

ACADEMIC ADVISING

Partnering with students to successfully navigate college

Location: Main Hall 208

Phone: 719.255.3260

Website: [Academic Advising](http://www.uccs.edu/academic-advising)

Connect With Your Advisor

Current UCCS Students

- Appointments: www.uccs.edu/advising/current-students

Prospective Students: www.uccs.edu/admissions/contact

GENERAL ACADEMIC INFORMATION

Minimum Graduation Requirements

- 125 credit hours
- 45 upper-division credit hours (3000-4999 level)
- 2.0 CU cumulative GPA
- Residency: Last 30 credit hours of degree must be completed while registered in the College Engineering & Applied Science at UCCS

Student Responsibilities

Students are required to know and follow:

- All academic policies set forth by the University, College, and academic department in the UCCS Catalog: catalog.uccs.edu
- All course prerequisites designated by the University. Failure to meet course prerequisites may result in an administrative drop of the course from a student's schedule. See degree audit for course prerequisites within the academic major.

DEGREE REQUIREMENTS

Explore Computer Science: [Computer Science Home](http://www.uccs.edu/computer-science) | [College of Engineering and Applied Science \(uccs.edu\)](http://www.uccs.edu/college-of-engineering-and-applied-science)

| Major Requirements | | | |
|--|--|--|--------------|
| Computer Security Core Courses (55 hours) | Course/Area | Course Title | Credit Hours |
| <ul style="list-style-type: none"> • Requires a minimum of 46 credit hours of CS course work, with an additional 9 hours of Computer Science Electives. • Requires a minimum of 31 credit hours of upper-division (3000-4999 level) CS course work. • All CS Core and Mathematics courses must be completed with a grade of "C" or better. <p><i>You must be admitted into the College of Engineering in order to take CS 1450 or any 2000-level or higher CS coursework.</i></p> | CS 1150 | Principles of Computer Science | 3 |
| | CS 1450 | Data Structures & Algorithms | 3 |
| | CS 2060 | Programming in C | 3 |
| | CS 2080 | Programming with UNIX | 3 |
| | CS 2160 | Computer Org. & Assembly Language | 3 |
| | CS 3050 | Social & Ethical Implications of Computing | 1 |
| | CS 3020, CS 3060, OR CS 3080 | Advanced Object Technology Using C#/.NET Object Oriented Programming in C++ Python Programming | 3 |
| | CS 3300 | Software Engineering | 3 |
| | CS 3910 | System Administration & Security | 3 |
| | CS 4200 | Computer Architecture I | 3 |
| | CS 4220 | Computer Networks | 3 |
| | CS 4420 | Database Systems I | 3 |
| | CS 4500 | Operating Systems I | 3 |
| | CS 4910 | Fundamentals of Computer/Network Security | 3 |
| | CS 4920 | Applied Cryptography | 3 |
| | CS 4940 | Ethical Hacking | 3 |
| | CS Electives | <i>Complete 9 hours of upper-division (3000+ level) CS, CYSM, INFS, or MGMT electives that are focused on security. Faculty advisor approval required.</i> | |
| BI Innovation Core (24 hours) | INOV 1000 or INOV 1001 | Introduction to Entrepreneurship or Social Entrepreneurship | 3 |
| | INOV 1010 or INOV 1011 | The Innovation Process or Social Innovation | 3 |
| | INOV 2010 | Innovation Team: Analyze and Report | 3 |
| | INOV 2100 | Technical Writing, Proposals, and Presentations | 3 |
| | INOV 2500 | Business Law and Innovation | 3 |
| | INOV 3010 | Innovation Team: Research and Execute | 3 |
| | INOV 4010 | Innovation Team: Design and Lead | 3 |
| | INOV 4500 | Entrepreneurship and Strategy | 3 |
| BI Cross-Discipline Core (15 hours) | Complete one of the Cross-Discipline Cores listed below. Each Cross-Discipline Core consists of 15 credit hours. See the degree audit or Academic Catalog for specific courses: http://catalog.uccs.edu/ Business, Creative Communication, Globalization, Inclusive Education, or Custom (for Veterans and Transfer students only) | | 15 |

