

2022-2023 Computer Science BS Degree Plan



Student name: _____ UMID: _____ Date: _____
 Advisor name: _____ Concentration: **None**

The Purpose of General Education is to Gain:

- Knowledge of Human Cultures and the Physical and Natural World
- Intellectual and Practical Skills
- Personal and Social Responsibility
- Integrative and Applied Learning

Key Courses For General Education (48 hours)

1. **Written Composition (6)**
Choose: ENG 101 or 103. 3 _____
Choose: ENG 102 or 104. 3 _____
2. **Humanities & Fine Arts (18)**
Choose one: ENG 231/233 or 232/234.* 3 _____
*Students must complete a six-hour sequence in either History or Literature. Students may complete both sequences.
Choose: COMS 101 or 102. 3 _____
Choose one Fine Arts: ART 100, 120, 220; 3 _____
 MC 100, 325; MUS 121 or 122, 125, 211, 255, 342; THEA 120 or 122.
Choose one Humanities:
 ENG 231 or 233, 232 or 234; FRN 101, 102, 150, 201, 202, 250; SPN 101 or 103, 102 or 104, 150, 201, 202, 250; GER 101, 102, 201, 202; PHIL 110 or 111, 180, 220 or 221, 230, 280, 290.
Choose two of the following (not used above):
 ART 100, 120, 220; ENG 231 or 233, 232 or 234; 3 _____
 FRN 101, 102, 150, 201, 202, 250; SPN 101 or 103, 102 or 104, 150, 201, 202, 250; GER 101, 102, 201, 202; MC 100, 325; MUS 121 or 122, 125, 211, 255, 342; PHIL 110/111, 180, 220 or 221, 230, 280, 290; THEA 120 or 122.
3. **Natural Sciences & Mathematics (12)**
Choose one lab science from two different disciplines:
 BIO 100, 105-107; CHEM 100-102, 121, 122; 4 _____
 ES 100; GEOL 110, 115; PHYS 100 or higher. 4 _____

Choose: MATH 170. 4 _____
4. **History, Social & Behavioral Sciences (12)**
Choose one: HIST 101, 102, 103 or 104.* 3 _____
*Students must complete a six-hour sequence in either History or Literature. Students may complete both sequences.
Choose three of the following (not used above):
 EC 231, 232; FCS 291, 402; GEOG 231; 3 _____
 HIST 101 or 103, 102 or 104; POS 200, 250; 3 _____
 PSYC 201/202; SOC 101/102; SWK 203, 260, 322. 3 _____
5. **Personal Development (3)**
Choose: CS 161. 3 **

**Indicates requirement is satisfied in major course requirements.

Additional Requirements for Degree (6 hours) *

Bachelor of Science Requirements (6)

Choose MATH 171 4 _____

Choose 2 additional hours in mathematics and/or science (not used toward requirement #3 above).

_____ 2 _____

*** Bachelor of Science requires 18 or more credit hours in mathematics and natural science, 12 hours in the general education core and 6 additional credit hours**

Major Course Requirements (36 hours)

- CS 161 (Introduction to Computer Science) 3 _____
- CS 170 (Introduction to Programming with Python) 3 _____
- CS 270 (Object-Oriented Programming) 3 _____
- CS 280 (Algorithm Dev and Data Structure) 3 _____
- CS 305 (Operating System) 3 _____
- CS 320 (Database Management Systems) 3 _____
- CS 400 (Program Languages) 3 _____
- CS 405 (Computer Networks) 3 _____
- CS 415 (Software Engineering) 3 _____
- CS 485 (Senior Seminar) 3 _____

Choose two of the following (at least one of which must be a CS course):

- CS elective (200-level or above) 3 _____
- CS elective (200-level or above) 3 _____
- ART 250 (Introduction to New Media) 3 _____
- INFM 241 (Intro. to Informatics & Computing) 3 _____
- MATH 261 (Intro. to Prog. & Comp. Alg. Sys.) 3 _____

Minor Course Requirements (12-24 hours)

CS majors must complete either:

1. A minor in a selected field or
2. A second major

Title: _____ Hrs. Req. _____

General Electives (remaining for required hours)

GENERAL GRADUATION REQUIREMENTS

- | | |
|-----------------------------------|--|
| 1. 50% of hrs in major area at UM | 5. 45 hr limit of non-traditional credit |
| 2. 30 hrs 300/400 at UM | 6. 6-hr sequence in history or literature |
| 3. 30 of last 40 hours at UM | 7. Capstone experience within major |
| 4. 64 hr limit from 2-year school | 8. 2.0 or higher UM GPA and in all major and minor areas |

Total Hours Required: 120
 Total Hours Completed to Date: _____
 Hours Remaining for Completion: _____
 Hours Currently Registered: _____
 Hours Remaining: _____