
# ENGR 569

## Cybersecurity Awareness for Systems Engineers


**Spring 2019 Semester**
**Location: CSU Campus**
**Fort Collins, CO**
**ENGR B4**

**Date: 1/23 – 5/15 2019 Wednesday 5:15—8 pm**

**Last date for registration: 27 January 2019**

**https://www.online.colostate.edu/courses/ENGR/ENGR569.dot**

## BENEFITS

Systems Engineering is an interdisciplinary approach and means to enable realization of successful systems. By focusing on what the customer needs, how it should function, defining the requirements, and then design synthesis, validation, and verification, real solutions to complex problems can impact every type of system.

## COURSE OBJECTIVES

Topics include requirements analysis, cyber risk analysis, secure system architecture and design, secure software development, secure networking, and the basics of cryptography. The course employs team teaching to ensure students benefit from outstanding expertise in all areas of content. Students will practice the principles taught in the course by developing a project of the individual student's choice. Each student will complete an architecture project based on a system or enterprise of her or his choice!

Successful students will learn to:

- Effectively integrate Cybersecurity into the Systems Engineering process
- Interact with Cybersecurity specialists to employ robust and resilient secure system solutions
- Acquire a foundation by teaching and practicing the fundamentals of Cybersecurity in the Systems

## INSTRUCTOR BIO

Dr. Simske is a CSU Professor, an HP Fellow emeritus and a previous Director in HP Labs. As of November 2017, he is the author of more than 400 publications and more than 170 US patents (many more worldwide). He is an IS&T Fellow and an honorary professor at the University of Nottingham. Dr. Simske was a member of the World Economic Forum Global Agenda Councils from 2010-2016, including Illicit Trade, Illicit Economy and the Future of Electronics. At HP, he directed teams in research on 3D printing, education, life sciences, sensing, authentication, packaging, analytics, imaging and manufacturing. His book “Meta-Algorithmics” addresses intelligent systems. He is currently co-authoring books on Industrial Inkjet Printing (Wiley), Fundamentals and Applications of Hardcopy Communication (Springer), and Meta-Analytics (Elsevier). He has degrees/Post-Docs in biomedical, electrical and aerospace engineering.

GRADUATE SCHOOL

Colorado State University