**Michigan Technological University**
**Minor in Computer Science**
Program Code: SCSM, Academic Year 2020-21
College of Computing
Total Credits Required: 18

**Required Courses**

| Course | Credits |
|---|---|
| CS 1142 Programming at HW/SW Interface (3), *(Prereq-CS1122/1132)* | |
| CS 2311 Discrete Structures **or** MA 3210 Combinatorics (3), *(Prereq-(CS1122 or CS1131) and (MA1135 or MA1160 or MA1161))* | |
| CS 2321 Data Structures (3), *(Prereq-CS1122 or CS1131)* | |
| CS 3141 Team Software Project (3), *Prereq-CS2311 or MA3210 and CS2321)* | |

**Elective Courses: select 6 credits from the following**

| Course | Credits |
|---|---|
| CS 3311 Formal Models of Computation (3), *(Prereq-CS2311 Discrete Structure or MA3210 Combinatorics)* | |
| CS 3331 Concurrent Computing (3), *(Prereq-CS1142 or (CS1141 & CS1040) & (CS2311 or MA3210) & CS2321)* | |
| CS 3411 Systems Programming (3), *(Prereq-CS3421 Computer Organization)* | |
| CS 3421 Computer Organization (3), *(Prereq-CS1141 & CS1040 or CS1142 Prog at HW/SW Interface)* | |
| CS 3425 Intro to Database Systems (3), *(Prereq- (CS2311 Discrete Structures or MA3210 Combinatorics) & CS2321 Data Structures)* | |
| CS 3712 Software Quality Assurance (3), *(Prereq-CS3141 Team Software Project)* | |
| CS 4130 Compiler Design and Optimization (3), *(Prereq-CS4121 Programming Languages)* | |
| CS 4321 Intro to Algorithms (3), *(Prereq-(CS2311 Discrete Structures or MA3210 Combinatorics) & CS2321 Data Structures)* | |
| CS 4611 Computer Graphics (3), *(Prereq-CS1141 or CS1142 & CS2321 & MA2330)* | |
| CS 4710 Model-Driven Software Dev. (3), *(Prereq-CS3311 Formal Models of Computation & CS3141)* | |
| CS 4711 Software Processes and Mgmt (3), *(Prereq-CS3141 Team Software Project)* | |
| CS 4760 Human-Computer Interactions (3), *(Prereq-CS3141 Team Software Project)* | |
| CS 4811 Artificial Intelligence (3), *(Prereq-(CS2321 Data Structures and MA3210 Combinatorics) & CS3311 Formal Models of Cmptn)* | |
| CS 4821 Data Mining (3), *(Prereq-[CS3425 or MIS3100] & MA2330 or MA 2320 or MA2320 or MA2321 & MA2710 or MA2720 or MA3710)* | |

**This minor is not open to students majoring in Computer Engineering**