

# SOCIAL ENGINEERING

CENTR SHORT COURSE - 3 WEEKS

## CENTR SHORT COURSES

The CENTR's noncredit short courses provide working cybersecurity professionals the opportunity to broaden their skills on an accelerated basis. Taught by Purdue's highly ranked cybersecurity faculty, these courses are three weeks long, cover essential topics in the industry today and include the topics that cybersecurity professionals and industry partners are requesting.

Learners will meet throughout the week for live virtual sessions. Once the course is successfully completed, learners will receive a certificate of completion and receive continuing education units (CEUs), or continuing professional education (CPE) credits.

## PROGRAM OVERVIEW

*One of the biggest threats to cybersecurity is social engineering.*

Social engineering represents a growth area in cybersecurity. It is a low cost, high impact way to compromise security. Over 90% of cybersecurity breaches contain some element of social engineering. This area has been identified by employers as a highly desired skill set for their employees. An understanding of social engineering is important for management and operational roles as well as information technology roles.

Social engineering is the use of various techniques, including deception and manipulation, to gain access or information by inducing individuals to compromise security. This course will introduce learners to the psychological principles that underlie social engineering, some of the tools commonly used in social engineering attacks, and how to prevent and mitigate social engineering attacks.

## STUDENTS WILL BE ABLE TO:

- » Understand the psychology behind social engineering
- » Use open-source intelligence techniques to gather information
- » Understand the principles necessary for pretexting and impersonation
- » Plan a social engineering attack
- » Recommend steps to prevent social engineering attacks

## DELIVERY MODE

### Live Virtual Sessions

Schedule: M & F 6:30 p.m. - 9:00 p.m. EST

## FACULTY MEMBER

Dr. Ida Ngambeki  
Assistant Professor, Purdue University

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## COURSE SCHEDULE

### WEEK 1:

- » Evolution of Social Engineering
- » Social Engineering Ethics
- » Understanding Personality
- » Empathy and Authority
- » Nonverbal communication

### WEEK 2:

- » Social Influence and Persuasion
- » Elicitation and Pretexting
- » Social Engineering Penetration Testing
- » Open Source Intelligence

### WEEK 3:

- » Threat Modeling
- » Attack Vectors and Tools
- » Training and Conducting Audits
- » Creating Security Policy

*Upon completion, students will receive a certificate of completion and receive continuing education units (CEUs), or continuing professional education (CPE) credits.*



Dr. Ida Ngambeki is an Assistant Professor in the Department of Computer and Information Technology at Purdue University. She is the Director of the CyberSecure Behavior Lab and a CERIAS Fellow.

**KEY AREAS OF RESEARCH:** Cybersecure behavior, social engineering, cybersecurity education, cybersecurity policy, and cybersecurity workforce development.