| General Education and Elective Requirements | | | | | | | | | | | | | | | | | | | | | |
|---|--|--|--------|----------------|----------|--|--|---|--|---|--|-----------------|---------------------------------|---------------|---------------------------------|--|--|----------------------|--|-----------------------|--|
| Core Writing Requirement (3 hours) | <ul style="list-style-type: none"> ENGL 1310, 1308, or 1305 (<i>Students choosing ENGL 1305 must complete ENGL 1300 first.</i>) Writing Portfolio – PORT 3000 (0 credits) or PORT 4000 (1 credit) or alternative – See Degree Audit | | | | | | | | | | | | | | | | | | | | |
| Mathematics (13 hours) <ul style="list-style-type: none"> Courses must be completed with a grade of “C” or better. | <ul style="list-style-type: none"> MATH 1350 MATH 2150 CS 2020 or MATH 3810 CS 2300 or MATH 3130 | | | | | | | | | | | | | | | | | | | | |
| Basic Science (10 hours) | Complete 10 hours of basic science courses from the following: BIOL 1300, BIOL 1310, BIOL 1350, BIOL 1360, CHEM 1401, CHEM 1402, CHEM 1411, CHEM 1412, PES 1110, PES 1160, PES 1120, PES 2160 | | | | | | | | | | | | | | | | | | | | |
| Compass Curriculum (3 hours) <ul style="list-style-type: none"> Explore and Navigate courses must be taken in departments other than the major. Writing Intensive, Inclusiveness, and Sustainability courses may count toward other requirements within the degree. | <table border="1"> <thead> <tr> <th>Component</th> <th>Course</th> </tr> </thead> <tbody> <tr> <td>Gateway</td> <td>GPS 1010</td> </tr> <tr> <td>Explore – Arts, Humanities and Cultures</td> <td>INOV 1010 or INOV 1011 (included in BI Core)</td> </tr> <tr> <td>Explore – Society, Behavior and Health</td> <td>INOV 1000 or INOV 1001 (included in BI Core)</td> </tr> <tr> <td>Explore – Physical and Natural World</td> <td>Basic Science Course (included in Basic Science requirement)</td> </tr> <tr> <td>Navigate</td> <td>INOV 3010 (included in BI Core)</td> </tr> <tr> <td>Summit</td> <td>INOV 4500 (included in BI Core)</td> </tr> <tr> <td>Writing Intensive Courses (WIC) <i>Two courses with one upper-division (3000+ level)</i></td> <td> <ul style="list-style-type: none"> INOV 2010 (included in BI Core) INOV 3010 (included in BI Core) </td> </tr> <tr> <td>Inclusiveness</td> <td>INOV 1010 or INOV 1011 (included in BI Core)</td> </tr> <tr> <td>Sustainability</td> <td>INOV 1000 or INOV 1001 (included in BI Core)</td> </tr> </tbody> </table> | Component | Course | Gateway | GPS 1010 | Explore – Arts, Humanities and Cultures | INOV 1010 or INOV 1011 (included in BI Core) | Explore – Society, Behavior and Health | INOV 1000 or INOV 1001 (included in BI Core) | Explore – Physical and Natural World | Basic Science Course (included in Basic Science requirement) | Navigate | INOV 3010 (included in BI Core) | Summit | INOV 4500 (included in BI Core) | Writing Intensive Courses (WIC) <i>Two courses with one upper-division (3000+ level)</i> | <ul style="list-style-type: none"> INOV 2010 (included in BI Core) INOV 3010 (included in BI Core) | Inclusiveness | INOV 1010 or INOV 1011 (included in BI Core) | Sustainability | INOV 1000 or INOV 1001 (included in BI Core) |
| | Component | Course | | | | | | | | | | | | | | | | | | | |
| | Gateway | GPS 1010 | | | | | | | | | | | | | | | | | | | |
| | Explore – Arts, Humanities and Cultures | INOV 1010 or INOV 1011 (included in BI Core) | | | | | | | | | | | | | | | | | | | |
| | Explore – Society, Behavior and Health | INOV 1000 or INOV 1001 (included in BI Core) | | | | | | | | | | | | | | | | | | | |
| | Explore – Physical and Natural World | Basic Science Course (included in Basic Science requirement) | | | | | | | | | | | | | | | | | | | |
| | Navigate | INOV 3010 (included in BI Core) | | | | | | | | | | | | | | | | | | | |
| | Summit | INOV 4500 (included in BI Core) | | | | | | | | | | | | | | | | | | | |
| Writing Intensive Courses (WIC) <i>Two courses with one upper-division (3000+ level)</i> | <ul style="list-style-type: none"> INOV 2010 (included in BI Core) INOV 3010 (included in BI Core) | | | | | | | | | | | | | | | | | | | | |
| Inclusiveness | INOV 1010 or INOV 1011 (included in BI Core) | | | | | | | | | | | | | | | | | | | | |
| Sustainability | INOV 1000 or INOV 1001 (included in BI Core) | | | | | | | | | | | | | | | | | | | | |
| Open Electives (2 hours) | Complete any 2 hours of Elective coursework except Computer Science courses numbered below CS 1150, or Math courses numbered below MATH 1350. | | | | | | | | | | | | | | | | | | | | |

