# B.S. in Computer Science

| Code | Title | Semester Hours |
|------|-------|----------------|
| **BS in Computer Science with Math Minor Degree Plan (120 hours)** | | |
| **Core Requirements (42 hours)** | | |
| First Year Seminar | | 3 |
| FYE 1301 | First Year Seminar | |
| Freshmen Composition I | | 3 |
| EN 1311 | Rhetoric and Composition | |
| or EN 1313 | Rhetoric and Composition for International Students | |
| Literature | | 3 |
| Any EN 23XX literature course | | |
| History | | 3 |
| Any 1000, 2000, or 3000-level HS course | | |
| Social Science | | 6 |
| Select two from the following: BA 1310, CJ 1301, CPH 1301, EC 2301, EC 2303, ED 2330, HU 3300, HU 3303, PO 1311, PO 1312, PO 1314, PS 1301, PS 2310, PS 2353, PS 2355, PS 2363, PS 2337, SC 1311, SC 2321, SC 2371, 3 hrs. of Communication Studies (CM 1341, CM 2333, CM 2334) | | |
| Mathematics | | |
| Satisfied by MT 2412 in the courses required for this major. | | |
| Natural or Physical Sciences | | 3 |
| Select one: BL 1301, BL 1302, BL 3311, CH 1303, CH 1401, CH 1402, ES 1300, ES 1301, ES 1302, ES 1303, ES 1304, ES 1305, ES 1373, PY 1300, PY 1310, PY 1401, PY 1402 | | |
| Fine Arts | | 3 |
| AR 1300, AR 1301, AR 1311, AR 1312, AR 2301, AR 2321, AR 2361, AR 2362, AR 3331, AR 3351, AR 3381, AR 3392, 3 hrs. DM, 3 hrs. of MU | | |
| Foreign Language and International Engagement | | 6 |
| This requirement is satisfied through one of four ways: (1) One 3-hour course in any language at the 3000 level or above, with a grade of B or better; (2) Two courses (1311 and 1312) in a language not previously studied; (3) Two courses (2311 and 2312) in a language previously studied at the high school or college level; (4) Qualifying scores on an AP or CLEP exam, or both the ACTFL OPI and WPT exams | | |
| Philosophy - Self | | 3 |
| PL 1301 | Intro to Philosophy | |
| Philosophy - Ethics | | 3 |
| PL 2301 | Foundations of Ethics | |
| Theology - God | | 3 |
| TH 1301 | Introduction to Theology | |
| Intermediate Theology | | 3 |
| Any TH 33xx course | | |
| **Computer Science Major Courses (45 hours)** | | |
| CS 1310 | Programming I in C | 3 |
| CS 1311 | Data Structures | 3 |
| CS 2110 | Sophomore CS Seminar | 1 |
| CS 2313 | Object Oriented Programming I | 3 |
| CS 2315 | Algorithms | 3 |
| CS 2323 | Object Oriented Programming II | 3 |
| CS 2350 | Computer Architecture | 3 |
| CS 3110 | Junior CS Seminar | 1 |
| CS 3310 | Intro to Systems Analysis and Design | 3 |
| CS 3320 | Files and Database | 3 |
| CS 3330 | Computer Networks | 3 |
| CS 3335 | Survey of Programming Languages | 3 |

| CS 3340 | Software Engineering | 3 |
|---|---|---|
| CS 3350 | Operating Systems | 3 |
| CS 4110 | Senior CS Seminar | 1 |
| CS 4395 | Senior Project | 3 |
| CS 43XX Elective | | 3 |
| **Mathematics Minor (17 hours)** | | |
| MT 2412 | Calculus I | 4 |
| MT 2318 | Applied Linear Algebra | 3 |
| MT 2323 | Discrete Math Structures | 3 |
| MT 2413 | Calculus II | 4 |
| MT 3000 level or MT 2317 or MT 2414 | | 3 |
| **Electives (16 hours)** | | **16** |
| An elective can be any course taken from any discipline. Students can use these hours to pursue certificates, minors, or second majors. | | |
| Total Semester Hours | | 120 |

*This is a recommended degree plan subject to changes. Please meet with your adviser on a regular basis.*

**First Year**

| Fall | Semester Hours | Spring | Semester Hours |
|---|---|---|---|
| Elective | 3 | Social Science | 3 |
| FYE 1301 | 3 | Communication | 3 |
| EN 1311 | 3 | Literature | 3 |
| CS 1310 | 3 | CS 1311 | 3 |
| MT 2412 | 4 | MT 2413 | 4 |
| | | Fine Arts | 3 |
| | 16 | | 16 |

**Second Year**

| Fall | Semester Hours | Spring | Semester Hours |
|---|---|---|---|
| CS 2315 | 3 | CS 2323 | 3 |
| PL 1301 | 3 | PL 2301 | 3 |
| Foreign Language | 3 | CS 2350 | 3 |
| CS 2313 | 3 | Foreign Language | 3 |
| MT 2323 | 3 | MT 2318 | 3 |
| CS 2110 | 1 | | |
| | 16 | | 15 |

**Third Year**

| Fall | Semester Hours | Spring | Semester Hours |
|---|---|---|---|
| History | 3 | Advanced Theology | 3 |
| TH 1301 | 3 | CS 3330 | 3 |
| CS 43XX Elective (consider CS track course) | 3 | CS 3340 | 3 |
| CS 3110 | 1 | Elective | 3 |
| CS 3320 | 3 | MT 3000 level or MT 2317 or MT 2414 | |
| CS 3310 | 3 | CS 43XX Elective | 3 |
| | 16 | | 15 |

**Fourth Year**

| Fall | Semester Hours | Spring | Semester Hours |
|---|---|---|---|
| Natural / Physical Science | 3 | Social Science | 3 |
| Elective | 3 | CS 4395 | 3 |
| CS 3350 | 3 | Elective | 3 |

| CS 4110 | 1 | Elective | 3 |
|---|---|---|---|
| CS 3335 | 3 | Elective | 1 |
| | 13 | | 13 |

Total Semester Hours 120