

CATALOGUE OF WMD AND WMD-RELATED EDUCATION PROGRAMS

Center for the Study of Weapons
of Mass Destruction
National Defense University



STAYING LEFT OF BOOM

Catalogue of professional and educational opportunities for federal government employees and non-government individuals spanning a wide range of WMD – related topics.

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Cover photo from <https://warriorforge2013.wordpress.com/2013/07/11/waiting-to-exhale/>



About our Catalogue

The Center for the Study of WMD has worked to identify, assess, and evaluate the state of CWMD academic programs in the United States and partner nations in order to produce this comprehensive list of WMD Education Programs that can serve as a guide for those interested in furthering their professional development on a wide range of WMD topics. Initially aimed at providing DoD employees with educational advancement opportunities outside of DoD, the project has been expanded to target a larger audience with representation from graduate programs, fellowships, certificate programs, and online coursework.

This compilation includes programs run or sponsored by government, academia, and non-governmental organizations with varying degrees of intensity and specialization. We plan to update the catalogue periodically to reflect the most up-to-date information available regarding these opportunities and maintain an updated version on our website at <http://wmdcenter.ndu.edu/>.

We will be continuing to seek assistance as this is the first publication resulting from this project. Despite the large collection of opportunities we have represented here, we recognize that there are likely more we have not yet discovered. These may be closed government programs or outreach programs without public advertising. If there is a class or program that you believe may fit our search, please reach out to alert us to that opportunity so that we can create the most accurate and comprehensive list possible.

Please direct all inputs to CSWMD-Admin@ndu.edu

We would also like to thank those who have contributed to this catalogue thus far for enabling this project to grow into its current form and purpose.

About the Center

Established in 1994, the Center for the Study of Weapons of Mass Destruction is at the forefront of education and research on the impact of weapons of mass destruction (WMD) on U.S. and global security. Originally focused on threats to U.S. military forces, the Center now applies its expertise and experience to the full range of WMD challenges.

The Center maintains a broad mandate for education, research, and outreach, and pursues ambitious initiatives in these areas. Its research contributes to the understanding of the security implications of WMD, as well as to the challenge of fashioning effective responses. Through its education, research, and outreach programs, the Center seeks to enhance awareness in the next generation of military and civilian leaders of the WMD threat. At the direction of the Chairman, Joint Chiefs of Staff, the Center is the focal point for WMD matters in Joint Professional Military Education. In addition to the Center's courses on countering WMD and consequence management at National Defense University, staff members also lecture on WMD issues widely and across the academic and operational spectrum.

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Entries are organized alphabetically by topic within each section.

As some entries fall under multiple sections, some entries appear in multiple sections.

Advanced Degree Programs

This section contains advanced degree programs at nationally and regionally accredited universities and colleges. This includes everything from Master's and Doctoral degrees in WMD-related fields like security studies to concentrations and degrees in WMD-focused programs that we acquired either through online searches, word-of-mouth, or direct contact with program managers.

General WMD Studies (Overview)

War in the Modern World

Master of Arts

Synopsis: The fully-online two-year part-time program offers a well-designed, engaging, and flexible learning program for those interested in warfare from 1945 to the present, with special reference to the seemingly ubiquitous role of air power. Modules (courses) such as *International Law and the Use of Force* include components of state and non-state actors in the WMD space.

Eligibility: This is a fully online program that requires the completion of 6 11-week modules, as well as a 15,000 word dissertation at the end of the taught modules.

[Link](#)

Tags: Part-Time, Online

Course Information

Institution: King's College London; War Studies Online

Location: Fully online

POC: Dr. David Easter, Programme Director and Admissions; david.easter@kcl.ac.uk

Center for Homeland Defense and Security (CHDS)

Master of Arts Program

Synopsis: This program includes WMD components in courses like *Introduction to Homeland Security* and *The Unconventional Threat to Homeland Security*. NPS requires students to be in residence only two weeks every quarter. Students complete the remainder of their coursework via the web.

Eligibility: The Master's Degree Program is provided at no cost to state (including members of the National Guard under Title 32), local municipality, tribal, territorial and U.S. Department of Homeland Security government employees (including the U.S. Coast Guard) accepted into the program.

[Link](#)

Tags: Part-time, Online, On-site

[Course Information](#)

Institution: Naval Postgraduate School

Location: Monterey, CA or National Capital Region (currently in Hagerstown, Maryland)

Sponsored By: Federal Emergency Management Agency (FEMA); U.S. Department of Homeland Security's National Preparedness Directorate

POC: Ms. Heather Issvora
hissvora@nps.edu

Defense and Strategic Studies at Missouri State University

Master of Science

Synopsis: The Department of Defense and Strategic Studies provides professional, graduate-level education in national security policy, cyber security, WMD proliferation, international terrorism, military operations, global security challenges, and intelligence analysis. In lieu of the Defense and Strategic Studies M.S., an individual can obtain a certificate in Weapons of Mass Destruction Studies.

Eligibility: Must possess a Bachelor's degree.

[Link](#)

Tags: Full-time; Part-time; On-site

[Course Information](#)

Institution: Missouri State University;
Department of Defense and Strategic Studies (DSS)

Location: Fairfax, VA

POC: Dr. Keith Payne;
DSS1@missouristate.edu

Countering WMD Graduate Fellowship Program

Graduate Fellowship/Master of Science Degree

Synopsis: The goal of the CWMD Graduate fellowship is to build an enduring cadre of national security leaders intellectually and experientially equipped to meet future WMD challenges and to function in an interagency capacity in support of the US Government's CWMD mission.

Course Information

Institution: Missouri State University; National Defense University

Location: Fairfax, VA and Washington, DC

Sponsored By: U.S. Department of Defense, ASD NCB

POC: CWMDFellowship@ndu.edu

Eligibility: Applicants must hold a SECRET security clearance. Civilians GS-09 through GS-15 and military O-3 through O-6 or WO2 or WO5. Non-DoD employees of equivalent ranks are eligible but must provide funding for the program completion. Only DoD personnel are eligible for DoD funding.

[Link](#)

also listed in Fellowship Programs

Tags: Part-time, On-site

Environmental Management

Master of Science

Synopsis: This program provides students with the tools and techniques to navigate the business aspects of environmental management, including managing environmental-related risk from an organization's operation, identifying environmental hazards affecting air, water, and soil quality, and assessing environmental-related risk, including outcomes from WMD.

Course Information

Institution: Webster University; Biological Sciences

Location: St. Louis, MO

POC: admit@webster.edu

Eligibility: Transfer credits are available for this program through the US Army CBRN Captains Career Course

[Link](#)

Tags: Full-time, Part-time, On-site

Government or International Relations at Harvard University

Master of Liberal Arts

Synopsis: These programs seek to have participants gain insights into the institutions of government, politics, policy, and the systems used to govern communities and nation states to better-understand today's pressing global issues. Courses like *The Future of War* focus heavily on WMD issues like nonproliferation, deterrence, and the role of state and non-state actors.

Eligibility: Students begin by completing three stipulated degree courses as outlined on the degree requirements page. During the third degree course, the student submits their application. This program has application cycles in the fall, spring, and summer.

[Link](#)

Tags: Full-time, Part-time, On-site, Online

Course Information

Institution: Harvard University; Social Sciences and Cultural Studies or Global Studies in the Harvard Extension School

Location: Cambridge, MA

POC: inquiry@extension.harvard.edu

Homeland Security at the University of DC

Master of Science

Synopsis: The program focuses on community preparedness, response, and recovery from catastrophic events, and includes specializations including cybersecurity, global institutions and security, terrorism and counterterrorism, and WMD.

Eligibility: Must possess a Bachelor's degree.

[Link](#)

Tags: Full-time, Part-time, On-site

Course Information

Institution: University of the District of Columbia; College of Arts and Sciences, Office of Graduate Studies

Location: Washington, D.C.

POC: Dr. Angelyn Flowers; MSHS@udc.edu

Homeland Security Science at West Kentucky University

Master of Science

Synopsis: This program is meant as a multidisciplinary graduate degree program to prepare science professionals and technology leaders for careers in Homeland Security as an emerging cross-cutting discipline. The program is concentrated in applications of physics, biology, and chemistry to detect, quantify, prevent, and decontaminate CBRNE/WMD threats.

Course Information

Institution: West Kentucky University;
Department of Physics and Astronomy,
Homeland Security Sciences
Location: Bowling Green, KY
POC: Dr. Ivan Novikov;
ivan.novikov@wku.edu

Eligibility: Requires a Bachelor's degree in biology, chemistry, or physics.

[Link](#)

Tags: Full-time, Part-Time, On-site

Intelligence and National Security Studies (INSS)

Master of Science, Graduate Certificate

Synopsis: These programs provide a highly-rigorous interdisciplinary approach that focuses on specific intelligence and security competencies that are delivered across the spectrum of academic disciplines. Courses like *Intelligence and Counterproliferation*, *Public Health Issues and Homeland Security*, and *International Security* primarily address WMD risks, threats, and implications.

Course Information

Institution: University of Texas at El Paso
Location: El Paso, Texas
POC: Ms. Carmen Medellin;
cbsanchez@utep.edu

Eligibility: Intended for students seeking employment or career advancement in the United States Intelligence Community (IC). The INSS graduate program is also suitable for students interested in security-related jobs in the private sector or with applied research institutions (think tanks). The INSS graduate program is also ideal preparation for advanced graduate study at the doctoral level in international relations, political science, public administration, public policy, history, or other closely related fields.

[Link](#)

also listed in Undergraduate and Certificate Programs

Tags: Full-time, Part-time, On-site

International Relations and Contemporary War

Master of Arts

Synopsis: This is a fully online program that provides students with a deep and systematic understanding of the historical evolution of the international system and contemporary war, and critical awareness of current problems and new insights. Modules (courses) such as *International Law and the Use of Force* include components of state and non-state actors in the WMD space.

Eligibility: This is a fully online program that requires the completion of 6 11-week modules, as well as a 15,000 word dissertation at the end of the taught modules.

[Link](#)

Tags: Full-time, Part-time, Online

Course Information

Institution: King's College London; War Studies Online

Location: Fully online

POC: Dr. Rachel Kerr, Programme Director and Admissions; Rachel.kerr@kcl.ac.uk

Master of Science in Nuclear Studies at AFIT

Graduate Degree

Synopsis: This curriculum focuses on nuclear issues, from nuclear weapon fundamentals and history to advanced nuclear concepts, science and technology frontiers of nuclear weapon delivery systems, and nuclear strategy. This program is *currently under development*, and is not accepting students at this time.

Eligibility: Air Force Institute of Technology provides education for the United States Armed Forces.

[Link](#)

Tags: Part-Time, In-Person, Online

Course Information

Institution: Air Force Institute of Technology (AFIT), School of Strategic Force Studies

Location: Wright-Patterson Air Force Base, Ohio

POC: Mr. Jeff Martinez, 314-487-6349

Master of Science in Science and Technology Intelligence

Graduate Degree Program

Synopsis: The Science and Technology Intelligence (MSSTI) program requires that students declare a concentration or tract, one of which is WMD.

Course Information

Institution: National Intelligence University

Location: Bethesda, MD

POC: niuadmit@dodiis.mil

Eligibility: Must be either a member of the U.S. Armed Forces or a federal government employee with an active TS/SCI security clearance.

[Link](#)

Tags: Full-time, Part-time, On-site

Non-Proliferation and International Security

Master of Arts Program

Synopsis: The MA course will enable students to examine the causes, processes and effects of weapons proliferation, the evolution and effectiveness of the international non-proliferation regime, and the way in which proliferation influences other issues in international relations. Students will use the knowledge and tools of analysis from history, political science, the hard sciences, philosophy and sociology to explore the topic from a variety of perspectives.

