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<b>Freshman Year</b>	<b>F</b>	<b>S</b>
Chem 112*, 112L, General Chemistry I and Lab . . . . .	4	
Chem 114*, General Chemistry II . . . . .		3
Engl 101*, Composition I . . . . .	3	
GE 101, Introduction to Engineering . . . . .		1
GE 121, Engineering Design Graphics I . . . . .	1	
GE 122, Engineering Design Graphics II . . . . .		1
Math 123*, Calculus I . . . . .	4	
Math 125, Calculus II. . . . .		4
Phys 211, 211L, University Physics I and Lab . . . . .		4
SpCm 101*, Fundamentals of Speech . . . . .		3
SGR Goal 3 (Social Science) * (Catalog p xx)(G) . . . . .	<u>3</u>	<u>    </u>
	15	16

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<b>Sophomore Year</b>	<b>F</b>	<b>S</b>
CSc 150, CSc 213, or CSc 218, (a programming language) . .		3
EE 220, 220L, Circuits I and Lab . . . . .	4	
EM 214, Statics . . . . .		3
GE 225, Survey of machine Tools Applications . . . . .		1
Math 225, Calculus III . . . . .	4	
Math 321, Differential Equations . . . . .		3
ME 240, Fundamentals of Mechanical Design . . . . .		3
Phys 213, 213L, University Physics II and Lab . . . . .	4	
SGR Goal 3, (Social Science) * (Catalog p xx) . . . . .	3	
SGR Goal 4, (Humanities and Fine Arts)* (Catalog p xx-xx)(G) .	<u>3</u>	<u>3</u>
	18	16

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<b>Junior Year</b>	<b>F</b>	<b>S</b>
EE 221, 221L, Circuits II and Lab . . . . .	4	
EM 331, Fluid Mechanics . . . . .		3
Engl 201*, Composition II, <b>or</b>		
Engl 277, Tech. Writing in Engineering . . . . .		3
Math 331, Advanced Engineering Mathematics <b>or</b>		
Math 327, Calculus of Several Variables . . . . .		3
Phys 316, 316L, Meas. Theory and Exp. Design (AW) . . . . .	2	
Phys 318, Advanced Lab I . . . . .		1
Phys 331, Introduction to Modern Physics . . . . .	3	
Phys 341, Thermodynamics . . . . .	2	
Phys 343, Statistical Physics . . . . .	2	
Phys 451, Classical Mechanics. . . . .		4
IGR Goal 1**, (Land & Nat Res.) (Catalog p xx) . . . . .	3	
IGR Goal 3**, (Soc. Resp.) (Catalog p xx) . . . . .	<u>        </u>	<u>    3    </u>
	16	17

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<b>Senior Year</b>	<b>F</b>	<b>S</b>
Phys 361, Optics . . . . .	3	
Phys 418, Advanced Lab II. . . . .		1
Phys 421, Electromagnetism . . . . .	4	
Phys 435, Intro. to Nuclear Engineering <b>or</b>		
Phys 439, Solid State Physics . . . . .		3
Phys 464, Senior Design I (or ME 478) . . . . .	1	
Phys 465, Senior Design II (or ME 479) . . . . .		2
Phys 471, Quantum Mechanics . . . . .		4
Phys 490, Seminar . . . . .		1
IGR Goal 2**, Wellness, (Catalog p xx) . . . . .		2
◇Technical Electives . . . . .	<u>    6    </u>	<u>    3    </u>
	14	16

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- \*\* South Dakota State University has an 8-9 credit Institutional Graduation Requirement (IGRs). See the Catalog, pages xx-xx for details. These requirements are indicated by a double asterisk (\*\*).
- (G) The BOR General Education requirements (SGRs) include an International/Global Diversity requirement. See the Catalog, page x for details.
- (AW) The BOR General Education requirements (SGRs) include an Advanced Writing requirement. See the Catalog, page x for details.

Students must take the proficiency examination after completing 48 credits. English 101, and a course in each of the General Education areas of social science, mathematics, natural science, and humanities and fine arts must be taken prior to taking this exam.

- ◇ Technical electives will be selected with the assistance of the student's advisor from courses offered by the Electrical Engineering, Physics, Computer Science, Chemistry, Biology, and Mathematics Departments. Technical electives must be carefully chosen so as to meet the minimum EAC/ABET "Engineering Topics" component. A complete list of departmental approved technical electives is available in the Physics Department office. Any departures from this list must be approved by the Head of the Physics Department.

Name \_\_\_\_\_  
Date \_\_\_\_\_

41 credits in physics

Physics 211, 211L .....	4	_____
Physics 213, 213L .....	4	_____
Physics 316 .....	2	_____
Physics 318 .....	1	_____
Physics 331 .....	3	_____
Physics 341 .....	2	_____
Physics 343 .....	2	_____
Physics 361 .....	3	_____
Physics 418 .....	1	_____
Physics 421 .....	4	_____
Physics 435 or Physics 439 .....	3	_____
Physics 451 .....	4	_____
Physics 464 or ME 478 .....	1	_____
Physics 465 or ME 479 .....	2	_____
Physics 471 .....	4	_____
Physics 490 .....	1	_____

18 credits in mathematics

Math 123 .....	4	_____
Math 125 .....	4	_____
Math 225 .....	4	_____
Math 321 .....	3	_____
Math 327 or Math 331 .....	3	_____

8 credits in electrical engineering

EE 220, 220L .....	4	_____
EE 221, 221L .....	4	_____

3 credits in mechanical engineering

ME 240 .....	3	_____
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13 credits in miscellaneous engineering courses

GE 101 .....	1	_____
GE 121 .....	1	_____
GE 122 .....	1	_____
GE 225 .....	1	_____
CSc 150, or CSc 213, or CSc 218 .....	3	_____
EM 214 .....	3	_____
EM 331 .....	3	_____

7 credits in chemistry

Chem 112, 112L .....	4	_____
Chem 114 .....	3	_____

9 additional credits of technical electives ◇

Mechanical Engineering, Physics,  
 Math, Electrical Engineering,  
 Chemistry, or Computer Science  
 numbered 300 or greater  
 or other science/technical credits by  
 approval of physics department head

21 additional credits of BOR (SGR) requirements

SGR Goal 1, Engl 101*, Composition I .....	3	_____
SGR Goal 1, Engl 201*, Composition II (or Engl 277) .....	3	_____
SGR Goal 2, SpCm 101,101A*, Fund. of Speech and Lab .	3	_____
SGR Goal 3, Social Science* (Catalog p xx - 2 disciplines) .....	3	_____
SGR Goal 3, Social Science* (Catalog p xx-xx) (G) .....	3	_____
SGR Goal 4, Humanities & Fine Arts* (Catalog p xx) .....	3	_____
SGR Goal 4, Hum. & Fine Arts* (Catalog p xx-xx)(G) .....	3	_____
SGR Goal 5, Mathematics * (Catalog p xx) (3) .....	0	<u>above</u> Math 123
SGR Goal 6, Natural Science * (Catalog p xx) (6) .....	0	<u>above</u> Chem 112,114

8 credits of SDSU (IGR) requirements

IGR Goal 1, Land & Nat Res. (catalog p xx) .....	3	_____
IGR Goal 2**, Wellness (Catalog p xx) .....	2	_____
IGR Goal 3**, Soc Resp. / Cultural (Catalog p xx) .....	3	_____

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