

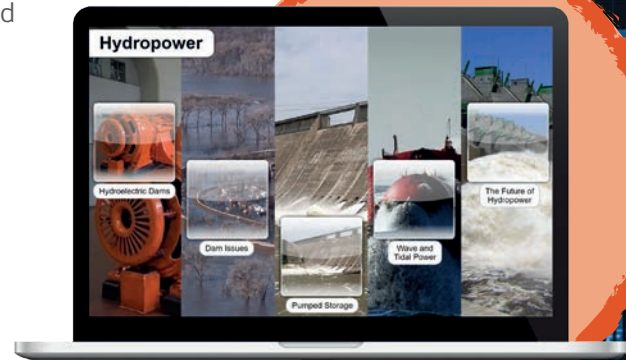
AGRICULTURE (40-50 LESSONS)



This course investigates the development of agricultural technology and its impact. Students explore the **application of biotechnology in agriculture**, and the use of control principles in agricultural systems. Students will also explore plant biology and investigate the importance of soil in agriculture.

Learning Objectives

- Explore careers in the agriculture sector
- Investigate the development of agricultural machinery and its impact
- Explore the application of biotechnology in producing sustainable energy resources
- Design automated agricultural machinery
- Explore the use of technology in the design and control of artificial environments
- Recognize the impact of human activity on ecosystems
- Carry out soil analysis and recognize the importance of natural resources for agriculture
- Explore the use of natural resources for production of materials and energy
- Explore fuel cell technology and its efficiency



Typical Careers

Agricultural Engineer, Food Science Technician, Farm Equipment Mechanic, Agriculture Technician

Lessons

- Introduction - Careers: Agricultural Technology
- Agricultural Technology
- Natural Resources
- Energy Resources

Equipment

- Engineering Construction Kit (220-01)
- Earth Science Apparatus Kit (513-01)
- Sustainable Energy Production Student Resource Pack (100-02)

Design Projects

- A Seed Dispenser with Solution
- Vertical Farming System

