

**EMIS Change 25-36**

*This change adds five new subject codes.*

## SECTION 4.7: SUBJECT CODES

### CAREER-TECHNICAL EDUCATION SECTION Workforce Development Section

Table 1. Career Field 01: Agricultural & Environmental Systems Codes (01xxxx)

Subject Code	Description	Suggested Subject Area for Credit	Core Subject Area (for proper cert)
<a href="#">012030</a>	<a href="#">Foundations of Sustainable and Innovative Agriculture</a> This course will focus on the purpose, resources, indoor and outdoor growing operations, production strategies, business development, and financing as it applies to innovative agricultural production in urban, suburban, and rural communities.	CTA	=
<a href="#">012035</a>	<a href="#">Precision Applications in Agriculture, Food, and Natural Resources</a> This course will provide an overview of precision agriculture, emphasizing the integration of technology, data analysis, and sustainable practices to optimize production and resource utilization. Students will gain knowledge in the areas of electrical theory, electronic systems and controls applied to mapping, GIS, and equipment operation.	CTA	=

Table 2. Career Field 14: Manufacturing Technologies Codes (17xxxx)

Subject Code	Description	Suggested Subject Area for Credit	Core Subject Area (for proper cert)
<a href="#">176030</a>	<a href="#">Introduction to Semiconductors</a> This course is a broad introduction to semiconductor and integrated circuit manufacturing from a technician and maintenance perspective. In lecture, students will learn about what a cleanroom is, why it's important to gown up, and have a broad non-quantitative introduction to semiconductor processing. In lab, students will use hand-tools to perform inspection, maintenance, and repair of mechanical fasteners and fixtures associated with semiconductor equipment, and gown up to simulate working in a bunny suit.	CTA	=
<a href="#">176035</a>	<a href="#">Principles of Advanced Manufacturing</a> This course introduces students to modern manufacturing organizations, technology, business systems, and problem solving. Provides the fundamentals of Lean Manufacturing, Quality Systems and Statistical Process Control, documentation and standard operating	CTA	=

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 Public Comment open from April 10 through May 9

Subject Code	Description	Suggested Subject Area for Credit	Core Subject Area (for proper cert)
	<a href="#">procedures, concepts in measurement, geometric dimensioning and tolerancing, visualization, and graphics.</a>		
<a href="#">176040</a>	<b><a href="#">Vacuum Systems</a></b> <a href="#">This class focuses on the mechanical maintenance, processing, and data collection of vacuum systems typically used in semiconductor processes such as thin film deposition, ion implantation, and reactive ion etching. The lectures consist of a broad introduction to the use of vacuum pumps in semiconductor manufacturing and how to measure vacuum pressure within a multi-pump system. In lab, students will gown up in a bunny suit and simulate working in a cleanroom environment.</a>	<a href="#">CTA</a>	<a href="#">=</a>