

## Green Design and Technology HS/One Part

**COURSE DESCRIPTION:** This course examines the impact of human activities on sustainability while exploring the basic principles and technologies that support sustainable design. Students learn about the potential for emerging energy technologies such as water, wind, and solar power. They find out how today's businesses are adapting to the increased demand for sustainable products and services. In this course, students develop a comprehensive understanding of this fast-growing field.

**PREREQUISITES:** None

**COURSE LENGTH:** One Semester

**REQUIRED TEXT:** None

**MATERIALS LIST:** None

### **COURSE OUTLINE:**

#### **Unit 1: Course Overview**

- Start the Course
- Set Up Your Computer
- Set Up a Browser
- Find and Complete Coursework

#### **Unit 2: Section 1: Exploring Systems**

- Designing for the Environment
- Systems
- Human Impact
- Global Climate Change
- Calculating Impact

#### **Unit 3: Section 2: Waste Management**

- Reduce, Reuse, and Recycle
- Special Types of Waste

#### **Unit 4: Section 3: Green Energy**

- Alternative Energy Sources
- Clean Energy and Conservation

**Unit 5: Section 4: Green Transportation**

- Green Vehicles
- Green Transportation Planning

**Unit 6: Section 5: Green Agriculture**

- Agriculture and Aquaculture
- Property Rights and Sustainability
- Organic Products and Local Agriculture
- Sustainable Agriculture

**Unit 7: Section 6: Green Manufacturing and Construction**

- Economic Systems and the Environment
- Life Cycles and Industrial Production
- Green Product Design
- Green Construction