

# SECURITY AND RISK ANALYSIS, B.S. (ALTOONA)

**Begin Campus:** Any Penn State Campus

**End Campus:** Altoona

## Degree Requirements

For the Bachelor of Science degree in Security and Risk Analysis, a minimum of 120 credits is required:

| Requirement                | Credits |
|----------------------------|---------|
| General Education          | 45      |
| Electives                  | 5-13    |
| Requirements for the Major | 77-85   |

15 of the 45 credits for General Education are included in the Requirements for the Major. This includes: 6 credits of GQ courses; 6 credits of GS courses; and 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>).

### Common Requirements for the Major (All Options)

| Code  | Title   | Credits |
|---|---|---------|
| <b>Prescribed Courses</b>                                 |   |         |
| <i>Prescribed Courses: Require a grade of C or better</i> |   |         |
| IST 110   | Information, People and Technology  | 3       |
| IST 210   | Organization of Data  | 3       |
| IST 432   | Legal and Regulatory Environment of Information Science and Technology      | 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       |
| STAT 200  | Elementary Statistics   | 4       |
| <b>Additional Courses</b>                                 |   |         |
| ENGL 202C<br>or ENGL 202D                                 | Effective Writing: Technical Writing<br>Effective Writing: Business Writing | 3       |
| PSYCH 100<br>or SOC 5                                     | Introductory Psychology<br>Social Problems                                  | 3       |
| Select one of the following:                              |   | 3       |
| AGBM 101  | Economic Principles of Agribusiness Decision Making                         |         |
| ECON 102  | Introductory Microeconomic Analysis and Policy                              |         |
| ECON 104  | Introductory Macroeconomic Analysis and Policy                              |         |
| Select one of the following:                              |   | 3-5     |
| MATH 22   | College Algebra With Analytic Geometry and Applications II                  |         |

|   |  |       |
|---|--|-------|
| MATH 26   | Plane Trigonometry and Applications of Trigonometry                          |       |
| MATH 40   | Algebra, Trigonometry, and Analytic Geometry                                 |       |
| MATH 41   | Trigonometry and Analytic Geometry   |       |
| MATH 110  | Techniques of Calculus I   |       |
| MATH 140  | Calculus With Analytic Geometry I  |       |
| Select one of the following:                              |  | 3     |
| GEOG 128  | Geography of International Affairs   |       |
| PLSC 1  | American Politics: Principles, Processes and Powers                          |       |
| PLSC 14   | International Relations  |       |
| <i>Additional Courses: Require a grade of C or better</i> |  |       |
| SRA 365<br>or STAT 460                                    | Statistics for Security and Risk Analysis<br>Intermediate Applied Statistics | 3     |
| Select one of the following:                              |  | 3     |
| IST 140   | Introduction to Application Development                                      |       |
| CMPSC 101   | Introduction to Programming  |       |
| CMPSC 121   | Introduction to Programming Techniques                                       |       |
| <b>Requirements for the Option</b>                        |  |       |
| Select an option  |  | 30-36 |

### Requirements for the Option

#### Intelligence Analysis and Modeling Option (36 credits)

*Available at the following campuses: University Park, World Campus*

| Code  | Title  | Credits |
|---|--|---------|
| <b>Prescribed Courses</b>                                 |  |         |
| <i>Prescribed Courses: Require a grade of C or better</i> |  |         |
| IST 452   | Legal and Regulatory Environment of Privacy and Security | 3       |
| SRA 268   | Visual Analytics   | 3       |
| SRA 311W  | Risk Analysis in a Security Context                      | 3       |
| SRA 421   | The Intelligence Environment                             | 3       |
| SRA 433   | Deception and Counterdeception                           | 3       |
| SRA 440W  | Security and Risk Analysis Capstone Course               | 3       |
| SRA 468   | Spatial Analysis of Risks                                | 3       |

#### Supporting Courses and Related Areas

Select 15 credits from College-approved list (at least 3 credits must be at the 400-level) 15

#### Information and Cyber Security Option (30 credits)

*Available at the following campuses: Altoona, Berks, Harrisburg, University Park, World Campus*

| Code  | Title   | Credits |
|---|---|---------|
| <b>Prescribed Courses</b>                                 |   |         |
| <i>Prescribed Courses: Require a grade of C or better</i> |   |         |
| IST 220   | Networking and Telecommunications                                   | 3       |
| IST 451   | Network Security  | 3       |
| IST 454   | Computer and Cyber Forensics  | 3       |
| IST 456   | Information Security Management                                     | 3       |
| SRA 311   | Risk Analysis in a Security Context                                 | 3       |
| <b>Additional Courses</b>                                 |   |         |
| <i>Additional Courses: Require a grade of C or better</i> |   |         |
| IST 440W  | Information Sciences and Technology Integration and Problem Solving | 3       |

or SRA 440W Security and Risk Analysis Capstone Course

### Supporting Courses and Related Areas

Select 12 credits from College-approved list (at least 3 credits must be at the 400-level) 12

## General Education

Connecting career and curiosity, the General Education curriculum provides the opportunity for students to acquire transferable skills necessary to be successful in the future and to thrive while living in interconnected contexts. General Education aids students in developing intellectual curiosity, a strengthened ability to think, and a deeper sense of aesthetic appreciation. These are requirements for all baccalaureate students and are often partially incorporated into the requirements of a program. For additional information, see the General Education Requirements (<https://bulletins.psu.edu/undergraduate/general-education/baccalaureate-degree-general-education-program/>) section of the Bulletin and consult your academic adviser.

The keystone symbol appears next to the title of any course that is designated as a General Education course. Program requirements may also satisfy General Education requirements and vary for each program.

### Foundations (grade of C or better is required and Inter-Domain courses do not meet this requirement.)

- **Quantification (GQ):** 6 credits
- **Writing and Speaking (GWS):** 9 credits

### Breadth in the Knowledge Domains (Inter-Domain courses do not meet this requirement.)

- **Arts (GA):** 3 credits
- **Health and Wellness (GHW):** 3 credits
- **Humanities (GH):** 3 credits
- **Social and Behavioral Sciences (GS):** 3 credits
- **Natural Sciences (GN):** 3 credits

### 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.