

COURSE OFFERINGS



INTRO TO ACTP

A preliminary course providing introductory training for the CNO Programmer courses. Familiarizing students with computing concepts that improve skills on how to interact with machines and operating systems. Specially crafted by ACTP instructors to build and strengthen core skills that are the foundation of the Linux and Windows CNO Programmer courses.

5 DAYS
 \$2,500

LINUX CNO PROGRAMMER

Intensive, hands-on course focusing on the skills and knowledge necessary to become an advanced CNO programmer, with emphasis in the Linux environment. Course is a ten-week journey, beginning at using user space POSIX APIs, to advanced topics such as manipulating ELF files and exploiting vulnerable services, and ending with the design and deployment of CNO tools within the Linux kernel itself. Class format combines lecture and demonstrations with practical lab assignments.

45 DAYS
 \$32,220

WINDOWS CNO PROGRAMMER

Intensive, hands-on, offensive cybersecurity course, focuses on developing experienced systems programmers into CNO professionals on the Windows platform. Course is comprised of ten classes, grouped into three modules – each building on the material presented previously. Material covers topics such as the registry, windows security, vulnerability research, and driver development. Emphasizes lab work over a lecture format combining demonstrations with practical lab assignments.

45 DAYS
 \$26,250

ADVANCED VULNERABILITY RESEARCH

Advanced course offering focusing on finding vulnerabilities in modern software applications from web browsers to operating system kernels. Learn from vulnerability research experts on how to apply fuzzing, reverse engineering, symbolic execution, and code property graphs to find different types of software vulnerabilities. Deep dives into modern CVE examples and labs, such as writing a binary symbolic execution engine, uniquely positions students to take on the most challenging mission critical targets.

5 DAYS
 \$4,000

INTRO TO ARM ASSEMBLY

Learn to read, write, and debug assembly code for the ARM EABI used by smart phones and mobile devices. Topics include registers, the ARM and Thumb instruction sets and their encodings, literal pools, the stack, the ARM calling conventions, cross compilation, remote debugging with GDB, GNU inline assembly, reverse engineering pitfalls, and more.

3 DAYS
 \$1,800

ANDROID PROGRAMMING

A unique opportunity to explore the Android operating system. This lab-driven class exposes students to the entire OS API, covering everything from development of Android applications using the SDK and Android Studio to APIs mapping to native libraries, the Linux kernel, and Android-specific kernel components. Heavy emphasis on security at each level, including features and developments from the latest releases of Android.

5 DAYS
 \$3,300

ANDROID INTERNALS

Provides a deeper dive into the Android OS and expands on the foundational Android Programming course. Explores concepts such as the internals of APKs, Package Manager, Activity Manager, Zygote, Android Services, RILD, HAL, and WiFi. Other Topic areas: Android OS advanced architectural concepts; develop native applications interfacing with different Android device components; how to analyze and reverse engineer APKs.

5 DAYS
 \$3,300

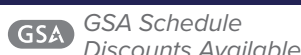
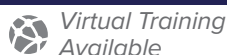
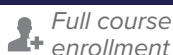
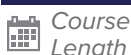
EMBEDDED TESTING

Explores the fundamental concepts, tools and techniques required to perform proper testing of CNO tools for verification and validation according to defined project requirements. A broad and complex topic in and of itself, this course streamlines the testing pipeline using multiple tools as well the creation of testing environments.

5 DAYS
 \$2,500

ACTP also offers follow-on, co-development training. Providing the necessary personnel to embed within a software development team to conduct reverse engineering, vulnerability discovery, and development utilizing paired programming.

GSA Schedule Pricing
(where available)
47QTCA21D0031



ACTP-SS-OFF-2022-0926

SCHEDULE - 2024



INTRO TO ACTP		QTR 1	QTR 2	QTR 3	QTR 4
	📅 5 DAYS	25 - 29 MAR	--	15 - 19 JUL	16 - 20 SEP

CNO PROGRAMMER - LINUX & WINDOWS <i>(CONDUCTED CONCURRENTLY)*w</i>					
CNO CORE MODULE		QTR 1	QTR 2	QTR 3* ^w	QTR 4
PYTHON	📅 3 DAYS	17 - 19 JAN	3 - 5 APR	22 - 24 JUL	18 - 20 SEP
NETWORKS	📅 5 DAYS	22 - 26 JAN	8 - 12 APR	25 - 31 JUL	23 - 27 SEP
ASSEMBLY	📅 3 DAYS	29 - 31 JAN	15 - 17 APR	1 - 5 AUG	30 SEP - 2 OCT
REVERSE ENGINEERING	📅 5 DAYS	1 - 7 FEB	18 - 24 APR	6 - 12 AUG	3 - 9 OCT
CORE CRUCIBLE	📅 1 DAY	8 FEB	25 APR	13 AUG	10 OCT
USER MODE DEVELOPMENT MODULE		QTR 1	QTR 2	QTR 3* ^w	QTR 4
SYSTEMS PROGRAMMING	📅 4 DAYS	12 - 15 FEB	29 APR - 2 MAY	14 - 19 AUG	15 - 18 OCT
INTERNALS	📅 4 DAYS	20 - 23 FEB	6 - 9 MAY	20 - 23 AUG	21 - 24 OCT
CNO USER MODE	📅 5 DAYS	26 FEB - 1 MAR	13 - 17 MAY	26 - 30 AUG	25 - 31 OCT
VULNERABILITY RESEARCH & EXPLOITATION	📅 5 DAYS	4 - 8 MAR	20 - 24 MAY	3 - 9 SEP	1 - 7 NOV
USER MODE CRUCIBLE	📅 2 DAYS	11 - 12 MAR	28 - 29 MAY	10 - 11 SEP	8 - 12 NOV
KERNEL MODE DEVELOPMENT MODULE		QTR 1	QTR 2	QTR 3* ^w	QTR 4
KERNEL INTERNALS	📅 5 DAYS	13 - 19 MAR	30 MAY - 5 JUN	--	13 - 19 NOV
CNO KERNEL MODE	📅 3 DAYS	20 - 22 MAR	6 - 10 JUN	--	20 - 22 NOV

