



Choosing Computer Science Electives to Complete a CS Minor

After students complete all prerequisites and the one required course (i.e., CSCI 243) for the CS minor, they must then select four additional undergraduate or graduate level Computer Science courses to use as electives. Some courses offered by Computer Science are excluded as choices (for example, CSCI 471 Professional Communications). When choosing graduate level Computer Science courses, some courses may not be allowed if a student has taken a comparable undergraduate level course. For example, students who have completed CSCI 331 Introduction to Intelligent Systems are not permitted to take CSCI 630 Foundations of Intelligent Systems for credit.

We will not define all of the possible combinations of Computer Science courses that might be used for a minor, although we suggest several likely combinations below. Rather, we will seek to advise students and help them create collections of courses that are appealing and useful to their specific goals. The following example scenarios demonstrate the *feasibility* of creating viable Computer Science minors that meet the RIT requirement that at least two courses in the minor are numbered 300 and above.

Computer Science Minor – Scenario 1 – theory oriented – electives include:

- CSCI 261 (Analysis of Algorithms) or CSCI 264 (Honors Analysis of Algorithms)
- CSCI 262 (Introduction to Computer Science Theory) or CSCI 263 (Honors Introduction to Computer Science Theory)
- CSCI 462 (Introduction to Cryptography)
- CSCI 464 (Xtreme Theory)

Computer Science Minor – Scenario 2 – programming oriented – electives include:

- CSCI 250 (Concepts of Computer Systems)
- CSCI 251 (Concepts of Parallel and Distributed Systems)
- CSCI 344 (Programming Language Concepts)
- CSCI 541 (Programming Skills)

Computer Science Minor – Scenario 3 – artificial intelligence – electives include:

- CSCI 261 (Analysis of Algorithms) or CSCI 264 (Honors Analysis of Algorithms)
- CSCI 331 (Introduction to Artificial Intelligence) (MATH 251 (Probability and Statistics I) is an additional prerequisite for this course)
- CSCI 431 (Introduction to Computer Vision)
- CSCI 532 (Introduction to Intelligent Security Systems) or CSCI 539 (Seminar in Artificial Intelligence)

Computer Science Minor – Scenario 4 – computer graphics – electives include:

- CSCI 250 (Concepts of Computer Systems)
- CSCI 510 (Introduction to Computer Graphics) (MATH 241 (Linear Algebra) is an additional prerequisite for this course)
- Two courses chosen from:
 - CSCI 711 (Global Illumination) or
 - CSCI 712 (Computer Animation: Algorithms and Techniques) or
 - CSCI 713 (Applied Perception in Graphics and Visualization) or
 - CSCI 714 (Scientific Visualization) or
 - CSCI 715 (Applications in Virtual Reality) or
 - CSCI 716 (Computational Geometry) (CSCI 261 (Analysis of Algorithms) or CSCI 264 (Honors Analysis of Algorithms) or CSCI 665 (Foundations of Algorithms) is an additional prerequisite for this course)
 - CSCI 719 (Topics in Computer Graphics)