## BS Software Engineering SSEN

**Catalog Year:** 2019-2020

### Sample Plan

**Calculus-ready students**

This Flowchart is meant as a guide only, any questions about scheduling should be brought up with your academic advisor.

### Core List

- **Lab Science (3)**
- **Social Responsibility & Ethical Reasoning (3)**
- **Human/Fine Arts (3)**
- **Crit./Creat. Thinking (3)**

**Credits:** 14-16

### Core List

- **UN1015 (3) Composition**
- **UN1025 (3) Global Issues**

May use upper level language course in place of UN1025.

**Credits:** 16

### Year 1

- **CS1000 (1) Explorations in Computing**
- **CS1122/3 (5) Intro to Programming I**
- **MA1031/1032 (Concurrently)**
- **MA1160 (4) or MA1161 (5) CALC I**
- **MA1160/61 (4)**

**Credits:** 16

### Year 2

- **CS1121/1131**
- **MA1160/61**
- **CS1122/1131**
- **CS2311 (3) Discrete Structures**
- **MA2160 (4) CALC II**
- **CS2321 (3) Data Structures**
- **MA2330 (3) Linear Algebra**

**Credits:** 16.5

### Year 3

- **CS2311, CS2321**
- **CS3141 (3) Team Software proj**
- **CS3421 (3) Comp Org**
- **CS3311 (3) Formal Models of Comp**
- **MA2720 (4) or MA3710 (3) Statistics**

**Credits:** 16.5

### Year 4

- **CS3141**
- **CS3421**
- **CS4712 (3) Software Qty Assurance**
- **CS4760 (3) User Interface & UI**
- **CS4710 (3) Model-driven SW Dev.**

**Credits:** 14.5-15.5

### Year 4 (continued)

- **CS3141, CS3311**
- **CS4711 (3) SW Proc and Mgmnt**
- **CS4791 (3) Sr SSEN Design I**
- **CS4792 (3) Sr SSEN Design II**

**Credits:** 16-18

**Total Credits:** 125

### Optional Ordering

- Lab Sci or Math Elective (3)
- Technical Elective (3)
- **Communication** (3)
- Free Elective (3)
- Free Elective 1-3

### Prerequisite Course

- Yellow boxes are Major Specific courses
- Blue Boxes are General Education Courses

---

1. Lab Science Courses: Need 7 total credits, two different disciplines (BL,CH,FW,GE,PH, etc), one course must include course & lab. Pick courses off the Science Course list from the Gen Ed STEM list.
2. Technical Electives: List available on CS advising site
3. HASS (Humanities & Fine Arts, Social & Behavioral Sciences) electives: 6 credits must be upper division 3000-4000 level - UN1015 and UN1025 are prerequisites for all upper division HASS courses.
4. MA3210 Intro to Combinatorics can be used in place of CS2311 Discrete Structures and used for any CS course that has CS2311 as a pre-req.

Undergraduate advisor: Rekhi 221/227 Email: csadvisor@mtu.edu