## What you need to know about

**NPEF Need to Know Series** 

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# **Career and Technical Education**

## **Career and Technical Education (CTE)**

Courses in middle and high school that seek to expose and prepare students for careers aligned to industry needs; designed as sequenced courses of study, CTE courses can lead to industry certifications and apprenticeships; students are not required to take CTE courses but CTE courses can count toward a student's required 3 elective courses needed for graduation

#### **CTE Career Clusters in Tennessee**

**Advanced Manufacturing** 

Agriculture, Food, & Natural Resources

**Architecture & Construction** 

Arts, Audio/Visual Technology, &

**Communications** 

**Business Management &** 

**Administration** 

**Education & Training** 

**Finance** 

**Government & Public Administration** 

**Health Science** 

**Hospitality & Tourism** 

**Human Services** 

**Information Technology** 

Law, Public Safety, Corrections, &

Security

**Marketing, Distribution, & Logistics** 

STEM

What are barriers to high-quality CTE pathways?

**Transportation** 

### Example of a High School Pathway in Machining Technology in the Advanced Manufacturing CTE Program of Study

Course

rtification

Principles of Manufacturing

Precision Measurement Instruments Principles of Machining I

Principles of Machining II

Manufacturing Practicum

Production
Certification:
Manufacturing
Processes and
Production

Teacher

recruitment

Districts compete with corporations for CTE teachers, who can often make much more money in the private sector

**Industry** alignment

District offerings may misalign with the needs of the local business community or not lead to highwage, highdemand jobs Antiquated stigmas

Negative
perceptions
about jobs that
stem from CTE
paths prevent
some students
from exploring
options

3 of 5 required courses to become a Certified Production Technician