Major Map: Cyber Intelligence
Bachelor of Science (B.S.)

College of Arts and Sciences Bulletin Year: 2021-2022

This course plan is a recommended sequence for this major. Courses designated as critical (!) may have a deadline for completion and/or affect time to graduation. Please see

the Program Notes section for details regarding "critical courses" for this particular Program of Study.

| Critical Course Subject and Title Hours Grade¹ Gra | Notes |
|--|----------|
| ENGL 101 Critical Reading and Composition 3 | |
| ENGL 101 Critical Reading and Composition 3 | |
| MATH 141 Calculus I MATH 141 Calculus I Carolina Core SCI PSYC 101 Introduction to Psychology 3 C CC-GSS Foreign language³ or Approved Elective⁴ 3-4 CC-GFL Semester Two (17 Credit Hours) PSYC 102 Rhetoric and Composition 3 C CC-CMW C or better in ENGL 101 CC-INF MATH 142 Calculus II Carolina Core SCI Select one from the following: POL 101 Introduction to Global Politics ANTH 102 Understanding Other Cultures GEOG 121 Globalizations and World Regions GEOG 210 People, Places, and Environments Foreign language³ or Approved Elective⁴ 3 CC-GFL Semester Three (16 Credit Hours) STAT 509 Statistics for Engineering or STAT 515 Statistical Methods I Carolina Core GHS⁵ 3 C CR MATH 142 (STAT 509) MATH 141 (STAT 515) CSCE 145 Algorithmic Design I 4 C PR Carolina Core GHS⁵ 3 C CR GEOG 105 The Digital Earth 3 C CR Foreign language³ or Approved Elective⁴ 3 CR/CC Semester Four (14 Credit Hours) CSCE 146 Algorithmic Design II 4 C PR Cor better in CSCE 145 | |
| Carolina Core SCI | |
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| Semester Two (17 Credit Hours) ! ENGL 102 Rhetoric and Composition 3 C CC-CMW C or better in ENGL 101 CC-INF MATH 142 Calculus II 4 C CC-ARP C or better in MATH 141 Carolina Core SCI 4 CC-SCI Select one from the following: 3 C CR POLI 101 Introduction to Global Politics ANTH 102 Understanding Other Cultures GEOG 121 Globalizations and World Regions GEOG 210 People, Places, and Environments Foreign language³ or Approved Elective⁴ 3 CC-GFL Semester Three (16 Credit Hours) STAT 509 Statistics for Engineering 3 C CR MATH 142 (STAT 509) or STAT 515 Statistical Methods I CARD MATH 141 (STAT 515) CSCE 145 Algorithmic Design I 4 C PR Carolina Core GHS⁵ 3 CC GEOG 105 The Digital Earth 3 CC Semester Four (14 Credit Hours) CSCE 146 Algorithmic Design II 4 C PR C Or better in CSCE 145 CSCE 146 Algorithmic Design II 4 C PR C Or better in CSCE | |
| ! ENGL 102 Rhetoric and Composition 3 C CC-CMW CC-INF C or better in ENGL 101 CC-INF MATH 142 Calculus II 4 C CC-ARP C or better in MATH 141 Carolina Core SCI 4 CC-SCI Select one from the following: POLI 101 Introduction to Global Politics ANTH 102 Understanding Other Cultures GEOG 121 Globalizations and World Regions GEOG 210 People, Places, and Environments CC-GFL Foreign language³ or Approved Elective⁴ 3 CC-GFL Semester Three (16 Credit Hours) 3 C CR STAT 509 Statistics for Engineering or STAT 515 Statistical Methods I 3 C CR CSCE 145 Algorithmic Design I 4 C PR Carolina Core GHS⁵ 3 C CR GEOG 105 The Digital Earth 3 C CR Foreign language³ or Approved Elective⁴ 3 C CR/CC Semester Four (14 Credit Hours) 4 C PR C or better in CSCE CSCE 146 Algorithmic Design II 4 C PR C or better in CSCE | |
| MATH 142 Calculus II Carolina Core SCI Select one from the following: POLI 101 Introduction to Global Politics ANTH 102 Understanding Other Cultures GEOG 121 Globalizations and World Regions GEOG 210 People, Places, and Environments Foreign language3 or Approved Elective4 STAT 509 Statistics for Engineering or STAT 515 Statistical Methods I CSCE 145 Algorithmic Design I Carolina Core GHS5 GEOG 105 The Digital Earth Foreign languaga3 or Approved Elective4 CSCE 146 Algorithmic Design II CSCE 145 Cor better in CSCE 145 | |