Course Information

Institution: King's College London,
Department of War Studies

Location: London campuses

POC: Dr. Susan Martin

Susan.b.martin@kcl.ac.uk

Eligibility: Undergraduate degree with high 2:1 honors (i.e. overall average of at least 67% across all years of study) in history, international relations, political science, economics or other appropriate subject.

[Link](#)

Tags: Full-time, Part-time, On-site

Public Policy

Doctoral Program

Synopsis: The Pardee school offers a Ph.D. in public policy program that is multidisciplinary, emphasizing analytic tools and methodologies drawn from mathematics, economics, statistics, political science, operations research, and the behavioral and social sciences. Meant to help policymakers and policy influencers, wide-ranging electives include understanding WMD and terrorism, social network analysis, terrorism, national security strategic and planning, and other topics of interest to federal employees.

Eligibility: Pardee RAND limits admission to students who can participate full-time in its combined research-and-study program.

[Link](#)

Tags: Full-time, Residency

Course Information

Institution: RAND Corporation, Pardee RAND Graduate School

Location: Santa Monica, CA

POC: prgs@prgs.edu

Science and Int'l Security

Master of Arts

Synopsis: The Science & Security MA will provide you with a detailed understanding of science and its relationship to international politics. Developments in technology are central to all aspects of international conflict and you will need a multidisciplinary understanding of these developments to fully comprehend their policy implications. Through this programme you will gain a deep understanding of topics such as nuclear weapons and WMD, arms control verification, cyber security, and terrorism.

Eligibility: Undergraduate degree with high 2:1 honours (i.e. overall average of at least 65% across all years of study) in history, international relations, political science, economics or other appropriate subject.

[Link](#)

Tags: Full-time, Part-time, On-site

Course Information

Institution: King's College London; Department of War Studies; Centre for Science and Security Studies

Location: London campuses

POC: Dr. Susan Martin;
susan.b.martin@kcl.ac.uk

Security Policy Studies

Master of Arts

Synopsis: The Security Policy Studies (SPS) program focuses on the security challenges for the 21st century and how to respond to them. This program has specialized fields, including a specialization for WMD.

Course Information

Institution: The George Washington University; Elliott School of International Affairs

Location: Washington, D.C.

POC: Dr. David Malet; dmalet@gwu.edu

Eligibility: Must possess a Bachelor's degree.

[Link](#)

Tags: Full-time, Part-time, On-site

Interdisciplinary Security Studies

Master of Science, Graduate Certificate

Synopsis: Offering four areas of emphasis (environmental health and occupational safety, homeland security policy, international security, and science and technology security), this program includes WMD considerations, as well as areas of specialization including emerging technologies in computer and information science.

Course Information

Institution: East Carolina University; Department of Political Science

Location: Greenville, NC; Some courses can be completed via distance education.

POC: Dr. Armin Krishnan; krishnana@ecu.edu

Eligibility: Must possess a Bachelor's degree. Other requirements vary by curriculum.

[Link](#)

also listed in Undergraduate and Certificate Programs

Tags: Full-time, Part-Time, On-site, Online

Naval Postgraduate School (NPS) - Security Studies

Master of Arts, Ph.D.

Synopsis: Students in this area will develop a solid understanding of CBRNE security, with courses that examine the technical details of weapons and sensor technologies, nonproliferation regimes, and the threat of states or non-state actors acquiring and using WMDs.

Course Information

Institution: Naval Postgraduate School, School of International Graduate Studies, Department of National Security Affairs

Location: Monterey, CA

POC: Jumana Kavar

jkavar@nps.edu

Eligibility: Must possess Bachelor's degree.

[Link](#)

Tags: Full-time, Part-time, On-site

Security Studies - Chemical, Biological, Radiological, Nuclear, and Explosive Security Concentration

Master of Science

Synopsis: Students in this area will develop a solid understanding of CBRNE security, with courses that examine the technical details of weapons and sensor technologies, nonproliferation regimes, and the threat of states or non-state actors acquiring and using WMDs. This program also offers M.S. degrees in Security Studies with Homeland Defense and International Security concentrations.

Course Information

Institution: University of Massachusetts, Lowell, College of Fine Arts, Humanities & Social Sciences, Security Studies

Location: Lowell, MA

POC: Dr. Arie Perliger;
Arie_Perliger@uml.edu

Eligibility: Must possess Bachelor's degree.

[Link](#)

Tags: Full-time, Part-time, On-site

War in the Modern World

Master of Arts

Synopsis: This is a fully online two-year part-time MA degree program that offers well-designed, engaging, and flexible learning for everyone interested in warfare from 1945 to the present. Modules (courses) such as *International Law and the Use of Force* include components of state and non-state actors in the WMD space.

Eligibility: This is a fully online program that requires the completion of 6 11-week modules, as well as a 15,000 word dissertation at the end of the taught modules.

<https://www.kcl.ac.uk/sspp/departments/warstudies/study/wsonline/programmes/wimw.aspx>

Tags: Part-time, Online

Course Information

Institution: King's College London; War Studies Online

Location: Fully online

POC: Dr. David Easter, Programme Director and Admissions; david.easter@kcl.ac.uk

WMD Nonproliferation and Terrorism Studies (NPTS)

Master of Arts, Graduate Certificate

Synopsis: NPTS prepares students for professional careers dealing with the threats posed by violent extremism and WMD/NBC weapons. The interdisciplinary curriculum integrates instruction in international security, science and technology, history, practical skills, and language training.

Eligibility: Must possess a Bachelor's degree.

[Link](#)

Tags: Full-time, On-site

Course Information

Institution: Middlebury Institute for International Studies at Monterey; James Martin Center for Nonproliferation Studies

Location: Monterey, CA; Offices also in Washington, D.C.

POC: Jen Holguin; jhamblet@miis.edu

Nuclear and Radiological Weapons Studies

Air Force Nuclear College

Graduate Coursework

Synopsis: Develop Nuclear Enterprise Airmen with a comprehensive understanding of nuclear deterrence, assurance, and the critical thinking skills and knowledge of nuclear deterrence and assurance challenges in the 21st Century. Also associated with the Center for Unconventional Weapons Studies (CUWS).

Eligibility: For USAF personnel.

<https://www.afit.edu/EX/page.cfm?page=1251>

Tags: Full-time, Part-time, On-site

Course Information

Institution: The Air Force Institute of Technology, School of Strategic Force Studies
Location: Wright-Patterson Air Force Base, Ohio
POC: AFIT Main Number: 937-255-6565

Air University, Air Command and Staff College (ACSC) Military Operational Art and Science

Master's Degree

Synopsis: The Air Command and Staff College resident curriculum is a rigorous 10-month graduate-level program taught through intensive seminars and engaging leaders. Students are taught to critically write, read, and think at an advanced level of mastery on topics including nuclear terrorism and WMD proliferation.

Eligibility: For USAF personnel.

<http://www.airuniversity.af.mil/ACSC/Display/Article/922353/resident-curriculum/>

Tags: Full-time, On-Site

[Course Information](#)

Institution: Air University, Air Command and Staff College

Location: Maxwell Air Force Base, AL

POC: ACSC Main Number – 334-953-5024 (3223)

Air University – Officer Professional Military Education with a Concentration in Nuclear Weapons

Master's Degree Concentration

Synopsis: The Online Master's Program (OLMP) curriculum is designed to produce more effective officers serving in operational-level command or staff positions. The program fosters the development of higher-order thinking by challenging students to think critically about applying airpower in joint campaign planning at the operational level of war. In terms of WMD, one of the program's 4 concentrations is on Nuclear Weapons.

Eligibility: For USAF personnel.

<http://www.airuniversity.af.mil/eSchool/OLMP/>

Tags: Full-time, Part-time, On-site

[Course Information](#)

Institution: Air University, eSchool of Graduate PME

Location: Maxwell Air Force Base, AL

POC: eSchool_HelpDesk@outlook.com

Arms Control and International Security

Master's, Diploma, or Certificate

Synopsis: Students will learn about historical arms control challenges, such as negotiation of the Comprehensive Test Ban Treaty, along with contemporary arms control issues as they relate to international security, to include the Iran Nuclear Deal, U.S.-Russia arms control, and disarmament verification.

Course Information

Institution: King's College London;
Departments of War Studies and Defence
Studies

Location: London campuses

POC: Dr. Heather W. Williams;
heather.w.williams@kcl.ac.uk

Eligibility: Undergraduate degree with 1st Class or high 2:1 honours (i.e. overall average of at least 65% across all years of study) in a social science or other related subject.

<https://www.kcl.ac.uk/study/postgraduate/taught-courses/arms-control-and-international-security-ma-pg-dip-pg-cert.aspx.aspx>

also listed in Undergraduate and Certificate Programs

Tags: Full-time, Part-time, On-site

Chemical and Biological Weapons Studies

Biodefense

Doctoral, Master's, and Graduate Certificates

Synopsis: GMU's biodefense program provides students with the knowledge and analytic capabilities to bridge the gap between WMD science and policy.

Course Information

Institution: George Mason University

Location: Online available; D.C. Metropolitan Area

POC: Gregory Koblentz; gkoblent@gmu.edu

Eligibility: Must possess Bachelor's degree.

<https://schar.gmu.edu/prospective-students/programs/masters-programs/biodefense-ms>

also listed in Undergraduate and Certificate Programs

Tags: Full-time, Part-time, On-site, Online

Bioinformatics

Bachelor's, Master's, or PhD Programs

Synopsis: Bioinformatics is a new integrative discipline that combines 21st century high-throughput life sciences technologies such as genomics and proteomics with computer science and information technology. MS has both thesis and professional tracks.

Eligibility: Varies based on curriculum of choice.

<https://csbc.vcu.edu/>

also listed in Undergraduate and Certificate Programs

Tags: Full-time, Part-time, On-site

Course Information

Institution: Virginia Commonwealth University, Center for the Study of Biological Complexity (CSBC)

Location: Richmond, Virginia

POC: Dr. Herschell Emery, hsemery@vcu.edu

Biohazardous Threat Agents and Emerging Infectious Diseases

Master of Science or Graduate Certificate

Synopsis: These programs focus on biohazardous agents and emerging infectious diseases facing the world community; whether such threats occur naturally or are purposefully designed.

Eligibility: Must possess a Bachelor's degree.

<https://biohaz.georgetown.edu/>

also listed in Undergraduate and Certificate Programs

Tags: Full-time, Part-time, On-site, Online

Course Information

Institution: Georgetown University;
Georgetown University Medical Center

Location: Washington, D.C.

POC: Judie Kuo, BGE Coordinator;
judie.kuo@georgetown.edu

Biotechnology – Biosecurity and Biodefense Specialization

Master of Science

Synopsis: This program prepares practitioners for the front lines of homeland biodefense and bioterrorism response by enabling educated practitioners to engage with technology to detect, analyze, and respond to biosecurity threats.

Course Information

Institution: University of Maryland; University College; Department of Healthcare and Science

Location: Adelphi, MD; also available online

POC: Dr. Rana Khan, Director of Biotechnology Programs;
rana.khan@umuc.edu

Eligibility: If you don't have a molecular biology background, you must either take a college-level molecular biology course or Introduction to Molecular Biology (3 Credits, BIOT 601) prior to the required program core.

<http://www.umuc.edu/academic-programs/masters-degrees/biotechnology/biosecurity-and-biodefense.cfm>

Tags: Full-time, Part-time, On-site, Online

Public Health Studies, Concentration in Biosecurity and Disaster Preparedness

Doctoral, Master's, and Graduate Certificates

Synopsis: SLU's concentration in biosecurity and disaster preparedness provides knowledge and skills that are necessary to work as a biosecurity professional within the public health, education, academic, or consulting domains.

