CYBERSECURITY BOOTCAMP COURSE
JUNE 10 – JUNE 13, 2025

LECTURER-IN-CHARGE: Michael Brown, Cybersecurity Test & Evaluation Branch, Naval Undersea Warfare Center (NUWC)

TUITION: $2310

DAILY CLASS ROUTINE:

Tuesday: Classroom facility opens at 0730 and will be secured at 1700.
Class begins at 0930 and ends at 1700. Optional ice breaker after class –
Sulmona, 608 Main Street, Cambridge – pizza, salad and cash bar.

Wednesday: Classroom facility opens at 0730 and will be secured at 1700.
Class begins at 0800 and ends at 1700.

Thursday: Classroom facility opens at 0730 and will be secured at 1700.
Class begins at 0800 and ends at 1700.

Friday: Classroom facility opens at 0730 and will be secured at 1700.
Class begins at 0800 and ends at 1700.

COURSE DESCRIPTION AND OBJECTIVE:

The objective of this course is to provide the student with a broad foundation in CYBER – from the policy level to the tools used by today's hackers. Real world threats will be examined to provide a firm grounding of the importance of cyber to the warfighter. Threats, threat vectors, attack surfaces, cyber protection practices, and defense of infrastructure will be discussed. Security tools and techniques will be covered as they apply to Naval systems and infrastructure. The Risk Management Framework (RMF) used to achieve accreditation will be introduced. Exposure to real world experimentation as well as Navy shipboard systems will be provided.

Upon completion of the course, the student will:

- Understand the changing cyber environment and its effects on Naval systems and infrastructure.
- Identify the challenges in maintaining a cyber-secure environment in today's worldwide environment.
- Identify the considerations and interactions between system, ship and cyber design.
- Understand the importance of incorporating cybersecurity early and continuously throughout the acquisition life cycle development.
- Value the use of experimentation in the cyber process.
- Understand the changing threat landscape.
- Be familiar with some of the tools used in cyber protection and exploitation.

The following topics will be covered:

- Introduction and overview of Cybersecurity concepts and fundamentals
- Cyber Engineering and Assessments
- The Risk Management Framework
- Protection Methods and Security Architectures
- U.S. Navy Cybersecurity Policy
- Cyber Kill Chain and Defense-In-Depth
- Cybersecurity Test & Evaluation
- Penetration Testing
- Cyber Real-World Examples
- Cyber Risk Threats Vulnerabilities Countermeasures
- Attack Methodologies
- In addition, a Cyber Table Top Exercise will be held

SPECIAL NOTE: This course contains material governed by Distribution Statement D. Distribution authorized to the Department of Defense and U.S. DoD contractors only. Other requests shall be referred to Naval Undersea Warfare Center, 1176 Howell St., Newport, RI 02841-1708 via the Lecturer-in-Charge, Mr. Michael Brown.

LOCATION: Classes will be held in the Hill Building, Building NE-80, Room 1409 at 1 Hampshire Street, Cambridge, MA. The classroom is adjacent to MIT's main campus at The Charles Stark Draper Laboratory.

COURSE ELIGIBILITY AND CLASSIFICATION: Applicants are expected to have mature technical backgrounds which, either through experience or education, is at least equivalent to graduate education. This course is classified SECRET/NORFORN. It is open to active-duty U.S. military, U.S. government employees, and U.S. civilian contractor personnel with U.S. government sponsorship. It is NOT open to foreign nationals. A SECRET security clearance is required. A current U.S. Government ID or current Passport will be required each day to obtain a badge for classroom access. The course is limited to 40 students. Students with appropriate clearances that are outside of DoD must apply by 30 April 2025 to allow time for 'need to know' to be established and approval received through appropriate channels.

APPLICATION AND TUITION PAYMENT: Course enrollment is limited. Seats are reserved in order of receipt of complete applications with 'confirmation of enrollment' upon receipt of payment or obligation of funding through your training coordinator (SF-182).

Note: If course demand is high, we reserve the right to release any unconfirmed enrollments in order to provide a wait-listed student an opportunity to attend. Nominally we will do so three weeks before course start date. However, we will make every effort to notify you beforehand and request your intentions.

