Computer Science BS Degree Requirements Flow Chart: 2010-2011
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 3104-4
Algorithms

CSCI 3155-4
Principles of Programming Languages

CSCI 3308-3
Software Engineering Methods and Tools

CSCI 3753-4
Operating Systems

CSCI 4202-3
Artificial Intelligence 2: Machine Learning

CSCI 4229-3
Computer Graphics

CSCI 4332-3
Game Programming

CSCI 4446-3
Chaotic Dynamics

CSCI 4448-3
Object-Oriented Analysis and Design

CSCI 4809-3
Computer Animation

CSCI 4839-3
User Centered Design

CSCI 4839-3
Object Oriented Analysis and Design

CSCI 4950-4
Senior Thesis

CSCI 2824-3
Discrete Structures

Appm 1350-4
Calculus 1 for Engineers

Appm 1360-4
Calculus 2 for Engineers

CSCI 3656-3
Numerical Computation

CSCI 4576-4
High-Performance Scientific Computing 1

CSCI 4753-3
Computer Performance Modeling

CSCI 4753-3
Computer Performance Modeling

CSCI 4824-3
Discrete Structures

CSCI 4950-4
Senior Thesis

Computational Science and Engineering Foundation
all courses required
(10 hours)

CSCI 2270-4
Computer Science 2: Data Structures

CSCI 3155-4
Principles of Programming Languages

CSCI 3104-4
Algorithms

CSCI 3308-3
Software Engineering Methods and Tools

CSCI 3753-4
Operating Systems

CSCI 4202-3
Artificial Intelligence 2: Machine Learning

CSCI 4229-3
Computer Graphics

CSCI 4332-3
Game Programming

CSCI 4446-3
Chaotic Dynamics

CSCI 4448-3
Object-Oriented Analysis and Design

CSCI 4839-3
User Centered Design

CSCI 4839-3
Object Oriented Analysis and Design

CSCI 4950-4
Senior Thesis

CSCI 2824-3
Discrete Structures

Computational Science and Engineering Core
select 3
(9-10 hours)

CSCI 3656-3
Numerical Computation

CSCI 4576-4
High-Performance Scientific Computing 1

CSCI 4753-3
Computer Performance Modeling

CSCI 4824-3
Discrete Structures

CSCI 4950-4
Senior Thesis

Computational Science and Engineering Capstone
select one option
(8 hours)

CSCI 4380-4
Software Engineering Project 1

CSCI 4318-4
Software Engineering Project 2

Lesley.McDowell@Colorado.EDU

Computer Science Electives
(24 hours)
(6 hours upper division)
Writing

Humanities and Social Sciences
(17 hours)
must include science sequence approved for the track

Natural Sciences
(17 hours)

Free Electives
(to bring total to 58 hours)

www.cs.colorado.edu
April 20, 2010