Course Information

Institution: Saint Louis University, Institute for Biosecurity

Location: St. Louis, MO

POC: Patti Mazzuca; pmazzuca@slu.edu

Eligibility: This program is designed for individuals who already hold a master's degree in public health or a related field.

<https://www.slu.edu/programs/graduate/public-health-studies-phd.php>

also listed in Undergraduate and Certificate Programs

Tags: Full-time, Part-time, On-site

Fellowship Programs

This section contains full-time and part-time fellowship opportunities. These are all short-term opportunities lasting from a few months to several years, focus on the professional development of the fellow, and are sponsored by a specific association or organization seeking to expand leadership in their field. This includes fellowship opportunities in WMD-related areas that were acquired either through online searches, word-of-mouth, or direct contact with program managers.

General WMD Studies (Overview)

Arroyo Center's Army Fellows Program at RAND

One-year Fellowship

Synopsis: This program provides Army officers the opportunity to increase their analytical capabilities by participating in studies at the Arroyo Center addressing critical policy issues face by the Army. Topics in focus for past Army fellows include WMD, counterterrorism, and threat assessments.

Course Information

Institution: RAND Corporation, Arroyo Center

Location: Santa Monica, CA

Sponsored By: U.S. Army

POC: Marcy Agmon, Director of Operations and Army Business Liaison;
Marcy_Agmon@rand.org

Eligibility: Each year, the Army selects a number of majors and lieutenant colonels to work at RAND Arroyo Center as visiting analysts in the RAND Arroyo Center's Army Fellows Program.

<https://www.rand.org/ard/fellows.html>

Tags: Full-time, On-site

Christine Mirzayan Science and Policy Graduate Program

Fellowship for Graduated Students

Synopsis: The fellowship provides early career individuals with the opportunity to spend 12 weeks at the Academies in Washington, DC. These fellows are paired with mentors to learn about science and technology policy, as well as the role that scientists, engineers, and subject matter experts play in advising the nation. Past fellows have focused on a broad range of topics with WMD implications, like understanding the effects of synthetic biology and the spread of information.

Eligibility: For early career individuals.

<http://sites.nationalacademies.org/pga/policyfellows/>

Tags: On-site

Course Information

Institution: Missouri State University; National Defense University

Location: Fairfax, VA and Washington, DC

Sponsored By: U.S. Department of Defense, ASD NCB

POC: Karolina Konarzewska, Program Coordinator; kkonarzewska@nas.edu

Computational Science Pre-Doctoral Fellowship

Pre-Doctoral Fellowship

Synopsis: With areas of study like molecular spectroscopy and reactions in molecular organic chemistry, this program of study trains future computational scientists to model everything from atmospheric conditions to WMD-related areas like the computational modeling of proteins.

Eligibility: For students planning full-time, uninterrupted study toward a Ph.D. at an accredited U.S. university. We encourage applications from students in engineering and the physical, computer, mathematical or life sciences.

<https://www.krellinst.org/csgf/>

Tags: Part-time, On-site

Course Information

Institution: Krell Institute

Location: Ames, Iowa with laboratory practicums in one of 20 DOE sites

Sponsored By: National Nuclear Security Administration, U.S. Department of Energy

Countering WMD Graduate Fellowship Program

Graduate Fellowship/Master of Science Degree

Synopsis: The goal of the CWMD Graduate fellowship is to build an enduring cadre of national security leaders intellectually and experientially equipped to meet future WMD challenges and to function in an interagency capacity in support of the US Government's CWMD mission.

Course Information

Institution: Missouri State University; National Defense University

Location: Fairfax, VA and Washington, DC

Sponsored By: U.S. Department of Defense, ASD NCB

POC: CWMDFellowship@ndu.edu

Eligibility: Applicants must hold a SECRET security clearance. Civilians GS-09 through GS-15 and military O-3 through O-6 or WO2 or WO5. Non-DoD employees of equivalent ranks are eligible but must provide funding for the program completion. Only DoD personnel are eligible for DoD funding.

<http://cwmdgradfellowship.dodlive.mil/>

also listed in Advanced Degree Programs

Tags: Part-time, On-site

Department of Homeland Security Fellowship

Fellowship

Synopsis: This fellowship is meant to develop up-and-coming leaders with the strategic analysis and planning skills needed to meet the challenges of a complex organization, and help achieve DHS's mission set by studying with nationally-known RAND researchers on critical homeland defense issues, including counterterrorism and WMD.

Course Information

Institution: RAND Corporation, Homeland Security Research Division

Location: Crystal City, VA

Sponsored By: U.S. Department of Homeland Security

POC: Henry Willis, Director, RAND Homeland Security Program; Henry_Willis@rand.org

Eligibility: Annual nomination and selection processes begin in spring for a fall start-up date. Further, this fellowship is only for senior level DHS employees.

<https://www.rand.org/hsrd/fellowship.html>

Tags: Full-time, On-site

Fellowship in Grand Strategy, Security, and Statecraft

Pre or Post-Doctoral Fellowships

Synopsis: This program will educate young scholars from a variety of disciplines working in the broad area of strategy and statecraft, with particular emphasis on the United States and its role in the world. Research areas include WMD implications on international security, as well as more nuclear-centric areas of deterrence and compellence.

Course Information

Institution: Harvard University Kennedy School's Belfer Center for Science and International Affairs and Massachusetts Institute of Technology's Center for International Studies

Location: Massachusetts

POC: Susan Lynch;

susan_lynch@harvard.edu; 617-496-1981

Eligibility: Must have begun participating in or completed doctorate program.

<https://www.belfercenter.org/publication/new-fellowship-grand-strategy-security-and-statecraft>

Tags: Full-time, On-site

Jefferson Science Fellowship Program

Fellowship

Synopsis: The JSF is open to tenured, or similarly ranked, faculty from U.S. institutions of higher learning who are U.S. citizens. This program focuses on building a cohort that can address the complexities of good governance in a world of accelerated advancements in science, technology and engineering (STE). Accurate and timely understanding of rapidly advancing STEs include the effect that these innovations would have on the WMD threat space.

Course Information

Institution: National Academies of Sciences, Engineering, and Medicine

Location: Washington, D.C.

Sponsored By: U.S. Department of State

POC: jsf@nas.edu

Eligibility: This is a full-time, one-year assignment at the U.S. Department of State.

<http://sites.nationalacademies.org/pga/jefferson/>

Tags: Full-time, On-site

Military Fellowship Program

Fellowship

Synopsis: Military Fellows perform research at Lincoln Laboratory approximately two days a week in areas including Homeland Protection, ISR Systems and Technology, Advanced Technology, Cyber Security and Information Sciences, Space Control, and other topics that have potential CBRN applications.

Eligibility: For active-duty military either enrolled in a graduate degree program that requires a thesis, is sponsored by Training with Industry, or is sponsored by their respective service for Senior Service School.

<https://www.ll.mit.edu/careers/military-program.html>

Tags: On-site

Course Information

Institution: MIT Lincoln Laboratory

Location: Lexington, MA

Sponsored By: U.S. Department of Defense;
Department of the Air Force

POC: John E. Kuconis, Executive Officer at
MIT Lincoln Laboratory; jkuconis@LL.mit.edu

Federal Executive Fellowship (FEF)

Fellowship

Synopsis: The FEF provides selected officers an opportunity to improve their understanding of the national security decision-making process, including WMD-related issues, through assignment to world-class research organizations and academic institutions.

Eligibility: Navy – Active duty O4-O6 Unrestricted Line (URL) and Restricted Line (RL) officers
Marine – Unknown. Please contact POC Michael G. Cooper for more details
For the Navy fellowship (<https://doni.documentservices.dla.mil/default.aspx>)
For the USMC fellowship – Unknown. Please contact POC Michael G. Cooper for more details

Tags: Full-time, On-site

Course Information

Institution: RAND Corporation, National
Security Research Division

Location: Varies

Sponsored By: Office of the Secretary of
Defense

POC: Michael G. Cooper (USMC Program);
Michael.g.cooper2@usmc.mil

National Defense Science and Engineering Pre-Doctoral Fellowship

Pre-Doctoral Fellowship

Synopsis: This program is a means of increasing the number of U.S. citizens and nationals trained in science and engineering disciplines of military importance. It awards fellowships to applicants interested in WMD-related disciplines like biosciences, chemical engineering, physics, computer and computational sciences, and chemical engineering.

Eligibility: This fellowship is awarded to applicants who are pursuing a doctoral degree in, or closely related to, STEM fields including Biosciences, Chemical Engineering, Computer and Computation Sciences, Materials Science and Engineering, and other disciplines. Only full-time doctoral students beginning or enrolled in a U.S.-based and accredited institution of higher learning may apply for and receive this fellowship.

<https://ndseg.asee.org/>

Tags: Part-time

Course Information

Institution: U.S. Department of Defense

Location: Varies

Sponsored By: Sponsors or delete

POC: ndseg@asee.org

MIT Security Studies Program (SSP)

Fellowship

Synopsis: Each year, MIT's Security Studies Program welcomes one serving member of the U.S. Air Force, Navy, and Marine Corps, as well as two serving members of the Army to participate in classes, as well as offer their unique insights to the students. The curriculum includes classes with WMD components like *Economics of National Security*, *Protecting the Homeland: The Challenges of Domestic Security*, and *Controlling the World's Most Dangerous Weapons*.

Eligibility: Service members must be nominated by their respective branch

<https://ssp.mit.edu/about/national-security-fellows-program>

Tags: Full-time, On-site

Course Information

Institution: Massachusetts Institute of Technology, Security Studies Program

Location: Cambridge, MA

POC: ssp_info@mit.edu

Institute for Defense Analyses (IDA) Policy Fellowship Program

Fellowship

Synopsis: This two-year fellowship provides a unique opportunity to use critical thinking and analytic skills to work on a diverse set of challenges in science and technology (S&T) policy areas. These policy areas include WMD-related topics like national security, life sciences, innovation and competitiveness, space sciences, and information technologies.

Course Information

Institution: Institute for Defense Analyses, Science and Technology Policy Institute
Location: Washington, D.C.
POC: info-stpi@ida.org

Eligibility: This fellowship is only open to those that have recently completed their bachelor's degree (within the past two years).

<https://www.ida.org/en/STPI/STPIResearchStaff/FellowshipProgram.aspx>

Tags: Full-time, On-site

AAAS Science and Technology Policy Fellowship

Fellowship

Synopsis: AAAS fellowships provide opportunities to outstanding scientists and engineers to learn first-hand about policymaking while contributing their knowledge and analytic skills to the federal policymaking process. Executive branch fellows can focus on WMD-related topics like national and international security, terrorism and warfare prevention and nonproliferation, and NBC weapons.

Course Information

Institution: American Association for the Advancement of Science
Location: Washington, DC
Sponsored By: Varies depending on fellowship type
POC: fellowships@aaas.org

Eligibility: Must hold a doctoral level science degree or a master's in engineering. This program is NOT open to federal employees.

<https://www.aaas.org/page/stpf/become-st-policy-fellow>

Tags: Full-time, On-site

The Davis United World College (UWC) Scholars Fellowship in Nonproliferation Studies

Fellowship

Synopsis: Davis UWC Scholars engaged in this fellowship will conduct research on issues related to the spread and control of weapons of mass destruction, including nuclear, chemical, and biological weapons, and on regional security issues involving the former Soviet Union, East Asia, South Asia, and the Middle East. Program is currently on hold for 2018.

