Wisconsin Content Guidelines for
Technology Education (1220) Licensure

WISCONSIN DEPARTMENT OF Public Instruction

By the end of a preparation program leading to licensure in technology education, a student will demonstrate proficiency in:

1. Articulating a philosophy informed by current research findings in technology education, curriculum and instructional design, assessment, and professional development.

2. Designing programs based on a sound mission statement with stated goals and objectives that reflect the definition and intent of technology education.

3. Explaining the development of technology and its effect on people, the environment and culture; industry and its organization, personnel systems, techniques, resources, and products; and the impact of technology and industry on society and culture.

4. Categorizing technological concepts, processes, and systems according to various content organizers such as bio-related, construction, energy/power, information/communications, manufacturing, medical, transportation, and other technologies.

5. Articulating and using the concepts, skills, and knowledge contained in current state and national standards for technology education in the development of curriculum and assessments.

6. Relating technology education to other academic disciplines and fields of study including the articulation and integration of technology education across the curriculum.

7. The teaching and technical skills appropriate to technology education including:
    - The use of an organized set of technological concepts, processes and systems when designing course outlines, instructional strategies, and evaluating student work.
    - The development of a strategic program plan that includes a mission statement, rationale for change, goals and objectives, action steps, and program evaluation.
    - The selection of course and/or program content based on the goals and objectives appropriate to various the technology content organizers.
    - The development of lesson plans, the organization of material, and the selection of appropriate instructional strategies to effectively teach in the psychomotor, affective, and cognitive domains of learning.

- Applying problem-solving and creative abilities involving human and material resources, processes, and technological systems.

8. The application of their knowledge, understanding and philosophy of technology education to create and manage a positive, effective learning environment including:
    - The identification and incorporation of safe, effective, and appropriate use of contemporary technological tools, instruments, and machines into a program of study.
    - The incorporation of insights, knowledge and applications of technological concepts, processes, and systems into their instruction.
    - The incorporation of skills, creative abilities, positive self-concepts, and individual potentials into their instruction.
    - The use of activity-oriented laboratory instruction that reinforces abstract concepts through concrete experiences.
    - The application of technology to the design and production of activities for student use.
    - The development of technology education programs that advance student attitudes, knowledge, and skills related to the functions of technological systems.
    - The development of student abilities to apply technological knowledge and skills, and assess new or different past-present-future technology systems.
    - The selection of appropriate instructional strategies to effectively teach all student populations.
    - The effective management of a technology education laboratory for safety, inventory, filing, requisitioning equipment and materials, maintenance, and budgeting.
    - The development and implementation of a behavior management program which defines clear expectations for student conduct.
    - Establishing technology related career and technical student organizations such as SkillsUSA-VICA or Technology Student Association as an integral part of the technology education curriculum.
    - The management of technological activities in both individual and group settings.
    - The application of multicultural, gender, and global perspectives, as well as values and ethics of content issues as they relate to the study of technology.
    - The promotion and articulation of technology education to internal and external audiences.

- Relating the study and mastery of technology to lifelong learning and preparation for careers and future education and training.
- The implementation and management of a work-based learning program including the supervision of students.

9. Continuous program improvement, instruction, activities, and self through:
    - The development and coordination of an external advisory committee for technology education and student organizations.
    - The identification and use of standards for the evaluation and revision of technology education programs.
    - The participation in related professional organizations for technology education teachers.