Core Unit Components

Understanding Computers

- Hardware components and user needs
- Software products and user needs
- Operating system functions
- Basic networking concepts
- System maintenance

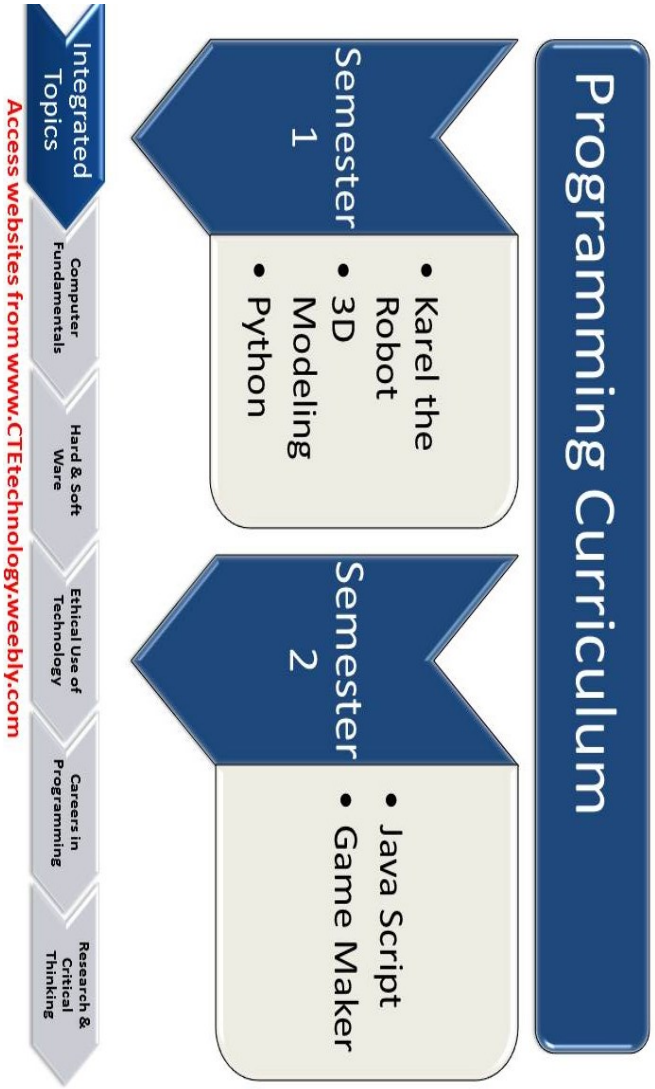
Introduction to Programming

- Fundamental concepts and constructs
- Basic code maintenance techniques

Computers and Society

- Technology & society
- Environmental sustainability computer use policies
- Legal and ethical issues
- Postsecondary career prospects

Intro to Computer Programming



Advisory Pre-requisite: a B in your last math class.

A wise being once said: "Training, you must ...

Intro to Computer Programming

Grades 9—12
Course #1400

Grades 9—12
Course #1400

amclin@cuhsd.org

Learn the Skills that You Need for the Careers of the Future!

Students will plan and write simple computer programs by applying fundamental programming concepts, and learn to create clear and maintainable internal documentation.

They will also learn to manage a computer by studying hardware configurations, software selection, operating system functions, networking, and safe computing practices.

Students will also investigate the social impact of computer technologies, and develop an understanding of environmental and ethical issues related to the use of computers.

Students will also learn about computer environments and systems, and explore environmental issues related to computers, safe computing practices, emerging technologies, and postsecondary opportunities in computer-related fields.

This course is preparation for AP Computer Science.

Description

The Introduction to Computer Programming curriculum is an introduction to the basics of computer programming. Students will learn how to:

- *plan and write simple computer programs by applying fundamental programming concepts, and learn to create clear and maintainable internal documentation.*
- *manage a computer by studying hardware configurations, software selection, operating system functions, networking, and safe computing practices.*
- *investigate the social impact of computer technologies, and develop an understanding of environmental and ethical issues related to the use of computers.*
- *learn about computer environments and systems, and explore environmental issues related to computers, safe computing practices, emerging technologies, and postsecondary opportunities in computer-related fields.*
- *Reflect on the personal, social, economic, and ethical impacts of technology and technological change, and the implications for rights, responsibilities and freedoms.*

Information & Communication Technology

Information and Communication Technology (ICT) is important educationally. It both develops and requires logical thinking and precision. It encourages innovation, collaboration, and resourcefulness: students apply underlying principles to understand real-world systems, and to create purposeful and usable artifacts.

This combination of **principles, practice, and invention** makes Intro to Computer Programming both rigorous and creative. More broadly, it is a lens through which to understand both natural and artificial systems.

ICT has great economic and societal value. It provides students with the knowledge and skills to contribute to the digital economy, and play an active role in a world where new technologies are invented daily. Technology has the potential to make the world a better place, and understanding ICT is the key to realizing that opportunity

CAMPBELL UNION HIGH SCHOOL DISTRICT • EDUCATING FOR OUR COMMUNITY AND THE FUTURE

CUHSD