

# Interdisciplinary Masters' Program in Information Security School of Technology Requirements

## Area A. Core Courses

--- CS 52600 Information Security <u>or</u> C&IT 55500 Advanced Network Security

--- CS 55500 Cryptography <u>or</u> ECE 62700 Intro to Cryptography & Secure Communication

--- PHIL 52400 or PHIL 58000N† or TECH 62100

Contemporary Ethical Theory Proseminar in Philosophy Information Assurance Ethics

--- POL 62100 Proseminar in Science, Technology, and Politics

--- SOC 51900—<u>or</u> equivalents; e.g. TECH 62100 Technology and Policy

--- TECH 69800 (for the thesis option only; e.g. C&IT 69800 or IT 69800)

### Area B. In-Depth Courses

One	of the	following	courses:

STAT	50200	Experimental Statistics II	
	51200	Applied Regression Analysis	
	51300	Statistical Quality Control	

#### Any two of the following courses:

AGEC	59600F	Forensic Economics I	CSR	63100	Consumer Behavior Theory
	60800	Benefit-Cost Analysis	ECE	56500	Computer Architecture
	68500	Advanced Quantitative Methods For		57200	Fault-Tolerant Computer Systems
		Decision Making Under Uncertainty		57400	Software Engineering Methodology
	69100K†	Research in Agricultural Economics		63200	Mach Learn & Data Mining
ASM	59100A	Foundations in Homeland Security		66900	Natural Language Processing (LING 68900)
		(CNIT 58100)	ECET	52500	Applications in Forensic Engineering
	59100B	Managing Resources and Applications			Technology
		for Homeland Security (CNIT 58100)	ECON	60700	Microeconomic Theory I
	59100S	Agro-Security Issues		61000	Game Theory
ΑT	57300	Foundations in Homeland Security	ΙE	53000	Quality Control
	58100B	Transportation Security Operations		53200	Reliability
COM	55900	Current Trends In Mass Communication		54800	Knowledge-Based Systems
		Research		55900§	Cognitive Engineering Of Interactive
	59000R†	Directed Study Of Special Problems		· ·	Software
CNIT	42100	Small Scale Digital Device Forensics		57700§	Human Factors in Engineering
	45500	Network Security		65900	Human Aspects of Computing
	45600	Wireless Network Security & Management		67400	Computer And Communication Methods
	49900C	Cyberforensics: Advanced Technical			For Production Control
		Issues	ΙΤ	54500	Biometrics Technology And Applications
	52800	Information Security Risk Assessment	LING	68900N	Natural Language Process (ECE 66900)
	55600	Basic Computer Forensics	MGMT	54700§	Computer Communication Systems
	55700	Advanced Cyberforensics		59000	Forensic Accounting
	55800	Bioinformatics Computing And Systems		68400	Information Security for Managers
		Integration	OBHR	68100	Behavior Organization
	58100C	Applied Cryptography		68300	Individual Behavior in Organizations
	58100HLS	Foundations in Homeland Security	PHIL	52400*	Contemporary Ethical Theory
		(ASM 59000)			Proseminar in Philosophy
	58100	Managing Resources and Applications		62400†	Seminar in Ethics
		for Homeland Security (ASM 59000)	POL		Administrative Law And Policy Making
	58100S	Information Security Management			Public Policy Evaluation
	58100V	Current Topics in Cyber Forensics		62000	Proseminar Public Policy
	58100Z	Programming for the Internet		62100	Proseminar In Science, Technology,
	62300R	Risk and Technology			And Politics
CS	50300	Operating Systems		66000€	Research Seminar On Public Law And
	53600§	Data Communication and Computer			Judicial Behavior
		Networks	PSY	55500	Cognitive Engineering Of Interactive
	56500	Programming Languages			Software
	58000	Algorithm Design, Analysis, and		57700§	Human Factors in Engineering
		Implementation		58500	Psychological Foundations of Consumer
	59000W†	Topics In Computer Sciences			Behavior
	62600	Advanced Information Assurance		62900	Motivation
	63600	Internetworking	STAT	51400	Design of Experiments
	65500	Advanced Cryptology		51700	Statistical Inference
					(Over)

Color Key

If Course Title Relevant

### Area C. Breadth Courses

(It is preferable to take these before the 4th semester and your thesis work):

T 50700 Measurement and Evaluation in Industry and Technology

TECH 64600 Analysis Of Research In Industry And Technology

Courses from <u>at least three different graduate programs</u> should be taken between Areas B and C. Other courses, often under variable numbers and offered on a one-time or occasional basis, may be of interest. Students are encouraged to bring those courses to the attention of their advisors, who may recommend these to other students and approve the substitution of these courses for some courses listed above.

Under the thesis option, the master's thesis must be completed and defended in an oral examination administered by the Advisory Committee. Under the examination option, a 3-hour written examination is administered by the student's Advisory Committee. This option is rarely employed and only in unusual circumstances.

§ Note: May take one or the other of the following but not both:

CS 53600 or ECE 56000 or MGMT 54700 PSY 57700 or IE 57700 PSY 55500 or IE 55900

\* unless taken under Area A
† When content is appropriate
€ not offered in recent years due to staff shortages.

Color Key Last Revised 10/4/10