

006.54 Skilled and Technical Sciences Education – Skilled Specific

006.54A Grade Levels: 9-12

006.54B Endorsement Type: Supplemental. This endorsement requires an applicant to hold, or earn concurrently, an endorsement in Agricultural Education or Skilled and Technical Sciences Education and be eligible for the Work-Based Learning endorsement.

006.54C Persons with this endorsement may teach Skilled and Technical Sciences Education – Skilled Specific in grades 9 through 12.

006.54D Certification Endorsement Requirements: This endorsement requires the following:

006.54D1 A minimum of 12 semester hours in one of the specific career fields listed below:

006.54D1a Architecture and Construction Career Field:

006.54D1a(1) Design and Pre-Construction; or

006.54D1a(2) Construction

006.54D1b Energy and Engineering Career Field:

006.54D1b(1) Energy; or

006.54D1b(2) Engineering; or

006.54D1b(3) Robotics

006.54D1c Manufacturing Career Field:

006.54D1c(1) Maintenance, Installation, and Repair; or

006.54D1c(2) Production; or

006.54D1c(3) Automation

006.54D1d Transportation, Distribution and Logistics Career Field:

006.54D1d(1) Facility and Mobile Equipment Maintenance; or

006.54D1d(2) Multi-modal Transportation; and

006.54D2 A minimum of one (1) semester hour of coursework in the organization and management of SkillsUSA which includes chapter development, leadership development, individual skill development, and community service development.

006.54E Work Experience: The endorsement is available only to those persons who have either (A) 1,000 verified hours of paid work-based experience relevant to the career field, or (B) at least 300 hours of supervised work

experience relevant to the career field under the direction of the college or university recommending the endorsement.

006.54F Endorsement Program Requirements: Nebraska teacher education institutions offering this endorsement program must have on file, within the institution, a plan which identifies the courses and the course completion requirements which the institution utilizes to grant credit toward completion of this endorsement.

***THE FOLLOWING ARE RECOMMENDED GUIDELINES FOR  
INCLUSION AS PART OF THE INSTITUTION'S PLAN  
UNDER THIS ENDORSEMENT.***

Through the courses identified in its plan, the institution must provide candidates for this endorsement with opportunities to demonstrate the dispositions and competencies required by the following guidelines:

**Standard 1.** Demonstrate teaching and technical skills appropriate to successfully teach the study of skilled and technical sciences in one of the following specific career fields:

Element 1. Architecture and Construction Knowledge and Skills in:

- 1a. Design and Pre-Construction and
- 1b. Construction;

Element 2. Energy and Engineering Knowledge and Skills in:

- 2a. Energy,
- 2b. Engineering, and
- 2c. Robotics;

Element 3. Manufacturing Knowledge and Skills in:

- 3a. Production,
- 3b. Maintenance, Installation, and Repair and
- 3c. Automation;

Element 4. Transportation, Distribution, and Logistics Knowledge and Skills in:

- 4a. Facility and Mobile Equipment Maintenance and
- 4b. Multi-modal Transportation.

Element 5. Demonstrate knowledge of leadership and personal development experiences through the SkillsUSA career and technical student organization.

Element 6. Meet all requirements for and hold the Occupational Safety and Health Administration (OSHA) 10 card.

**Standard 2.** Demonstrate professionalism with an emphasis in the following areas:

- Element 1. Professional growth, reflection, and evaluation.  
Candidates are aware of and reflect on their practice in light of research on teaching and learning, professional ethics, and resources available for professional learning; they continually evaluate the effects of their professional decisions and actions on students, families, and other professionals in the learning community, and actively seek out opportunities for ongoing professional development, especially by engagement in professional organizations, conferences, in-service workshops, and other professional opportunities.
- Element 2. Collaboration with families, colleagues, and community.  
Candidates engage in and reflect on a variety of experiences related to skilled and technical sciences that demonstrate understanding of and readiness for leadership, mentoring, collaboration, and community engagement and involvement.