
Advanced Manufacturing Course Standards

The Background:

Rules, Regulations, and Minimum Standards of the State Board of Education 0520-01-03-.05(1) calls for the State Board of Education to adopt curriculum standards for each subject area, grades K-12. The approved standards are to be the basis for planning instructional programs in each local school system. Adopted textbooks are also to be aligned with the state curriculum standards. Section 3.205 Approved High School Courses of the State Board of Education Policy identifies those courses which have been approved by the Board for instruction across the state.

The Department of Education's Division of Career and Technical Education (CTE) is proposing changes to approved course standards in the Advanced Manufacturing career cluster. This item includes revised courses within this career cluster that are now better aligned with postsecondary pathways, incorporate added instructional rigor by embedding Tennessee State Standards for English Language Arts & Literacy in Technical Subjects and where applicable, Mathematics, and reflect the competitive employment demands of our state.

Courses included in this item:

Principles of Manufacturing	Revised Course
Principles of Machining I	Revised Course
Advanced Electromechanical Technology	Revised/Renamed Course
Digital Electronics	Revised Course
Welding I	Revised/Renamed Course
Welding II	Revised/Renamed Course
Manufacturing Practicum	Revised/Renamed Course

Since first reading of the standards included in this item, the CTE Division has accepted feedback from Tennessee educators, CTE Directors, and industry experts via the CTE.Questions@tn.gov email address and through individual communications. Based on that feedback, the following changes have been made to the item since first reading:

- Made minor grammatical and formatting edits, in addition to small changes in language to enhance alignments to Tennessee State Standards for English Language Arts and Literacy in Technical Subjects.
- Generalized Specific technological documentation requirements found in the first draft of the standards for the Digital Electronics course to allow for additional teacher flexibility based on available technology in districts.
- Removed one standard in Welding I (computer-aided drafting) to reflect industry feedback about necessary knowledge about drawings and sketches.

The Recommendation:

The Department of Education recommends adoption of this item on final reading. The SBE staff concurs with this recommendation.