GEOSPATIAL ENGINEERING FLOWCHART

Geoinformatics Emphasis

Academic Year 2020-21

Total AcademicCredits: 127
Total Co-Curricular Units: 3

**HASS ELECTIONS**
- 6 credits must be upper level (3000-4000)
- UN1015 and UN1025 are prerequisites for all upper level HASS courses

**Sample = Gen Ed Requirements**
### IGT Elective List (3 credits)
- **CMG1200** Intro to BIM (3 cr)  
- **EE4777** Distributed Additive Manufacturing (3 cr)  
- **UN5550** Intro to Data Science (3 cr)

### GIS Elective List (3 credits)
- **SS2050** Fundamentals of GIS and Technologies (3 cr)  
- **SS4050** Advanced GIS Methods and Projects (3 cr)

### Programming Elective List (3 credits)
- **CS1121** Intro to Programming I (3 cr)  
- **CS1131** Accelerated Intro to Programming (5 cr)  
- **FW5553** Python Programming w/ ArcMap GIS (3 cr)  
- **SU4601** R for Geoscience (3 cr)

### Science Elective List (3 credits)
- **BL2001** Valuing the Great Lakes (3 cr)  
- **BL2160** Botany (4 cr)  
- **CH1153** Chemistry Recitation I (1 cr)  
- **FW2010** Vegetation of North America (4 cr)  
- **PH1200/2200** Physics II (4 cr – 1 cr lab, 3 cr lecture)  
- **PH1600/1610** Introductory Astronomy & Lab (3 cr – 1 cr lab, 2 cr lecture)  
- **GE3850** Geohydrology (3 cr)

### GENERAL EDUCATION REQUIREMENTS

#### A. CORE COURSES (12 CREDITS)
1. **UN1015** (COMPOSITION)
2. **UN1025** (GLOBAL ISSUES) or 3000+ level Modern Language Course
3. **CRITICAL AND CREATIVE THINKING**
   - [List of courses](https://www.mtu.edu/registrar/faculty-staff/advisors/gen-ed/)
4. **SOCIAL RESP. & ETHICAL REASONING**
   - [List of courses](https://www.mtu.edu/registrar/faculty-staff/advisors/gen-ed/)

#### B. HASS COURSES (12 CREDITS)
1. **COMMUNICATION & COMPOSITION:**
   - [List of courses](https://www.mtu.edu/registrar/faculty-staff/advisors/gen-ed/)
2. **HUMANITIES & FINE ARTS:**
3. **SOCIAL & BEHAVIORAL SCIENCE:**
4. **ANY HASS OR HASS RESTRICTED COURSE:**

#### C. CO-CURRICULAR ACTIVITIES (3 UNITS)
- [List of activities](https://www.mtu.edu/registrar/faculty-staff/advisors/gen-ed/)

---

**UNDERGRADUATE CATALOG:**
[http://www.mtu.edu/catalog/courses/](http://www.mtu.edu/catalog/courses/)

**GENERAL EDUCATION (CO-CURRICULAR & HASS LIST):**
[https://www.mtu.edu/registrar/faculty-staff/advisors/gen-ed/](https://www.mtu.edu/registrar/faculty-staff/advisors/gen-ed/)