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Students solve national defense challenges in interdisciplinary hacking course

By Matthew Ferguson, Marketing Intern



Hacking for Defense teaches students how to solve national security problems and work in a team setting.

- The top five cyber-attacks are ransomware, phishing, data leakage, hacking and insider threats. These attacks can disrupt phone and computer networks or paralyze systems.
- In an effort to protect our country, Wichita State is offering Hacking for Defense.
- Hacking for Defense is a social and behavioral science elective course made for undergraduates and graduates of all majors.
- “They will be solving real problems for real customers in real-time,” Smith said.

In 2018, there were 80,000 cyber attacks per day and more than 30 million attacks that year.

The top five cyber-attacks are ransomware, phishing, data leakage, hacking and insider threats.

These attacks can disrupt phone and computer networks and paralyze systems. They can result in the theft of valuable, sensitive data like medical records or financial statements. They can cause electrical blackouts, failure of military equipment and breaches of national security.

Cyber-attacks are one of the many threats that face our national security. In an effort to defend against future cyber-attacks, Wichita State is offering Hacking for Defense.

Hacking for Defense is a social and behavioral science elective course made for undergraduates and graduates of all majors. The class takes an entrepreneurial, interdisciplinary approach to the nation’s greatest national security challenges. Those challenges include espionage, terrorism and proliferation.

“This course teaches you how to problem solve and work in a team setting,” said design educator Kristyn Smith.

Students in Hacking for Defense will join interdisciplinary teams to research, design and propose solutions for real, national security challenges.

“The complexity of these challenges demands a transformative effort that requires multi-faceted teams,” Smith said.

Students will learn and apply policy, economics, technology and national security to solve security problems.

“The course is demanding. You’ll present at every class. You’ll work closely with your team, and you’ll receive relentlessly direct feedback,” Smith said.

Each group will be assigned a mentor ranging from active military liaisons to corporate partners. Their research will address critical problems facing the U.S. Department of Defense and the intelligence community.

“They will be solving real problems for real customers in real-time,” Smith said.

Hacking for Defense is only offered at 31 universities including Arizona State, Stanford University, Texas A&M and now Wichita State.

“I think it shows that Wichita State is constantly expanding to industry partners and delivering on its promise to give every student an applied learning opportunity,” Smith said.

Hacking for Defense will be offered in the spring of 2021 on Mondays from 2 to 4:30 p.m. (CRN 26946).

“We are looking for students who want experience in creating and executing ideas to solve problems – self-starters from any academic discipline to join this unique effort,” Smith said.

For more information, email Smith at Kristyn.smith@wichita.edu.