

## CS 4377/5377 Cyber-Security for Operational Technology Schedule (Spring 2015)

The following table shows a planned schedule for the course.

Dates		Topics	Reading	Projects
Week 1	Jan 21	– Intro to CS 4377/5377		
Week 2	Jan 28	Class Cancelled		
Week 3	Feb 4	– Software Engineering Ethics – Cyber Security Laws	– ACM Code of Ethics – UNIDIR Cyber-warfare and International Law – Federal Laws Relating to Cybersecurity: Overview and Discussion of Proposed Revisions	Industry Description
Week 4	Feb 11	– Industrial Control Systems Overview – Industrial Control Systems Cyber-security Requirements	– Chapter 1 – To Kill a Centrifuge Handout – Executive Order 13636	
Week 5	Feb 18	– Criticality Factor Analysis – Impact Analysis		Impact Analysis
Week 6	Feb 25	– Vulnerability Taxonomy – Vulnerability Assessment	– Chapter 3	Vulnerability Analysis
Week 7	March 4	– Vulnerability Analysis – Secure Software Development		PA1: ICS Simulation
Week 8	March 11	Spring Break		
Week 9	March 18	– Threat Analysis	– Chapter 2	Threat Analysis
Week 10	March 25	– Risk Analysis	– Chapter 4	Risk Analysis
Week 11	Apr 1	– Risk Standards	– NIST 800-53 – NIST 800-82 – NIST Cyber Security Framework – NERC- CIP	
Week 12	Apr 8	– Criticality/Vulnerability Data Analytics Methodologies		
Week 13	Apr 15	– Cyber-security Data Analytics Tools		PA2: CyberSecurity Analytics
Week 14	Apr 22	– Risk Mitigation		
Week 15	Apr 29	– Secure Cyberinfrastructure Design – Defense-in-Depth	– DHS Improving Industrial Control Systems Cybersecurity with Defense-In-Depth Strategies	
Week 16	May 6	– Project Work		Presentation
Week 17	May 13	<b>Final Presentations</b> 7:00 pm–9:45 pm		Report