**SHILEY-MARCOS SCHOOL OF ENGINEERING**

**Chair**  
John Glick, PhD, Computer Science

**Director**  
Gordon Romney, PhD, Center for Cyber Security Engineering and Technology

**Faculty**  
Mark Heckman, PhD  
Douglas M Magedman, MS  
Ashton Mozano, MS, JD

**Vision**  
The Shiley-Marcos School of Engineering is a community of scholars recognized for developing engineers with technical excellence, global perspective and social awareness.

**Mission**  
The Shiley-Marcos School of Engineering is distinguished by student-centered education that emphasizes modern engineering skills and development of the whole person. We are dedicated to effective teaching, meaningful scholarship, and compassionate service.

**Program Description**  
The Shiley-Marcos School of Engineering offers a Master of Science in Cyber Security Engineering (MS-CSE). The MS-CSE program provides knowledge and skill in architecting, developing, and fielding secure network solutions against advanced persistent threat. It explores the role assurance plays in security, particularly in the development and deployment of software products, and how one must account for this in security planning.

Students in the MS-CSE program learn the design, evaluation and certification and accreditation of trusted systems. Students will subsequently understand how to take the design of trusted systems and develop/engineer these into secure systems, with a focus on hands-on experiences in laboratory settings.

The curriculum covers digital and network forensics, and the technical considerations for incident response and continuity planning. It places students in simulated contested cyber environments where they will perform system assessments, potentially on solutions they have engineered, and understand the various types of penetrations an adversary might attempt on an information system. The goal being a real-world experience in which the application of cyber security engineering can be applied in dynamic settings where innovation and problem solving are required.

**Center for Cyber Security Engineering and Technology**  
The University of San Diego’s Center for Cyber Security Engineering and Technology (CCSET) is designed to develop and coordinate opportunities for world-class education, research and service to address threats to information systems. CCSET assists business, government, law enforcement, and private citizens to better prepare and respond to highly motivated, highly trained adversaries who are responsible for billions in lost revenue each year; catastrophic disruptions in service; terrorism and activism; a dark web of criminal activity; and constant peril to critical infrastructure.

CCSET is committed to mitigating cyber security risks developing and coordinating opportunities for education, research, outreach, and service to secure the future prosperity and freedom of in the digital realm. This effort combines the best technology, world-class curriculum and programs, and the mindset to approach the challenge holistically. Stakeholders from engineering, technology, law, policy, business and major industry sectors will all play a role in improving cyber security. USD is committed to uniting these communities to find real solutions, and changing the mentality in cyber security from reactive to proactive.