

**Michigan Technological University**  
**Bachelor of Science Degree Audit**  
**Major Program: Surveying Engineering**  
 Program Code: TSE, Academic Year 2018-19  
 Total credits required for the degree: 127

**Major Requirements: 72 to 73 credits**

Course	Credits
ACC 2000	3
CH 1150	3
CH 1151	1
CS 1121 or MIS 2100	3
EET 1411	4
GE 2000 or GE 2100	3
HU 3120	3
MA 1160 or MA 1161	4/5
MA 2160	4
MA 2320	2
MA 3160	4
MA 3710	3
MET 2120	4
PH 1100	1
PH 2100	3
SU 1000	1
SU 2000	2
SU 3210	4
SU 3300	3
SU 3540 or FW 3540	4
SU 3600	4
SU 4060	3
SU 4100 or GE 3860	3
SU 4140	3

**Choose one of the following options: 3 credits**

**Option 1**

Course	Credits
SU 4900	3

**Option 2**

Course	Credits
ENT 3960	1
ENT 4950	2

**Elective Courses: 7 to 8 credits**

**Technical Electives: 1 to 2 credits**

CEE3331, ENG3200, ENTXXXX except ENT3960/4950, UN3002

Course	Credits

**Engineering Electives: 3 credits minimum required**

CEE3101, CEE3332, CEE3401, CEE3810, SU4045

Course	Credits

**Science Electives: 3 credits minimum required**

CH1153, FW2010, PH1200, PH1600, PH1610, PH2200

Course	Credits

**Choose an Emphasis with you Academic Advisor**

The Emphasis areas below represent 19-20 of the required credits for your degree. In consultation with your advisor, you will choose one of two areas:

**Emphasis 1 – Geoinformatics: 19 credits**

Course	Credits
FW 4540	3
SU 4010	3
SU 4011 or Eng. Elective	3
SU 4012 or Eng. Elective	3
SU 4045 or SU 4013	3
SU 4142	3
SU 4800	1

**Emphasis 2 – Professional Surveying: 20 credits**

**Required Core Courses: 17 credits**

Course	Credits
BUS 2200	3
SU 2220	3
SU 3110	4
SU 3180	3
SU 4180	3
SU 4999	1

**Surveying Electives: 3 credits minimum required**

SU4010, SU4011, SU4012, SU4013, SU4045, SU4142, SU4996, SU4997, SU4998

Course	Credits

### General Education Core and HASS

Courses used to complete Core and HASS requirements may not be used to complete other degree requirements. Students must complete 12 credits of Core coursework and 12 credits of Humanities, Fine Arts, and Social Science (HASS) coursework. Repeatable courses may not be repeated for general education credit. Core and HASS courses can be found on the [General Education](#) page.

#### 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. Only courses on the co-curricular course list are eligible. Half credit (0.5) courses may be repeated to a maximum of one time for co-curricular credit. Find eligible courses on the [General Education](#) page.

Course	Credits

#### Free Electives: 0 to 2 credits

Any coursework is allowable, excluding co-curricular and coursework below the 1000-level.

Course	Credits