

INTEGRATED HOMELAND SECURITY MANAGEMENT (IHSM)

Courses

IHSM 611 CRITICAL NATIONAL INFRASTRUCTURES (3)

Examines America's critical infrastructures and their relationships to one-another, and issues pertaining to safeguarding and managing these infrastructures under serious threat. Analyzes key asset identification, threat and vulnerability, and studies technologies for their ability to support planning, mitigation, response, recovery, and prediction. Enrollment: Admission to the Integrated Homeland Security management program or approval of program director.

IHSM 612 PLANNING, PREVENTION AND RISK MANAGEMENT (3)

Explores technology and management of holistic information security and risk with respect to U.S. Homeland Security and specific technologies and techniques used by terrorists, hackers, crackers, spies, and thieves. Enrollment: Admission to the Integrated Homeland Security Management program or approval of program director.

IHSM 613 EMERGENCY COMMUNICATION AND MANAGEMENT (3)

Issues in communication in times of emergency, including communication within and between infrastructures, communication with the public, urgent message communication, and communication hierarchy and protocols in emergency situations. On-line course. Prerequisites: Admission to Integrated Homeland Security Management Program or approval of instructor.

IHSM 614 TEAM BUILDING AND LEADERSHIP SKILLS (3)

Psychological and organizational aspects of group dynamics and work teams. Application of theory to actual teams in the workplace with respect to U.S. Homeland Security and specific case analysis/team solutions. Prerequisite: Admission to Integrated Homeland Security Management program or approval of instructor.

IHSM 615 STRATEGIC AND TACTICAL PLANNING (3)

Deals with broad strategy and tactical planning at the national level as also at the level of each critical infrastructure. Strategies discussed include the Homeland Security Strategy, strategy for combating terrorism, strategy for aviation, strategy for pandemic/influenza, strategy for maritime defense, cyberspace strategy. Tactical aspects include the national response plan and the national incident management system. Prerequisites: Graduate Standing and Major Standing.

IHSM 620 INTRODUCTION TO INFORMATION ASSURANCE (3)

Principles, mechanisms, and implementation of information assurance. Emphasis is placed on human and technological aspects of information assurance and issues relevant to the risks in which information systems are exposed and methods of dealing with such risks. Not open to students who have taken COSC 644. Prerequisite: Graduate Standing.

IHSM 621 INFORMATION SYSTEMS VULNERABILITY AND RISK ANALYSIS (3)

The identification of vulnerabilities and risks inherent in the operation of information systems will be explored. Countermeasures will be discussed and documented in an effort to counter identified vulnerabilities.

IHSM 622 INTRODUCTION TO SOFTWARE SECURITY (3)

A study of security concepts in software. Discussion of design principles for secure software development, and some of the security issues in current applications, database systems, and web systems. It provides the foundation for identifying vulnerabilities, their impact, and solutions to securing them. Not open to students who have successfully completed COSC 647. Prerequisite: Open to IHSM-MS students only or by department consent.

IHSM 623 NETWORK SECURITY (3)

Network security, hacker attacks, Web security, e-mail security, e-commerce security, systems and operation environment security, database security, algorithms for making data communications secure, encryption and coding techniques and IP security.

IHSM 630 HEALTH SYSTEM PREPAREDNESS (3)

Examines the health related capacities and needs of homeland security infrastructures and systems, health response teams and communities at the local, regional, and national levels. Prerequisites: Open to IHSM-MS majors only or department consent.

IHSM 631 MENTAL HEALTH EMERGENCY PREPAREDNESS AND RESPONSE (3)

Incorporating emergency mental health principles, strategies, and concepts into overall emergency management planning; basic concepts of disaster and terrorism mental health response, at the individual, group, organizational, and community level. Case studies and course projects will be used to show practical applications. Prerequisites: Graduate standing and major standing.

IHSM 632 BIOTERROR PUBLIC HEALTH PREPAREDNESS (3)

Covers core and specific discipline competencies for health, public health and other workers with emphasis on bioterrorism and public health emergency preparedness that is related to a potential biological, chemical, radiation, nuclear or other public health emergency. Prerequisites: Graduate standing and major standing.

