Interdisciplinary Masters' Program in Information Security
School of Technology Requirements

In addition to the courses listed in the requirement areas, the various departments and programs occasionally offer new courses and courses on specific topics that may meet area requirements, especially when they are taught by CERIAS principals and fellows. These include TECH 621 (when taught by Prof. Dark), CNIT 623 and 499 (Prof. Taylor), CNIT 581, LING 689 (Prof. Raskin), some CS 590 offerings, and others. The INSC program administration will announce such courses when they are available, but students are welcome to ask about any courses that might not be otherwise listed."

Area A. Core Courses
--- CS 52600   Information Security   **or**   CNIT 55500 Advanced Network Security
--- CS 55500   Cryptography
--- PHIL 52400   **or**   PHIL 58000†   **or**   TECH 62100†
   Contemporary Ethical Theory   Proseminar in Philosophy   Information Assurance Ethics
--- POL 62000† Proseminar in Public Policy **OR** --- TECH 62100 Tech & 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:

--SFS Students must take *Applied Research Problems in National Information Security* TECH 58100 as one of the two

AGEC	60800	Benefit-Cost Analysis
	69100†	Research in Agricultural Economics
ASM	59100†	Special Topics
AT	53200	Contemporary issues in Transportation Sec
CNIT	42100	Small Scale Digital Device Forensics
	45500	Network Security
	45600	Wireless Network Security & Management
	49900†	Topics in Computer and Information Technology
	51100	Foundations in Homeland Security
	51200	Managing Resources and Applications for Homeland Security
	55600	Basic Computer Forensics
	55700	Advanced Cyberforensics
	55800	Bioinformatics Computing And Systems Integration
	58100†	Workshop in Computer Technology
		Cyber foren Mobile Embed Dev
		The Internet of Things
		Natural Language Technologies
		Network Forensics
		Prob In Natl Info Security
CNIT	62300†	Contemporary Computer Tech Problems
		Nat Lang Info Assur & Sec Sem
COM	55900	Current Trends In Mass Comm Research
	59000†	Directed Study Of Special Problems
	63200†	Special Topics in Mass Communication
CS	50300	Operating Systems
	52700	Software Security
	52800	Network Security
	53600§	Data Communication and Computer Networks

	56500	Programming Languages
	58000	Algorithm Design, Analysis, and Implementation
	59000†	Topics In Computer Sciences
		Intro To Artificial Intelligne
		Topics In Big Data Management
		Fault Tolerant Comp Sys Dsgn
		Passwords & Human Authenticatn
		Security Analytics
	62600	Advanced Information Assurance
	63600	Internetworking
	65500	Advanced Cryptology
CSR	63100	Consumer Behavior Theory
ECE	56500	Computer Architecture
ECET	52500	Applications in Forensic Engineering Technology
ECON	60600	Microeconomic Theory I
	61000	Advanced Game Theory
IE	53000	Quality Control
	53200	Reliability
	57700§	Human Factors in Engineering
	65900	Human Aspects of Computing
	67400	Computer And Communication Methods For Production Control
IT	53000	Biometric Technology Test Design, Performance and Evaluation
	54000	Biometric Performance and Usability Analysis
	54500	Biometrics Technology And Applications
	58100†	Biometric Data Analysis
LING	68900†	Seminar in Linguistics
MGMT	54700§	Computer Communication Systems
	59000†	Directed Readings in Management

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		Sem Tech Realztn Tpc II	POL	62000†	Proseminar Public Policy
		IT Project Management	PSY	57700§	Human Factors in Engineering
	68400	Information Security for Managers	STAT	51400	Design of Experiments
OBHR	68100	Behavior Organization		51700	Statistical Inference
	68300	Individual Behavior in Organizations	TECH	58100†	Workshop in Technology
PHIL	52400*	Contemporary Ethical Theory		62100†	Seminar in Technology
	58000†	Proseminar in Philosophy			
	62400†	Seminar in Ethics			

Area C. Breadth Courses

IT   50700   Measurement and Evaluation in Industry and Technology (taught by S Elliott). Possible alternates requiring approval - STAT 501, 502, 512, 513.

AND

CNIT   62300   Research Methods for Computing *(replaces TECH 64600)* EDPS 53300 and ENE 69500 are currently replacements for CNIT 62300 (It is preferable to take this *research methods class* before the 4th semester and your thesis work):

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 MGMT 54700
PSY 57700 or IE 57700

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