School of Computer Science Concentration (111 units minimum)

BCSA CS Assistant Dean & Academic Advisor:
Tom Cortina  GHC 4117, x8-3514  tcortina@andrew.cmu.edu

Prerequisite

15-112  Fundamentals of Programming and Computer Science  12

Computer Science Core Requirements (56 units)

15-122  Principles of Imperative Computation  10
15-150  Principles of Functional Programming  10
15-210  Parallel and Sequential Structures and Algorithms  12
15-213  Introduction to Computer Systems  12
15-251  Great Theoretical Ideas in Computer Science  12

Concepts of Mathematics (10 units)

21-127  Concepts of Mathematics (co-requisite for 15-122; prerequisite for 15-150)  10

Applications Courses or CS Electives (5 courses, 45 units minimum)

Choose a minimum of five courses from SCS beyond the core requirements, 200-level or higher, not including 15-221, 15-351, 16-223, 08-532. Listed below are suggested choices for these electives. Consult with the CS advisor if interested in courses not listed.

05-391  Designing Human Centered Software  12
05-418  Design Educational Games  12
11-344  Machine Learning in Practice  12
11-411  Natural Language Processing  12
15-322  Introduction to Computer Music  9
15-323  Computer Music Systems and Information Processing  9
15-365  Experimental Animation  12
15-381  Artificial Intelligence: Representation and Problem Solving  9
15-388  Practical Data Science  9
15-415  Database Applications  12
15-437  Web Application Development  12
15-462  Computer Graphics  12
15-463  Computational Photography  12
15-464  Technical Animation  12
15-465  Animation Art and Technology  12
15-466  Computer Game Programming  12
16-264  Humanoids  12
16-362  Mobile Robot Programming Laboratory  12
16-384  Robot Kinematics and Dynamics  12
16-385  Computer Vision  9
16-467  Human Robot Interaction  12