CS 149: Introduction to Programming

CS 159: Advanced Programming

Corequisite:

CS 227: Discrete Structures I

Open to all

Guaranteed admission for >= 3.0 average in CS 149 and 159

Open to fully admitted only

MATH 231 or 235

CS 240: Data Structures and Algorithms

CS 261: Computer Systems I

CS 240: Data Structures and Algorithms

CS 261: Computer Systems I

CS 327: Discrete Structures II

CS 361: Computer Systems II

CS 430: Programming Languages

Applications electives:
• CS 347: Web Development
• CS 374: Database Systems
• CS 447: Interaction Design

Robotics/AI electives:
• CS 354: Autonomous Robotics (*)
• CS 444: Artificial Intelligence (*) (also req. CS 327)
• CS 445: Machine Learning (*) (also req. CS 327)

Advanced systems electives:
(must take at least one)
• CS 432: Compilers (also req. CS 327)
• CS 450: Operating Systems
• CS 455: Advanced Computer Networking
• CS 456: Computer Architecture
• CS 470: Parallel and Distributed Systems

Advanced algorithms (must take one):
• CS 412: Applied Algorithms (*)
• CS 452: Design and Analysis of Algorithms (*)

Security electives (req. for infosec certificate):
• CS 457: Information Security (*) (co-req. CS 361)
• CS 458: Cyber Defense (req. CS 361 and 457)
• CS 482: Selected Topics in Information Security (req. CS 240 and 261, and others by topic)

No prerequisites aside from full admission:
• CS 330: Societal and Ethical Issues in Computing
• CS 332: Technical Communication for Computer Science
• CS 442: Logic in Computer Science

By permission only:
• CS 280: Projects in Computer Science
• CS 480: Selected Topics in Computer Science
• CS 497: Independent Study

Miscellaneous electives:
• CS 349: Developing Interactive Media (req. CS 240)
• CS 446: Software Analysis and Design (req. CS 240 and 345)
• CS 448: Numerical Analysis (req. MATH 237, 238/300, and 248) (#)
• CS 449: Numerical Analysis for Differential Equations (req. MATH 237, 238/336, and 248) (#)
• CS 462: Network Applications Development (req. CS 361)
• CS 488: Computer Graphics Applications (req. CS 240 and 261)

(*) Also requires statistics (MATH 220, 229, or 318)
(#) Typically taken only by dual Math majors as MATH 448/449 (cross-listed)