Computer Science Focus Areas

Course selection should be done under academic advisement

Network & Security

- Computer Architecture
- Operating Systems
- Computer Networking
- Computer and Network Security
- Topics: Secure Coding
- Topics: Information Systems Security
- Topics: Smart Grid Communication Networks
- Focused Capstone

Data Science

- Statistical Inference
- Data Mining & Predictive Modeling
- Database Systems
- Information Retrieval
- Machine Learning
- Natural Language Processing
- Focused Capstone

Software Engineering

- Database Systems
- Human Computer Interaction
- Software Engineering
- Programming Languages
- Focused Capstone

Foundational Courses

Computational Biology

- Statistical Inference
- Foundations of Computational Biology
- Algorithms in Computational Biology
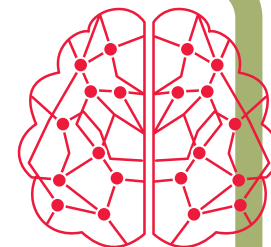- Genomics and Bioinformatics
- Focused Capstone

Computer Graphics and Game Development

- Linear Algebra
- Statistical Inference
- Computer Graphics
- Human Computer Interaction
- Topics: 3D Game Development
- Topics: Computer Vision and Multimedia Applications
- Focused Capstone

Artificial Intelligence

- Statistical Inference
- Human Computer Interaction
- Artificial Intelligence
- Machine Learning
- Natural Language Processing
- Theory of Computation
- Topics: Computer Vision and Multimedia Applications
- Focused Capstone

See the Computer Science Department website for full list of courses, including course numbers