

First Year – Fall Semester			First Year – Spring Semester		
CHEM 111	Principles of Chemistry I <i>Sufficient math scores or min 'C' in CHEM 101, MATH 143, 160, or 170</i>	4	CHEM 112	Principles of Chemistry II <i>CHEM 111 or Permission</i>	5
MATH 170	Analytic Geometry and Calculus I <i>MATH 143 with 'C' or better and 144, or sufficient exam scores</i>	4	MATH 175	Analytic Geometry and Calculus II <i>MATH 170 with a grade of 'C' or better</i>	4
ENGL 102	College Writing and Rhetoric <i>ENGL 101 or sufficient test scores</i>	3	PHYS 211, 211L	Engineering Physics I (with Lab) <i>MATH 170</i>	4
ISEM 101	Integrated Seminar	3		Humanities/Social Science Course	3
PHYS 200	Physics Seminar	1			
		<b>Total Credits</b>	<b>15</b>		
				<b>Total Credits</b>	<b>16</b>
Second Year – Fall Semester			Second Year – Spring Semester		
PHYS 212, 212L	Engineering Physics II (with Lab) <i>PHYS 211, 211L; MATH 175</i>	4	PHYS 213	Engineering Physics III (Spring only) <i>PHYS 211, 211L; MATH 170</i>	3
MATH 275	Analytic Geometry and Calculus III <i>MATH 175</i>	3	PHYS 305	Modern Physics (Spring only) <i>PHYS 212, 212L; MATH 275, PHYS 213</i>	3
MATH 330	Linear Algebra <i>MATH 170; 175 recommended</i>	3	MATH 310	Ordinary Differential Equations <i>MATH 175; 275 recommended</i>	3
CS 120	Computer Science I <i>MATH 143 or CS 112 with 'C' or better, or sufficient test scores</i>	4	ISEM 301	Great Issues Seminar <i>ENGL 102 and Sophomore Standing</i>	1
COMM 101	Fundamentals of Public Speaking	2	ELECTIVE	Physics and Engineering Elective <i>Prerequisites vary by course</i>	3
				Humanities/Social Science Course	3
		<b>Total Credits</b>	<b>16</b>		
				<b>Total Credits</b>	<b>16</b>
Third Year – Fall Semester			Third Year – Spring Semester		
PHYS 321	Analytical Mechanics (Fall only) <i>PHYS 212, 212L and MATH 275; MATH 310</i>	3	PHYS 351	Introductory Quantum Mechanics I (Spring only) <i>PHYS 305, 371; MATH 330</i>	3
PHYS 341	Electromagnetic Fields I (Fall only) <i>PHYS 212 and MATH 275</i>	3	PHYS 400+	Physics Elective (400+) <i>Prerequisites vary by course</i>	3
PHYS 371	Mathematical Physics <i>PHYS 212, 212L and MATH 275</i>	3	PHYS 490	Research <i>Permission of instructor</i>	1
PHYS 490	Research <i>Permission of instructor</i>	1	ELECTIVE	UPDV Physics and Engineering Elective <i>Prerequisites vary by course</i>	3
ELECTIVE	Physics and Engineering Elective <i>Prerequisites vary by course</i>	3		Humanities/Social Science Course	3
	American Diversity/International Course	3		American Diversity/International Course	3
		<b>Total Credits</b>	<b>16</b>		
				<b>Total Credits</b>	<b>16</b>
Fourth Year – Fall Semester			Fourth Year – Spring Semester		
PHYS 492	Senior Research <i>Junior or Senior Standing or Permission</i>	1	PHYS 411	Advanced Physics Lab (Spring only) <i>PHYS 305 or permission</i>	4
PHYS 400+	Physics Elective (400+) <i>Prerequisites vary by course</i>	3	PHYS 492	Senior Research <i>Junior or Senior Standing or Permission</i>	1
ELECTIVE	UPDV Physics and Engineering Elective <i>Prerequisites vary by course</i>	3	PHYS 400+	Physics Elective (400+) <i>Prerequisites vary by course</i>	3
ELECTIVES	Physics and Engineering Electives <i>Prerequisites vary by course</i>	6	ELECTIVE	UPDV Physics and Engineering Elective <i>Prerequisites vary by course</i>	3
	Humanities/Social Science Course	3	ELECTIVES	Physics and Engineering Electives <i>Prerequisites vary by course</i>	6
		<b>Total Credits</b>	<b>16</b>		
				<b>Total Credits</b>	<b>17</b>