

# TechCenter21: Technology Education *Alabama: Career Discoveries*

## Instructional Content Areas (Modules)

Introduction to Technology

Aerodynamic Principles

Aerospace

Alternate Energy

Biosphere

CAM/CNC Mill

Communications

Construction & CAD

Desktop Publishing

Electronics & Control

Engineering Structures

Environmental Management

Graphic Design

Hydraulics

Lasers & Fiber Optics

Manufacturing/Automation

Mechanisms

Multimedia Basics

Pneumatics

Power & Energy

Road Transportation

Robotics

Video Production

Waste Management

Weather Monitoring

CO<sub>2</sub> Race Car Design

Structure Design for Earthquake



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## Overview

This document demonstrates the correlation between the Techcenter21 curriculum supplied by Applied Educational Systems and the *Career Discoveries*, published by the Alabama Department of Education. The Techcenter21 (TC21) units are listed across the top row. The checkmarks in the second column indicate that the standard is covered as part of the TC21 course. The X's marked in the remaining columns show where the standard is covered in the TC21 curriculum.

TC21 curriculum includes *core themes* written into each and every module as part of the planning and development of the curriculum. Core themes are areas of educational content deemed of critical importance. Repeated exposure to core themes enables students to internalize and apply critical concepts in real world scenarios. Through repeated exposure in a variety of contexts, students achieve ever-increasing levels of sophistication in understanding and application.

### **Source for standards listed on the following pages:**

Alabama Department of Education. *Career Discoveries*. 2002

<<http://alex.state.al.us/standardAll.php?subject=CT&cocode=B01&summary=3>>

<b>Career Discoveries</b>		TechCenter21 Course	Introduction Unit	Aerodynamics	Aerospace	Alternate Energy	Biosphere	CAM/CNC Milling	Communications	Construction/CAD	Desktop Publishing	Electronic/Control	Engineer Structures	Environmental Management	Graphic Design	Hydraulics	Lasers and Fiber Optic	Manufacturing & Automation	Mechanism	Multimedia	Pneumatics	Power and Energy	Road Transportation	Robotics	Video Production	Waste Mgt.	Weather	CO <sub>2</sub> Race Car Design	Structure Design Earthquakes
<b>Careers</b>																													
1. Demonstrate an awareness of careers in the technology area being studied.	<ul style="list-style-type: none"> <li>• Contemporary</li> <li>• Future</li> </ul>	✓	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X
2. Recognize the educational preparation required for careers in the technology area being studied.		✓	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X
3. Demonstrate research skills related to current and projected employment opportunities in the technology area being studied.																													
4. Relate personal interests, experiences, and knowledge to the requirements of careers in the technology area being studied.		✓	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X
5. Exhibit positive human relations and leadership skills.																													
6. Demonstrate employability skills and work maturity skills.																													
7. Identify types and levels of work common to careers in the technology area being studied.		✓	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X
8. Identify basic concepts and processes associated with careers in the technology area being studied.																													
<b>Concepts</b>																													
9. Utilize terminology associated with the technology area being studied.		✓	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X
10. Apply basic skills in communications, mathematics, and science appropriate to the content of the technology area being studied.		✓	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X
<b>Processes</b>																													
11. Demonstrate knowledge of appropriate procedures in safely handling technological tools, apparatus, equipment, systems, and materials.		✓	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X
12. Complete a given task as assigned.		✓	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X

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	Applications																											
13. Demonstrate proper and safe procedures while working with technological tools, apparatus, equipment, systems, and materials.	✓		X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X
14. Demonstrate teamwork skills related to the technology area being studied.	✓																										X	X