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."

Courses are not taught every semester so your plan of study should take this into account.

Area A. Core Courses
--- CS 52600 Information Security or C&IT 55500 Advanced Network Security
--- CS 55500 Cryptography
--- PHIL 52400 or PHIL 58000† Contemporary Ethical Theory or Proseminar in Philosophy or TECH 62100 Information Assurance Ethics
--- POL 62000† Proseminar in Public Policy or TECH 62100 Tech & Policy
--- LING 69800 Research MA Thesis (for the thesis option only)

Area B. Recommended Courses
LING 68900 Natural Language Process (ECE 66900)

One of the following courses:
LING 52100 Syntax I: Syntactic Analysis
LING 53100 Semantics I: Lexical And Sentential Semantics

--SFS Students must take Applied Research Problems in National Information Security TECH 58100

One of the following courses:
AGEC 60800 Benefit-Cost Analysis 58000 Algorithm Design, Analysis, and Implementation
       69100† Research in Agricultural Economics
AT  53200 Contemporary Issues in Transportation Sec 59000† Topics In Computer Sciences
CNIT 42100 Small Scale Digital Device Forensics 62600 Advanced Information Assurance
      45500 Network Security 63000 Interntetworking
      45600 Wireless Network Security & Management 65500 Advanced Cryptology
      49900† Topics in Computer and Info 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
      58200† Contemporary Computer Tech Problems
      62300† Nat Lang Info Assur & Sec Sem
      63200† Seminar: Special Topics In Mass Comm
COM 55900 Current Trends in Mass Comm Research 57700§ Human Factors in Engineering
      59000† Directed Study of Special Problems
      63200† Seminar: Special Topics In Mass Comm
CS  50300 Operating Systems
      52700 Software Security
      52800 Network Security
      53600§ Data Communication and Computer Networks
      56500 Programming Languages
      58100† Biometric Data Analysis
      LING 59300† Special Topics in Semantics
      68900† Seminar in Linguistics

Last Revised: 4/6/16
Area C. Elective Courses

Any two of the following courses:

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
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<tbody>
<tr>
<td>CNIT 58100†</td>
<td>Workshop in Computer Technology</td>
</tr>
<tr>
<td>CS 50200</td>
<td>Compiling and Programming Systems</td>
</tr>
<tr>
<td>54100</td>
<td>Database Systems</td>
</tr>
<tr>
<td>54200</td>
<td>Distributed Database Systems</td>
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<tr>
<td>57300</td>
<td>Data Mining</td>
</tr>
<tr>
<td>ECE 54400</td>
<td>Digital Communications</td>
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<tr>
<td>56200</td>
<td>Introduction to Data Management</td>
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<tr>
<td>56500</td>
<td>Computer Architecture</td>
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<tr>
<td>57000</td>
<td>Artificial Intelligence</td>
</tr>
<tr>
<td>57300</td>
<td>Compilers And Translator Writing Systems</td>
</tr>
<tr>
<td>ECET 58100†</td>
<td>Selected Topics in Sensors</td>
</tr>
<tr>
<td>FNR 55800</td>
<td>Digital Remote Sensing and GIS</td>
</tr>
<tr>
<td>LING 50000</td>
<td>Introduction to Linguistics</td>
</tr>
<tr>
<td>53100</td>
<td>Semantics I: Lexical And Sentential Semantics</td>
</tr>
</tbody>
</table>

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 ECE 56000 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.