SELF-EVALUATION DOCUMENT

Utah Career and Technical Education
Program Approval Standards
Technology and Engineering

This document was developed to assist in evaluating Career and Technical Education programs throughout the state. Quality CTE programs are those which meet program standards based on the quality indicators provided. The goal of the evaluation process is to assist in improving programs. Documentation for each standard must be available upon request, where appropriate.

This document is to be used as the basis for the following processes:

1. Program self-evaluation, improvement, goal setting, and long-range planning
2. Onsite reviews/visits
3. Annual CTE program evaluation reporting
4. Six-year CTE program evaluation

Technology & Engineering Courses

21.0102	Exploring Technology	21.0104	Foundations of Technology
21.0108	Introduction to Communications Technology	21.0112	Advanced Technology
21.0111	Introduction to Transportation & Energy Technology	21.0105	Physics with Technology
21.0109	Introduction to Construction Technology	21.0116	Materials & Manufacturing Processes
21.0110	Introduction to Manufacturing Technology	21.0115	Engineering Design
21.0113	Introduction to Engineering Technology	21.0117	Robotics & Automation
		14.3101	Material Science
21.0107	Industrial/Agricultural Technology	21.0114	Pre-Engineering
15.0614	Introduction to Biomanufacturing		
		21.0120	Introduction to Engineering Design)PLtW)
47.0105	Basic Electronics	21.0122	Principles of Engineering (PLtW)
47.0108	Digital Electronics	21.0121	Digital Electronics (PLtW)
15.1301	Technical Design I	21.0123	Computer Integrated Manufacturing (PLtW)
15.1306	Technical Design II	21.0125	Civil Engineering & Architecture (PLtW)
15.1302	Architectural Design I	14.0201	Aerospace Engineering (PLtW)
15.1303	Architectural Design II	21.0124	Engineering Design & Development (PLtW)

Instructor: _____   Date: _____

School: _____   District: _____

EDUCATOR QUALITY

Achievement Rating	
1 NOT Endorsed	**4** Endorsed

Programs with identified deficiencies will be asked to develop a CTE Program Improvement Plan.

STANDARD 1	All instructors are licensed and appropriately endorsed

Determine the instructor endorsement status for each Technology & Engineering course taught

QUALITY INDICATORS

1.1	Instructor is licensed and appropriately endorsed to teach all corresponding courses/ programs

Course	Rating	
	1	4
	1	4
	1	4
	1	4
	1	4
	1	4
	1	4
	1	4

If indicator in **NOT** met, list what steps will be taken to become properly licensed and/or endorsed. Use back of sheet if necessary.

Achievement Rating			
1 Major Improvement Needed	**2** Minor Improvement Needed	**3** Good	**4** Superior

Programs with identified deficiencies will be asked to develop a CTE Program Improvement Plan.

STANDARD 2	All instructors participate in appropriate professional association and professional development activities

QUALITY INDICATORS		Rating			
2.1	Instructor maintains membership in the International Technology & Engineering Educators Association (ITEEA) and/or Association for Career & Technical Education (ACTE)	1	2	3	4
2.2	Instructors strive to upgrade their skills and knowledge by attending conferences, UACTE conventions, college courses, staff development in-service, and other sources of training	1	2	3	4
2.3	Instructors act as role models for students and exhibit leadership, teamwork, ethical and professional practices	1	2	3	4

Additional Information and/or Comments. Use back of sheet if necessary.

INSTRUCTION & PARTICIPATION

Achievement Rating			
1 **Major** Improvement Needed	**2** **Minor** Improvement Needed	**3** Good	**4** Superior

Programs with identified deficiencies will be asked to develop a CTE Program Improvement Plan.

STANDARD 3	Curriculum, instruction, and evaluation are based on the state-approved standards and objectives				
QUALITY INDICATORS		Rating			
3.1	Each course offered in the program is a state-approved course	1	2	3	4
3.2	Each course offered uses state standards, objectives, and/or competencies	1	2	3	4
3.3	Course/program prerequisites are followed	1	2	3	4
3.4	Program articulates with related core and postsecondary training and/or education programs	1	2	3	4
3.5	All students receive instruction in personal and leadership development	1	2	3	4
3.6	Student evaluation systems are in place and based on identified program objectives	1	2	3	4
3.7	State skill certificate tests or industry exams are administered in all courses where available	1	2	3	4
3.8	If state skill certificate tests include Student Performance Evaluation activities, the activities are started at the beginning of the course, and student progress is recorded throughout the remainder of the course	1	2	3	4
3.9	Each course has a disclosure statement, including goals, objectives and grading policies	1	2	3	4
3.10	Program prepares students for related employment or educational opportunities	1	2	3	4
3.11	The activities and instructional materials emphasize the importance of maintaining good relationship with fellow class members and there is evidence that there is a stable atmosphere within the laboratory	1	2	3	4
3.12	The instructional program reflects work behavior and group/team work dynamics	1	2	3	4
3.13	The classroom/laboratory and its equipment is reasonably set-up	1	2	3	4
3.14	Visual reminders of appropriate work behaviors are posted and easily viewed	1	2	3	4
3.15	Instructional materials reflect the appropriate work habits for the industry and education	1	2	3	4
Additional Information and/or Comments. Use back of sheet if necessary.					

