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To learn more about the Homeland Security graduate programs, visit: worldcampus.psu.edu/onlinehls

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"I did some extensive research on a Master's Degree in Homeland Security. The quality, reputation, and areas of specialization in the Penn State program made it the top choice for me. The interactions and responsiveness of Penn State World Campus, fellow students, and faculty made it feel like I was on campus. This degree has opened up many doors for me in my career. I feel like I'm part of a special group now, both professionally and as a Penn State alum."

—Anthony Flammia, Graduate, MPS in Homeland Security— Base Program

## **Online Homeland Security Portfolio**

Penn State's 33-credit online intercollege Master of Professional Studies (MPS) in Homeland Security program and graduate certificates can shape leaders who will make significant contributions to the U.S. homeland security enterprise and to civil security on a broader transnational and global scale. You can choose from multiple specialization areas, allowing you to tailor your studies to those areas that best match your strengths, interests, and career needs.

GRADUATE CERTIFICATE (12-15 credits)

#### **Graduate Certificates**

- Homeland Security
- Agricultural Biosecurity and Food Defense
- > Counterterrorism
- > Cyber Threat Analytics and Prevention
- Geospatial Intelligence
- > Information Systems Cybersecurity
- > Public Health Preparedness
- Hospital and Health System
  Preparedness

MASTER'S DEGREE (33 credits)

#### Master's Degree Specializations

- > Homeland Security Base Program
- Agricultural Biosecurity and Food Defense
- > Counterterrorism
- > Cyber Threat Analytics and Prevention
- > Geospatial Intelligence
- Information Security and Forensics
- Public Health Preparedness

#### **Core Curriculum and Specialization Courses**

The Homeland Security Master's Degree program's common core curriculum provides you with a basic understanding of management approaches, strategies, and organizations, as well as leadership in homeland security. You can gain fundamental knowledge of domestic and global aspects related to the field, and examine social, political, legal, and ethical issues that arise in the context of homeland security. After completing the core curriculum, you will pursue one of several specialization areas. Those comprise 12 credits in prescribed courses and 9 credits in electives, allowing you much flexibility to gear your studies to your academic and professional needs and preferences. In addition, you will take a 3-credit capstone course on research topics in your specialization area. No thesis is required.

For more information, including course descriptions, application details, and a free program orientation, visit: **worldcampus.psu.edu/onlinehls** 



### Homeland Security Base Program

The base program of the 33-credit online intercollege MPS degree, offered by the Penn State Harrisburg School of Public Affairs, focuses on general aspects of homeland security. Topics include homeland security policies and strategies of other nations; prevention of terrorism; core missions, current priorities, and legal foundations; interagency cooperation and homeland security intelligence; civilmilitary relations; national planning framework; crisis and emergency management, all-hazards preparedness and resilience to disasters; and homeland security risk methodology. Courses also address the need for collaboration between federal, state, and local entities and the growing importance of public-private partnerships.

#### Curriculum

The curriculum for the base program offers a comprehensive learning experience in homeland security foundation and implementation, applicable to the workplace. The set of prescribed courses provides general foundations of homeland security, emergency management, preparedness, and resilience. It offers a multidisciplinary introduction to homeland security organizational, policy and leadership studies, as well as to strategic analysis and planning within the whole-community and allhazards approach. You may choose electives from a broad field of disciplines contributing to the

homeland security enterprise and its evolving mission space.

#### Optional International Track

Civil security is a field with remarkable projected job growth around the world. In this optional track, based on state-of-the-art security research and its practical applications, you can learn about the differences and commonalities between homeland, national, and international security, as well as the characteristics of homeland security as an evolving global enterprise facing global challenges.

## Homeland Security Graduate Certificate

The 12-credit online Graduate Certificate in Homeland Security, offered by the Penn State Harrisburg School of Public Affairs, is designed to help professionals in varied backgrounds further their knowledge of homeland security policies, planning, and processes in an allhazards and whole-community context.

#### The curriculum covers topics such as:

- major legislation shaping homeland security
- > key actors and their interactions
- planning and organizational imperatives related to homeland security, including emergency management
- preparedness, resilience to disasters, and the impact of catastrophic events on society

The 12 credits you earn in the Homeland Security Graduate Certificate may be applied to the Master's (MPS) Degree in Homeland Security (Base Program), if you apply and are granted admission to the master's program. "Every professor that I've had and all the students I have come across have been nothing but professional, helpful, intelligent, and courteous. I have very much enjoyed my time with Penn State World Campus. I am confident that my Penn State degree will continue to be a benefit throughout my career."

