This worksheet is designed to help you plan and track your progress toward your degree. It lists all graduation requirements in the recommended sequence. For full course descriptions, please refer to the current undergraduate Catalog.

### SEQUENCE

Courses are listed in the order in which students should take them. Changes in courses and order may affect other elements of the degree plan.

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<tr>
<th>COURSE TAKEN OR TRANSFERRED</th>
<th>SEMESTER TAKEN OR CREDIT REMAINING</th>
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Recommendations will differ for specific majors. Refer to catalog for alternatives to recommended general education requirements (GenEds). Courses used for GenEds may not be used in the major or minor.

### GENERAL EDUCATION COURSES (41 credits)

- **PACE 111T (3)** Or other PACE 111 course chosen from 111B, 111C, 111M, 111P, 111S, or 111T
- **WRTG 111 (3)** Or other 3-credit WRTG course except 288, 388, 486A, 486B, COMM 390 and 492, ENGL 102 and JOUR 201 apply
- **WRTG 112 (3)** Required GenEd course. Must be completed with a grade of C- or better
- **MATH 107 (3)** or other approved math GenEd course (MATH 105, MATH 107, STAT 200, or more advanced MATH or STAT)
- **LIBS 150 or CAPL 398A (1)** Or other GenEd elective
- **CMIS 102 (3)** Prerequisite for major courses and technology GenEd course
- **HIST 125 (3)** Or other arts/humanities GenEd course
- **HUMAN 100 (3)** Or other arts/humanities GenEd course
- **GEOL 100 (3)** Or other 3-credit biological/physical science GenEd course
- **BIOL 101/102 or NSCI 100/101 (4)** Or other biological/physical science GenEd course with related lab
- **ECON 103 (3)** Or other behavioral/social science GenEd course
- **BEHS 103 (3)** Or other behavioral/social science GenEd course
- **SPCH 100 (3)** Or other communication, writing, or speech GenEd course
- **WRTG 393 (3)** Or other upper-level advanced writing GenEd course

### CHECKLIST FOR FULFILLMENT OF DEGREE REQUIREMENTS

- 30 credits at UMGC, including at least half of the major and minor and 15 upper level credits.
- 45 upper-level credits, including half the credit for the major and for the minor.
- All required courses and minimum number of credits for major and minor.
- Prerequisites for major and minor courses, if needed.
- All General Education Requirements.
- Grade of C- or better in WRTG 112
- Grade of C or better in all courses for the major and minor.
- Overall GPA of at least 2.0.
- At least half the credit for the major earned through graded coursework.
- Total 120 credits.

### NOTES:
**Degree Worksheet (p. 2)**

## BS in Software Development and Security

### SEQUENCE
33 total credits for major, of which at least half must be upper-level and at least half taken through UMGC.

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**MAJOR COURSES (30 credits)**

- CMIS 141 Introductory Programming (3)
- CMIS 242 Intermediate Programming (3)
- CMIS 320 Relational Database Concepts and Applications (3)
- SDEV 300 Building Secure Web Applications (3)
- SDEV 325 Detecting Software Vulnerabilities (3)
- SDEV 350 Database Security (3)
- SDEV 360 Secure Software Engineering (3)
- SDEV 400 Secure Programming in the Cloud (3)
- SDEV 425 Mitigating Software Vulnerabilities (3)
- SDEV 460 Software Security Testing (3)

**CAPSTONE COURSE FOR MAJOR (3 credits)** *To be taken in last 9 credits*

- CMSC 495 Current Trends and Projects in Computer Science (3)

**MINOR OR ELECTIVES (15 credits, at least 9 credits upper level for minor)** Complete in last 60 credits along with major courses.

See requirements of individual minor.

**ADDITIONAL ELECTIVES (31 credits)** Complete in last 60 credits along with major and minor courses.

Choose any courses to meet 120 credits for degree.

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**TOTAL: 120 CREDITS**