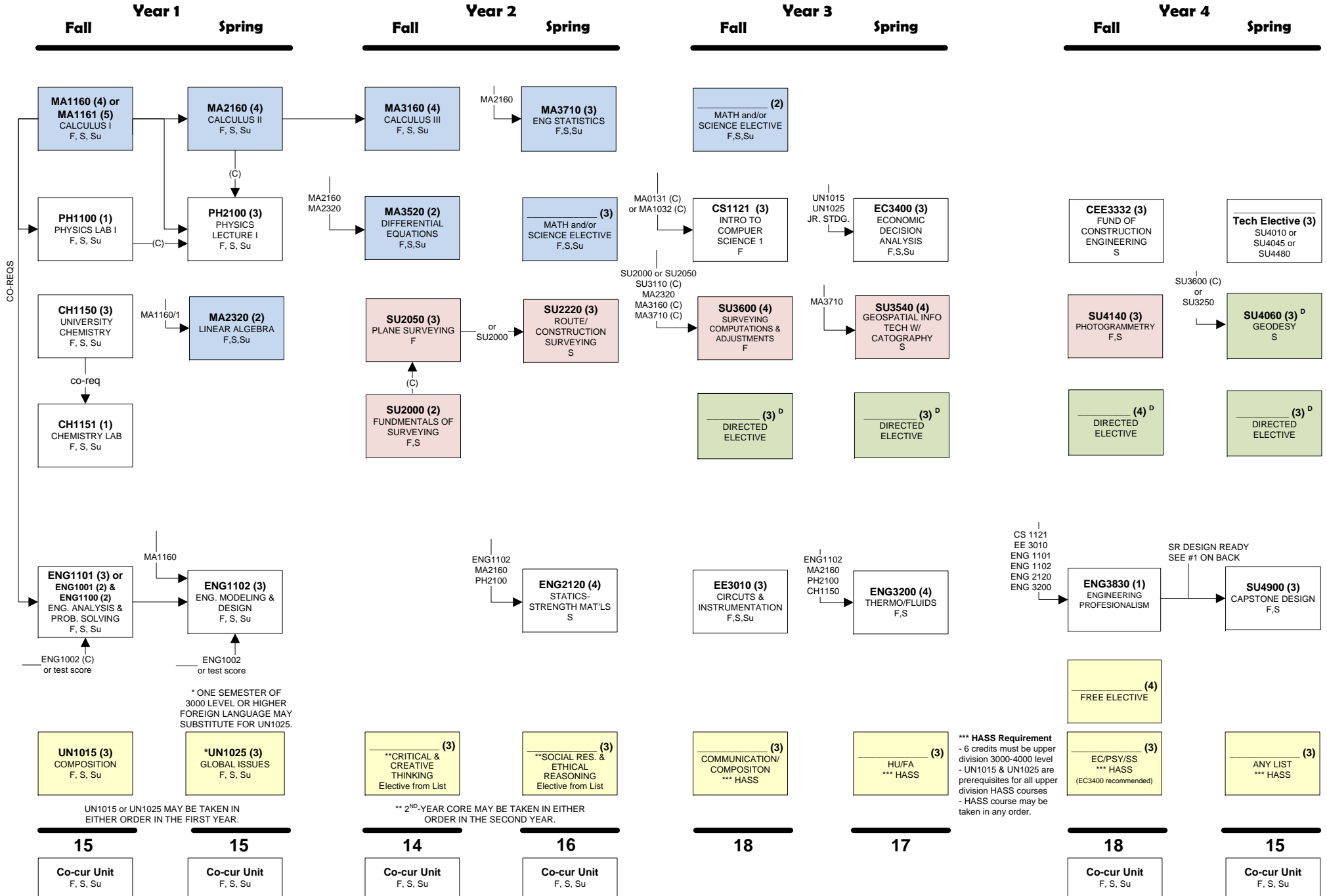
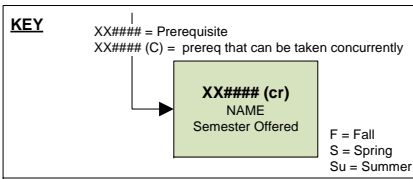


BSE with Geospatial Engineering 2017-18

Updated May 2017

This is not an official list of degree requirements. Adjustments may be required due to curriculum changes.

See back of academic plan for more information on requirements for elective courses.



BSE with Geospatial Emphasis 2017-18
(minimum of 128 credits)

Academic questions: E-mail efadvise@mtu.edu

1 Senior Design Ready:

a. Senior Design Prerequisite courses:

CS1121, CEE3332, EE3010, ENG1101, ENG1102, ENG2120,
ENG3200, ENG3830.

b. Core Competency Check test - Take and pass the test; test topics include all ENG4905 prerequisite courses except CEE3332 and ENG3830.

2 General Education Requirements (24 credits + 3 PE units):

I. Core Courses (12 credits)

___ UN1015 Composition

___ UN1025 Global Issues or 3000+ Modern Language _____

___ Critical/Creative Think List _____

___ Social Resp./Ethical Reason List _____

II. HASS Courses Requirements (12 credits)

([www.admin.mtu.edu/em/documents/HASS Distribution List.pdf](http://www.admin.mtu.edu/em/documents/HASS_Distribution_List.pdf))

- 6 credits upper level (3000- 4999)

- 3 credits from each listed below

___ Communication/Composition _____

___ Humanities/Fine Arts List (HU/FA) _____

___ Social & Behavioral Science List (EC/PSY/SS) _____

___ 3 credits from any list _____

* **EC3400** is required by the degree and may **NOT** be counted as a HASS course.

III. Co-curricular activities (3 units)

In the co-curricular requirement, the three semester units will be physical education activities. These units are required for graduation, but are not included in the calculation of the GPA, nor in the overall degree-credit requirement. Note: most physical education activities will last for 7 ½ weeks or ½ semester. A student would need **six** of these ½-semester units to fulfill the 3-semester unit co-curricular requirement.

PE _____ PE _____ PE _____

PE _____ PE _____ PE _____

3 Geospatial Directed Electives (16 credits):

Required course

___ SU4060 – 3 Geodesy (see Spring 4)

Select 13 credits (prerequisite)

___ ACC 2000 – 3 Accounting Principles I

___ BUS 2200 – 3 Business Law

___ CS 1122 – 2 (CS 1121) Intro to Computer Science II

___ CS 2321 – 3 (CS 1122) Data Structures

___ FW 4540 – 3 Remote Sensing of the Environment

___ GE 3250 – 3 (MA 1160) Computational Geosciences

___ PH 1200 / 2200 – 1 or 4 (MA 2160 & PH 2100) University Physics II

___ PH 1600/1610 – 2 or 3 Introductory Astronomy

___ SU 3110 – 4 (SU 2220) Surveying Field Practice

___ SU 3180 – 3 (SU 3600(C)) Boundary Surveying Principles

___ SU4045 – 3 Geospatial Data Fusion

___ SU 4100 – 3 (SU 4060(C)) Geodetic Positioning

___ SU 4142 – 3 (SU 3600) Terrestrial Lidar Scanning

___ SU4990 – 3 Professional Practice Seminar

___ UN 3002 – 1-2 Undergraduate Cooperative Education Laboratory

___ UN 4000 – 1 Remote Sensing Seminar