

Student:		Minimum 124 semester hours required for graduation 18 of the last 24 hours must be at Houghton Must have 30 hours at Houghton One half of major must be at Houghton <i>Must have C- or above in each course to meet Major, Concentration, or Minor credit</i> <i>Must have 62 liberal arts credits for BS degree</i>	
Major: Applied Physics (<i>Engineering emphasis</i>)			
Minor:			
BS	Advisor:		
Applied Physics Major (64 - 68 hrs)			
General Education (see GenEd Audit Sheet – Creation: Lab Science and 2 nd Creation met by major)			
Pre-Requisites		16-20 hrs	
(4) PHYS 151 General Physics I	LA	(4) PHYS 152 General Physics II	LA
(4/4,4) MATH 181 Calculus I or MATH 170/171 Calculus I with Pre-calculus A & B or MATH 160 Mathematics for the Life Sciences and MATH 161 Calculus for the Life Sciences			
(4) MATH 182 Calculus II	LA		
Co-Requisites		12 hrs	
(4) MATH 241 Differential Equations	LA	(4) MATH 225 Multivariate Calculus	LA
(4) CHEM 151 General Chemistry I (LA) or CSCI 211 Programming I			
Half of credits listed below must be taken at Houghton			
Required Courses		36 hrs	
(4) PHYS 215 Statics and Engineering Design	LA	(4) PHYS 251 Mechanics I	LA
(4) PHYS 258 Analog Electronics	LA	(4) PHYS 259 Digital Electronics	LA
(2) PHYS 212 Modern Physics	LA	(1,1) PHYS 275/276 Experimental Physics Lab	LA
(4) PHYS 353 Electricity and Magnetism I	LA	(4) PHYS 355 Thermal Physics	LA
(1,1) PHYS 471/472 Physics Project Lab	LA	(1) PHYS 482 Physics Seminar (Senior Capstone)	LA
(1) STEM 371 Career Seminar			
One 4 hour advanced theory course selected from:			
(4) PHYS 352 Mechanics II	LA	(4) PHYS 354 Electricity and Magnetism II	LA
(4) PHYS 356 Quantum Mechanics	LA		
Additional recommended supporting courses:			
(4) PHYS 260 Optics	LA	(4) CHEM 152 General Chemistry II	LA
(3) ECON 210 Principles of Microeconomics	LA	(3) BADM 303 Entrepreneurship	