

Essential Questions in the Computer Science Program

The courses in this program are designed not just to give you coding skills, but also to help you think like a computer scientist. There are 10 “essential questions” spread throughout the program to help you develop this mindset. These questions are open-ended: There is not only one “right” answer. Instead, they introduce you to big ideas that you will engage with throughout the program.

CS 340

Theme

Essential Question

Problem Solving | How do I approach a problem as a computer scientist?

Teamwork and Collaboration | What does it mean to be a good team member in software development?

Ethics | What are my ethical responsibilities as a software developer to the end user and the organization?

Requirements Analysis | How do I interpret user needs and implement them into a program?

Design | How do I approach designing software?

Develop | How do I approach developing programs?

Develop | How do I write programs that are maintainable, readable, and adaptable?

Test | How do I ensure my code, program, or software is functional and secure?

Personal and Professional Growth | What do computer scientists do, and why does it matter?

Personal and Professional Growth | How can computer science help me in reaching my goals?