Computer Science BS Degree Requirements Flow Chart: 2009-2010

**Computational Science and Engineering Track**

**Computer Science Foundation**
- 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**
- CSCI 3753-4: Operating Systems
- CSCI 4839-3: User Centered Design
- CSCI 4448-3: Object-Oriented Analysis and Design
- CSCI 3287-3: Database and Information Systems
- CSCI 4576-4: High-Performance Scientific Computing 1
- CSCI 3656-3: Numerical Computation
- CSCI 4446-3: Chaotic Dynamics
- CSCI 4308-4: Software Engineering Project 1
- CSCI 4292-3: Computer Graphics
- CSCI 4332-3: Game Programming
- CSCI 4308-4: Software Engineering Project 2
- CSCI 4809-3: Computer Animation

**Computational Science and Engineering Core**
- CSCI 4308-4: Software Engineering Project 1
- CSCI 4950-4: Senior Thesis
- CSCI 4318-4: Software Engineering Project 2
- CSCI 4950-4: Senior Thesis

**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)

**Other Courses**
- APPM 1350-4: Calculus 1 for Engineers
- APPM 1360-4: Calculus 2 for Engineers
- CSCI 2824-3: Discrete Structures
- Probability or Statistics
- Linear Algebra

**Additional Requirements**
- (9-10 hours)
- (24 hours)
- 6 hours upper division

**Notes**
- All courses required
- June 30, 2009

Lesley.McDowell@Colorado.EDU

www.cs.colorado.edu