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| or STAT 515 Statistical Methods I MATH 141 (STAT 515) CSCE 145 Algorithmic Design I 4 C PR Carolina Core GHS ⁵ 3 CC GEOG 105 The Digital Earth 3 C CR Foreign language³ or Approved Elective⁴ 3 CR/CC Semester Four (14 Credit Hours) CSCE 146 Algorithmic Design II 4 C PR C or better in CSCE 145 | |
| Carolina Core GHS ⁵ 3 | |
| GEOG 105 The Digital Earth 3 C CR Foreign language³ or Approved Elective⁴ 3 CR/CC Semester Four (14 Credit Hours) CSCE 146 Algorithmic Design II 4 C PR C or better in CSCE 145 | |
| Foreign language³ or Approved Elective⁴ 3 CR/CC Semester Four (14 Credit Hours) CSCE 146 Algorithmic Design II 4 C PR C or better in CSCE 145 | |
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| CSCE 146 Algorithmic Design II 4 C PR C or better in CSCE 145 | |
| | |
| 142 | |
| SPCH 213 Communicating Moral Issues 3 CC-CMS | |
| 200-level Foreign Language ⁶ 3 CR See Bulletin listing | |
| Semester Five (15 Credit Hours) | |
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| CSCE 201 Introduction to Computer Security 3 C PR CSCE 145 MATH 374 Discrete Structures 3 C MR C or better in MATH 142 and CSCE 146 | |
| | + |
| | _ |
| POLI 201 American National Government 3 CC-VSR | |
| 200-level Foreign Language ⁶ 3 PR See Bulletin listing | |
| Semester Six (15 Credit Hours) | <u> </u> |
| STAT 587 Big Data Analytics (cross-listed with CSCE 587) or STAT 530 Applied Multivariate Statistics and Data Mining STAT 587 Big Data Analytics (cross-listed with 3 C MR C or better in STAT 509 or 515 | |
| Law and Public Policy course ⁷ 3 C MR | |
| PHIL 320 Ethics 3 C MR | 1 |
| or POLI 504 Politics and Ethics | |
| 300-level Foreign Language ⁶ 3 PR See Bulletin listing | + |
| GEOG 345 Interpretation of Aerial Photographs 3 C MR | + |
| | <u> </u> |
| Semester Seven (15 Credit Hours) Select one from the following: MATH 528 Math Foundations of Machine Learning 3 C MR C or better in MATH 344 (MATH 528) | |
| & Data Science C or better in MATH | |
| or MATH 572 Math Foundations of Network Science or MATH 587 Introduction to Cryptography (cross- listed with CSCE 557) or STAT 516 – Statistical Methods II 344 and 374 (MATH 572) C or better in CSCE 145 and MATH 374 (MATH 587) STAT 509 or 515 (STAT 516) | |
| or MATH 572 Math Foundations of Network Science or MATH 587 Introduction to Cryptography (cross- listed with CSCE 557) or STAT 516 – Statistical Methods II Law and Public Policy course ⁷ 344 and 374 (MATH 572) C or better in CSCE 145 and MATH 374 (MATH 587) STAT 509 or 515 (STAT 516) | |
| or MATH 572 Math Foundations of Network Science or MATH 587 Introduction to Cryptography (cross- listed with CSCE 557) or STAT 516 – Statistical Methods II Law and Public Policy course ⁷ PSYC 410 Behavioral and Mental Disorders or PSYC 430 Survey of Social Psychology or PSYC 440 Survey of Personality 344 and 374 (MATH 572) C or better in CSCE 145 and MATH 374 (MATH 587) STAT 509 or 515 (STAT 516) MR PSYC 101 or SCHC 130 | |
| or MATH 572 Math Foundations of Network Science or MATH 587 Introduction to Cryptography (cross- listed with CSCE 557) or STAT 516 – Statistical Methods II Law and Public Policy course ⁷ PSYC 410 Behavioral and Mental Disorders or PSYC 430 Survey of Social Psychology 344 and 374 (MATH 572) C or better in CSCE 145 and MATH 374 (MATH 587) STAT 509 or 515 (STAT 516) MR PSYC 101 or SCHC | |