FOUR-YEAR DEGREE PLAN

Please note that this is an *example* degree program and your program may vary. **Students are responsible for completing all course prerequisites.**

| Year One | ✓ | FALL | Hours | ✓ | SPRING | Hours |
|----------|---|------------------------|---------|---|------------------------------|---------|
| | | | CS 1150 | 3 | | CS 1450 |
| | | ENGL 1310 | 3 | | CS 2060 | 3 |
| | | INOV 1000 or INOV 1001 | 3 | | INOV 1010 or INOV 1011 | 3 |
| | | GPS 1010 | 3 | | MATH 2150 | 3 |
| | | MATH 1350 | 4 | | Cross Discipline Core Course | 3 |
| | | TOTAL | 16 | | TOTAL | 15 |

| Year Two | ✓ | FALL | Hours | ✓ | SPRING | Hours |
|----------|---|----------------------------------|-----------|---|------------------------------|-------------------------------|
| | | | INOV 2500 | 3 | | CS 3060 or CS 3020 or CS 3080 |
| | | CS 2080 | 3 | | CS 3910 | 3 |
| | | CS 2160 | 3 | | INOV2010 | 3 |
| | | CS 2300 or MATH 3130 | 3 | | INOV 2100 | 3 |
| | | CS 2020 or ECE 3610 or QUAN 2010 | 3 | | Cross Discipline Core Course | 3 |
| | | Cross Discipline Core Course | 3 | | | |
| | | TOTAL | 18 | | TOTAL | 15 |

| Year Three | ✓ | FALL | Hours | ✓ | SPRING | Hours |
|------------|---|----------------------------|---------|---|------------------------------|---------|
| | | | CS 3050 | 1 | | CS 3300 |
| | | CS 4910 | 3 | | CS 4200 | 3 |
| | | INOV 3010 | 3 | | CS 4220 | 3 |
| | | Computer Security Elective | 3 | | Cross Discipline Core Course | 3 |
| | | Basic Science w/Lab | 5 | | Basic Science w/Lab | 5 |
| | | | | | PORT 3000 | 0 |
| | | TOTAL | 15 | | TOTAL | 17 |

| Year Four | ✓ | FALL | Hours | ✓ | SPRING | Hours |
|-----------|---|----------------------------|---------|---|------------------------------|---------|
| | | | CS 4420 | 3 | | CS 4920 |
| | | CS 4500 | 3 | | INOV 4500 | 3 |
| | | INOV 4010 | 3 | | Computer Security Elective | 3 |
| | | Computer Security Elective | 3 | | Cross Discipline Core Course | 3 |
| | | CS 4940 | 3 | | Open Elective | 2 |
| | | TOTAL | 15 | | TOTAL | 14 |