

B.S. DEGREE in PHYSICS+

with Chemistry Emphasis

Iowa State University

Semester 1	Freshman Year	Semester 2
Critical Thinking and Comm. - Engl 150	3	Intro to Class. Physics II – Phys 242 5
Introductory Seminar - Phys 199	R	Calculus III - Math 265 4
Intro to Classical Physics I – Phys 241	5	Social Science Choice 3
Calculus II – Math 166	4	General Chemistry I Chem 177+177L ¹ 5
Arts&Humanities + IP prespective*	3	17
Library Instruction – Lib 160	1	
	<u>16</u>	

Semester 1	Sophomore Year	Semester 2
WOVE Composition - Engl 250	3	Intro to Modern Physics II – Phys 322 3
Intro to Modern Physics I – Phys 321	3	Intro Lab in Mod Phys II – Phys 322L 1
Intro Lab in Mod Phys I - Phys 321L	1	Classical Mechanics - Phys 361 3
Elementary Differential Equations and Laplace Transforms – Math 267	4	Introduction to Partial Differential Equations - Math 385 3
General Chemistry II Chem 178+178L ¹	5	Social Science Choice 3
	16	Humanities Choice 3
		<u>16</u>

Semester 1	Junior Year	Semester 2
Humanities choice	3	Thermal Physics – Phys 304 3
Electricity and Magnet. I - Phys 364	3	Quantitative and Environmental Analysis Chem 211+211L 4
English Proficiency Requirement - Engl 302, 305, 309 or 314	3	Humanities Choice 3
Matrix/Lin. Algebra – Math 207/317	3(4)	Foreign Language (or Elective) 4(3)
Foreign Language (or Elective)	4(3)	14(13)
	<u>16</u>	

Semester 1	Senior Year	Semester 2
Electronics - Phys 310	4	Organic Chemistry II Chem 332 + 332I 4
Quantum Mechanics – Phys 480	3	Humanities Choice 3
Elective	3	Social Science Choice 3
Organic Chemistry I Chem 331+331L	4	Elective 3
	14	<u>13</u>

* Students should choose a course that satisfy both Arts& Humanities and International Prospective requirements

¹ Chem 177 and Chem 178 can be used as Natural Science Electives

Students in all ISU majors must complete a three-credit course in U.S. diversity, a three-credit course in international perspectives, 9 credits in Social Science, 8 credits in Natural Science and 12 credits in Arts and Humanities courses.

LAS majors require a minimum of 120 credits, including a minimum of 45 credits at the 300/400 level. You must also complete the LAS foreign language requirement.