

BACHELOR OF SCIENCE IN CIVIL ENGINEERING (202 -202 Catalog Year)

First Year: Fall

ES F10 ; ± Engineering \$ O D V N D	3
MATH F251X ± CalculusI	4
CHEM F105X ± General Chemistry	4
MIN F202 or CE F112 ± Surveying	2 or 3
WRTG F111X ± Intp. to Acad. Writing	3
	<u>16 or 17</u>

First Year: Spring

MATH F252X ± CalculusII	4
CHEM F106X ± General Chemistry	4
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WRTG F21XX ± Writing*	3
LS F101X ± Library Info. & Research	1
	<u>15</u>

Second Year: Fall

MATH F253X ± Calculus III	4
PHYS F211X ± General Physics	4
DRT F210 ± Intermediate CAD	3
ES F201 ± Computer Techniques	3
GER A, H, SS, E (1 of 6)	3
	<u>17</u>

Second Year: Spring

MATH F302 ± Differential Eqn.	3
PHYS F212X ± General Physics	4
ES F208 ± Mechanics	4
ES F301 ± Engineering Analysis	3
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	<u>17</u>

Third Year: Fall

ES F331 ± Mechanics of Materials	3
CE F326 ± Intro. to Geotech. & Fndts	4
ES F341 ± Fluid Mechanics	4
CE F341 ± Environmental Engr.	4
	<u>15</u>

Third Year: Spring

CE F302 ± Transportation Engr.	3
CE F331 ± Structural Analysis	3
CE F334 ± Properties of Materials	3
GER A, H, SS, E (2 of 6)	3
GER A, H, SS, E (3 of 6)	3
	<u>15</u>

Fourth Year: Fall

Fourth Year: Approved by an advisor:

ARCTIC EMPHASIS

- CE F401 Arctic Engineering
 - CE F424 Permafrost Engineering
 - ME F441 Heat and Mass Transfer
- CONSTRUCTION EMPHASIS
- CE F451 Constr. Cost Est. and Bid Prep.
- ENVIRONMENTAL EMPHASIS
- CE F442 Water & Wastewater Trtmt. Design
 - CE F443 Air Pollution Management
 - ENVE F446 Biological Unit Processes
- GEOTECHNICAL EMPHASIS
- CE F422 Foundation Engineering

- GE F440 Slope Stability
 - GE F441 Geohazard Analysis
- STRUCTURAL EMPHASIS
- CE F433 Reinforced Concrete Design
 - CE F434 Timber Design
- TRANSPORTATION EMPHASIS
- CE F405 Design of Highways and Streets
 - CE F407 Pavement Materials and Design
 - CE F408 Transportation Safety Analysis
- WATER RESOURCES EMPHASIS
- CE F445 Hydrologic Analysis and Design
 - CE F420 Groundwater Engineering

STUDENT NAME: _____

**202 -202 CATALOG
CIVIL ENGINEERING**

B.S. Degree Requirements
Minimum required credits: 125

**GENERAL EDUCATION REQUIREMENTS:
COMMUNICATIONS:**

WRTG F111X (3) _____
WRTG F21XX* (3) _____
COJO F1X1X* (3) _____

***ARTS:** (3) _____

***HUMANITIES:** (3) _____

***SOCIAL SCIENCES:** (3) _____

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***ADDITIONAL A, H, SS:** (3) _____

***ETHICS:** (3) _____

*Course meeting Alaska Native-themed requirement:

MATHEMATICS:

MATH F251X (4) _____ MATH F252X (4) _____
§MATH F253X (4) _____ §MATH F302 (3) _____

NATURAL SCIENCE:

CHEM F105X (4) _____ CHEM F106X (4) _____
§PHYS F211X (4) _____ §PHYS F212X (4) _____

LIBRARY & INFO. SKILLS:

LS F101X (1) _____