

Michigan Tech – Department of Physics - Typical Schedule Applied Physics Major (SAP)

Note: Physics majors are expected to be calculus ready upon entering this program. Students with low math ACT or SAT scores should complete a summer course equivalent to MA1032 (possibly by participating in the MaCH-1 program at MTU). **Note:** The following is intended to serve as a guide. Updated October 21, 2008.

Year 1	
<p>Fall Semester</p> <p>PH1160 Honors Physics I (4) PH1161 Intro to Experimental Physics I (1) MA1160 Calculus with Tech I (4) CH1110 University Chemistry I (4) CH1111 University Chemistry Lab I (1) UN1001 Perspectives on Inquiry (3)</p> <p>Total 17 Cr</p>	<p>Spring Semester</p> <p>PH1360 Honors Physics II (3) PH1361 Intro to Experimental Physics II (1) PH2300 University Physics III (2) MA2160 Calculus with Tech II (4) MA2320 Elem Linear Algebra (2) UN1002 World Cultures (4) Gen Ed Elective (3)</p> <p>Total 18 Cr</p>
Year 2	
<p>Fall Semester</p> <p>PH2010 Sophomore Seminar (1) PH2260 Honors Physics III (4) PH2261 Intro to Experimental Physics III (1) MA3530 Intro Differential Eqns (3) UN2001 Re-Visions I (3) or UN2002 Institutions (3) Gen Ed Elective (3)</p> <p>Total 15 Cr</p>	<p>Spring Semester</p> <p>PH2230 Electronics (4) PH2400 University Physics IV (3) MA3160 Multivariable Calculus (4) UN2002 Institutions (3) or UN2001 Re-Visions I (3) Gen Ed Elective (3)</p> <p>Total 17 Cr</p>
Year 3	
<p>Fall Semester</p> <p>PH3110 Theoretical Mechanics I (3) PH3210 Optics (3) PH3320 Methods Theoretical Phys (3) Application Elective*** (3) Gen Ed Elective (3)</p> <p>Total 17 Cr</p>	<p>Spring Semester</p> <p>PH3300 Thermo & Stat Mech** (3) PH3410 Quantum Physics I (3) PH3480 Modern Physics Lab (2) Application Elective*** (4) Second Sem. Physics* (3) Gen Ed Elective (3)</p> <p>Total 14-17 Cr</p>
Year 4	
<p>Fall Semester</p> <p>PH4010 Senior Colloquium I (1) PH4050 Qualitative Methods (1) PH4080 Senior Research I (3) PH4210 E & M I (3) PH4390 Computational Meth in Physics (2) Application Elective*** (4) Gen Ed Elective (3)</p> <p>Total 16 Cr</p>	<p>Spring Semester</p> <p>PH4011 Senior Colloquium II (1) PH4081 Senior Research II (3) Second Sem. Physics* (3) or Electives (3-6) Application Elective*** (4) Gen Ed Elective (3)</p> <p>Total 16 Cr</p>

Plus 3 units of Physical Education activity. *** 13 credits in an appropriate APPLICATION AREA or UNIVERSITY MINOR * Only one (1) of Theoretical Mechanics II, Quantum Physics II, or E & M II is required. ** IF a similar Electronics or Thermo/Stat Mech course is offered in the department of the application area or minor, the student may take it and replace the equivalent Physics requirement with Physics Electives.