Eligibility: All Davis UWC Scholars who have completed at least their sophomore year of study by time of application are eligible. Knowledge of international security topics and command of a foreign language are desirable. Students majoring in the physical or biological sciences are also encouraged to apply.

<http://sites.miiis.edu/summerintern/fellowships/>

Tags: Full-time, On-site

Course Information

Institution: Middlebury Institute of International Studies at Monterey, James Martin Center for Nonproliferation Studies

Location: Monterey, CA

POC: Masako Toki; Fellowship Coordinator; 831-647-3580; masako.toki@miiis.edu

Nuclear and Radiological Weapons Studies

Nuclear Nonproliferation International Safeguards (NNIS) Graduate Fellowship Program

Doctoral Fellowship

Synopsis: Participating universities foster partnerships between science/engineering programs and programs focused on nuclear nonproliferation and safeguards policy. Armed with both deep technical expertise and policy understanding, NNIS Fellows are primed to take on the exciting and challenging work of international nuclear safeguards.

Eligibility: Restricted to Doctoral Candidates

<http://www.scuref.org/nnis/>

Tags: Part-time, On-site

Course Information

Institution: South Carolina Universities
Research and Education Foundation
(SCUREF)

Location: The University of South Carolina
Aiken (USCA)

Sponsored By: National Nuclear Security
Administration; U.S. Department of Energy

Rickover Fellowship Program in Nuclear Engineering (RFP)

Graduate Fellowship Program

Synopsis: This program is meets the needs of the Naval Reactors Division of the U.S. Department of Energy (DOE) for appropriately trained personnel to maintain and develop the science and engineering technology of naval nuclear propulsion. The program prepares students to support the broader objective of advancing fission energy development through the research efforts of the fellows. This also generates nuclear engineering expertise that may be useful for WMD-related discussions on nuclear energy.

Eligibility: Fellows must be enrolled in an academic course of study and pursue research applicable to the science and engineering programs.

<http://www.scuref.org/rfp/>

Tags: Part-time, On-site

Course Information

Institution: South Carolina Universities Research and Education Foundation (SCUREF)

Location: South Carolina

Sponsored By: Knolls Atomic Power Laboratory; Bettis Atomic Power Laboratory; U.S. Department of Energy

Stanton Nuclear Security Fellows Program

Fellowship

Synopsis: The Nuclear Security Fellows Program seeks to stimulate the development of the next generation of thought leaders in nuclear security. Fellows are expected to produce policy-relevant research, including book manuscripts, draft articles, dissertations, chapters in edited volumes, or reports.

Eligibility: Available to scholars with a PhD or equivalent degree (MD/JD) from the U.S. or abroad. PhD candidates must have at least three chapters of their dissertation completed, and their dissertation topic must be in nuclear security.

<https://ssp.mit.edu/about/nuclear-security-fellows-program>

Tags: Residency

Course Information

Institution: Massachusetts Institute of Technology, Security Studies Program

Location: Cambridge, MA

Sponsored By: The Stanton Foundation

POC: Fellowship Coordinator; ssp-fellowships@mit.edu

Stewardship Science Pre-Doctoral Fellowship

Pre-Doctoral Fellowship

Synopsis: The DOE NNSA SSGF program's primary objective is to encourage the training of scientists by providing financial support to talented students who study and research designated areas of stewardship science accompanied by practical work experience at DOE NNSA research facilities. This also generates nuclear expertise that may be useful for WMD-related discussions on nuclear energy and weapons maintenance.

Eligibility: For doctoral candidates studying high energy density physics, nuclear science, or properties of materials under extreme conditions and hydrodynamics.

<https://www.krellinst.org/ssgf/>

Tags: Part-time, On-site

Course Information

Institution: Krell Institute

Location: Ames, Iowa with laboratory practicums at various DOE sites

Sponsored By: National Nuclear Security Administration, U.S. Department of Energy

Chemical and Biological Weapons Studies

Johns Hopkins' Center for Health Security – Emerging Leaders in Biosecurity Initiative (ELBI) Fellowship

Fellowship

Synopsis: The Emerging Leaders in Biosecurity Fellowship is an opportunity for career professionals to deepen their expertise, expand their network, and build their leadership skills. This highly-competitive, part-time program boasts more than 100 alumni from a wide variety of organizations in government, the private sector, and academia.

Eligibility: Currently enrolled in or have graduated from a masters or doctoral program in the past 3 years or have at least 1 year of professional experience in national security, public health, medicine, biotechnology, or a related field. Must be a U.S., U.K., Canadian, or Australian Citizen.

<http://www.centerforhealthsecurity.org/our-work/emergingbioleaders/>

Tags: Full-time, On-site

Course Information

Institution: Johns Hopkins University, Center for Health Security

Location: Washington, DC

Sponsored By: The Robert Wood Johnson Foundation

POC: Elle Law; Senior Program Assistant;

info@healthpolicyfellows.org

National Academy of Medicine's Health Policy Fellows Program

Fellowship

Synopsis: This non-partisan fellowship has offered exclusive, hands-on policy experience in the nation's capital by working hand-in-hand with key players in federal health policy. More than 250 fellows have participated in the policy process at the federal level and used that leadership experience to improve WMD-related areas like emergency response and health policy.

Eligibility: Must have earned an advanced degree in one of the following disciplines: allied health professions; biomedical sciences; dentistry; economics or other social sciences; health services organization and administration; medicine; nursing; public health; social and behavioral health; or health law.

<http://www.healthpolicyfellows.org/>

Tags: Full-time, On-site

Course Information

Institution: National Academy of Medicine

Location: Washington, DC

Sponsored By: The Robert Wood Johnson Foundation

POC: Elle Law; Senior Program Assistant;

info@healthpolicyfellows.org

Undergraduate and Certificate Programs

This section contains undergraduate degree and certificate programs at nationally and regionally accredited universities and colleges. This includes everything from Bachelor's degrees in WMD-related fields like security studies to concentrations and degrees in WMD-focused programs to certificate programs that we acquired either through online searches, word-of-mouth, or direct contact with program managers.

General WMD Studies (Overview)

Air Force Global Strike Command (AFGSC)- Funded Distance Learning in Nuclear Studies Certificate

Graduate Certificate Program

Synopsis: The certificate program is currently available as a distance-learning program. It is funded through the Air Force Global Strike Command (AFGSC).

Course Information

Institution: The Air Force Institute of Technology (AFIT), School of Strategic Force Studies

Location: Wright-Patterson Air Force Base, Ohio

POC: Mr. Jeff Martinez – 314-487-6349

Eligibility: Unknown. Please contact POC Mr. Jeff Martinez for more details

<https://www.afit.edu/EX/programs.cfm?p=80&a=pd>

Tags: On-line

Homeland Security Program

Bachelor's Degree with Concentrations

Synopsis: The Homeland Security Program at St. John's University focuses on the protection of the nation's critical infrastructure and populace from terrorism, criminal acts, and natural disasters. All tracks for the Bachelor's Degree incorporate CBRNE coursework. This program includes WMD components in coursework like *Global Threats to Security*, *Introduction to CBRNE*, and *Disaster Response and Hazard Control*.

Eligibility: See Admissions Criteria for St. John's University

<http://www.stjohns.edu/academics/schools-and-colleges/college-professional-studies/programs-and-majors/homeland-security-bachelor-science#Core>

Tags: On-site

Course Information

Institution: St. John's University,
College of Professional Studies

Location: Queens, NY

POC: admissions@stjohns.edu

Intelligence and National Security Studies (INSS)

Masters of Science, Graduate Certificate

Synopsis: The INSS graduate curriculum focuses on specific intelligence and security competencies that are delivered across the spectrum of academic disciplines at the University of Texas at El Paso. This program features WMD components in coursework like *Intelligence and Counterproliferation*, *Public Health Issues and Homeland Security*, and *International Security*.

Eligibility: Intended for students seeking employment or career advancement in the United States Intelligence Community (IC). The INSS graduate program is also suitable for students interested in security-related jobs in the private sector or with applied research institutions (think tanks). The INSS graduate program is also ideal preparation for advanced graduate study at the doctoral level in international relations, political science, public administration, public policy, history, or other closely related fields.

<http://academics.utep.edu/Default.aspx?tabid=75264>

also listed in Advanced Degree Programs

Tags: On-site

Course Information

Institution: University of Texas at El Paso

Location: El Paso, Texas

POC: Ms. Carmen Medellin;
cbsanchez@utep.edu

Science, Technology, and International Security

Post-Baccalaureate Certificate

Synopsis: This Certificate Program in Science, Technology, and International Security draws on academics and seasoned practitioners in broad areas such as cyber operations, biological sciences, big data, energy policy, security studies, and intelligence. It also includes WMD components in its coursework like *Technology and Terrorism*, *Technology of Weapons of Mass Destruction*, *Biological and Chemical Threat Response & Forensics*, and *Science, Medicine, and Policy in Biodefense*.

Eligibility: A grade point average of at least 3.0 on a 4.0 scale in the latter half of undergraduate studies; particular interests and work experience will also be considered.

<http://advanced.jhu.edu/academics/certificate-programs/science-technology-and-international-security/degree-requirements/>

Tags: On-site

Course Information

Institution: Johns Hopkins University, Krieger School of Arts and Sciences, Advanced Academic Programs

Location: Baltimore, MD

POC: Dr. Mark Stout;
mstout4@jhu.edu

Security Studies

Master of Science, Graduate Certificate

Synopsis: Offering environmental health and occupational safety, homeland security policy, international security, and science and technology security as emphases, this program includes WMD considerations, as well as areas of specialization including emerging technologies.

Eligibility: Must possess a Bachelor's degree. Other requirements vary by curriculum.

<http://www.ecu.edu/polsci/sec/>

also listed in Advanced Degree Programs

Tags: Full-time, Part-time, On-site, Online

Course Information

Institution: East Carolina University;
Department of Political Science

Location: Greenville, NC; Some courses can be completed via distance education.

The Terror-Crime Nexus and CBRN Threats

Certificate Training Course

Synopsis: This course is designed to give you an understanding of the ongoing debate (and the implications of the different viewpoints) about the terror-crime nexus, especially about the extent to which it may extend to chemical, biological, radiological, and nuclear (or CBRN) threats. It offers an introduction to the conflicting positions about the nature and scale of the collaboration between these different types of actors.

Eligibility: You do not need to be a UMD student to take this course.

Tags: Online

Course Information

Institution: National Consortium for the Study of Terrorism and Responses to Terrorism, University of Maryland; University of Maryland's Office of Extended Studies

Location: Online

POC: Liberty Day; START Training Manager; 301-405-6600; training@start.umd.edu

Texas A&M's National Security Affairs Certificate

Certificate Program

Synopsis: The graduate Certificate in National Security Affairs (Bush School of Government and Public Service) is intended to provide a comprehensive overview of the formation and operation of the United States national security policy, including WMD-related subjects, for individuals with specific background and experience.

Eligibility: Individuals may apply who hold a terminal or graduate degree from an accredited university and three years employment (or a bachelor's degree and five years employment) in a firm, laboratory, agency or non-governmental organization in which the individual's responsibilities involve the development or provision of systems, services or products for use in national or international security. Applicants must meet these requirements and those for admission for graduate study at Texas A&M University as a non-degree seeking students (G-6).

Tags: On-site

Course Information

Institution: Texas A&M University, Bush School of Government and Public Service

Location: College Station, TX

POC: Janeen Wood- 979-458-2276
jwood@tamu.edu

Nuclear and Radiological Weapons Studies

Arms Control and International Security

Masters, Diploma, or Certificate

Synopsis: Students will learn about WMD-related historical arms control challenges, such as negotiation of the Comprehensive Test Ban Treaty, along with contemporary arms control issues as they relate to international security, to include the Iran Nuclear Deal, U.S.-Russia arms control, and disarmament verification. Along with subject matter expertise, students will develop transferable analytic and research skills in a dynamic and rigorous intellectual environment.

