Hours	17		

Spring

Prefix + Number	Course Title	Prerequisites/Comments	Credits	Semester	Grade
CEE 455	Steel Design	p. CEE 353	3	S	
CEE 465	Capstone Design II	p. CEE 464	2	S	
CEE	Technical Elective	See advisor for approved list	3		
CEE	Technical Elective	See advisor for approved list	3		
SGR #3	Social Science (SGR #3)		3		
		Total Credit Hours	14		

COMMENTS/NOTES

Students from all academic majors can pursue graduation with Fishback Honors College distinction. View the Honors program requirements.

- Students must earn a combined average "C" or better in all CEE courses
- Students must earn a combined average "C" or better in EM 214, EM 215, EM 321, and EM 331
- Students must earn a combined average "C" or better in MATH 123, MATH 125, MATH 225, MATH 321, and STAT 381
- Students must take the Fundamentals of Engineering examination prior to graduation

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Semester: F = Fall, S = Spring, SU = Summer