| Semester Eight (12 Credit Hours) | | | | | | |
|--|---|---|--|----|----------------------|--|
| CSCE 522 Information Security Principles | 3 | С | | MR | CSCE 146 and MATH | |
| | | | | | 374 | |
| Domestic and Global Cyber-challenges course ⁷ | 3 | С | | MR | See Bulletin listing | |
| GEOG 551 Principles of Remote Sensing | 3 | С | | MR | | |
| or GEOG 563 Advanced Global Information | | | | | | |
| Systems | | | | | | |
| History ⁸ | 3 | | | CR | | |

Graduation Requirements Summary

| Minimum Total Hours | Minimum Major Requirements Hours | College & Program Requirements Hours | Carolina Core Hours | Minimum Institutional GPA | |
|------------------------|-------------------------------------|---|---------------------|------------------------------|--|
| 120 | 43 | 29-46 | 34-46 | 2.000 | |

- 1. Regardless of individual course grades, students must maintain a minimum 2.000 institutional GPA.
- 2. Some colleges require a minimum GPA for major courses. Courses indicated in this column are included in the major GPA for this program of study.
- 3. Students in the College of Arts and Sciences are required to demonstrate proficiency in one foreign language equivalent to the 122 course through course credit or the corresponding foreign language placement score.
- 4. No courses of a remedial, developmental, skill-acquiring, or vocational nature may apply as credit toward degrees in the College of Arts and Sciences. The College of Arts and Sciences allows the use of the Pass-Fail option on elective courses. Further clarification on inapplicable courses can be obtained from the College of Arts and Sciences.
- 5. The Carolina Core provides the common core of knowledge, skill and academic experience for all Carolina undergraduate students.
- 6. Students may use a 200-level foreign language course, if needed, to fulfill the 3 hours of Fine Arts of Humanities requirement. Students in the Cyber Intelligence major must complete at least 3 hours of foreign language at the 300-level.
- 7. Students must complete 6 credit hours of Law and Public Policy courses and 6 credit hours of Domestic and Global Cyber-challenges courses:

| Law and Public Policy courses (6 hours) | Domestic and Global Cyber-challenges courses (6 hours) |
|--|---|
| POLI 315 International Relations | CRJU 424 Criminal Justice Intelligence |
| POLI 342 National Security Policies of the United States | CRJU 440 Homeland Security and Terrorism |
| POLI 417 Theories of War in International Relations | CRJU 512 Information-Based Management in Criminal Justice |
| POLI 420 International Law | CRJU 577 Law and Criminal Justice Policy |
| POLI 421 Law and Contemporary International Problems | CRJU 582 Computer Applications in Criminal Justice |
| POLI 433 Economic Aspects of International Politics | HIST 397 Evolution of Warfare |
| POLI 442 Globalization and Security | HIST 468 American Military Experience |
| POLI 450 Constitutional Law I | |
| POLI 451 Constitutional Law II | |
| GEOG 515 Political Geography | |

8. The College of Arts and Sciences requires one U.S. History and one non-U.S. History course, both of which must be chosen from the approved Carolina Core GHS courses. Whichever is not fulfilled through the Carolina Core GHS requirement must be fulfilled through this college requirement.

Program Notes:

- Courses identified as "critical" must be completed in the student's first 60 semester hours of work in order for these courses to be credited toward graduation.
- All undergraduate students must take a 3-credit course or its equivalent with a passing grade that covers the founding documents. This course may fulfill any requirement in the program of study. Courses that meet this requirement are listed in the academic bulletin.
- The last 30 credit hours toward your degree must be earned in residence at the University of South Carolina-Columbia.

University Requirements: Bachelor's degree-seeking students must meet Carolina Core (general education) requirements. For more information regarding these requirements, please visit the <u>Carolina Core</u> page on the University website.

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|-------------------|--|--------|---|--|--|--|
| Codes: | odes: | | | | | |
| CC | Carolina Core | CC-INF | Carolina Core – Information Literacy | | | |
| CC-AIU | Carolina Core-Aesthetic and Interpretive Understanding | CC-INT | Carolina Core – Integrative Course | | | |
| CC-ARP | Carolina Core-Analytical Reasoning and Problem-Solving | CC-SCI | Carolina Core – Scientific Literacy | | | |
| CC-CMS | Carolina Core-Effective, Engaged, and Persuasive Communication: Spoken Component | CC-VSR | Carolina Core – Values, Ethics, and Social Responsibility | | | |
| CC-CMW | Effective, Engaged, and Persuasive Communication: Written Component | CR | College Requirement | | | |
| CC-GFL | Carolina Core-Global Citizenship and Multicultural Understanding: Foreign Language | MR | Major Requirement | | | |
| CC-GHS | Carolina Core – Historical Thinking | PR | Program Requirement | | | |
| CC-GSS | Carolina Core – Social Sciences | | | | | |

Disclaimer: Major maps are only a suggested or recommended sequence of courses required in a program of study. Please contact your academic advisor for assistance in the application of specific coursework to a program of study and course selection and planning for upcoming semesters.