

**Computer Science MS program
MS Computer Science Plan of Study**

Student Name: _____

ID: _____

First semester of enrollment: () Spring () Fall 20____

General requirements:

- 30 graduate credit hours (which may optionally include 6 hours of thesis. Submit MS Thesis Proposal Form)
- At least 21 hours must be from the Department of Computer Science.
- At least 15 hours must be 6000 level or above courses.

All courses must be approved by the academic adviser. For more information of allowed courses and policies see http://cs.uncc.edu/~abw/MSprogram/program_policies.html

Core subject requirements:

All students must take TWO courses from the Core Category:

Date taken Grade

ITCS 5102 Survey of Programming Languages

ITCS 5141 Computer Organization and Architecture
or ITCS 6182 Advanced Computer Architecture

ITCS 6112 Software System Design and Implementation

ITCS 6114 Algorithms & Data Structures

Breadth requirements:

All students must take three courses, each from a different Course Category, to satisfy the breadth requirements. The courses must be listed below. The course categories are:

Date taken Grade

Data Management

ITCS 6155 Knowledge Based Systems

ITCS 6157 Visual Databases

ITCS 6160 Database Systems

ITCS 6161 Advanced Topics in Database Systems

ITCS 6162 Knowledge Discovery in Databases

ITCS 6163 Data Warehousing

Networked Systems

ITCS 5145 Parallel Computing

ITCS 5146 Grid Computing

ITCS 6132 Modeling & Analysis of Communication Networks

ITCS 6166 Computer Networks

ITCS 6167 Advanced Networking Protocols

ITCS 6168 Wireless Communications

Visualization and Computer Graphics

ITCS 5120 Introduction to Computer Graphics

ITCS 5121 Information Visualization

ITCS 5122 Visual Analytics

ITCS 5123 Visualization and Visual Communication

ITCS 6124 Illustrative Visualization

ITCS 6126 Large Scale Information Visualization

ITCS 6127 Real-time Rendering Engines

ITCS 6128 3D Display and Advanced Interfaces
ITCS 6140 Data Visualization

Intelligent & Interactive Systems

ITCS 5152 Computer Vision
ITCS 6050 Topics in Intelligent Systems
ITCS 6111 Evolutionary Computation
ITCS 6125 Virtual Environments
ITCS 6134 Digital Image Processing
ITCS 6150 Intelligent Systems
ITCS 6151 Intelligent Robotics
ITCS 6156 Machine Learning
ITCS 6158 Natural Language Processing
ITCS 6267 Intelligent Information Retrieval
ITCS 6500 Complex Adaptive Systems

Applications

ITCS 5133 Numerical Computation Methods and Analysis
ITCS 5230 Introduction to Game Design and Development
ITCS 5231 Advanced Game Design and Development
ITCS 5232 Game Design and Development Studio
ITCS 5235 Game Engine Construction
ITCS 5236 Artificial Intelligence for Computer Games
ITCS 5237 Audio Processing for Entertainment Computing
ITCS 6153 Neural Networks
ITCS 6159 Intelligent Tutoring Systems
ITCS 6165 Coding and Information Theory
ITCS 6222 Biomedical Signal Processing
ITCS 6224 Biomedical Image Processing
ITCS 6226 Bioinformatics
ITCS 6228 Medical Informatics

Concentration:

All students must form a concentration - three related courses, at least two must be ITCS courses. A course used for a breadth requirement can also be used for the concentration.

Area: _____

Courses:

Electives to complete 30 hours:

Student Signature: _____

Date: _____

Academic Advisor Signature: _____

Date: _____