

I-Courses¹

The I-courses are intended to expose our students to broad foundations in intra-disciplinary computing. Ph.D. students are required to take three I-courses, one from each of the Interaction, Infrastructure, and Informatics categories.

Interaction Core

- GCCIS-HCIN-600 Research Methods (HCI)
- GCCIS-HCIN-610 Foundations of HCI
- GCCIS-HCIN-700 Current Topics in HCI
- GCCIS-HCIN-722 HCI with mobile, wearable, and ubiquitous devices
- GCCIS-IGME-740 Game Graphics Programming
- GCCIS-ISTE-782 Visual Analytics

Infrastructure Core

- GCCIS-SWEN-610 Foundations of Software Engineering
- GCCIS-CSCI-651 Foundations of Computer Networks
- GCCIS-CSCI-652 Distributed Systems
- GCCIS-CSCI-654 Foundations of Parallel Computing
- GCCIS-CSCI-740 Programming Language Theory
- GCCIS-CSEC-741 Internet of Things Security

Informatics Core

- GCCIS-CSCI-620 Introduction to Big Data
- GCCIS-CSCI-630 Foundations of Artificial Intelligence
- GCCIS-CSCI-635 Introduction to Machine Learning
- GCCIS-CSCI-636 Information Retrieval
- GCCIS-CSCI-662 Foundations of Cryptography
- KGCOE-CMPE-677 Machine Intelligence
- GCCIS-CSEC-720 Deep Learning Security
- GCCIS-CSCI-723 Graph Databases
- GCCIS-CISC-863 Statistical Machine Learning

Note: I-courses should be available to the GCCIS PhD students without requiring them to take other pre-requisite courses.

Alternative I-courses to fulfill the I-courses requirement

When I-courses listed above are not available, appropriate graduate courses can be used to fulfill the I-courses requirement if they are selected from the Golisano College Ph.D. program or graduate programs in Golisano College, the College of Engineering, or the College of Science and approved by the advisor and the Ph.D. director. Taking a more advanced RIT course, which has an I-course as a prerequisite, can be used as an alternative.

¹ This list was updated by the Curriculum and Assessment Committee and Ph.D. faculty in April 2025.