Computer Science - Minor

Requirements:
- CS 163 or CS 164
- CS 165
- Pick one from: CS 220, CS 270, or CS 253
- Pick 12 credits of Upper Division CS Classes (3xx-4xx)

Declaring Minor Requirements:
- CSU GPA of 2.5 or greater
- ‘C’ or better in CS 163 or CS 164
- ‘C’ or better in (MATH 160 or CS 165)

Considerations

CS 163/4 prerequisites:
To succeed in CS 163/4 it is important to have a strong algorithmic background. It is suggested that either you have the minimum math requirement (MATH 124 completed) or complete CS 150 or 152 with a ‘C’ or better. For many students, completing CS 150 first would be an ideal start - either Freshman or Sophomore year.

Other CS courses may have additional prereqs. Consult the prerequisite chart.

A Few Possible Pathways

Software Developer
If you are interested in adding the ability to develop software applications - a good path would be - CS 150, CS 163/4, CS 165, CS 253, CS 312, CS 314, CS 356, CS 464, CS 414, CS 415, or CS 430. Recommended for any major, especially liberal arts or business.

Security Specialist
If you are interested in adding a strong understanding of software security there are two possible paths.
- Security Application Development - CS163/4, CS 165, CS 253, CS 314, CS 356, CS 456, CS 458
- Network & Security (hardware focus) - CS 163/4, CS 165, CS 270, CS 370, CS 356, CS 457 (prerequisite CS 253), CS 430, CS456

Artificial Intelligence / Bioinformatics / Machine Learning
If you are interested in adding knowledge of machine learning and artificial intelligence to your degree - a good path would be - CS 163/4, CS 165, CS 220, CS 320, CS 345. CS 440, CS 445, CS 425 or CS 420. Please note that his path would require matrices (MATH 229, 369, or DSCI 369), calculus (MATH 160 or MATH 155), and statistics (301 or higher). It is recommended for majors that already need most of these extra courses.