Careers in Computer Science

Studying computer science will help you to develop problem-solving, critical thinking and complex analytical skills. Skills such as these are especially useful for specialists working with complex algorithms and big data to create instructions and understand design patterns.
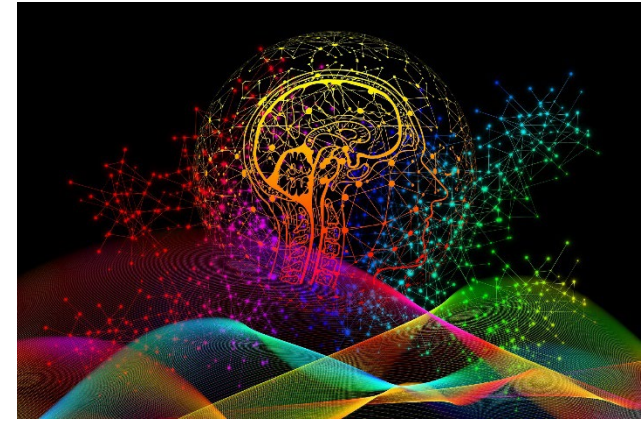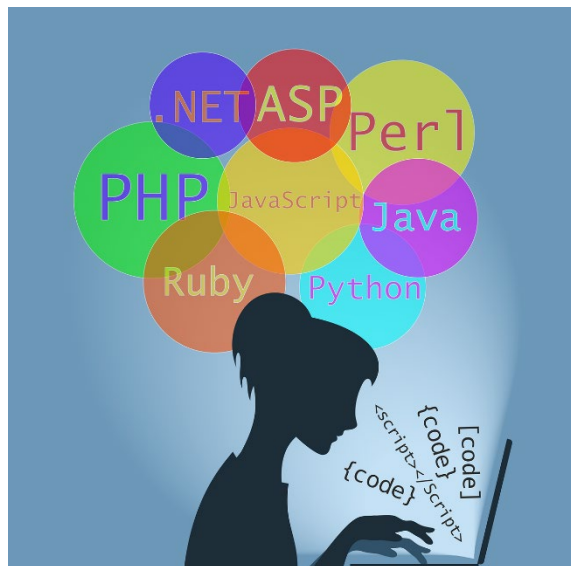
As computer science is used in so many areas of life and business, there are plenty of choices available to qualified professionals.

- Software developer
- Computer systems analyst
- IT manager
- Computer network architect
- Mobile application designer or developer
- Research and development (R&D) scientist
- Computer scientist
- Computer science researcher
- Artificial intelligence and machine learning engineer

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Computer Science

The Language of the Future

Pittsburg State University

U.S. BUREAU OF
LABOR STATISTICS

Computer Programmers

Computer programmers write and test code that allows computer applications and software programs to function properly.

2020 Median Pay $89,190 per year

Job Outlook, 2020-30   About 9,700 openings for computer programmers are projected each year, on average, over the decade. All of those openings are expected to result from the need to replace workers who transfer to other occupations or exit the labor force, such as to retire.
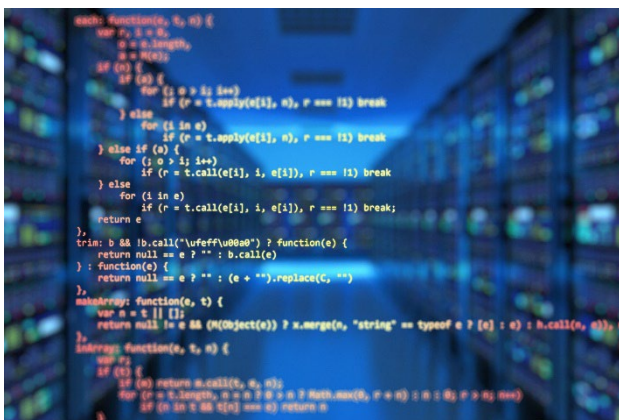
Curriculum

Core

CIS 230	Introduction to Programming
CIS 240	Intermediate Programming
CIS 380	Systems Analysis and Design
CIS 615	Database Management
CS 405	Principles of Software Architecture
EET 244	Logic Circuits
MATH 122	Plane Trigonometry
MATH 212	Matrix Algebra
MATH 326	Mathematics for Programming
MATH 413	Introduction to Mathematical Thought
MATH 513	Discrete Structures
MATH 626	Data Structures and Algorithms

15 hours chosen from the following

CS 300	Web Application Development I
CS 305	Web Application Development II
CS 400	Mobile Application Development
CS 410	Introduction to Front End Frameworks
CS 500	Advanced Programming
EET 344	Micro Computer Systems
EET 449	Programmable Logic Devices
EET 549	Micro Controllers
EET 647	Digital Signal Processing

Software Developers, Quality Assurance Analysts, and Testers

Software developers design computer applications or programs. Software quality assurance analysts and testers identify problems with applications or programs and report defects.

2020 Median Pay $110,140 per year

Job Outlook, 2020-30   22% (Much faster than average)

Computer Systems Analysts

Computer systems analysts study an organization's current computer systems and find a solution that is more efficient and effective.

2020 Median Pay $93,730 per year

Job Outlook, 2020-30   7% (As fast as average)