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:

<table>
<thead>
<tr>
<th>Requirement</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>General Education</td>
<td>45</td>
</tr>
<tr>
<td>Electives</td>
<td>5-13</td>
</tr>
<tr>
<td>Requirements for the Major</td>
<td>77-85</td>
</tr>
</tbody>
</table>

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)

<table>
<thead>
<tr>
<th>Code</th>
<th>Title</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>IST 110</td>
<td>Information, People, and Technology</td>
<td>3</td>
</tr>
<tr>
<td>IST 210</td>
<td>Organization of Data</td>
<td>3</td>
</tr>
<tr>
<td>IST 432</td>
<td>Legal and Regulatory Environment of Information and Technology</td>
<td>3</td>
</tr>
<tr>
<td>IST 495</td>
<td>Internship</td>
<td>1</td>
</tr>
<tr>
<td>SRA 111</td>
<td>Introduction to Security and Risk Analysis</td>
<td>3</td>
</tr>
<tr>
<td>SRA 211</td>
<td>Threat of Terrorism and Crime</td>
<td>3</td>
</tr>
<tr>
<td>SRA 221</td>
<td>Overview of Information Security</td>
<td>3</td>
</tr>
<tr>
<td>SRA 231</td>
<td>Decision Theory and Analysis</td>
<td>3</td>
</tr>
<tr>
<td>STAT 200</td>
<td>Elementary Statistics</td>
<td>4</td>
</tr>
</tbody>
</table>

Additional Courses
ENGL 202C | Effective Writing: Technical Writing                 | 3       |
or ENGL 202D Effective Writing: Business Writing

PSYCH 100 Introductory Psychology 3
or SOC 5 Social Problems

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 Statistics for Security and Risk Analysis 3
or STAT 460 Intermediate Applied Statistics

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

Intelligence Analysis and Modeling Option (36 credits)

Available at the following campuses: University Park

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<thead>
<tr>
<th>Code</th>
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</tr>
</thead>
<tbody>
<tr>
<td>Prescribed Courses</td>
<td></td>
<td></td>
</tr>
<tr>
<td>IST 452</td>
<td>Legal and Regulatory Environment of Privacy and Security</td>
<td>3</td>
</tr>
<tr>
<td>SRA 268</td>
<td>Visual Analytics</td>
<td>3</td>
</tr>
<tr>
<td>SRA 311W</td>
<td>Risk Analysis in a Security Context</td>
<td>3</td>
</tr>
<tr>
<td>SRA 421</td>
<td>The Intelligence Environment</td>
<td>3</td>
</tr>
<tr>
<td>SRA 433</td>
<td>Deception and Counterdeception</td>
<td>3</td>
</tr>
<tr>
<td>SRA 440W</td>
<td>Security and Risk Analysis Capstone Course</td>
<td>3</td>
</tr>
<tr>
<td>SRA 468</td>
<td>Spatial Analysis of Risks</td>
<td>3</td>
</tr>
</tbody>
</table>

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

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<tr>
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<tr>
<td>IST 220</td>
<td>Networking and Telecommunications</td>
<td>3</td>
</tr>
<tr>
<td>IST 451</td>
<td>Network Security</td>
<td>3</td>
</tr>
<tr>
<td>IST 454</td>
<td>Computer and Cyber Forensics</td>
<td>3</td>
</tr>
<tr>
<td>IST 456</td>
<td>Information Security Management</td>
<td>3</td>
</tr>
<tr>
<td>SRA 311</td>
<td>Risk Analysis in a Security Context</td>
<td>3</td>
</tr>
</tbody>
</table>

Additional Courses: Require a grade of C or better

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

Requirements for the Option

Select an option 30-36