-Meghann Stiff Graduate, MPS in Homeland Security-Base Program, International Track



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## Agricultural Biosecurity and Food Defense

By specializing in the Agricultural Biosecurity and Food Defense option of the 33-credit online Homeland Security program, you can gain a broad knowledge of the agricultural food system. Offered through the Penn State College of Agricultural Sciences, it covers natural and intentional threats to plant and food animal production; current diagnostic and surveillance technologies; regulatory aspects; local, state, and federal government roles; and methods for prevention, detection, response, and recovery for emergencies and incidents in this critical infrastructure sector.

This option is appropriate for those currently working in or aspiring to work in emergency management, law enforcement, intelligence, inspection, and other areas that interface with the agriculture food system.

#### Curriculum

The curriculum is designed to teach professionals how to act responsibly and effectively to protect our nation's most basic and valuable resources: our food, environments, and health. In addition to the 9 credits of core curriculum courses, the option has a set of prescribed courses and multidisciplinary electives.

## Agricultural Biosecurity and Food Defense Graduate Certificate

Penn State's 12-credit online Graduate Certificate in Agricultural Biosecurity and Food Defense, offered by the College of Agricultural Sciences, consists of courses designed to enhance your understanding of diverse agricultural and food supply chain systems, with emphasis on vulnerabilities, public health and surveillance systems, and compliance policies, in order to combat loss or theft of our resources for malicious use. The credits you earn in this certificate may be applied to the Agricultural Biosecurity and Food Defense option in the Master's Degree in Homeland Security, if you apply and are granted admission to the master's program.

## Counterterrorism

By specializing in the Counterterrorism option of the 33-credit online Homeland Security program through the Penn State College of the Liberal Arts, you can gain knowledge of strategic, policy-based, and practical solutions to terrorism in both the government and the private sectors. You can learn such core skills as threat and data analysis, intelligence writing, threat management, counterterrorism briefing, and anti-terrorism strategy assessment. For federal, state, and local emergency management officials, law enforcement personnel, and members of the military, as well as employees connected with the Department of Homeland Security and other federal agencies, this option can provide the knowledge and insight to help prevent

acts of terror. Individuals in the private sector, including those in finance corporations, insurance agencies, and security consultants, may also find the program relevant and valuable to their careers.

#### Curriculum

In addition to the 9 credits of core curriculum courses, the Counterterrorism option has a set of prescribed courses with a focus on understanding terrorist organizations in detail, along with their motives, threats, recruitment strategies, and operational tactics. Additional interdisciplinary electives allow you to expand your knowledge base in areas that fit your goals and interests.

### Counterterrorism Graduate Certificate

Penn State's 12-credit online Graduate Certificate in Counterterrorism, offered by the Department of Political Science, College of the Liberal Arts, is designed to enhance your understanding of the motives, threats, recruitment strategies, and operational tactics of terrorist organizations. The courses focus on key elements of counterterrorism, such as diagnosing the root causes of terrorism, understanding radicalization processes, and honing critical data gathering and analysis skills.

The 12 credits you earn in this graduate certificate may be applied to the Counterterrorism option in the Master's Degree in Homeland Security, if you apply and are granted admission to the master's program.

## **Geospatial Intelligence**

The Geospatial Intelligence option of the 33-credit online Homeland Security program is offered by the Penn State College of Earth and Mineral Sciences. The program focuses on the intersection of geography and intelligence-known as Geospatial Intelligence or "GEOINT." It gives the decision-makers an advantage of geographic knowledge to prevent surprise, exploit emerging opportunities, counteract threats, and provide time to adapt to a changing situation. Geospatial Intelligence gives decision-makers actionable knowledge of human use of geography to aide

homeland security, humanitarian, defense, law enforcement, and business decisions.

#### Curriculum

In addition to the 9 credits of core curriculum courses, this option is adaptable to the new or established working professional, with or without geographic information systems experience, who is interested in working in federal agencies or occupations requiring knowledge of cultural and political geography to solve problems and produce accurate intelligence to help save lives.



### Geospatial Intelligence Analytics Graduate Certificate

Expand your skills and enhance your credentials with the Penn State College of Earth and Mineral Sciences' 13-credit online graduate certificate that focuses on both technical skills and the analytical knowledge you need to apply those skills in the real world.

