

# CS591CF / ECE591CF – Cyber Security Faculty Lecture Series

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| • <b>Meeting:</b>     | W 1:25-2:15PM  |
| • <b>Locations:</b>   | Computer Science room 151 and Integrated Learning Center room S140 (see dates below) |
| • <b>Instructors:</b> | Daniel Holcomb, Amir Houmansadr, Wayne Burleson, Brian Levine                        |

## Description

This course is a one-credit seminar on security research across departments at UMass. Each presentation will cover an active research topic at UMass in a way that assumes only a basic background in security. External speakers may also be invited. Note that this course is not intended to be an introduction to cybersecurity, and will not teach the fundamentals of security in a way that would be useful as a foundation for future security coursework. The intended audience is graduate and advanced undergraduate students, as well as faculty.

## Format

Each 50-minute meeting comprises a 30-minute interactive presentation and 20 minutes of discussion. Each speaker may assign a short reading to be completed before the session.

## Seminar Schedule (Subject to change)

Date	Speaker	Topic	Room
9/9	Burleson	RFID Privacy: from Transportation Payment Systems to Implantable Medical Devices	CS-151
9/16	Berger	Barbarians At The Gates: Securing the Runtime Against Attack	CS-151
9/23	Tessier	Hardware-Assisted Code Obfuscation for FPGA Soft Microprocessors	ILC-S140
9/30	Guha	Language-Based Web Security	CS-151
10/7	Houmansadr	Censorship Resistant Networking	ILC-S140
10/14	Goeckel	Fundamental Limits of Covert Communications	ILC-S140
10/21	Miklau	Analyzing Private Data: Challenges and Recent Approaches	ILC-S140
10/28	Levine	Digital Forensics and Crimes Against Children	CS-151
11/4	Koren	Fault injection attacks on cryptographic devices and countermeasures	CS-151
11/18	Paar	Constructive and Destructive Aspects of Hardware Security	CS-151
11/25	Wolf	Attacks and Hardware Defenses for Network Infrastructure	CS-151
12/2	Nagurney	Game Theory and Cybercrime	CS-151
12/9	Holcomb	Reverse Engineering of Obfuscated Hardware	CS-151

## Grading Policy (Subject to change)

Students taking the course for credit will be graded on a pass-fail basis. There is no penalty for missing two or fewer meetings. Contingent on the number of enrolled students, each student will be asked to scribe for one seminar. The scribe for each seminar will document the interactive discussion of the session.