Michigan Technological University – Department of Physics
Typical Schedule: BA Physics Major (SPA) Calculus Start

Note: The following is intended to serve as a guide. This is not an official list of degree requirements. Adjustments may be required due to curriculum changes. Students are encouraged to discuss and review their schedules with their advisors. Three units of Co-Curricular activities are also required.

Year 1 – Fall Semester

PH1160 Honors Physics I- Mechanics (4)
PH1161 Intro to Experimental Physics I (1)
MA1160/1 Calculus with Technology I (4-5)[†]
CH1150 University Chemistry I (3)
CH1151 University Chemistry Lab (1)
[CH1153 University Chemistry Recitation (1)][‡]
UN1015 Composition (3)

Total Credits: 16-18

Year 1 – Spring Semester

PH1360 Honors Physics II (2)[*]
PH1361 Intro to Experimental Physics II (1)
PH2300 Univ Phys III – Fluids & Thermal (2)[*]
MA2160 Calculus with Technology II (4)
MA2320 Elementary Linear Algebra (2)
UN1025 Global Issues (3)
General Education elective (3)[§]

Total Credits: 17

Year 2 – Fall Semester

PH2020 Sci. Programming & Error Analysis (2)
PH2260 Honors Physics III- Electricity & Magnetism (4)
PH2261 Intro to Experimental Physics III (1)
MA3530 Intro to Differential Equations (3)
Gen Ed Critical & Creative Thinking or Social Responsibility & Ethical Reasoning core course (3)[§]
Elective/Gen Ed elective (3)
Co-curricular (0-1)

Total Credits: 16-17

Year 2 – Spring Semester

PH2230 Electronics (4) [or PH3210 in fall]
PH2400 Univ Physics IV- Waves & Modern Phys. (3)
MA3160 Multivariable Calculus (4)
Elective (3-6)
Gen Ed Critical & Creative Thinking or Social Responsibility & Ethical Reasoning core course (3)[§]
Co-curricular (0-1)

Total Credits: 16-17

Year 3 – Fall Semester

Physics Electives (3-6)[**]
PH3210 Optics (3) [or PH2230 in spring]
Electives (3-6)
General education elective (3)[§]
Co-curricular (0-1)

Total Credits: 15-18

Year 3 – Spring Semester

Physics electives (3-6)[**]
Electives (6-9)
General education elective (3)[§]
Co-curricular (0-1)

Total Credits: 15-18

Year 4 – Fall Semester

Physics elective (3)[**]
Elective or Gen Ed elective (3)
Electives (9-12)
Co-curricular (0-1)

Total Credits: 15-18

Year 4 – Spring Semester

Physics elective (3)[**]
Elective or General Elective (3)
Electives (9-12)
Co-curricular (0-1)

Total Credits: 15-18

[†] This sample schedule assumes incoming students are calculus ready. Alternately, see "Non-calculus Start".

[‡] Recommended but not required for students seeking more practice in chemistry problem solving

[*] Half Semester Course

[§] For General Education requirements see http://www.mtu.edu/registrar/faculty-staff/advisors/gen-ed/

[**] 15 credits with a minimum of 9 credits at the 3000-level or higher. PH4010, PH4011, PH4050, PH4080 and more than 3 credits of PH4999 may not be counted toward the 3000-level or higher requirement.

Michigan Technological University – Department of Physics
Typical Schedule: BA Physics Major (SPA) Non-Calculus Start

Note: The following is intended to serve as a guide. This is not an official list of degree requirements. Adjustments may be required due to curriculum changes. Students are encouraged to discuss and review their schedules with their advisors. Three units of Co-Curricular activities are also required.

Year 1 – Fall Semester

MA1032 Data Functions and Graphs Plus (4)[†]
CH1150 University Chemistry I (3)
CH1151 University Chemistry Lab (1)
[CH1153 University Chemistry Recitation (1)][‡]
UN1015 Composition (3)
Elective or Physics Electives (3-4)[**]

Total Credits: 16-18

Year 1 – Spring Semester

MA1161 Calculus Plus with Technology I (5)
UN1025 Global Issues (3)
General Education elective (3-6)[§]
Electives (3-6)
Co-curricular (0-0.5)

Total Credits: 14-17.5

Year 2 – Fall Semester

PH1160 Honors Physics I- Mechanics (4)
PH1161 Intro to Experimental Physics I (1)
MA2160 Calculus with Technology II (4)
Gen Ed Critical & Creative Thinking or Social Responsibility & Ethical Reasoning core course (3)[§]
Elective/Gen Ed elective (3)

Total Credits: 15-16

Year 2 – Spring Semester

PH1360 Honors Physics II (2)[*]
PH1361 Intro to Experimental Physics II (1)
PH2300 Univ Phys III – Fluids & Thermal (2)[*]
MA2320 Elementary Linear Algebra (2)
Gen Ed Critical & Creative Thinking or Social Responsibility & Ethical Reasoning core course (3)[§]
Elective (3-6)
Co-curricular (0-1)

Total Credits: 16-17

Year 3 – Fall Semester

PH2020 Sci. Programming & Error Analysis (2)
PH2260 Honors Physics III- Electricity & Magnetism (4)
PH2261 Intro to Experimental Physics III (1)
MA3530 Intro to Differential Equations (3)
General education elective (3-6)[§]
Elective or Gen Ed elective (3)
Co-curricular (0-1)

Total Credits: 16-18

Year 3 – Spring Semester

PH2400 Univ Physics IV- Waves & Modern Phys. (3)
MA3160 Multivariable Calculus (4)
Elective or Physics electives (3)[**]
Elective (3)
General education elective (3)[§]
Co-curricular (0-1)

Total Credits: 16-17

Year 4 – Fall Semester

PH3210 Optics (3) [or PH2230 in spring]
Physics electives (3-6)[**]
Elective or Gen Ed elective (3)
Electives (6)
Co-curricular (0-1)

Total Credits: 15-18

Year 4 – Spring Semester

PH2230 Electronics (4) [or PH3210 in fall]
Physics elective (3-6)[**]
Elective or General Elective (3)
Electives (3-6)
Co-curricular (0-1)

Total Credits: 13-18

[†] This sample schedule assumes incoming students are calculus ready. Alternately, see "Non-calculus Start".
[‡] Recommended but not required for students seeking more practice in chemistry problem solving
[**] 15 credits with a minimum of 9 credits at the 3000-level or higher. PH4010, PH4011, PH4050, PH4080 and more than 3 credits of PH4999 may not be counted toward the 3000-level or higher requirement.
[§] For General Education requirements see http://www.mtu.edu/registrar/faculty-staff/advisors/gen-ed/
[*] Half Semester Course