Eligibility: Must possess a Bachelor's degree. Other requirements vary by curriculum.

<https://www.kcl.ac.uk/study/postgraduate/taught-courses/arms-control-and-international-security-ma-pg-dip-pg-cert.aspx.aspx>

also listed in Advanced Degree Programs

Tags: Full-time, Part-time, On-site

Course Information

Institution: King's College London;
Departments of War Studies and Defence
Studies

Location: London campuses

POC: Dr. Heather W. Williams;
heather.w.williams@kcl.ac.uk

International Security

Graduate Certificate

Synopsis: The International Security graduate certificate provides the opportunity to acquire a background in treaties and policy as context for work in defense systems, verification, and other complex security issues. WMD-related coursework includes a course in the International History of Nuclear Weapons.

Eligibility: Engineers, scientists, corporate managers, security professionals, military personnel, government officials, and national labs staff encouraged to apply. A B.A. is required.

<https://scpd.stanford.edu/public/category/courseCategoryCertificateProfile.do?method=load&certificateId=1226779>

Tags: Part-time, Online

Course Information

Institution: Stanford University, Center for Professional Development

Location: Online

Nonproliferation Studies

Certificate Program

Synopsis: Certificate students take courses, seminars, and workshops taught by nonproliferation experts and faculty in the Graduate School of International Policy and Management (GSIPM) department of the Monterey Institute of International Studies. WMD-centric courses include *Nuclear Weapons Technology*, *Biological Weapons Technology*, *Chemical Weapons Technology*, *Terrorism and Weapons of Mass Destruction*, and *Chemical and Biological Weapons and Arms Control*.

Eligibility: This program is a non-degree, 16 credit option that takes a year or less. Applications for admission must be from individuals holding advanced degrees (M.A. or higher), or those with equivalent work experience in international relations, science, engineering, law, or other related fields.

<http://www.nonproliferation.org/about-2/programs/nonproliferation-education/certificate-in-nonproliferation-studies/>

Tags: Part-time, On-site

Course Information

Institution: Middlebury Institute of International Studies at Monterey, James Martin Center for Nonproliferation Studies

Location: Monterey, CA

POC: Alisyn Gruener; agruener@miis.edu

Nuclear Deterrence

Graduate Certificate

Synopsis: This certificate program, developed in consultation with the USAF, is meant to increase understanding of the history and contemporary issues related to nuclear deterrence, security, nonproliferation, and arms control.

Course Information

Institution: Harvard University, Harvard Extension School

Location: Cambridge, MA

POC: inquiry@extension.harvard.edu

Eligibility: To earn this certificate, participants must complete four certificate courses for graduate credit within three years, all while earning at least a B grade in each course.

<https://www.extension.harvard.edu/academics/professional-graduate-certificates/nuclear-deterrence-certificate>

Tags: Part-time, On-site

Nuclear South Asia: A Guide to India, Pakistan, and the Bomb

Online Certificate Course

Synopsis: The course provides the emerging generation of strategic analysts in India, Pakistan, and elsewhere a platform to study nuclear competition and dangers on the Subcontinent. This WMD-related certificate course includes video interviews with more than 80 leading practitioners and scholars from India, Pakistan, and the United States, including former senior diplomats and military officers.

Course Information

Institution: The Stimson Center, South Asia Program

Location: Online

Eligibility: Open to public.

<https://www.nuclearlearning.org/courses/nuclear-south-asia>

Tags: Part-time, Online

Nuclear Weapons and Strategy Minor

Degree Program

Synopsis: The Nuclear Weapons and Strategy minor at the Academy focuses on the enduring WMD-related fundamentals of the nuclear enterprise. This includes the origin of nuclear energy, strategic policy, proliferation, and the effects of radiation as a result of nuclear reactions.

Course Information

Institution: U.S. Air Force Academy

Location: Colorado Springs, CO

POC: Dr. Ryan Cress; ryan.cress@usafa.edu; 719-333-3272

Eligibility: Available for all majors. Cadets in the minor must have a SECRET security clearance.

<https://www.usafa.edu/academic/nuclear-weapons-strategy-minor/>

Tags: On-site

Nuclear Weapons Effects, Policy, and Proliferation Certificate Program (NWEPP)

Graduate Certificate Program

Synopsis: The primary focus of NWEPP is providing formal graduate education in the areas of nuclear weapon effects, nuclear proliferation and technologies, and nuclear weapon strategy and policy to the Air Force's operational nuclear community.

Course Information

Institution: Air Force Institute of Technology, Department of Engineering Physics

Location: Wright-Patterson Air Force Base, Ohio

POC: Ms. Jennifer Ngo; Administrative Assistant; 937-255-3636 ext 4706 and Dr. John McClory; Director; 937-255-3636 ext 7308

Eligibility: This program is targeted to mid-career Air Force officers, non-commissioned officers, and civilians with current or future assignments in the Air Force and DoD nuclear enterprise. The NWEPP program starts 4 cohorts each calendar year.

<https://www.afit.edu/ENP/programs.cfm?p=56&a=pd>

Tags: Part-time, On-site

Chemical and Biological Weapons Studies

Biodefense

Doctoral, Masters, and Graduate Certificates

Synopsis: GMU's biodefense program provides students with the knowledge and analytic capabilities to bridge the gap between WMD science and policy.

Course Information

Institution: George Mason University

Location: Online available; D.C. Metropolitan Area

POC: Gregory Koblentz; gkoblent@gmu.edu

Eligibility: Varies by curriculum

<https://schar.gmu.edu/prospective-students/programs/masters-programs/biodefense-ms>

also listed in Advanced Degree Programs

Tags: Part-time, On-site, Online

Biodefense Certificate

Certificate Program

Synopsis: This certificate covers a broad knowledge of biodefense topics, including the fundamentals of biomedical sciences, an understanding of Select Agent pathogens and their biology, homeland security issues related to bioterrorism, and an overarching view of CBRN strategy and policy.

Eligibility: Must possess a Bachelor's degree.

http://njms.rutgers.edu/gsbs/current_students/certificate_programs4.php

Tags: Part-time, On-site

Course Information

Institution: Rutgers University, Graduate School of Biomedical Sciences

Location: Newark, NJ

POC: Dr. Nancy Connell, Program Coordinator; connell@njms.rutgers.edu

Biohazardous Threat Agents and Emerging Infectious Diseases

Master of Science or Graduate Certificate

Synopsis: These programs focus on biohazardous agents and emerging infectious diseases facing the world community; whether such threats occur naturally or are purposefully designed.

Course Information

Institution: Georgetown University; Georgetown University Medical Center

Location: Washington, D.C.

POC: Judie Kuo, BGE Coordinator; judie.kuo@georgetown.edu

Eligibility: Must possess a Bachelor's degree. Other requirements vary by curriculum.

<https://biohaz.georgetown.edu/>

also listed in Advanced Degree Programs

Tags: Part-time, On-site, Online

Bioinformatics

BS, MS, or PhD Programs

Synopsis: Bioinformatics is a new integrative discipline that combines 21st century high-throughput life sciences technologies such as genomics and proteomics with computer science and information technology. Bioinformatics expertise has applications in WMD-related areas of interest like pathogen detection, identification, and characterization. MS has both thesis and professional tracks.

Eligibility: Varies based on curriculum.

<https://csbc.vcu.edu/>

also listed in Advanced Degree Programs

Tags: Full-time, Part-time, On-site

Course Information

Institution: Virginia Commonwealth University, Center for the Study of Biological Complexity (CSBC)

Location: Richmond, Virginia

Law and Biodefense

Certificate Program

Synopsis: This Certificate program includes the core course of Law and Bioterrorism, requires four elective courses ranging from individual civil rights to public international law and treaties, and a major research paper in an area of biodefense and law. LPEC focuses on select agents, SAP, Two-Animal Rule, Vaccine Approval Processes, Intellectual Property Processes, and Scientific Publication and International Human Subject Testing.

Eligibility: This is a specialty area in the completion of the J.D. degree at TTU.

<http://www.ttu.edu/biodefense/certificate.php>

Tags: Part-time, On-site

Course Information

Institution: Texas Tech University, Center for Biodefense, Law & Public Policy

Location: Lubbock, TX

POC: Dr. Victoria Sutton, Director;
Vickie.sutton@ttu.edu

Public Health Studies, Concentration in Biosecurity and Disaster Preparedness

Doctoral, Master's, and Graduate Certificates

Synopsis: SLU's concentration in biosecurity and disaster preparedness provides knowledge and skills that are necessary to work as a biosecurity professional within the public health, education, academic, or consulting domains.

Course Information

Institution: Saint Louis University, Institute for Biosecurity

Location: St. Louis, MO

POC: Patti Mazzuca; pmazzuca@slu.edu

Eligibility: Varies by curriculum

<https://www.slu.edu/programs/graduate/public-health-studies-phd.php>

also listed in Advanced Degree Programs

Tags: Part-time, On-site

Professional Development Courses

This section contains courses, training, and programs that are meant to help participants increase their WMD-related skills and knowledge. These programs encompass professional development course opportunities from government, academia, and the private sector. The programs listed here were those found through online searches, word-of-mouth, or direct contact with program managers.

General WMD Studies (Overview)

Emergency & Disaster Management

Executive Master of Professional Studies (EMPS)

Synopsis: EMPS in Emergency & Disaster Management provides experienced management leaders and practitioners with a cohort-based program that emphasizes a strategic mindset and critical thinking skills to position students for success. Residency Travel includes a specific module on Terrorism and WMD, which explores the challenges and complexities associated with CBRNE hazards.

Course Information

Institution: Georgetown University; School of Continuing Studies

Location: Washington, D.C. with one-week residencies in different locations

POC: Ashley Barnes;
aab106@georgetown.edu

Eligibility: This is a one-year program for full-time professionals. It leverages both distance learning with in-person residencies in different geographic locations.

<https://scs.georgetown.edu/programs/366/executive-master-of-professional-studies-in-emergency-and-disaster-management/>

also listed in Continuing Education Courses

Tags: Full-time, On-site, Online

Emergency Management Institute (EMI)

Training Courses

Synopsis: EMI offers self-paced, online, courses designed for people who have emergency management responsibilities and the general public. There are currently five courses offered on WMD-related topics like nuclear/radiological, one on chemical, and several on pandemic planning.

Eligibility: Some qualifications necessary for enrollment in specific courses.

<https://training.fema.gov/emicourses/>

also listed in Continuing Education Courses

Tags: Part-time, Online

Course Information

Location: Online

Sponsored By: Federal
Emergency Management Agency
(FEMA)

Mid-Level Leadership Development Program (MLDP)

Professional Development Program

Synopsis: The program places participants in 60-day rotational assignments outside of their current roles. Participants also take part in mentoring opportunities, leadership training courses, and a capstone project.

Eligibility: Registration restricted to NNSA personnel.

<https://nnsa.energy.gov/blog/new-nnsa-program-develops-future-leaders>

Tags: Full-time, On-site

Course Information

Institution: National Nuclear Security
Administration, U.S. Department of Energy
Location: Nevada Field Office

Military Academy Cadet/Midshipman Program

Professional Development Program

Synopsis: This program places military academy cadets/midshipmen in tours of duty within science, technology, national security, and relevant fields at any of the NNSA sites. Participants expand their understanding of the NNSA National Security Enterprise and DoD programs while working closely with nationally recognized staff and researchers.