This program is ideal if you have some experience in geographic information systems and will be further honing your analytic skills in government, business, or humanitarian areas related to critical aspects of homeland security. You can learn to combine spatial thinking, information literacy, and geospatial technology skills with knowledge of cultural and human geography and a commitment to ethical practice. You can also enhance your ability to use spatial tools and data to solve analytic problems and then communicate this analysis in the context of issues of concern to your employer. Once you have successfully completed this certificate, you will also receive a certificate from the U.S. Geospatial Intelligence Foundation.

## Geospatial Intelligence Applications Postbaccalaureate Certificate

Begin your career in geospatial intelligence with the Penn State College of Earth and Mineral Sciences' 13-credit online postbaccalaureate certificate that introduces the technical skills required in the geospatial intelligence field and how to apply those skills in the real world.

This certificate is ideal if you are interested in starting a career in the geospatial intelligence field. You will be introduced to the theories, techniques, and ethics of the geospatial intelligence profession. These principles can be applied across several fields, including national security, disaster response, environmental resource preservation, or business. Once you have successfully completed this certificate, you will also receive a certificate from the U.S. Geospatial Intelligence Foundation.



## Cyber Threat Analytics and Prevention

The Cyber Threat Analytics and Prevention option of the 33-credit online Homeland Security program, offered by Penn State Great Valley, is ideal if you work in or want to transition to a career in homeland security or cyber threat analysis and prevention. This option will concentrate on the cyber and netcentric approach to analytics, appealing to individuals who are responsible for technical analysis and solutions to hacking, espionage, security, and counterterrorism over networks and the internet. This can help you gain knowledge and skills that are critical to success on the job, such as:

 technically exploring, analyzing, and visualizing attacks and threats launched over the internet

- using relevant tools, methods, and technologies in cyber threat monitoring, detection, analysis, and prevention/protection
- analysis, design, development, and deployment of appropriate applications and means to enhance protection from cyber threats and attacks

#### Curriculum

In addition to the 9 credits of core curriculum courses, this option can provide you with a focus on preventing cyber attacks and understanding cyber laws, as well as addressing network vulnerabilities, system threats, and cyber terrorism.

## Cyber Threat Analytics and Prevention Graduate Certificate

Penn State's 12-credit online Graduate Certificate in Cyber Threat Analytics and Prevention, offered in partnership with Penn State Great Valley and the College of Information Sciences and Technology, is designed to enhance your understanding of cyber attacks, cyber laws and regulations, cyber terrorism, network vulnerabilities, system threats, and surveillance protocols. You can acquire the skills needed to prevent, respond to, and recover from cyber threats and attacks.

The Homeland Security curriculum is designed so that the 12 credits you earn in the Cyber Threat Analytics and Prevention Graduate Certificate may be applied to the Cyber Threat Analytics and Prevention option in the Master's Degree in Homeland Security, if you apply and are granted admission to the master's program.

## **Information Security and Forensics**

The Information Security and Forensics option of the 33-credit online Homeland Security program, offered by the Penn State College of Information Sciences and Technology, is ideal if you work in or want to transition to a career in homeland security or information systems, cybersecurity, and information assurance. This option will focus on the forensics of cyber defense, analytics, and risk management, appealing more to managerial and penetration testing personnel in the security field. This can help you gain knowledge and skills that are critical to success on the job, such as:

- information systems, cybersecurity, and information assurance
- core technologies used in making a networked information system secure

- how to analyze the security of modern information systems
- building information systems with assurances and the role of "trust" in delivering these assurances
- how to comprehend socioeconomic aspects of security and the human factor in security

#### Curriculum

The curriculum is designed for experienced industry professionals who want to develop critical thinking and analytic and IT management skills related to information security and forensics, to enter either IT management in homeland security or the private security sector. In addition to the 9 credits of core curriculum courses, the option has a set of prescribed courses and multidisciplinary electives.

## Information Systems Cybersecurity Postbaccalaureate Certificate

This online 15-credit certificate can provide more in-depth knowledge about information security. You will study the principles, models, tools, and applications in information security, focusing on network security, risk management, digital forensics, crisis and disaster management, and web security and privacy. The curriculum is designed so that the 15 credits you earn may be applied to the Information Security and Forensics option in the Master's Degree in Homeland Security, if you apply and are granted admission to the master's program.

