EE 500E Energy & Environment Seminar

Title: Managing the Growing Cyber Attack Surface in the Power Grid

Speaker: Adam Hahn, Washington State University

Location: MEB 238

Map: [http://www.washington.edu/maps/?l=MEB](http://www.washington.edu/maps/?l=MEB)

Time and Date: **4:00 PM, Thursday, October 18, 2018**

**Abstract:** Cybersecurity of the electric power grid has become a significant challenge due to expanding threats and a growing attack surface. Once only a theoretical threat, real-world attacks have now been identified that resulted in regional power outages. This cyber landscape is only expanding as the integration of Distributed Energy Resources (DER) and Internet of Things (IoT) devices introduce new risk and security challenges. This talk will provide an introduction to the cybersecurity of the electric power grid, including current threats and key challenges that are being faced by the industry. It will discuss both approaches to traditional grid control systems security, and novel risks from DER. At WSU, the Attack Surface Host Analysis tool has been developed to help industry manage the growing exposure of software platforms and the complexity of managing legacy software that must support critical grid operations, along with case studies on various grid software platforms within the WSU Smart City Testbed and other industry systems. Furthermore, the talk will highlight the need for new risk assessment approaches and perspectives to understand the interconnectivity of DER as ownership of energy resources shifts from the utility to consumers or third parties.

Adam Hahn is currently an assistant professor in the Department of Electrical Engineering and Computer Science at Washington State University. His research interests include cybersecurity of the smart grid and cyber-physical systems (CPS), including intrusion detection, risk modeling, vulnerability assessment, and secure system architectures. He received M.S. and Ph.D. degrees from the Department of Electrical and Computer Engineering at Iowa State University in 2006 and 2013. Previously, he worked as a Senior Information Security Engineer at the MITRE Corporation, supporting numerous cybersecurity assessments within the federal government and leading research projects in CPS security.