Computer Science BS Degree Requirements Flow Chart: 2012-2013
Computational Science and Engineering Track

Computer Science Foundation
all courses required (21 hours)
- CSCI 1000-1: Computer Science as a Field of Work and Study
- CSCI 1300-4: Computer Science 1: Programming
- CSCI 2270-4: Computer Science 2: Data Structures
- CSCI 2400-4: Computer Systems
- CSCI 3155-4: Principles of Programming Languages
- CSCI 3104-4: Algorithms

Computational Science and Engineering Foundation
all courses required (10 hours)
- CSCI 3308-3: Software Engineering Methods and Tools

Computational Science and Engineering Core
select 3 (9-10 hours)
- CSCI 3753-4: Operating Systems
- CSCI 4308-4: Software Engineering Project 1
- CSCI 4753-3: Computer Performance Modeling
- CSCI 4839-3: User Centered Design
- CSCI 4202-3: Artificial Intelligence 2: Machine Learning
- CSCI 4448-3: Object-Oriented Analysis and Design
- CSCI 4229-3: Computer Graphics
- CSCI 4309-3: Game Programming
- CSCI 4332-3: Database and Information Systems
- CSCI 4446-3: Chaotic Dynamics
- CSCI 4809-3: Computer Animation

Humanities and Social Sciences
(24 hours)
6 hours upper division Writing

Natural Sciences
(17 hours)
must include science sequence approved for the track

Computer Science Electives
(to bring total to 58 hours)

Free Electives
(to bring total to 128 hours)

Computer Science as a Field of Work and Study
Computer Science 1: Programming
Computer Science 2: Data Structures
Computer Systems
Principles of Programming Languages
Algorithms
Software Engineering Methods and Tools
Operating Systems
User Centered Design
Artificial Intelligence 2: Machine Learning
Object-Oriented Analysis and Design
Computer Graphics
Game Programming
Database and Information Systems
Chaotic Dynamics
Computer Animation
Software Engineering Project 1
Senior Thesis
Software Engineering Project 2
Senior Thesis
Numerical Computation
High-Performance Scientific Computing 1

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