Unit description

Introduction to the AWS Cloud and Sustainability pre-requisite unit introduces students to the basic concepts of cloud computing and the Amazon Web Services (AWS) Cloud through the lens of sustainability. Students will explore key cloud concepts and vocabulary, as well as the many benefits of cloud computing. This introductory unit is designed as a pre-requisite supplemental for STEM and CTE educators to incorporate into their classroom curriculum prior to beginning any other AWS Spark unit.

The Introduction to the AWS Cloud and Sustainability unit includes video presentations and interactive activities.

Intended audience

This unit is intended for students and educators:

Students:
- At least 13 years or older
- Enrolled in participating AWS Spark secondary school STEM, CTE, and/or Physical Education classes

Educators:
- Teach STEM, CTE, and/or Physical Education classes to eligible secondary school students at a participating AWS Spark school
- Interested in supplemental curricular content designed to highlight the ways in which cloud computing technology is used in the subjects they teach

Recommended delivery method

The Introduction to the AWS Cloud and Sustainability unit is designed to be facilitated by an educator in a classroom setting. If necessary, the unit may be delivered in a virtual or “flipped classroom” manner with minimal educator instruction.

Prerequisites

We recommend the following prerequisites for students and educators:

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1 Science, Technology, Engineering, Mathematics (STEM)
2 Career and Technology Education (CTE)
Students:
- None required

Educators:
- Completed Introduction to the AWS Cloud for K-12 Educators training
- Reviewed and completed the Instructor Guide for Introduction to the AWS Cloud and Sustainability unit

Technical requirements
Educators and students must have:
- Access to a laptop or desktop computer running Windows, Mac or Linux, or a Chromebook
- Access to internet connection

Unit and module objectives
In the Introduction to the AWS Cloud and Sustainability unit, students will:
- Learn key concepts of the cloud computing model
- Identify the key benefits of the cloud computing model, including the environmental benefits

Unit outline
Module 1: The AWS Cloud and sustainability (20 minutes)