

# SECURITY AND RISK ANALYSIS, B.S. (INFORMATION SCIENCES AND TECHNOLOGY)

**Begin Campus:** Any Penn State Campus

**End Campus:** University Park

## 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.

### 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.)

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

### Knowledge Domains

- **Arts (GA):** 6 credits
- **Health and Wellness (GHW):** 3 credits
- **Humanities (GH):** 6 credits
- **Social and Behavioral Sciences (GS):** 6 credits
- **Natural Sciences (GN):** 9 credits

### Integrative Studies (may also complete a Knowledge Domain requirement)

- **Inter-Domain or Approved Linked Courses:** 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 (<http://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.

## 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 (<http://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

**Additional Courses**

ENGL 202C or ENGL 202D	Effective Writing: Technical Writing Effective Writing: Business Writing	3
PSYCH 100 or SOC 5	Introductory Psychology 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 II and Analytic Geometry	
MATH 26	Plane 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	

*Additional Courses: Require a grade of C or better*

SRA 365 or STAT 460	Statistics for Security and Risk Analysis 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	

**Requirements for the Option**

Select an option 30-36

**Requirements for the Option****Intelligence Analysis and Modeling Option (36 credits)**

*Available at the following campuses: University Park*

Code	Title	Credits
------	-------	---------

**Prescribed Courses**

*Prescribed Courses: Require a grade of C or better*

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
------	-------	---------

**Prescribed Courses**

*Prescribed Courses: Require a grade of C or better*

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

**Additional Courses**

*Additional Courses: Require a grade of C or better*

IST 440W or SRA 440W	Information Sciences and Technology Integration and Problem Solving Security and Risk Analysis Capstone Course	3
-------------------------	---	---

**Supporting Courses and Related Areas**

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