

HOMELAND SECURITY

Degree Requirements

Master of Professional Studies (M.P.S)

Requirements listed here are in addition to Graduate Council policies listed under GCAC-700 Professional Degree Policies (<https://gradschool.psu.edu/graduate-education-policies/>).

The Master of Professional Studies in Homeland Security program requires a minimum of 33 credits, 24 of which must be earned at Penn State. Up to 10 graduate credits may be transferred in from a regionally accredited institution (subject to restrictions outlined in GCAC-309 Transfer Credit (<http://gradschool.psu.edu/graduate-education-policies/gcac/gcac-300/transfer-credit/>)); if the full 10 credits are transferred, the minimum total number of credits in the degree program will be 34. At least 18 credits must be courses at the 500 or 800 level, of which 6 credits must be in 500-level courses.

Students are expected to maintain a B (3.0) or better average in academic courses to be retained in the program. Graduate Council policy requires that students must have a GPA of 3.0 or above in order to graduate from the program.

Each student will take a 9-credit *core curriculum* consisting of HLS 801/PADM 801, HLS 803/PHIL 803, and HLS 805/PLSC 805, as well as a non-credit Orientation Course. Students will also take 12 credits of prescribed courses for the specialized option. There are 9 elective credits that are chosen from an approved list in consultation with the student's academic adviser. The list of electives is maintained by the Base Program and Option Directors and is provided to the students in the respective specialization area. Finally, each degree candidate must complete a capstone project on a topic related to homeland security and defense, in association with HLS 594/AGBIO 594/GEOG 594/INSC 594/IST 594/PHP 594/PLSC 594.

Time Limitation

All degree requirements for the Master of Professional Studies in Homeland Security must be met within five years of admission to degree status.

Prescribed Courses

Homeland security refers to the unifying core for the vast global network of organizations and institutions that are involved in the efforts to secure society. Regardless of field of specialization, or chosen discipline for graduate study, all professionals in the program will participate in a Unifying Core Curriculum with the following educational goals and objectives:

- Understand major policies and legislation that shapes homeland security in a globalized society.
- Become familiar with organizations that play a key role in the implementation of homeland security policies and administration, and recognize the interactions among them.
- Understand the way in which a person or group responds to a set of conditions so as to prevent and respond to incidents and catastrophic events when needed.
- Recognize the impact that catastrophic events, both natural and man-made, have on society and the domestic and global economy.
- Identify and assess potential threats, vulnerabilities, and consequences.
- Apply leadership skills and principles that are necessary for producing and acting on information of value within a collaborative setting.
- Communicate effectively in the context of particular institutional cultures.
- Use, conduct, and interpret research and data effectively in decision-making.
- Practice ethics and integrity as a foundation for analytical debate and conclusion.
- Develop an appreciation of the cultural, social, psychological, political, and legal aspects of terrorism and counterterrorism.

The Core Curriculum consists of the following four courses:

Code	Title	Credits
Required Courses		
HLS Orientation Course (non-credit)	Overview of program expectations, parts, academic specialization areas, and mechanics; as well as an essential overview of the field of homeland security and its community of practice. The Options may add content to aspects of homeland security that are specific to their academic specialization area.	0
HLS/PADM 801	Homeland Security Administration: Policies and Programs	3
HLS/PHIL 803	Homeland Security: Social and Ethical Issues	3
HLS/PLSC 805	Violence, Threats, Terror, and Insurgency	3
Total Credits		9

Listed below are the courses required/suggested for the Base Program and for the Options:

Homeland Security (Base Program)

Code	Title	Credits
Required Courses		
HLS Orientation		0
HLS/PADM 801	Homeland Security Administration: Policies and Programs	3
HLS/PHIL 803	Homeland Security: Social and Ethical Issues	3
HLS/PLSC 805	Violence, Threats, Terror, and Insurgency	3
Base Program Prescribed Courses		
HLS 811	Fundamentals of Homeland Security and Emergency Management	3
HLS 812	Homeland Security and Homeland Defense in Practice	3
HLS 813	Multifaceted Approaches to Homeland Security	3
HLS 558	Whole-Community Disaster Preparedness	3
Electives		
Choose 9 credits from an approved elective list in consultation with adviser. The list of electives is maintained by the Base Program Director and is provided to the students in the base program.		9
Capstone Experience		
HLS 594	Research Topics	3
Total Credits		33

Agricultural Biosecurity and Food Defense Option

Code	Title	Credits
Required Courses		
HLS Orientation		0
HLS/PADM 801	Homeland Security Administration: Policies and Programs	3
HLS/PHIL 803	Homeland Security: Social and Ethical Issues	3
HLS/PLSC 805	Violence, Threats, Terror, and Insurgency	3
<i>Agricultural Biosecurity and Food Defense Option Prescribed Courses</i>		
AGBIO 520	Agricultural Biosecurity: Protecting a Key Infrastructure	3
AGBIO 521	Food Defense: Prevention Planning for Food Processors	3
AGBIO 801	Veterinary Infectious Disease Diagnostic and Surveillance Systems	3
AGBIO 802	Plant Protection: Responding to Introductions of Threatening Pests and Pathogens	3
Electives		
Choose 9 credits from an approved elective list in consultation with adviser. The list of electives is maintained by the Option Director and is provided to the students in the option.		9
Capstone Experience		
AGBIO 594	Agricultural Biosecurity and Food Defense Capstone Experience	3
Total Credits		33

