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THE UNIVERSITY of
NEW MEXICO

Global and National Security Online Module

Directed energy is a technology that offers the ability to deliver energy to a target at the speed of light with a very deep magazine. Advances in pulsed power technology, batteries, capacitors, and electronics have made directed energy closer to reality. Cybersecurity is the protection of information systems from theft or damage to the hardware, the software, and to the information on them, as well as from disruption or misdirection of the services they provide. It is a concern to both the military and to civil society.

In this module you will explore the ideas of:

- The fundamental scientific basis behind directed energy
- How directed energy technology will be used in future conflicts
- What the policy challenges are in transitioning directed energy from the laboratory to the warfighter
- The history behind today's cybersecurity environment; where hacking really began, what it was originally about, and how that led to today
- How today's offensive cybersecurity techniques and culture has evolved, what it is today, and how these attacks really work
- How and why cyber-attacks are used by politically motivated players to influence today's geopolitical environment

The Electrical and Computer Engineering Department at the University of New Mexico, in partnership with the Global and National Security Policy Institute (GNSPI), is offering two online courses for graduate credit (to be taken together) that focus on Directed Energy and Cybersecurity. A certificate of completion will be awarded. Visit the website for more information: <http://gnspi.unm.edu>

43048 ECE 595-010 Special Topics: Intro to Directed Energy (Edl Schamiloglu)
43046 ECE 595-003 Special Topics: Intro to Cybersecurity (Chris Lamb)

Courses will be offered Spring 2017 from January 16-March 11. Please note that these courses culminate in a 2 ½ day seminar on March 9, 10, and 11. Graduate registration opens November 14th.

Who will benefit from this module?

- Individuals interested in learning the basics about directed energy and cybersecurity with little technical background, both civilian and uniformed service
- Individuals working in acquisitions for the Air Force, Navy and DoD in general
- Anyone interested in better understanding these technology areas

Benefits of the Global and National Security Modules:

- Enhance your career perspectives
- Obtain a better understanding of the technology that is gaining attention in the acquisitions community
- Learn about policy matters in these areas

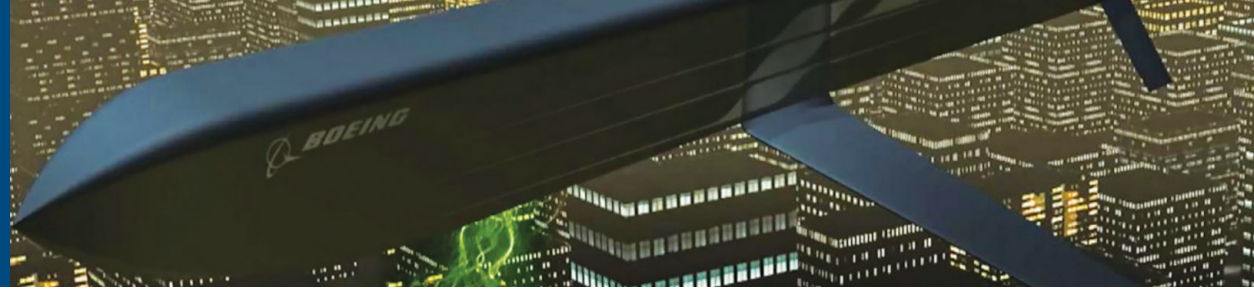
Instructors:

- Edl Schamiloglu, Ph.D., Distinguished Professor of Electrical and Computer Engineering, UNM School of Engineering
- Chris Lamb, Ph.D., Research Assistant Professor of Electrical and Computer Engineering, UNM School of Engineering

Registration Information:

The Non-Degree credit program allows individuals to earn academic credit without being formally admitted in a degree-seeking status. For more information about registering as a Non-Degree student, visit the website at: http://admissions.unm.edu/future_students/non-degree.html

For information about taking an Online Course, visit the website at: <http://online.unm.edu>



GATHERING THREATS TO NATIONAL AND GLOBAL SECURITY:

- Terrorism, ISIS, and the Middle East
- Imploding states
- Refugees and displaced persons
- Expanding technology - hacking, economic, military, political espionage, global finance, digitalization, virtual networks, and social media
- Growing digital and technological threats from states and non-state actors
- Sectarian conflicts, violence, and global volatility

GNPSI LOOKS AT TRENDS IN THE FOLLOWING AREAS:

- Social, economic, humanitarian issues
- Infrastructure and institutional resiliency
- Natural resources, energy, food & water security
- Health and disease
- Innovation
- Nuclear proliferation/non-proliferation
- Cyber security and cyber warfare
- Rule of law and governance
- Regional conflicts
- Global warming
- Environmental degradation and security

Questions?

For course content and registration information:

Edl Schamiloglu, PhD
Distinguished Professor of Electrical and Computer Engineering
University of New Mexico, School of Engineering
Email: edls@unm.edu | 505-277-4423

For information on the Global and National Security program:

Emile A. Nakhleh, PhD
Research Professor and Director, Global and National Security Policy Institute,
University of New Mexico
Email: enakhleh@unm.edu | 505-385-8334

*UNM anticipates launching a new interdisciplinary master's degree in Global and National Security Fall of 2017. Visit the website for more information:
<http://gnspi.unm.edu>



The Global and National Security Policy Institute (GNPSI) is a national security umbrella that serves the UNM and greater community. It combines scientific expertise, analytics along with cultural and language understanding. GNPSI prepares future leaders to interact with their counterparts across the globe. It supports the workforce at the Department of Energy national laboratories and the national security industry.