

AFIT and Center for Cyberspace Research designated the Air Force Cyberspace Technical Center of Excellence



By: AFIT Public Affairs

On June 19, 2008, the Secretary and Chief of Staff of the Air Force designated the Air Force Institute of Technology and the Center for Cyberspace Research as the Air Force's Cyberspace Technical Center of Excellence (CyTCoE). The CyTCoE is chartered to be a unifying and synergistic body for promoting cyberspace education, training, research, and technology development. The CyTCoE will facilitate development of Air Force education and training in support of cyber operations as well as identify and provide subject matter experts that understand doctrine, techniques, and technology to ensure dominance and superiority in cyberspace.

This designation enhances CCR's ability to be a clearinghouse for "who does what" and "who needs what" in cyber. The center will develop and strengthen relationships with, and maintain awareness about the activities of, various cyber-related research, education, and training communities within the Air Force, our service partners in the Department of Defense (DoD), various federal agencies, and civilian academic and commercial research organizations around the globe. The center will promote information sharing to enable operational organizations to identify and partner with particular research, development, education, and training organizations for problem solutions. As the CyTCoE, the CCR will serve as a bridge between the operational AF cyber forces and various cyber research, education, and training communities across the Air Force, the DoD, and national organizations. Oversight and direction for the center will be provided via the Air Force Cyberspace Education Board of Advisors, comprised of Air Force and DoD senior leaders.

The CCR, established in March 2002, conducts defense focused research at the Master's and PhD levels. The CCR is forward-looking and responsive to the changing educational and research needs of the Air Force, the Department of Defense, and the federal government. The CCR was designated as a National Security Agency (NSA) National Center of Academic Excellence in Information Assurance Education (CAE/IAE) in 2002, recertified in 2005 and 2008 by the NSA and the Department of Homeland Security. In 2005, the CCR received national CyberCorp Institution status from the National Science Foundation. Strong research ties exist between the CCR and the Air Force Cyber Command (AFCYBER) Provisional, the Autonomic Trusted Sensing for Persistent Intelligence Office of the Air Force Research Laboratory (AFRL), the Sensors and Information Directorates of AFRL, the NSA, the Air Force Information Operations Center (AFIOC), and the Air Force Communications Agency (AFCA). The CCR conducts both classified and unclassified research; faculty and students

hold security clearances and conduct research at many classification levels. The CCR faculty possesses a wealth of knowledge and experience in communications, networking, and information security gained through DoD operational assignments before joining the faculty.

Supporting the CCR research efforts are two highly-focused graduate degree programs: Cyber Operations and Cyber Warfare. These two programs support one of the federal government's and DoD's most critical mission areas – Computer Network Operations (CNO). CNO includes both defensive and offensive operations. The defensive side of CNO focuses on protecting critical assets and intellectual property from exploitation. Offensive CNO is concerned with proactive measures to affect an adversary's critical resources. The AFIT cyber-related academic programs provide education across the CNO spectrum of operations.

Both cyber academic programs require incoming students to possess undergraduate backgrounds in Computer Science/Engineering or closely related fields. Students entering the AFIT cyber education programs must be United States citizens. Graduate fellowships are available for U.S. citizens to attend AFIT either through the Dayton Area Graduate Studies Institute (DAGSI) www.dagsi.org or via NSF fellowships managed by the CCR: <http://www.afit.edu/ccr/CyberCorp/>. For further information, view pages at www.afit.edu/ccr/.