Eligibility: Restricted to Military Academy students.

<https://nnsa.energy.gov/aboutus/ourprograms/defenseprograms/militaryacademiccollaborations>

Tags: Full-time, On-site

Course Information

Sponsored By: U.S. Department of Energy, National Nuclear Security Administration (NNSA)

Location: Each of NNSA's 8 sites

Program for Emerging Leaders (PEL)

Professional Development Program

Synopsis: PEL aims to foster a community of rising U.S. government leaders to enhance awareness of WMD threats to national security and the full range of means, processes, and organizations for addressing them. Through education, outreach, mentorship, and debate, PEL seeks to cultivate trusting relationships among future leaders who may someday need to call upon one another to address WMD-related issues.

Eligibility: Candidates must be early- to mid-career U.S. government employees (GS-11-13 or equivalent), or commissioned military officers (O-3/O-4) with responsibilities related to national security and an interest in learning about WMD.

<http://wmdcenter.ndu.edu/education/pel/>

Tags: Part-time, On-site

Course Information

Institution: Center for the Study of WMD, National Defense University

Location: Washington, DC

POC: Nima Gerami; PEL@ndu.edu

Visiting Fellows Program at the Middlebury Institute

Internship Program

Synopsis: The program is 2-3 months in duration and offered 3 times a year. It is given by WMD nonproliferation experts and graduate-level faculty, with outside speakers. Lectures are given by experts from all over the world.

Course Information

Institution: Middlebury Institute of International Studies at Monterey, James Martin Center for Nonproliferation Studies
Location: Monterey, CA
POC: Margarita Sevcik; 831-647-6540; msevcik@miis.edu

Eligibility: The program is designed for young and mid-career professionals who train to make a positive impact on arms control and nonproliferation policy in their respective countries.

<http://www.nonproliferation.org/about-2/nonproliferation-internships/#visiting>

also listed in Continuing Education Courses

Tags: On-site

WMD Counterproliferation at PNNL

Training Program

Synopsis: Three multiple-day courses available. The WMD Border Security/Interdiction Course is hands-on training at the HAMMER Federal Training Center for the detection, identification, and interdiction of illicit transfers of material, commodities, and components related to WMD. The Radiation/Nuclear Material Interdiction Course is specifically for law enforcement personnel and involves instruction and field exercises related to the detection and interdiction of radiological and nuclear materials. The Frontier Border Security Training is held in partner countries to assist border security personnel with the interdiction of WMD.

Course Information

Institution: Pacific Northwest National Laboratory, National Security Directorate
Location: Richland, Washington
POC: Hal Udem; (509) 375-2846
Halvor.Udem@pnnl.gov

Eligibility: These courses are mission specific and may not be maintained in a readily deployable state for all who are interested.

<http://nationalsecuritytraining.pnnl.gov>

Nuclear and Radiological Weapons Studies

Nuclear Scholars Initiative at CSIS

Program

Synopsis: Scholars are hosted once per month to participate in daylong workshops with senior government officials, policy experts, and technical experts to discuss nuclear weapons issues. Over the course of the 6-month program, Scholars are required to prepare a research product: a journal article, an op-ed, a presentation or a collaborative research product. Scholars will be given the opportunity to develop their research product in teams throughout the program, be matched with a senior expert to review their research, and later publish in a journal produced by CSIS, present at a PONI conference or publish externally.

Eligibility: Target audience includes graduate students and young professionals.

<https://www.csis.org/programs/international-security-program/project-nuclear-issues/nuclear-scholars-initiative>

also listed in Continuing Education Courses

Tags: Part-time, On-site

Course Information

Institution: Center for Strategic & International Studies (CSIS), Project on Nuclear Issues (PONI)

Location: Washington, D.C.

POC: Sarah Minot; SMinot@csis.org

Program for International Nuclear Security

Response Force Training Courses and Workshops

Synopsis: A variety of courses targeting leadership/management, instructor, and operator training. Topics include: fixed site and transportation security, vulnerability and protective force assessment, curriculum development, and special response teams. Training includes WMD-related considerations like *Chemical and Biological Security, Nonproliferation and Arms Control*, and *Critical Infrastructure Protection*.

Eligibility: These courses are mission specific and may not be maintained in a readily deployable state for all who are interested.

<http://nationalecuritytraining.pnnl.gov>

Tags: On-site

Course Information

Institution: Pacific Northwest National Laboratory, National Security Directorate

Location: Richland, Washington

Weapon Intern Program (WIP)

Internship Program

Synopsis: WIP is a NSE-wide, 11-month residential educational program that consists of interns from across the NNSA and DOD, covering topics including WMD-related components like nuclear politics, nuclear history, science & technology foundations, and nuclear components and systems.

Eligibility: Candidates should have a Bachelor's (Master's preferred) in an engineering or science discipline as well as 3-5 years' experience in the NW community.

<https://nnsa.energy.gov/blog/weapon-intern-program-holds-graduation-ceremony>

also listed in Continuing Education Courses

Tags: Residency

Course Information

Institution: U.S. Department of Energy, National Nuclear Security Administration (NNSA), Sandia National Laboratories

Location: Washington, D.C.

POC: Larry Schoof; WIP Program Manager; 505-844-5156; laschoo@sandia.gov

Continuing Education Courses

This section contains courses, training, and programs that are meant to help participants increase their WMD-related skills and knowledge. These programs encompass continuing education course opportunities from government, academia, and the private sector. The programs listed here were those found through online searches, word-of-mouth, or direct contact with program managers.

Comprehensive WMD Studies

CBRN Defense Science Course

Ten-day Course

Synopsis: For scientists, the course is intended to widen the appreciation of the areas of science that are applied to CBRN Defence beyond their key specialism, and provide understanding of the military context in which scientific developments will find a practical application. In addition, a key aspect of the course is offered by the broad mix of Military and Civilian CBRN practitioners attending this course and so providing for an informal atmosphere enabling open exchange views and opportunity to establish contacts.

Eligibility: Course content is classed to OFFICIAL - SENSITIVE, with two sessions classed to SECRET - "Five Eyes". Students will require clearance to minimum of Security Check (SC) level to attend the course. Citizens of countries other than the UK, USA, Canada, New Zealand and Australia may not be able to attend the two sessions classed to SECRET-"Five Eyes" level.

<https://www.cranfield.ac.uk/Courses/Short/Defence-and-Security/CBRN-Defence-Science>

also listed in OCONUS Opportunities

Tags: On-site

Course Information

Institution: Cranfield University

Location: Cranfield University at
Shrivenham, England

Defense Support of Civil Authorities (DSCA) Phase II, Mobile Training Team (MTT)

Resident Course

Synopsis: The Phase II course consists of students from a wide array of specialty backgrounds. A majority of time is spent in small groups with student-led exercises facilitated by subject matter experts, including WMD SMEs. These exercises are conducted at different levels of command to enhance the overall learning experience regarding the process by which U.S. Military assets and personnel can be used to assist in missions normally carried out by civil authorities.

Eligibility: This is a follow-up on the Phase I DSCA course, available through Joint Knowledge Online (JKO). For DoD employees only.

<http://www.arnorth.army.mil/Operations/Pages/DSCA-Courses.aspx>

Tags: Residency

Course Information

Institution: U.S. Department of Defense, U.S. Army North (ARNORTH)

Location: Throughout the U.S.

POC: usarmy.jbsa.arnorth.mbx.dsca-registrar@mail.mil

Emergency & Disaster Management

Executive Master of Professional Studies (EMPS)

Synopsis: EMPS in Emergency & Disaster Management provides experienced management leaders and practitioners with a cohort-based program that emphasizes a strategic mindset and critical thinking skills to position students for success. Residency Travel includes a week-long specific module on Terrorism and WMD.

Eligibility: This is a one-year program for full-time professionals. It leverages both distance learning with in-person residencies in different geographic locations.

<https://scs.georgetown.edu/programs/366/executive-master-of-professional-studies-in-emergency-and-disaster-management/>

also listed in Professional Development Courses

Tags: Part-time, On-site, Online

Course Information

Institution: Georgetown University; School of Continuing Studies

Location: Washington, D.C. with one-week residencies in different locations

POC: Ashley Barnes;
aab106@georgetown.edu

Emergency Management Institute (EMI)

Training Courses

Synopsis: EMI offers self-paced, online, courses designed for people who have emergency management responsibilities and the general public. There are currently five courses offered on WMD-related topics like nuclear/radiological, one on chemical, and several on pandemic planning.

Eligibility: Some qualifications necessary for enrollment in specific courses.

<https://training.fema.gov/is/crslist.aspx>

also listed in Professional Development Courses

Tags: Part-time, Online

Course Information

Location: Online

Sponsored By: Federal
Emergency Management Agency
(FEMA)

Introduction to Weapons of Mass Destruction

Online-Training Program

Synopsis: The training and academic preparation provided through the online interface offered at Johns Hopkins University's Center for Public Health Preparedness are meant to provide differing levels of insights as an introduction to the issues that are posed by WMD.

Eligibility: This training course is appropriate for public health workers and emergency responders who need a basic introduction (or refresher) to weapons of mass destruction.

<http://www.jhsph.edu/research/centers-and-institutes/johns-hopkins-center-for-public-health-preparedness/training/online/chem-trainings.html>

Tags: Part-time, Online

Course Information

Institution: Johns Hopkins Center for Public Health Preparedness, Bloomberg School of Public Health

Location: Online

Joint CWMD Planning Course (JCPC)

Course

Synopsis: JCPC teaches students how to incorporate CWMD-related USG and DoD policy, strategy, doctrine, and planning into the Joint Operational Planning Process (JOPP). Focuses include: the three pillars of CWMD (nonproliferation, counter proliferation, and WMD consequence management), the eight military mission areas of CWMD identified in joint doctrine and the National Military Strategy to Combat WMD, as well as select areas of the JOPP and the intersection of CWMD and JOPP concepts.

Eligibility: SECRET clearance required; available to military personnel and federal employees (O3 – O6, senior NCOs or equivalent grades) and their supporting contractors

www.dtra.mil/Portals/61/Documents/DNWS/DNWSCourseCatalog2016finalweb.pdf

Tags: On-site

Course Information

Institution: Defense Nuclear Weapons School

Location: Varies

Sponsored By: U.S. Department of Defense, Defense Threat Reduction Agency

POC: LTC Ned Krafchick, Course Director; 703-767-4141; ned.a.krafchick.mil@mail.mil and Mr. John Grewelle; 703-767-6049; john.l.grewelle.ctr@mail.mil

Joint Senior Leader Course (JSLC)

Course

Synopsis: The JSLC is a three-day course designed to provide Senior Joint Service and Inter-Agency Leaders with an understanding of the domestic threat of WMD, DoD Combating WMD policies, programs, and organizations, as well as how DoD forces are incorporated into Homeland Defense and Defense Support of Civil Authorities operations. Presentations covering the global threat of WMD, Combatant Command efforts to address regional WMD developments, WMD elimination, and Department of State efforts to combat WMD provide attendees with an outlook on OCONUS and operational efforts to combat WMD.

Eligibility: Available for GS-12 and above, E-8 and above, CWO-4 and above, and O-4 and above.

Tags: On-site

Course Information

Institution: U.S. Department of Defense, 7 with NORAD and USNORTHCOM (N-NC)

Location: Fort Leonard Wood, MO

Marine Corps University Command and Staff College: WMD Electives and Exercises

Electives and Exercises

Synopsis: Issues related to CWMD are addressed in the Culture and Interagency Operations (CIAO) and Operational Art (OPART) curricula, as well as in an elective (20 Seminar hours). The College conducts the National Response to Catastrophic and Disruptive Threats (NRCDT) exercise in the second semester (4 days).