IHSM 633 DISASTER RESPONSE AND COMMUNITY HEALTH (3)

Addresses the need for professionals to incorporate an all hazards approach for disaster management and community health. Students will identify key international and national policies and their impact upon community health and national security. Student will be engaged in field work with the community of their choice to plan, implement, and evaluate a project designed to actively involve community members in some aspect of disaster preparedness. Prerequisites: Graduate standing, major standing.

IHSM 640 U.S. HOMELAND SECURITY POLICY (3)

U.S. homeland security policy examines the concept of U.S. homeland security in the context of recent history. It provides an overview of the nature of threats and major vulnerabilities that are the focus of homeland security efforts. The course surveys the principal actors engaged in the homeland security enterprise. It describes the evaluation of institutions, network, and organizational relationships that are emerging to accomplish the various homeland security missions and functions. The course analyzes current homeland security policy issues and discusses the future of the homeland security enterprise. Prerequisites: Graduate Standing, Major Standing.

IHSM 641 TERRORISM AND POLITICAL VIOLENCE (3)

Analysis of the role of violence in the political process and of the threat posed to localities, states, and nations from groups willing to employ political violence. Review of current political and terrorist groups and examination of efforts to address threats of political violence. Prerequisite: Graduate Standing.

IHSM 642 INTELLIGENCE AND HOMELAND SECURITY (3)

Examination of the roles of intelligence in homeland security and national security policy, strategic and tactical warning, support for military operations, and covert action. Emphasis on problems in conducting intelligence in a democracy and on ethical considerations.

IHSM 643 HOMELAND SECURITY AND CONSTITUTIONAL RIGHTS (3)

A comprehensive investigation and analysis of the relationship between national security and civil liberties in the war on terrorism and other threats to American security. Prerequisites: Completion of IHSM core courses or permission of instructor.

IHSM 660 GIS APPLICATIONS: HOMELAND SECURITY AND EMERGENCY MANAGEMENT (3)

Study and use of selected computer hardware and software for the storage, retrieval, manipulation, analysis, and display of geographic data. Emphasis is placed on the application of geographic information systems (GIS) for homeland security and emergency management. The course is not intended to provide students with extensive training in particular GIS software. However, laboratory projects involving student use of Windows-based GIS software on desktop computers, and internet-based GIS applications using Web browsers, are required and will reinforce important concepts. Prerequisites: Graduate standing, major standing.

IHSM 670 SPECIAL TOPICS IN HOMELAND SECURITY (3)

Selected topics in the Homeland Security area. Emphasis on new and emerging issues in Homeland Security. May be repeated for a maximum of 6 units. Prerequisites: completion of all core courses in the IHSM Program and consent of instructor.

IHSM 695 INDEPENDENT STUDY IN HOMELAND SECURITY (1-6)

Selected topics in the Homeland Security area. Emphasis on new and emerging issues in homeland security. May be repeated for a maximum of 6 credits. Prerequisites: Completion of all core core courses in the IHSM Program and consent of instructor.

IHSM 881 CAPSTONE PROJECT I (3)

An original investigation of a problem to be pursued in cooperation with a federal, state, city or county agency on a homeland security related topic under the direction of an agency supervisor and a member of the IHSM faculty. The faculty advisor will in conjunction with the agency supervisor guide the student throughout different phases of completing the project. Permit required, only IHSM graduate students. Prerequisites: Completion of at least 12 credits toward the MS degree Integrated Homeland Security Management and consent of program director.

IHSM 882 CAPSTONE PROJECT II (3)

An original investigation of a problem to be pursued in cooperation with a federal, state, city or county agency on a homeland security related topic under the direction of an agency supervisor and a member of the IHSM faculty. The faculty advisor will in conjunction with the agency supervisor guide the student throughout different phases of completing the project. Permit required, only IHSM graduate students. Prerequisites: Completion of at least 12 credits toward the MS degree Integrated Homeland Security Management and consent of program director.

IHSM 885 CAPSTONE PROJECT CONTINUUM (1)

Continuation of graduate project. May be repeated for a maximum of 3 credits. Graded S/U. Prerequisites: Graduate Standing and major standing; previous registration for project work.