



Computer Engineering - Course Syllabus (.5 Credit)

Description:

Computer Engineering is an introductory computer course that focuses on the basics of computer hardware, software, data, images, and coding. This course is designed to provide a wide, general introduction to students who are exploring computer-based or internet-based careers. Computer Engineering specifically addresses: The History of Computers, Analog vs. Digital Information, Data Protocols, Converting Images, and Coding Basics.

Textbook: Computer Engineering - Excel Education Systems, Inc. – 2020 ©

Course objectives:

Throughout the course, you will meet the following goals:

- Explain the history of the development of the modern-day computer.
- Describe the difference between digital and analog information.
- Explain how to use protocols to organize information.
- Describe the process of converting images to bits.
- Explain the basics of sound production and how it is described.
- List and explain the different types of coding and how they are used.
- Explain the applications of the various types of data transmission.

Contents:

Module 1: Computer Basics
Module 2: Data Protocols
Module 3: Images and Innovations
Module 4: Coding and Compression
Module 5: Audio/Video Compression and Conversion
Module 6: Understanding Sound
Module 7: Data Transmission
Module 8: Data in the New Age
Module 9: Internet-Based Information

Grading Scale

A = 90-100%
B = 80-89%
C = 70-79%
D = 60-69%
F = under 59%

Grade Weighting

Quizzes.....	70%
Final Exam.....	30%
	100%