Code.org

Planning Tools and Resources

- [Computer Science Principles Syllabus](#)

Curriculum At-a-Glance

The curriculum is divided into roughly 120 daily lesson plans which comprise 10 units of study. More detailed information about each unit can be found later in this syllabus.

Unit 1 Digital Information	Explore how computers store complex information like numbers, text, images and sound and debate the impacts of digitizing information.
Unit 2 The Internet	Learn about how the Internet works and discuss its impacts on politics, culture, and the economy.
Unit 3 Intro to App Design	Design your first app while learning both fundamental programming concepts and collaborative software development processes.
Unit 4 Variables, Conditionals, and Functions	Expand the types of apps you can create by adding the ability to store information, make decisions, and better organize code.
Unit 5 Lists, Loops, and Traversals	Build apps that use large amounts of information and pull in data from the web to create a wider variety of apps.
Unit 6 Algorithms	Design and analyze algorithms to understand how they work and why some are considered better than others.
Unit 7 Parameters, Return, and Libraries	Learn how to design clean and reusable code that you can share with a single classmate or the entire world.
Unit 8 Create PT Prep	Practice and complete the Create Performance Task (PT).
Unit 9 Data	Explore and visualize datasets from a wide variety of topics as you hunt for patterns and try to learn more about the world around you.
Unit 10 Cybersecurity and Global Impacts	Research and debate current events at the intersection of data, public policy, law, ethics, and societal impact.

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- **Curriculum Guide 2021 – 2022**

  # Welcome to Computer Science Principles

  Code.org's Computer Science Principles (CSP) curriculum is a **full-year, rigorous, entry-level course** that introduces high school students to the foundations of modern computing. The course covers a broad range of foundational topics such as programming, algorithms, the Internet, big data, digital privacy and security, and the societal impacts of computing. All teacher and student materials are provided for free online and can be accessed at code.org/csp.

  ### Curriculum Overview and Goals
  Computing affects almost all aspects of modern life, and all students deserve an education that prepares them to pursue the wide array of opportunities that computing has made possible. This course seeks to provide knowledge and skills to meaningfully participate in our increasingly digital society, economy, and culture.

- **Course Vocabulary List**

  This Google document provides essential terms introduced in each unit. Students can download the vocabulary list for future reference

- **All Resources**

  code.org has comprised a comprehensive library that is organized by unit and by lesson. Every resource required by both educators and students can be accessed here.

- **All Standards**

  This index aligns each lesson to relevant national standards established by:

  o NSTA – National Science Teachers Association
  o CSP – Advanced Placement Computer Science Frameworks