CSCI 107. Joy and Beauty of Computing, 3 Credits. (3 Lec) F
Examines the computing field and how it impacts the human condition.
Introduces exciting ideas and influential people. Provides a gentle introduction to
computational thinking using the Python programming language.

CSCI 111. Programming with Java I, 4 Credits. (3 Lec, 1 Lab) F,S
COREQUISITE: M 151Q. Introduction to programming: program design, analysis,
and implementation in Java, including I/O, assignment, decision, iteration, scalar
types, arrays, control structures, methods, classes, and common data types. No
previous programming experience required.

CSCI 112. Programming with Java II, 3 Credits. (2 Lec, 1 Lab) S
PREREQUISITE: CSCI 111 or CSCI 127 or EEELE 101. C Programming
knowledge. Introduces imperative programming and the C standard library. Course
covers pointers, memory management and structures.

CSCI 132. Basic Data Structures and Algorithms, 4 Credits. (3 Lec, 1 Lab) F,S
PREREQUISITE: CSCI 111 or CSCI 127 and M 151Q. An examination of
advanced Java and basic data structures and their application in problem solving.
Data structures include stacks, queues and lists. An introduction to algorithms
employing the data structures to solve various problems including searching and
sorting, and recursion. Understanding and using Java class libraries. The laboratory
uses Java. Introduces Big-O Notation.

CSCI 215CS. Social & Ethical Issues in CS, 3 Credits. (2 Lec, 1 Rec) F
PREREQUISITE: W core and US core. Social and ethical issues as they relate to
computing, including privacy, risks, computer abuse, commerce, professionalism,
free speech, intellectual property, social justice, and current issues. History of computing.

CSCI 232. Data Structures and Algorithms, 4 Credits. (3 Lec, 1 Lab) S
PREREQUISITE: CSCI 132. Advanced data structures and programming
techniques and their application. Topics include: trees, balanced trees, graphs,
dictionaries, hash tables, heaps. Examines the efficiency and correctness of
algorithms. The laboratory uses Java. CSCI 246 is recommended as a prerequisite.

CSCI 246. Discrete Structures, 3 Credits. (3 Lec) F
PREREQUISITE: M 171Q, COREQUISITE: CSCI 132. This course covers logic,
discrete probability, recurrence relations, Boolean algebra, sets, relations, counting,
functions, maps, Big-O notation, proof techniques including induction, and proof
by contradiction.

CSCI 477. Simulation, 3 Credits. (3 Lec) F
PREREQUISITE: CSCI 112, consent of instructor, and a probability or statistics
course. Discrete and continuous simulation modeling methodology using a
computer simulation language; random number generation, output analysis,
validation, and verification; application to varied system design and analysis
problems. Cross-listed with EIND 422.

CSCI 491. Special Topics, 1-4 Credits. (1-4 Lec; 12 cr max) On Demand
Max 12 cr. PREREQUISITE: To be determined based on actual topic offered.
Courses not required in any curriculum for which there is a particular one-time
need, or given on a trial basis to determine acceptability and demand before
requesting a regular course number. Co-convened with CSCI 591.

CSCI 591. Graduate Consultation, 1-3 Credits. (1-3 Ind; 3 cr max) On Demand
PREREQUISITE: Master's standing, consent of instructor and approval of director
of the School of Computing. This course may be used only by students who have
completed all of their course work, and thesis, if on a thesis plan but who need
additional faculty or staff time or help.

Font Notice

This document should contain certain fonts with restrictive licenses. For this draft, substitutions were made using less legally restrictive fonts. Specifically:

Times was used instead of Adobe Garamond Pro.

The editor may contact Leepfrog for a draft with the correct fonts in place.