### **Public Health Preparedness**

By specializing in the Public Health Preparedness option of the 33-credit online Homeland Security program, offered by the Penn State College of Medicine, you can gain knowledge and skills related to public health and hospital preparedness. You will cover principles and methods of health exposure assessment, epidemiology and outbreak investigation, assessment of health system vulnerability, and protection of health care delivery systems. The option uses an all-hazards approach with training in the health impact of natural disasters, terrorist activity, and infectious disease outbreaks including bioterrorism. It is the first

online public health preparedness program curriculum offered by a medical school.

#### Curriculum

In addition to the 9 credits of core curriculum courses, the Public Health Preparedness option offers you the opportunity to specialize in areas such as preparing for disaster and terrorist public health emergencies, countering bioterrorism, or protecting critical infrastructure of health care delivery systems.



"There are things in Penn State's courses on critical infrastructure, terrorism, and communications that I use every day, some I wish I never had to use, some I thought I never would use."

-Charlette Roy, Graduate, MPS in Homeland Security—Public Health Preparedness Option

## Public Health Preparedness: Graduate Certificate

Penn State College of Medicine's 12-credit online Graduate Certificate in Public Health Preparedness can enhance your understanding of:

- > the public health impact of chemical, biological, radiological, and nuclear incidents, as well as natural disasters
- community resilience and preparation for emergency medical response
- the design and testing of emergency plans for hospitals and health care systems



 the principles of exposure assessment and measurement of risk of disease both locally and globally

### Hospital and Health System Preparedness Graduate Certificate

Penn State College of Medicine's 15-credit online graduate certificate can prepare you with the necessary knowledge and skills to protect the critical infrastructure of hospitals, medical facilities, and emergency management systems. Course topics include:

- coordinated disaster or terrorism
  response as it relates to public health
- fundamentals of emergency preparedness exercises
- impact of terrorist incidents on health care

The credits you earn in these graduate certificates may be applied to the Public Health Preparedness option in the Master's Degree in Homeland Security, if you apply and are granted admission to the master's program.

## Why Penn State?

#### Experience in Distance Education

As a distance education pioneer, Penn State has developed a nationally recognized support system for students who are geographically removed from campus. With our professional team of Penn State instructors, academic advisers, technical support experts, and student support representatives, we'll help you get where you want to go—successfully—through distance education.

#### Library Services

As a Penn State World Campus student, you will have access to one of the top 10 largest research library collections in North America—the Penn State University Libraries system, which holds more than 750 online research databases, 110,000 scholarly journals, and 444,000 electronic books. You can search the online catalog and review databases as if you were sitting at a terminal in any Penn State library.

#### Military and Veteran Students

We have aligned our online programs, student support services, policies, and procedures to support military personnel, veterans, and military family members.

#### An Exceptional Student/Alumni Body

Whether you take our courses online or in a traditional classroom, you become a "Penn Stater," who is part of:

- an institution with more than 150 years of excellence in teaching, research, and service
- > a proud network of more than 673,000 alumni located around the world, with representation in hundreds of professions. Take advantage of our vast alumni network to help you advance your career.

#### Networking Opportunities

Interact with dedicated, goal-oriented peers from around the world, creating a network of great ideas. As you communicate regularly with other classmates and faculty members, you'll gain insights that you can apply to your job immediately.

#### Student Support

We support our students with a variety of e-learning opportunities, including those that allow for real-time online interaction with classmates and professors. We also offer various kinds of help for students, from financial support to a learning center for writing support, as well as support with internships.

# **Begin Your Application Today**

Each specialization has slightly different requirements, but when applying to the master's degree or certificate, you may be required to include the following:

- > online application form and fee
- statement of purpose
- references
- › résumé
- transcripts from all institutions attended
- > GRE scores, if applicable
- > TOEFL or IELTS score, if applicable



To apply or for the most up-to-date information about these application materials, visit: **worldcampus.psu.edu/admissions** 

#### Did You Know?

- Penn State credits and degrees earned online are identical to those earned on campus.
- Penn State World Campus has enrolled students from all 50 states and all 7 continents.
- Our online courses involve frequent interactions among students and faculty.
- According to the U.S. Bureau of Labor Statistics, job occupations related to homeland security are expected to grow through 2020.
- Occupations in homeland security, and on a broader scale in civil security, continue to grow in both the public and private sectors.

# For More Information

#### **Contact Us**

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#### Penn State World Campus

The Pennsylvania State University 128 Outreach Building University Park, PA 16802 800 252 3592 (toll free within the United States)

For more information, including course descriptions, application details, and a free program orientation, visit: **worldcampus.psu.edu/onlinehls** 



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