ADVANCED VULNERABILITY RESEARCH		QTR 1	QTR 2	QTR 3	QTR 4
	📅 5 DAYS	--	15 - 19 APR	--	16 - 20 SEP

ARM & ANDROID		QTR 1	QTR 2	QTR 3	QTR 4
<i>Additional dates available upon Customer request</i>					
INTRO TO ARM ASSEMBLY	📅 3 DAYS		TO BE ANNOUNCED		
ANDROID PROGRAMMING	📅 5 DAYS	--	24 - 28 JUN	--	--
ANDROID INTERNALS	📅 5 DAYS	--	--	8 - 12 JUL	--

EMBEDDED TESTING		QTR 1	QTR 2	QTR 3	QTR 4
	📅 5 DAYS		TO BE ANNOUNCED		

*w Quarter 3 dates for Windows Course Only – Q1, 2, 4 Windows and Linux courses run concurrently

ACTP-SS-SCHb-20231120



VIRTUAL TRAINING



ACTP goes beyond the classroom to deliver industry leading training to remote students. Live, instructor-led instruction for the **Introduction to ACTP**, **Linux/Windows CNO Programmer**, and **Advanced Vulnerability Research** courses is available for students who are unable to train onsite in a ManTech classroom.

Features:

- Students RDP to workstations within ManTech's LDRnet environment
- No deviation from our in-classroom training. Virtual students connect to a physical classroom and receive the same instruction, course materials, labs, and exams as in-person students
- One-on-one instruction is enabled via dedicated assistant instructor support

Recommended Resources

- Strong and reliable internet connection is required
- Dual monitor workstation is supported and highly recommended but not required

Learning Environment:

- ACTP uses FedRAMP authorized Zoom for Government service for instruction broadcast
- Students are strongly encouraged to actively participate in class to foster a cohesive and dynamic classroom environment



LDRnet

(Lab Development & Research Network)

LDRnet is a ManTech sponsored, managed and hosted virtualized, private cloud environment. Built with commercial class cloud management software and using enterprise class storage, servers and networking equipment, this environment hosts thousands of virtual servers to address customer and program, specific needs.

ACTP-SS-VT-2021-1019



ACTP OVERVIEW



In the ever-changing world of Cyberwar, the **Advanced Cyber Training Program (ACTP)** mission is to train premier cyber programmers that are needed to engage on the front line. As a DoD and Intelligence Community leader in the development and delivery of critical cyber workforce training, ACTP provides the programming skills necessary to perform cyber security research and development for the nation's most elite students.

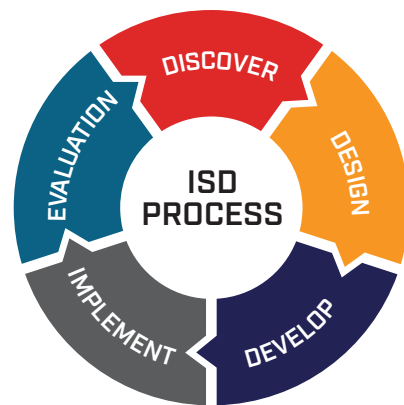
PROGRAM OFFERINGS	Advanced Cyber Training Program (ACTP)					
	INTRO TO ACTP	CNO PROGRAMMING	ADVANCED VULNERABILITY RESEARCH	ARM & ANDROID	MISSION FOCUSED CO-DEVELOPMENT	NEW COURSE DEVELOPMENT
		LINUX		ARM ASSEMBLY	EMBEDDED TRAINING	SOHO ROUTER
		WINDOWS		ANDROID PROGRAMMING		EMBEDDED TESTING
				ANDROID INTERNALS		

Instructors are selected and screened based on their technical knowledge, industry experience, and ability to provide instruction and navigation in both full-group and one-on-one settings. Instructors are matched with classes that reflect their specific skillset and pairs with the work they perform as members of the cyber workforce.

- 60+ instructors who perform the work professionally daily

Dedicated staff members that are continuously developing and updating course content, further enhancing our student experience.

ACTP utilizes the *Instructional Systems Development (ISD)* process to constantly improve both course content and the student experience.



ACTP-SS-OV-2021-1019

ACTP HIGHLIGHTS



***CYBERWAR** is constantly changing.*

Learn the skills and tools you will need to engage on the front line.

CERTIFICATION
Success Rate



Program Enrollment
SINCE 2018

Exclusive Access
U.S. GOVERNMENT/MANTECH



ACTP, Training at the Tip of the Spear

ACTP-SS-HL-2021-0927

ManTech



actp.mantech.com



actp@mantech.com



(443) 820-2195