Flexible payment options, including:
1) Wire transfer
2) Credit card (VISA, MasterCard, Discover Card, American Express)
3) Check

Please see detailed directions on our website for application and payment. Link on upper right of the 2N

course webpage http://2n.mit.edu/ or direct to link of http://naval-pro-summer.mit.edu/

It is critical that you provide the name of your training coordinator and/or the person who will be making the tuition payment on your application as we must receive payment in order to hold your place in the course – without payment (or obligated funds via approved SF-182) we may need to release your seat to someone else on the wait list.

In advance of payment, a training officer approval (block 3b of SF182) obligating funds is accepted to confirm enrollment. Full payment is due MIT at least one week before course.

CANCELLATION: Cancellations within ONE (1) week of the first day of the course will be subject to a $100.00 charge. Substitution by another applicant will be allowed provided an application is received and their security clearance is processed by Draper Laboratory.

ACCOMMODATIONS: Course tuition DOES NOT include accommodations. Each student must arrange his or her own transportation and hotel accommodations. Hotel space in Cambridge is very limited during the summer, so early advance reservations are strongly recommended. We have reserved a small block of rooms at the government rate at a local hotel which is located a short walking distance from the classroom and provides convenient access to the MBTA Red Line at the Kendall/MIT station. We will send you information about our hotel block when we confirm enrollment and payment (or obligated funds via approved SF-182) in the course. The hotel will release the hold on any unclaimed rooms FOUR (4) weeks prior to the first day of the course. Car rental is neither necessary nor recommended.

STUDENT ATTIRE: Business casual. Students are advised to bring a sweatshirt, sweater or jacket in the event that the classroom is cold.

REFRESHMENTS: Continental breakfast will be provided in the morning and a light snack each afternoon. Lunch will be provided on those days when working lunches/guest speakers are scheduled.

POINT OF CONTACT: If you have any questions, please contact the Naval Professional Summer Coordinator at 617-324-2237 or by e-mail to profsum@mit.edu.

EMERGENCY CONTACT INFORMATION: During class, students may be contacted by leaving a message at 617-258-2285 or by e-mail at dsegall @draper.com.

PORTABLE ELECTRONIC DEVICES: This course is CLASSIFIED. The classroom will be a managed as a CLOSED AREA at all times during the period of instruction. Among other restrictions, this means that no recording devices or other electronic devices will be allowed into the room unless prior arrangements have been made. Such arrangements must be made at least three weeks prior to the first day of class. Personal electronic equipment must be left outside the classroom. The area will be guarded, but will NOT be locked. Please keep this in mind when deciding what to bring with you and what to leave in your hotel room. Examples of personal electronic equipment that are NOT allowed in the classroom: laptops, PDAs, iPods, calculators, wireless fitness trackers (such as Fitbit, Basis Peak, or Jawbone Up), cell phones, Iwatches, cameras, and flash drive memory sticks. NOTE that this is not an all-inclusive list. If you have a Portable Electronic Device not listed here, do not hesitate to ask Draper Security prior to bringing the device inside the classroom.

If you require a medical assist electronic device, arrangements can be made to allow these in the classroom. Please contact Draper at (617) 258-2285 or dsegall @draper.com at least three weeks prior to the first day of class.

VISIT REQUESTS:
Visit requests can be sent via two methods and should be sent no later than three weeks prior to your class in order to ensure adequate processing time.

1. Preferred Method: Visit requests can be sent via <u>DISS</u> SMO Code 519934. Please ensure that the following is included in DISS visit requests:
    a. Visit Name: 2025 MIT ProSummer
    b. POC: Nate Candeias, ncandeias@draper.com/MIT ProSummer
    c. Valid dates (length of the course/visit only)
    d. phone number: 617-258-1459
    e. In the Visit Notes section, specify whether you are an instructor or student and enter name of the course you are teaching or attending
2. If you cannot use DISS, visit requests can be faxed to (617) 258-2000. Faxed visit requests must contain the following information.
    a. Employer's Name
    b. Employer's address, Phone Number and CAGE Code.
    c. Visitor(s) Full Name
    d. Social Security Number
    e. Citizenship
    f. Date and Place of Birth
    g. POC: Nate Candeias/MIT ProSummer
    h. Valid dates (length of the course/visit only)
    i. Purpose: (Specify whether you are an instructor or student and enter the name of the course you are teaching or attending.)
    j. Clearance Information

If you need to confirm that your visit request has been received and is in order, please contact Draper's Personal Security Office at persec@draper.com or (617)-258-3105.