How to Plan Your Program Of Study

Sequence for registering for Ph.D. Graduate Hours

Fill our the Graduate Consent Form with your thesis advisor and sign the form before submitting for approval. The CRN (used for registering) will be emailed to you so you can register for the course.

After completing the core requirements you may complete the following

1. CS or CEG 8920 Independent Study 1-6 credit hours
2. CS or CEG 8940 Residency Research 1-12 credit hours
   Minimum of 18 credit hours of residency research.
3. CS or CEG 8690 Candidacy exam 1 credit hour
   Completion of candidacy examination with satisfactory grade
4. CS or CEG 8950 Dissertation Research 1-6 credit hours
5. CS or CEG 8990 Dissertation Defense 1 credit hour
   Submission of an approved dissertation

Choose Your Core

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<th>Computer Science Core Courses</th>
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<td>CS 7100 or CS 7140</td>
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Systems & Applications

CEG 7370 or CS 7700

Areas Of Specialty

Software:
CS 7100, CS 7120, CS 7140, CS 7200, CS 7220

Hardware:
CEG 7020, CEG 7030, CEG 7040, CEG 7080, CEG 7350, CEG 7360, CEG 7370, CEG 7450, CEG 7470

Intelligent Systems:
CS 7800, CS 7810, CS 7820, CS 7830, CS 7840, CEG 6870, CEG 7060

Data Analysis:
CS 7700, CS 7720, CEG 7570

Vision and Graphics:
CEG 7550, CEG 7590

Mathematics of Computation:
CS 7060, CS 7070

Secure Software/Hardware:
CS 7600, CS 7850, CS 7900, CEG 7050, CEG 7370, CEG 7380, CEG 7420, CEG 7450, CEG 7470, CEG 7560, EE 7400

Areas Of Specialty

Secure Software/Hardware:
CS 7600, CS 7850, CS 7900, CEG 7050, CEG 7370, CEG 7380, CEG 7420, CEG 7450, CEG 7470, CEG 7560, EE 7400
### Graduate Areas of Specialty

#### SOFTWARE
- **CS 7100** Advance Programming Languages
- **CS 7120** Functional and Logic Programming
- **CS 7140** Advanced Software Engineering
- **CS 7200** Algorithm Design and Analysis
- **CS 7700** Advanced Data Base Systems
- **CS 7720** Data Mining

#### HARDWARE
- **CEG 7020** Low Power VLSI System Design
- **CEG 7030** VLSI Testing & Design for Testability
- **CEG 7040** VLSI Design Synthesis and Optimization
- **CEG 7080** CMOS Mixed Signal IC Design
- **CEG 7350** Computer Architecture
- **CEG 7360** Embedded Systems
- **CEG 7370** Distributed Computing

#### SECURE SOFTWARE/HARDWARE
- **CS 7600** Trust Networks
- **CS 7850** Privacy Aware Computing
- **CS 7900** Analysis & Design of Human-Machine Cyber Security Systems
- **CEG 7050** Trust in Integrated Circuit Design
- **CEG 7370** Distributed Computing
- **CEG 7380** Cloud Computing

#### INTELLIGENT SYSTEMS
- **CS 7800** Information Retrieval
- **CS 7810** Knowledge Representation and Reasoning
- **CS 7820** Advanced Semantic Web
- **CS 7830** Machine Learning
- **CS 7840** Soft Computing
- **CS 7850** Privacy Aware Computing

#### DATA ANALYSIS
- **CS 7700** Advanced Data Base Systems
- **CS 7720** Data Mining
- **CS 7740** Data Mining

#### MATHEMATICS OF COMPUTATION
- **CS 7060** Numerical Analysis I
- **CS 7070** Numerical Analysis II
- **CS 7600** Trust Networks
- **CS 7700** Advanced Data Base Systems
- **CS 7720** Data Mining

#### VISION & GRAPHICS
- **CEG 7550** Computer Vision
- **CEG 7590** Medical Image Analysis and Visualization

#### RESEARCH AND INDEPENDENT STUDY
- **CS/CEG 7920** Independent Study in CS/CEG (Thesis)
- **CS/CEG 8920** Independent Study in CS/CEG
- **CS/CEG 8940** Residency Research
- **CS/CEG 8950** Dissertation Research

### Graduate Courses 7000/8000 level

#### CEG Courses:
- **CEG 7020** Low Power VLSI System Design
- **CEG 7030** VLSI Design Synthesis and Optimization
- **CEG 7040** VLSI Design Synthesis and Optimization
- **CEG 7060** Advanced Robotics
- **CEG 7080** CMOS Mixed Signal IC Design
- **CEG 7350** Computer Architecture
- **CEG 7360** Embedded Systems
- **CEG 7370** Distributed Computing
- **CEG 7420** Host Computer Security II
- **CEG 7450** Advanced Computer Networks
- **CEG 7470** Advanced Wireless Networks
- **CEG 7550** Computer Vision
- **CEG 7560** Visualization for Cyber Security
- **CEG 7570** Pattern Recognition
- **CEG 7590** Medical Image Analysis and Visualization

#### CS Courses:
- **CS 7060** Numerical Analysis I
- **CS 7070** Numerical Analysis II
- **CS 7100** Advance Programming Languages
- **CS 7120** Functional and Logic Programming
- **CS 7140** Advanced Software Engineering
- **CS 7200** Algorithm Design and Analysis
- **CS 7700** Advanced Data Base Systems
- **CS 7720** Data Mining
- **CS 7800** Information Retrieval
- **CS 7810** Knowledge Representation and Reasoning
- **CS 7820** Advanced Semantic Web
- **CS 7830** Machine Learning
- **CS 7840** Soft Computing
- **CS 7850** Privacy Aware Computing
- **CS 7900** Analysis & Design of Human-Machine Cyber Security Systems
- **CS 7920** Independent Study in Computer Engineering
- **CS 7940** Residency Research - Computer Science
- **CS 7950** Dissertation Research - Computer Science
- **CS 8920** Independent Study in Computer Science
- **CS 8940** Residency Research - Computer Science
- **CS 8950** Dissertation Research - Computer Science
- **CS 8960** Ph.D. Candidacy Exam
- **CS 8980** Continuing Registration
- **CS 8990** Dissertation Defense