

# 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: Smart Grid Communication Networks  
Focused Capstone



## Data Science

Calculus B  
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



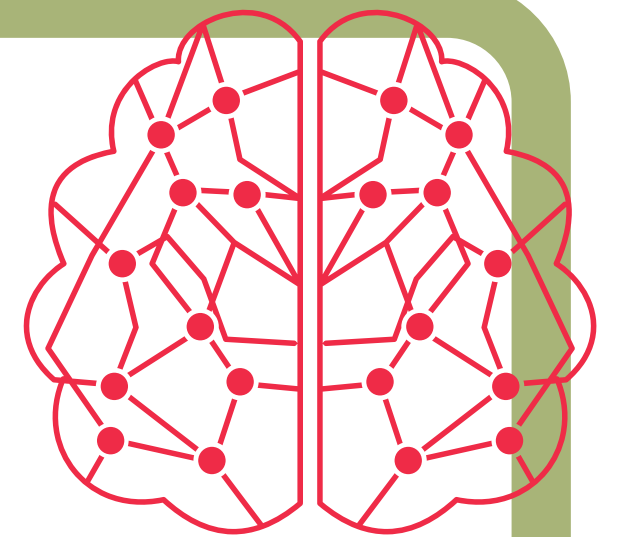
## Computer Graphics

Linear Algebra  
Statistical Inference  
Computer Graphics  
Human Computer Interaction  
Topics: Mobile App Development  
Topics: Computer Vision and Multimedia Applications  
Focused Capstone



## Artificial Intelligence

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



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