Eligibility: Available for O-3 through O-4.

<https://www.usmcu.edu/csc>

Tags: On-site

Course Information

Institution: Marine Corps University
Command and Staff College

Location: Quantico, VA

Tactical CBRN Instruction

Certification

Synopsis: The joint services' primary center of instruction for CBRN and WMD-related education.

Eligibility: Depends on the type of course taken. Please refer to the specific course for eligibility requirements.

<http://www.wood.army.mil/newweb/chemical/>

Tags: On-site

Course Information

Institution: United States Chemical,
Biological, Radiological and Nuclear School,
Directorate of Training and Leader
Development

Location: Fort Leonard Wood, MO

POC: Dr. Barbara Kilthau;
Barbara.a.kilthau.civ@mail.mil

The Advanced Methods of Cooperative Security Program

Research Program

Synopsis: This program educates and carries out research on the many shifting risk and threat dynamics that are occurring both now and on the horizon. WMD-related research areas include emerging technologies, counterterrorism, and nonproliferation of nuclear, chemical, and biological weapons.

Eligibility: This program is part of the UMD School of Public Policy. See school admission criteria for details.

<http://www.cissm.umd.edu/projects/advanced-methods-cooperative-security-program>

Tags: On-site

Course Information

Institution: University of Maryland School of Public Policy, Center for International and Security Studies

Location: College Park, MD

Sponsored By: The John D. and Catherine T. MacArthur Foundation

POC: Nancy Gallagher, Director;
ngallag@umd.edu

Nuclear and Radiological Weapons Studies

Asia-Pacific Nuclear History Institute

Program

Synopsis: This course, led by world-class historians and leading experts on nuclear weapons, is an intensive, one-week immersion into the international history of nuclear weapons in the Asia-Pacific region. It provides in-depth instruction and discussion on the evolution of nuclear technology, the origins and development of deterrence and extended deterrence theory, regional nonproliferation issues, and nuclear strategy.

Eligibility: Available for Ph.D. students and individuals with a completed M.A.

<https://www.wilsoncenter.org/article/apply-to-the-asia-pacific-nuclear-history-institute>

also listed in OCONUS Opportunities

Tags: On-site

Course Information

Institution: The Wilson Center, Nuclear Proliferation International History Project (NPIHP)

Location: Seoul, Korea

Defense Nuclear Weapons School (DNWS)

School

Synopsis: DNWS provides training in nuclear weapons; chemical, biological, radiological and nuclear incident command, control and response, chemical, biological, radiological and nuclear (CBRN) modeling for the Department of Defense (DOD), other federal, state, and local agencies.

Eligibility: Must be a federal government employee or a responder, emergency manager, or planner at the state/local level.

<http://www.dtra.mil/Missions/WMD-Training-and-Education/>

Tags: Part-time, On-site, Online

Course Information

Institution: Defense Nuclear Weapons School (DNWS)

Location: Kirtland AFB, Albuquerque, NM

Sponsored By: U.S. Department of Defense, Defense Threat Reduction Agency (DTRA)

POC: 505-846-5666;
dtra.kirtland.J10.mbx.dnws-registrar@mail.mil

Deterrence and Assurance Summer Institute

Summer Program

Synopsis: In collaboration with United States Strategic Command, the University of Nebraska at Omaha Deterrence and Assurance Summer Institute offers a two-week intensive, academically rigorous program designed for students and professionals wishing to gain expertise and specialization in 21st century deterrence that exceeds the traditional classroom experience. The objective is to develop a robust network of new strategic thought leaders prepared to confront future security threats with innovative solutions.

Eligibility: Applicants must be enrolled students, government/industry professionals, or junior faculty.

<https://www.unomaha.edu/college-of-arts-and-sciences/political-science/student-opportunities/det-assurance-institute.php>

Course Information

Institution: University of Nebraska at Omaha, Department of Political Science

Location: Omaha, NE

Sponsored By: USSTRATCOM

POC: unopolisci@unomaha.edu

Tags: Full-time, On-site

International School of Nuclear Law

Summer Program

Synopsis: This program provides participants with a comprehensive understanding of the various interrelated legal issues relating to the safe, efficient and secure use of nuclear energy.

[Course Information](#)

Institution: University of Montpellier

Location: Montpellier, France

Sponsored By: OECD Nuclear Energy Agency (NEA) and the International Atomic Energy Agency (IAEA)

POC: isnl@oecd-nea.org

Eligibility: Applicants must have an undergraduate university degree in a relevant discipline. Advanced graduate-level education and/or significant professional work experience are also significant factors in the application process.

<https://www.oecd-nea.org/law/isnl/>

also listed in OCONUS Opportunities

Tags: Full-time, On-site

Mahan Scholars Program

Advanced Research Program (ARP)

Synopsis: The Mahan Scholars Program is a year-long, seminar-based course of study focused on deterrence and related concepts at the strategic level as well as their applications to and implications for the nuclear realm. Depending on student cohort composition and interest, the program also examines additional WMD-related domains and/or tools of strategic importance, such as space, cyberspace, and/or special operations.

[Course Information](#)

Institution: Naval War College, Special Advanced Research Programs

Location: Newport, Rhode Island

POC: 401-841-6448;

MAHAN_DIRECTOR@usnwc.edu; DSN 841-6448

Eligibility: Students are field-grade officers or their civilian equivalents

<https://www.usnwc.edu/Research-and-Wargaming/Special-Advanced-Research-Programs/Mahan-Scholars-ARP>

Tags: Full-time, On-site

National Security Programs at Argonne National Laboratory

Program

Synopsis: Born out of the Manhattan Project more than 70 years ago, Argonne continues to provide the scientific expertise and world-class research facilities that deliver breakthrough innovation and technology through its National Security Programs.

Course Information

Institution: Argonne National Laboratory

Location: Argonne, IL

Sponsored By: U.S. Department of Energy

POC: Keith Bradley; ksbradley@anl.gov

Eligibility: These Programs serve as gateways for government sponsors and contractors to link into tailored, diverse teams of elite researchers to solve R&D challenges in national security.

<http://www.anl.gov/national-security-programs>

Tags: On-site

NATO Nuclear Command Control & Reporting System (NNCCRS) User/Operators Course

Program

Synopsis: The aim of this course (5 days) is to certify students to use the NATO Nuclear Command and Control Reporting procedures within Allied Command Operations. Learning objectives include: NATO nuclear operations, NATO nuclear crypto, and NNCCRS messaging.

Course Information

Institution: USAFE Nuclear University and NATO School, Conducted by PROT

Location: Oberammergau, Germany

Sponsored By: U.S. Air Force

POC:
USAFE10.A10N.NuclearUniversity@us.af.mil

Eligibility: Open to military officers (OF-1 through OF-5) and NCO's (OR-4 through OR-9) or civilian equivalents assigned to work in a nuclear-aligned post in a MOD or subordinate national military HQ, unit or agency that operates NNCCRS. French personnel are not eligible for this course.

<http://www.natoschool.nato.int/Academics/Resident-Courses/Course-Catalogue/Course-description?ID=11>

also listed in OCONUS Opportunities

Tags: On-site

NATO Nuclear Policy Course

Training Course

Synopsis: A one-week course with objectives of learning NATO nuclear policy strategic context, national nuclear policies and forces and NATO planning, consultation, and nuclear strike operations.

Eligibility: NCO not eligible, Officer: OF-3 thru OF-6. Open to military officers (OF-3 through OF-6) or civilian equivalents assigned to undertake staffing positions that fulfill responsibilities associated with NATO nuclear policy.

also listed in OCONUS Opportunities

Tags: On-site

Course Information

Institution: United States Air Forces in Europe (USAFE) Nuclear University and NATO School

Location: Oberammergau, Germany

POC:
USAFE10.A10N.NuclearUniversity@us.af.mil

NATO Nuclear Surety Management Course

Training Course

Synopsis: A one-week course with objectives of learning nuclear surety in ACO, nuclear weapon safety, weapon security and survivability systems (WS3).

Eligibility: Open to military officers (OF-1 through OF-4) and NCO's (OR-7 through OR-9) or civilian equivalents assigned to ACO DCA surety operations.

<http://www.natoschool.nato.int/Academics/Resident-Courses/Course-Catalogue/Course-Description?TabId=248&ID=12&language=en-US> ; also listed in OCONUS Opportunities

Tags: On-site

Course Information

Institution: United States Air Forces in Europe (USAFE) Nuclear University and NATO School

Location: Oberammergau, Germany

POC:
USAFE10.A10N.NuclearUniversity@us.af.mil

NNSA Summer School

Training Courses

Synopsis: This program offers five yearly courses at the DOE National Laboratories in which students learn about WMD-related topics like safeguards technology, nuclear materials measurement and the policy and legal challenges surrounding the implementation of safeguards.

Eligibility: This program targets undergraduate and graduate students as well as young professionals.

<https://nnsa.energy.gov/mediaroom/pressreleases/ngsi090910>

Tags: On-site

Course Information

Institution: U.S. Department of Energy, National Nuclear Security Administration, Next Generation Safeguards Initiative
Location: DOE National Laboratories

Nonproliferation and Homeland Security Field Support Group

Program

Synopsis: This group has developed protocols and procedures for first responder groups, and plans to increase its assistance by offering training and assistance to establishing nuclear and radiological emergency preparedness and response capabilities for local and state response agencies.

Eligibility: The training program is currently in development.

<https://www.bnl.gov/NNS/homeland.php>

Tags: None

Course Information

Institution: Brookhaven National Laboratory, Nonproliferation and National Security Department
Location: Upton, NY
Sponsored By: U.S. Department of Energy
POC: Biays Bowerman, Group Leader; Bowerman@bnl.gov

Nuclear History Boot Camp at the Wilson Center

Program

Synopsis: This is an intensive, ten-day immersion in the history of nuclear matters ranging from the evolution of nuclear technology to the origins and development of deterrence theory and nuclear strategy through the historical roots of today's global nuclear landscape.

Eligibility: Available for Ph.D. students and individuals with a completed M.A.

<https://www.wilsoncenter.org/nuclear-history-boot-camp>

also listed in OCONUS Opportunities

Tags: On-site

Course Information

Institution: The Wilson Center, Nuclear Proliferation International History Project (NPIHP)

Location: Varies: 2017 location was former ACE HIGH NATO communications relay site in the village of Allumiere near Rome, Italy.

Nuclear Safeguards and Non Proliferation

Five-Day Course

Synopsis: The course addresses aspects of the efforts to create a global nuclear nonproliferation system and how this system works in practice: the Treaty on Nonproliferation of Nuclear Weapons (NPT), safeguards technology, and export control. Also regional settings, such as Euratom Treaty, are presented and discussed.

Eligibility: Open to graduate degree students, in particular nuclear engineering students, but also to young professionals and International Relations / law students.

https://esarda.jrc.ec.europa.eu/index.php?option=com_content&view=article&id=330&Itemid=423

Tags: On-site

Course Information

Institution: European Safeguards Research & Development Association (ESARDA), Nuclear Security Unit

Location: European Commission's Research Centre, Ispra, Italy

POC: JRC-NUSAF-
SECRETARIAT@ec.europa.eu

Nuclear Scholars Initiative

Program

Synopsis: Scholars are hosted once per month to participate in daylong workshops with senior government officials, policy experts, and technical experts to discuss nuclear weapons issues. Over the course of the 6-month program, Scholars are required to prepare a research product. Scholars will be given the opportunity to develop their research product in teams throughout the program, be matched with a senior expert to review their research, and later publish in a journal produced by CSIS, present at a PONI conference or publish externally.

