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 62400†   **or**   TECH 62100†
   Contemporary Ethical Theory   Seminar in Ethics   Information Assurance Ethics
---May substitute PHIL 411 or PHIL 424 if PHIL 52400 is Not offered in a year
--- 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)

**PHIL 58000 is no longer available, but if you have already taken PHIL 58000, it will be recognized as meeting your requirements.

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			Communication Theory
	69100†	Research in Agricultural Economics			Communicaiton Pedagogy
ASM	59100†	Special Topics		63200†	Special Topics in Mass Communication
AT	53200	Contemporary issues in Transportation Sec	CS	50300	Operating Systems
CNIT	42100	Small Scale Digital Device Forensics		52700	Software Security
	45500	Network Security		52800	Network Security
	45600	Wireless Network Security & Management		53600§	Data Communication and Computer Networks
	49900†	Topics in Computer and Information Technology		56500	Programming Languages
	51100	Foundations in Homeland Security		58000	Algorithm Design, Analysis, and Implementation
	51200	Managing Resources and Applications for Homeland Security		59000†	Independent Study/Variable Topics
	55600	Basic Computer Forensics			Advanced Machine Learning
	55700	Advanced Cyberforensics			Computer Aided Prog Reasoning
	55800	Bioinformatics Computing And Systems Integration			Network & Matrix Computations
					Security Analytics
	58100†	Workshop in Computer Technology		62600	Advanced Information Assurance
		File Systems Forensics		63600	Internetworking
		Intro Assistive Tech & Robotics		65500	Advanced Cryptology
		Mobile & Embedded Device Foren	CSR	63100	Consumer Behavior Theory
		The Internet of Things	ECE	56500	Computer Architecture
		Natural Language Technologies	ECET	52500	Applications in Forensic Engineering Technology
		Prob in Natl Info Security			
CNIT	62300†	Contemporary Computer Tech Problems	ECON	60600	Microeconomic Theory I
		Applied Statistics in IT		61000	Advanced Game Theory
COM	55900	Current Trends In Mass Comm Research	IE	53000	Quality Control
	59000†	Directed Study of Special Problems		53200	Reliability

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	57700§	Human Factors in Engineering			IT Project Management
	65900	Human Aspects of Computing		68400	Information Security for Managers
	67400	Computer And Communication Methods For Production Control	OBHR	68100	Behavior Organization
				68300	Individual Behavior in Organizations
IT	53000	Biometric Technology Test Design, Performance and Evaluation	PHIL	52400*	Contemporary Ethical Theory
	54000	Biometric Performance and Usability Analysis		62400†	Seminar in Ethics
	54500	Biometrics Technology And Applications	POL	62000†	Proseminar Public Policy
	58100†	Biometric Data Analysis	PSY	57700§	Human Factors in Engineering
LING	68900†	Seminar in Linguistics	STAT	51400	Design of Experiments
	68900	Natrl Languages Process		51700	Statistical Inference
MGMT	54700§	Computer Communication Systems	TECH	58100†	Workshop in Technology
	59000†	Directed Readings in Management Sem Tech Realztn Tpc II		62100†	Seminar in Technology

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 at least three different graduate programs 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.