MSCSS Core Requirements

Foundations Group:
Courses in the Foundations group emphasize the ability to synthesize and apply relationships between mathematical and scientific foundations, and actual practices

CSS 565: Research Methods in Software Development
5 cr. Required by all students

Design and Development:
The purpose of the design and development group is to introduce types of problems that require students to demonstrate skill in analysis, problem solving and modeling.

CSS 555: Principles and Design
CSS 543: Advanced Programming Methodology
10 cr. Required by all students

Systems Group:
Courses within the Systems group are for Career Transition Students only. They will give students exposure to technologies and methods used in the types of systems they will be interacting with as a software developer.

Examples of Systems courses include:
- Computer Architecture
- Operating Systems
- Network Design
- Database Systems
5 – 10 cr. dependent upon students background (Career Transition only)

CSS Electives
10 – 20 credits, dependent upon students background and degree pathway; will provide student with specialized knowledge in a variety of advanced and contemporary computing topics. Potential topics include software development, game rendering, parallel and distributed computing, game studies, object recognition, etc.

Thesis
The masters thesis should be directed toward the solution of a problem of substantial scientific importance and should demonstrate the student's ability to use research methods in a limited area and to discuss critically the student's own and other investigators' work.
10 cr

Project
The Masters project should be an advanced, faculty supervised project in an area such as software engineering, artificial intelligence, multimedia, distributed and parallel systems, databases, scientific computing, networks, or other approved subject matter. The project will serve as a demonstration that student has the knowledge and capability to build and utilize quality systems.
10 cr