## NSA-DESIGNATED INSTITUTION CERTIFICATE IN CYBER SECURITY DEFENSE

The designation of CSU Pueblo as a National Security Agency, Center for Academic Excellence (NSA-CAE) in Cyber Defense Education allows us to offer the Designated Institution Certificate in Cyber Security Defense for CSU Pueblo students who complete the curriculum courses. Students interested in this certificate program should contact the CIS department for further information.

## **Program of Study Learning Outcomes**

After successfully completing the curriculum, students will possess the following skills:

- 1. Demonstrate the ability to understand and recognize the nature and range of Cyber Threats, Exploits, Attacks
- 2. Demonstrate appropriate analysis and application of Cyber Defense (CD) tools and methodologies to address and defend organizations and Information Systems (I.S.) from cyber attacks
- Understand the best application of Info Security Models, Cyber Sec Planning and Policies to analyze, integrate appropriate cyber security methodologies into viable solutions
- 4. As a team project member, the ability to develop and communicate Threat-Vulnerability-Asset (TVA) grids and IT solutions for cyber attack and vulnerability risk analysis
- 5. Demonstrate the ability to develop Disaster Recovery, Business Continuity and Risk Mitigation Strategies and solutions within financial, ethical and cyber Law boundaries

## **Specific Program Requirements**

Course	Title	Credits
CIS 171	Introduction to Java Programming	4
or CIS 271	Advance Program Design With Java	
CIS 289	Network Concepts	3
CIS 315	Linux Fundamentals	3
CIS 350	Database Management	3
or CIS 359	ADVANCED PROGRAMMING WITH C#	
CIS 401	Network Systems Administration	3
CIS 460	Cyber Security & Defense	3
CIS 461	IT Security Risk Management	3
CIS 462	Computer Forensics	3
BSAD 265	Inferential Statistics & Problem Solving	3
or BSAD 360	Advanced Business Statistics	
Total Credits		28