

# Michigan Technological University

## Bachelor of Arts Degree Audit

### Major Program: Physics, Concentration: Secondary Education

Program Code: SPA1, Academic Year 2018-19

Total credits required for the degree: 126

#### Major Requirements: 59 to 62 credits

Course	Credits
CH 1150	3
CH 1151	1
MA 1160/1161	4
MA 2160	4
MA 2320/2330	2/3
MA 3160	4
MA 3530	3
PH 1160	4
PH 1161	1
PH 1360	2
PH 1361	1
PH 1600	2
PH 1610	1
PH 2020	2
PH 2260	4
PH 2261	1
PH 2300	2
PH 2400	3
PH 3210	3
PH 4010	1

#### Physics Electives: 9 credits

Minimum 6 credits at the 3000-level or higher with no more than 3 credits of PH4999 counting toward the 6 credits. PH4010, PH4011, PH4050 and PH4080 can count towards the total credit hours of Physics Electives, but not toward the 6 minimum credits at the 3000- level or higher.

Course	Credits

#### Concentration Requirements: 31 credits

Course	Credits
ED 3210	2
ED 3410	1
ED 4110	3
ED/HU 4150	4
ED 4300	2
ED 4700	3
ED 4720	2
ED 4910	12
PH 4710	2

#### General Education Requirements: 24 credits

Courses used to complete General Education may not be used to complete other degree requirements.

[Core: 12 credits](#)

Course	Credits
UN 1015	3
UN 1025 or an upper level modern language	3
Critical and Creative Thinking	3
Social Responsibility and Ethical Reasoning	3

[HASS: 12 credits](#)

Six of the 12 HASS credits must be at the 3000 or 4000 level (an upper division language course in place of UN1025 does not meet this requirement). No more than three credits may come from the HASS Restricted course list.

Course	Credits
Communication/ Composition	Minimum 3
Humanities and Fine Arts	Minimum 3
Social and Behavioral Sciences	Minimum 3
Course from any list above or from the Restricted HASS course list	0 to 3

#### Co-curricular Activities: 3 credits

Required for graduation, but not included in the GPA calculation or in the overall credits required for the degree.

Course	Credits

#### Free Electives: 13 to 15 credits

Free elective credits are usually fulfilled by the required secondary teacher certification minor credits. The amount will vary depending on the minor selected and the minor credits being used in other areas of this degree.

Course	Credits

**Note:** For Michigan Teaching Certification, students must also complete a secondary teacher certification minor through the Dept of Cognitive and Learning Sciences. In addition, students must become certified by the Red Cross or American Heart Association in child and adult First Aid and CPR.