Eligibility: Target audience includes graduate students and young professionals.

<https://www.csis.org/programs/international-security-program/project-nuclear-issues/nuclear-scholars-initiative>

also listed in Professional Development Courses

Tags: Part-time, On-site

Course Information

Institution: Center for Strategic & International Studies (CSIS), Project on Nuclear Issues (PONI)

Location: Washington, D.C.

POC: Sarah Minot; SMinot@csis.org

PPNT Summer Boot Camp at the University of California – San Diego

Workshop in-residence

Synopsis: Participants attend talks dealing with nuclear threats, command and control, international safeguards, nonproliferation strategies, and other nuclear issues.

Course Information

Institution: University of California San Diego

Location: San Diego, CA

Sponsored By: National Nuclear Security Administration (NNSA)

POC: Marie Stewart; mthiveos@ucsd.edu

Eligibility: Available to graduate students, postdoctoral candidates, and professionals.

<http://igcc.ucsd.edu/research-and-programs/workshops/PPNT-boot-camp/index.html#Past-Boot-Camps>

Tags: On-site

Science and Global Security at Princeton University

Program

Synopsis: The program carries out research and policy analysis on nuclear arms control and nonproliferation. It has helped train technical nuclear arms control and nonproliferation researchers in Russia, China, India, and Pakistan, and facilitated the establishment of counterpart programs in China and Russia.

Eligibility: The Program provides training opportunities for post-doctoral and senior scientists interested in science and security policy.

<https://www.princeton.edu/sgs/>

Tags: On-site

Course Information

Institution: Princeton University, Woodrow Wilson School of Public and International Affairs

Location: Princeton, NJ

POC: Nancy Burnett, Program Manager; nancyb@princeton.edu

Using Cultural Analysis to Assess Nuclear Intentions

Training Workshop

Synopsis: The workshop provides regional analysts, nonproliferation policy students, and language professionals with a viable, replicable approach to assessing nuclear intentions that can support intelligence, policy, and defense community strategists. This is a cutting-edge model for cultural analysis, the Cultural Topography Analytic Framework (CTAF).

Eligibility: Program not running yet.

<https://www.casl.umd.edu/>

Tags: On-site

Course Information

Institution: University of Maryland and Utah State University, Center for Advanced Study of Language (CASL)

Location: College Park, MD

POC: Ms. Marilyn Maines; CASL Technical Lead; 301-226-9198

Visiting Fellows Program at the Middlebury Institute

Internship Program

Synopsis: The program is 2-3 months in duration and offered 3 times a year. It is given by WMD nonproliferation experts and graduate-level faculty, with outside speakers. Lectures are given by experts from all over the world.

Course Information

Institution: Middlebury Institute of International Studies at Monterey, James Martin Center for Nonproliferation Studies
Location: Monterey, CA
POC: Margarita Sevcik; 831-647-6540; msevcik@miis.edu

Eligibility: The program is designed for young and mid-career professionals who train to make a positive impact on arms control and nonproliferation policy in their respective countries.

<http://www.nonproliferation.org/about-2/nonproliferation-internships/#visiting>

also listed in Professional Development Courses

Tags: On-site

Weapon Intern Program (WIP) at the Department of Energy

Internship Program

Synopsis: WIP is a NSE-wide, 11-month residential educational program that consists of interns from across the NNSA and DOD, covering WMD-related topics including: nuclear politics, nuclear history, customers/requirements, science & technology foundations, design/assessment, nuclear components, and systems.

Course Information

Institution: U.S. Department of Energy, National Nuclear Security Administration (NNSA), Sandia National Laboratories
Location: Washington, D.C.
POC: Larry Schoof; WIP Program Manager; 505-844-5156; laschoo@sandia.gov

Eligibility: Candidates should have a Bachelor's (Master's preferred) in an engineering or science discipline as well as 3-5 years' experience in the NW community.

<https://nnsa.energy.gov/blog/weapon-intern-program-holds-graduation-ceremony>

also listed in Professional Development Courses

Tags: Residency

Chemical and Biological Weapons Studies

Pandemics, Bioterrorism, and Global Health Security: From Anthrax to Zika

Summer Workshop

Synopsis: This is a three-day, non-credit summer workshop designed to introduce participants to the biodefense and public health challenges facing the world.

Course Information

Institution: George Mason University, Schar School of Policy and Government
Location: Arlington, VA
POC: biodefensegmu@gmail.com

Eligibility: Professionals and academics, both domestic and international, in public health, the life sciences, the biotechnology and pharmaceutical industries, international affairs, law enforcement, emergency management, and national security who have responsibilities for preventing, preparing for, or responding to pandemics, bioterrorism, and other threats to global health security.

<https://www.eventbrite.com/e/summer-workshop-on-pandemics-bioterrorism-and-global-health-security-from-anthrax-to-zika-tickets-32096700094#>

Tags: On-site

Opportunities Outside of the Continental U.S.

This section contains courses, training, and programs that are meant to help participants increase their WMD-related skills and knowledge in institutions and forums outside the continental United States. These programs encompass continuing opportunities from government, academia, and the private sector. The programs listed here were those found through online searches, word-of-mouth, or direct contact with program managers.

General WMD Studies (Overview)

CBRN Defence Science Course

Ten-day Course

Synopsis: For scientists, the course is intended to widen the appreciation of the areas of science that are applied to CBRN Defence beyond their key specialism, and provide understanding of the military context in which scientific developments will find a practical application. In addition, a key aspect of the course is offered by the broad mix of Military and Civilian CBRN practitioners attending this course and so providing for an informal atmosphere enabling open exchange views and opportunity to establish contacts.

Eligibility: Course content is classed to OFFICIAL - SENSITIVE, with two sessions classed to SECRET - "Five Eyes". Students will require clearance to minimum of Security Check (SC) level to attend the course. Citizens of countries other than the UK, USA, Canada, New Zealand and Australia may not be able to attend the two sessions classed to SECRET-"Five Eyes" level.

<https://www.cranfield.ac.uk/Courses/Short/Defence-and-Security/CBRN-Defence-Science>

also listed in Continuing Education Courses

Tags: On-site

Course Information

Institution: Cranfield University

Location: Cranfield University at Shrivenham, England

Nuclear and Radiological Weapons Studies

Asia-Pacific Nuclear History Institute at the Wilson Center

Program

Synopsis: This course, led by world-class historians and leading experts, is an intensive, one-week immersion into the international history of nuclear weapons in the Asia-Pacific region and will provide in-depth instruction and discussion on the evolution of nuclear technology, the origins and development of deterrence and extended deterrence theory, regional nonproliferation issues, and nuclear strategy.

Eligibility: Available for Ph.D. students and individuals with a completed M.A.

<https://www.wilsoncenter.org/article/apply-to-the-asia-pacific-nuclear-history-institute>

also listed in Continuing Education Courses

Tags: On-site

Course Information

Institution: The Wilson Center, Nuclear Proliferation International History Project (NPIHP)

Location: Seoul, Korea

International School of Nuclear Law at the University of Montpellier

Summer Program

Synopsis: This program provides participants with a comprehensive understanding of the various interrelated legal issues relating to the safe, efficient and secure use of nuclear energy.

Course Information

Institution: University of Montpellier

Location: Montpellier, France

Sponsored By: OECD Nuclear Energy Agency (NEA) and the International Atomic Energy Agency (IAEA)

POC: isnl@oecd-nea.org

Eligibility: Applicants must have an undergraduate degree in a relevant discipline. Advanced graduate-level education and/or professional work experience are also significant factors in the application process.

<https://www.oecd-nea.org/law/isnl/>

also listed in Continuing Education Courses

Tags: Full-time, On-site

NATO Nuclear Command Control & Reporting System (NNCCRS) User/Operators Course

Program

Synopsis: The aim of this course (5 days) is to certify students to use the NATO Nuclear Command and Control Reporting procedures within Allied Command Operations. Learning objectives include: NATO nuclear operations, NATO nuclear crypto, and NNCCRS messaging.

Course Information

Institution: USAFE Nuclear University and NATO School, Conducted by PROT

Location: Oberammergau, Germany

Sponsored By: U.S. Air Force

POC:
USAFE10.A10N.NuclearUniversity@us.af.mil

Eligibility: Open to military officers (OF-1 through OF-5) and NCO's (OR-4 through OR-9) or civilian equivalents assigned to work in a nuclear-aligned post in a MOD or subordinate national military HQ, unit or agency that operates NNCCRS. French personnel are not eligible for this course.

<http://www.natoschool.nato.int/Academics/Resident-Courses/Course-Catalogue/Course-description?ID=11>

also listed in Continuing Education Courses

Tags: On-site

NATO Nuclear Policy Course at the United States Air Forces in Europe

Training Course

Synopsis: A one-week course with objectives of learning NATO nuclear policy strategic context, national nuclear policies and forces and NATO planning, consultation, and nuclear strike operations.

Eligibility: NCO not eligible, Officer: OF-3 thru OF-6. Open to military officers (OF-3 through OF-6) or civilian equivalents assigned to undertake staffing positions that fulfill responsibilities associated with NATO nuclear policy.

also listed in Continuing Education Courses

Tags: On-site

Course Information

Institution: United States Air Forces in Europe (USAFE) Nuclear University and NATO School

Location: Oberammergau, Germany

POC:
USAFE10.A10N.NuclearUniversity@us.af.mil

NATO Nuclear Surety Management Course

Training Course

Synopsis: A one-week course with objectives of learning nuclear surety in ACO, nuclear weapon safety, weapon security and survivability systems (WS3).

Eligibility: Open to military officers (OF-1 through OF-4) and NCO's (OR-7 through OR-9) or civilian equivalents assigned to ACO DCA surety operations.

also listed in Continuing Education Courses

Tags: On-site

Course Information

Institution: United States Air Forces in Europe (USAFE) Nuclear University and NATO School

Location: Oberammergau, Germany

POC:
USAFE10.A10N.NuclearUniversity@us.af.mil

Nuclear History Boot Camp at the Wilson Center

Program

Synopsis: This is an intensive, ten-day immersion in the history of nuclear matters ranging from the evolution of nuclear technology to the origins and development of deterrence theory and nuclear strategy through the historical roots of today's global nuclear landscape.

Eligibility: Available for Ph.D. students and individuals with a completed M.A.

<https://www.wilsoncenter.org/nuclear-history-boot-camp>

also listed in Continuing Education Courses

Tags: On-site

Course Information

Institution: The Wilson Center, Nuclear Proliferation International History Project (NPIHP)

Location: Varies: 2017 location was former ACE HIGH NATO communications relay site in the village of Allumiere near Rome, Italy.

Additional Courses

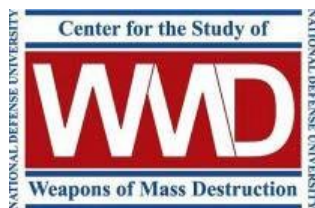
Below is a list of additional courses currently under review for inclusion in the next addition of the Resource Catalog.

Institution	Course Name	Description
Noblis	CBW Familiarization Training Courses	Several 2-day training courses, Spring
MIIS	International Safeguards Policy	One week, free intensive course

Please visit our website at <http://wmdcenter.ndu.edu/> for updated versions of this catalogue.

We will be continuing to seek assistance as this is the first publication resulting from this project. Despite the large collection of opportunities we have represented here, we recognize that there are likely more we have not yet discovered. These may be closed government programs or outreach programs without public advertising. If there is a class or program that you believe may fit our search, please reach out to alert us to that opportunity so that we can create the most accurate and comprehensive list possible.

Please direct all inputs to CSWMD-Admin@ndu.edu



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