

# SECURITY AND RISK ANALYSIS, MINOR

Requirements for a minor may be completed at any campus location offering the specified courses for the minor. Students may not change from a campus that offers their major to a campus that does not offer their major for the purpose of completing a minor.

## Program Description

The minor in Security and Risk Analysis (SRA) is intended to familiarize students with the general frameworks and multidisciplinary theories that define security and related risk analysis. Course work will engage students in the challenges and problems of assuring information confidentiality and integrity (e.g., social, economic, technology, and policy issues) as well as the strengths and weaknesses of various methods for assessing and mitigating associated risk in the students' major field.

The minor provides a grounding in analysis and modeling used in information search, visualization and creative problem solving. This knowledge is set in the context of legal, ethical and regulatory issues of security including analysis of privacy and security law, internal control standards, regulatory policies and basic investigative processes and principles. Such understanding overviews the information technology that plays a critical role in identifying, preventing and responding to security-related events in the student's major field.

## What is Security and Risk Analysis?

Security and risk analysis is a field that explores the integrated processes conducted to provide decision-makers with the information needed to understand factors that can negatively influence operations and outcomes, and make informed judgments concerning the extent of actions needed to reduce vulnerabilities, protect resources, and optimize investments. Security and risk analysis is a field of practice with two blended concentration areas: 1) security, which seeks to identify, understand, and analyze critical local, national and international security issues, and 2) risk, which includes risk assessment, risk characterization, risk communication, risk management, and the formulation of risk policy. In practice, the issues and processes for conducting of security and risk analytics are neither separate nor sequential. To be effective, the issues of security and risk must be addressed concurrently and synergistically.

MORE INFORMATION ABOUT SECURITY AND RISK ANALYSIS (<https://ist.psu.edu/students/undergrad/majors/sra>)

## You Might Like This Program If...

- You want to protect people, information, and assets from manmade and natural threats.
- You want to understand the role of data in protecting individuals, organizations and our nation.
- You are mission oriented, a good critical thinker and wish to put your problem-solving skills to work to make the world a safer place.
- You want to make informed strategic decisions that help to defend critical infrastructures that supports our daily lives.

## Program Requirements

Requirement	Credits
Requirements for the Minor	21

## Requirements for the Minor

At least 6 credits must be at the 400 level.

A grade of C or better is required for all courses in the minor, as specified by Senate Policy 59-10 (<http://senate.psu.edu/policies-and-rules-for-undergraduate-students/59-00-minors-and-certificates/#59-10>).

Code	Title	Credits
<b>Prescribed Courses</b>		
<i>Prescribed Courses: Require a grade of C or better</i>		
SRA 111	Introduction to Security and Risk Analysis	3
SRA 211	Threat of Terrorism and Crime	3
SRA 221	Overview of Information Security	3
<b>Additional Courses</b>		
<i>Additional Courses: Require a grade of C or better</i>		
IST 140 or CMPSC 101	Introduction to Application Development Introduction to Programming	3
IST 220 or SRA 231	Networking and Telecommunications Decision Theory and Analysis	3
Select 6 credits of the following: 6		
IST 432	Legal and Regulatory Environment of Information Science and Technology	
IST 451	Network Security	
IST 452	Legal and Regulatory Environment of Privacy and Security	
IST 453	Legal, Regulatory, Policy Environment of Cyber Forensics	
IST 454	Computer and Cyber Forensics	
IST 456	Information Security Management	
SRA 421	The Intelligence Environment	
SRA 468	Visual Analytics for Security Intelligence	
SRA 471	Informatics, Risk, and the Post-Modern World	
SRA 480	Crisis Informatics	

## Academic Advising

The objectives of the university's academic advising program are to help advisees identify and achieve their academic goals, to promote their intellectual discovery, and to encourage students to take advantage of both in-and-out-of class educational opportunities in order that they become self-directed learners and decision makers.

Both advisers and advisees share responsibility for making the advising relationship succeed. By encouraging their advisees to become engaged in their education, to meet their educational goals, and to develop the habit of learning, advisers assume a significant educational role. The advisee's unit of enrollment will provide each advisee with a primary academic adviser, the information needed to plan the chosen program of study, and referrals to other specialized resources.

READ SENATE POLICY 32-00: ADVISING POLICY (<http://senate.psu.edu/policies-and-rules-for-undergraduate-students/32-00-advising-policy>)

## University Park

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## Abington

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## World Campus

### Undergraduate Academic Advising

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## Career Paths

The Security and Risk Analysis program responds to the expanding need for a highly trained analytic workforce to address a wide range of security and risk domains including national/homeland security, emergency

and disaster management, law and crime, as well as enterprise risk management. The SRA degree prepares students to be future leaders to address the current and emerging security and risk challenges that face individuals, organizations and our nation. IST's Office of Career Solutions helps students navigate internship and career development through coaching, workshops, interview preparation, resume reviews, career fairs, job postings, and networking opportunities.

## Careers

Security and Risk Analysis students may specialize in risk domains ranging from national security to community emergency preparedness and response. Because our courses blend technical knowledge with skills in communication and business, a Security and Risk Analysis degree allows students to pursue opportunities in intelligence, counterterrorism, computer forensics, and a number of other growing careers. SRA graduates work in a variety of fields, including defense, business, and emergency management; and many graduates go on to work for government intelligence agencies like the CIA, FBI, and NSA.

MORE INFORMATION ABOUT POTENTIAL CAREER OPTIONS FOR GRADUATES WITH A MINOR IN SECURITY AND RISK ANALYSIS (<https://ist.psu.edu/students/careers/resources/search/jobtitles>)

## Opportunities for Graduate Studies

With a focus on problem solving, critical thinking and the presentation of analytic findings, the SRA program is a great stepping-stone to graduate education and higher learning. Many SRA graduates will go on to pursue graduate degrees in fields like law, cyber security, and data science. The foundational skills obtained in the SRA degree directly apply to graduate education.

## Contact

### University Park

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[https://ist.psu.edu/directory/office/grad\\_undergrad\\_studies](https://ist.psu.edu/directory/office/grad_undergrad_studies)

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<https://www.worldcampus.psu.edu/degrees-and-certificates/security-risk-analysis-minor/overview>