Counterterrorism Option

Code	Title	Credits
Required Courses		
HLS Orientation		0
HLS/PADM 801	Homeland Security Administration: Policies and Programs	3
HLS/PHIL 803	Homeland Security: Social and Ethical Issues	3
HLS/PLSC 805	Violence, Threats, Terror, and Insurgency	3
<i>Counterterrorism Option Prescribed Courses</i>		
PLSC 836	Root Causes of Terrorism	3
PLSC 569	Counterterrorism	3
PLSC 838	Tools and Analysis of Counterterrorism	3
PLSC 837	Radicalization, Counter-Radicalization, and De-Radicalization	3
Electives		
Choose 9 credits from an approved elective list in consultation with adviser. The list of electives is maintained by the Option Director and is provided to the students in the option.		9
Capstone Experience		
PLSC 594	Research in Political Science	3
Total Credits		33

Cyber Threat Analytics and Prevention Option

Code	Title	Credits
Required Courses		
HLS Orientation		0
HLS/PADM 801	Homeland Security Administration: Policies and Programs	3
HLS/PHIL 803	Homeland Security: Social and Ethical Issues	3

HLS/PLSC 805	Violence, Threats, Terror, and Insurgency	3
<i>Cyber Threat Analytics and Prevention Option Prescribed Courses</i>		12
<i>(Choose 4 out of the following 5)</i>		
SWENG 545	Data Mining	
INSC 561	Web Security and Privacy	
INSC 846	Network and Predictive Analytics for Socio-Technical Systems	
IST 564	Crisis, Disaster and Risk Management	
INSC 831	Contemporary Information Systems Architecture	
Electives		
Choose 9 credits from an approved elective list in consultation with adviser. The list of electives is maintained by the Option Director and is provided to the students in the option.		9
Capstone Experience		
INSC 594	Research Topics	3
Total Credits		33

Intelligence and Geospatial Analysis Option

Code	Title	Credits
Required Courses		
HLS Orientation		0
HLS/PADM 801	Homeland Security Administration: Policies and Programs	3
HLS/PHIL 803	Homeland Security: Social and Ethical Issues	3
HLS/PLSC 805	Violence, Threats, Terror, and Insurgency	3
<i>Intelligence and Geospatial Analysis Option Prescribed Courses</i>		
GEOG 882	Geographic Foundations of Geospatial Intelligence	3
GEOG 483	Problem-Solving with GIS	3
GEOG 479	Spatial Data Science for Cyber and Human Social Networks	3
GEOG 885	Analytical Methods and GeoAI in Geospatial Intelligence	3
Electives		
Choose 9 credits from an approved elective list in consultation with adviser. The list of electives is maintained by the Option Director and is provided to the students in the option.		9
Capstone Experience		
GEOG 594A	Culminating Experiences in Geospatial Intelligence	1
GEOG 594B	Geospatial Intelligence Capstone Experience	2
Total Credits		33

Information Security and Forensics Option

Code	Title	Credits
Required Courses		
HLS Orientation		0
HLS/PADM 801	Homeland Security Administration: Policies and Programs	3
HLS/PHIL 803	Homeland Security: Social and Ethical Issues	3
HLS/PLSC 805	Violence, Threats, Terror, and Insurgency	3
<i>Information Security and Forensics Option Prescribed Courses</i>		
IST 454	Computer and Cyber Forensics	3
IST 456	Information Security Management	3
IST 815	Foundations of Information Security and Assurance	3
IST 554	Network Management and Security	3

Electives

Choose 9 credits from an approved elective list in consultation with adviser. The list of electives is maintained by the Option Director and is provided to the students in the option. 9

Capstone Experience

IST 594	Research Topics	3
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Total Credits		33
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Public Health Preparedness Option

Code	Title	Credits
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Required Courses

HLS Orientation		0
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HLS/PADM 801	Homeland Security Administration: Policies and Programs	3
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HLS/PHIL 803	Homeland Security: Social and Ethical Issues	3
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HLS/PLSC 805	Violence, Threats, Terror, and Insurgency	3
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Public Health Preparedness Option Prescribed Courses

PHP 410	Public Health Preparedness for Disaster and Terrorist Emergencies I	3
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PHP 510	Public Health Preparedness for Disaster and Terrorist Emergencies II	3
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PHP 527	Public Health Evaluation of Disasters and Bioterrorism	3
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PHP 830	Critical Infrastructure Protection of Health Care Delivery Systems	3
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Electives

Choose 9 credits from an approved elective list in consultation with adviser. The list of electives is maintained by the Option Director and is provided to the students in the option. 9

Capstone Experience

PHP 594	Research Topics	3
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Total Credits		33
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