# CYBERSECURITY ANALYTICS AND OPERATIONS, B.S. <br> (ALTOONA) 

Begin Campus: Any Penn State Campus
End Campus: Altoona

## Degree Requirements

For the B.S. degree in Cybersecurity Analytics and Operations, a minimum of 123 credits is required:

| Requirement | Credits |
| :--- | :--- |
| General Education | 45 |
| Electives | 3 |
| Requirements for the Major | 87 |

12 of the 45 credits for General Education are included in the Requirements for the Major. This includes: 6 credits of GQ courses, 3 credits of GS courses, 3 credits of GWS courses.

## Requirements for the Major

To graduate, a student enrolled in the major must earn a grade of C or better in each course designated by the major as a C-required course, as specified by Senate Policy 82-44 (https://senate.psu.edu/policies-and-rules-for-undergraduate-students/82-00-and-83-00-degree-requirements/ \#82-44).

| Code | Title | Credits |
| :--- | :--- | :--- |
| Prescribed Courses |  |  |
| Prescribed Courses: Require a grade of C or better |  |  |
| CYBER 262 | Cyber-Defense Studio | 3 |
| CYBER 342W | Cyber Incident Handling and Response | 3 |
| CYBER 362 | Cybersecurity Analytics Studio | 3 |
| CYBER 366 | Malware Analytics | 3 |
| CYBER 440 | Cybersecurity Capstone | 3 |
| IST 210 | Organization of Data | 3 |
| IST 220 | Networking and Telecommunications | 3 |
| IST 230 | Language, Logic, and Discrete Mathematics | 3 |
| IST 432 | Legal and Regulatory Environment of Information | 3 |
| IST 451 | Science and Technology | 3 |
| Network Security 454 | Computer and Cyber Forensics | 3 |
| IST 456 | Information Security Management | 3 |
| IST 495 | Internship | 1 |
| SRA 111 | Introduction to Security and Risk Analysis | 3 |
| SRA 211 | Threat of Terrorism and Crime | 3 |
| SRA 221 | Overview of Information Security | 3 |
| SRA 231 | Decision Theory and Analysis | 3 |
| SRA 311 | Risk Analysis in a Security Context | 3 |
| SRA 365 | Statistics for Security and Risk Analysis | 3 |
| Addi0nal | S | 3 |

## Additional Courses

Additional Courses: Require a grade of $C$ or better
CYBER $100 \quad$ Computer Systems Literacy


## Integrative Studies

- Inter-Domain Courses (Inter-Domain): 6 credits


## Exploration

- GN, may be completed with Inter-Domain courses: 3 credits
- GA, GH, GN, GS, Inter-Domain courses. This may include 3 credits of World Language course work beyond the 12th credit level or the requirements for the student's degree program, whichever is higher: 6 credits


## University Degree Requirements

## First Year Engagement

All students enrolled in a college or the Division of Undergraduate Studies at University Park, and the World Campus are required to take 1 to 3 credits of the First-Year Seminar, as specified by their college First-Year Engagement Plan.

Other Penn State colleges and campuses may require the First-Year Seminar; colleges and campuses that do not require a First-Year Seminar provide students with a first-year engagement experience.

First-year baccalaureate students entering Penn State should consult their academic adviser for these requirements.

## Cultures Requirement

6 credits are required and may satisfy other requirements

- United States Cultures: 3 credits
- International Cultures: 3 credits


## Writing Across the Curriculum

3 credits required from the college of graduation and likely prescribed as part of major requirements.

## Total Minimum Credits

A minimum of 120 degree credits must be earned for a baccalaureate degree. The requirements for some programs may exceed 120 credits. Students should consult with their college or department adviser for information on specific credit requirements.

## Quality of Work

Candidates must complete the degree requirements for their major and earn at least a 2.00 grade-point average for all courses completed within their degree program.

## Limitations on Source and Time for Credit Acquisition

The college dean or campus chancellor and program faculty may require up to 24 credits of course work in the major to be taken at the location or in the college or program where the degree is earned. Credit used toward degree programs may need to be earned from a particular source or within time constraints (see Senate Policy 83-80 (https://senate.psu.edu/ policies-and-rules-for-undergraduate-students/82-00-and-83-00-degree-requirements/\#83-80)). For more information, check the Suggested Academic Plan for your intended program.