INSTRUCTION & PARTICIPATION

Achievement Rating			
1 **Major** Improvement Needed	**2** **Minor** Improvement Needed	**3** Good	**4** Superior

Programs with identified deficiencies will be asked to develop a CTE Program Improvement Plan.

STANDARD 4	Equal access is provided to all students, including nontraditional and special populations				
QUALITY INDICATORS			Rating		
4.1	Instructional program encourages the elimination of gender bias and stereotyping. • How do you recruit special population students into your CTE program? • Do your CTE program <u>promotional materials</u> seek to be representative of genders, race, color, national origin or disabilities?	1	2	3	4
4.2	Educational environment honors diversity and respect of each individual. • Do minority students enroll in your classes? Why or Why not? • What is done to increase enrollment of special pop students, especially male/female enrollments in programs considered nontraditional for their gender? • Who is designated as your school's grievance officer? Are you familiar with the grievance process?	1	2	3	4
4.3	Fair and impartial practices are incorporated into the classroom to facilitate the academic achievement of all students. • As a CTE teacher, have you ever been involved in student Section 504 plans • What specifically was your role in that plan? • What promotions or recruitment activities does the CTE program pursue within the high school and to pre-high school students? • What do these activities do to encourage students to enroll in nontraditional programs and to encourage students of color, national origin and disabilities to seek out and enroll in these CTE programs?	1	2	3	4
4.4	Fair and impartial assessment practices are incorporated into the classroom. • What instructional, evaluation and/or testing accommodations do you make for special population students?	1	2	3	4
4.5	Facility is free of barriers that would result in the denial of access to persons on the basis of race, color, national origin or disability. • What is done to ensure that students with limited English proficiency are successful in your classes? • Are there any physical barriers that will limit the access of special population students in your classroom? • Where would you put a student in a wheelchair in this classroom? Why? • What physical accommodations would need to be made to ensure the accessibility of all students in this classroom?	1	2	3	4
4.6	Entire curriculum is available to all students	1	2	3	4
Additional Information and/or Comments. Use back of sheet if necessary.					

INSTRUCTION & PARTICIPATION

	Achievement Rating		
1 **Major** Improvement Needed	**2** **Minor** Improvement Needed	**3** Good	**4** Superior

Programs with identified deficiencies will be asked to develop a CTE Program Improvement Plan.

STANDARD 5	**Students have the opportunity to concentrate in state-approved CTE Pathways (Programs of Study)**				
QUALITY INDICATORS			Rating		
5.1	Courses are organized into state-recognized CTE pathways	1	2	3	4
5.2	Courses offered allow students to complete or concentrate in CTE pathways.	1	2	3	4
5.3	High school to college articulation maps are developed showing CTE pathway connection to specific college majors or ATC programs available in region, including Tech Prep and concurrent enrollment options.	1	2	3	4
5.4	CTE pathway information is available and understood by teachers and counselors.	1	2	3	4
5.5	Counselors use CTE pathway information to assist students plan their HS schedules.	1	2	3	4
Additional Information and/or Comments. Use back of sheet if necessary.					

STANDARD 6	**Intra-curricular student leadership training opportunities are provided through the related Career & Technical Student Organization (CTSO)**				
QUALITY INDICATORS			Rating		
6.1	Students enrolled in the program have an opportunity to affiliate and participate in TSA and/or SkillsUSA	1	2	3	4
6.2	TSA and/or SkillsUSA is an intra-curricular part of the program	1	2	3	4
6.3	TSA and/or SkillsUSA provides opportunities for students to participate in community service activities	1	2	3	4
6.4	TSA and/or SkillsUSA provides opportunities for students to participate in leadership training activities	1	2	3	4
6.5	TSA and/or SkillsUSA provides opportunities for students to participate in regional, state or national competitions	1	2	3	4
6.6	School/district makes provision for travel expenses and release time for the advisor(s) to participate in TSA and/or SkillsUSA activities	1	2	3	4
6.7	School/district makes provision for travel expenses and release time for students to participate in TSA and/or SkillsUSA activities	1	2	3	4
6.8	Local TSA and/or SkillsUSA chapter is affiliated with appropriate state and national organization	1	2	3	4
Additional Information and/or Comments. Use back of sheet if necessary.					

INSTRUCTIONAL RESOURCES

Achievement Rating			
1 **Major** Improvement Needed	**2** **Minor** Improvement Needed	**3** Good	**4** Superior

Programs with identified deficiencies will be asked to develop a CTE Program Improvement Plan.

STANDARD 7	The program has an annual operating budget				
QUALITY INDICATORS		Rating			
7.1	Instructor provides input in regard to the amount of their annual operating budget	1	2	3	4
7.2	Instructor has access to and control over an annual supplies budget	1	2	3	4
7.3	Allocated resources are sufficient to provide for the maintenance, repair, and replacement of equipment and the operation of the facility	1	2	3	4
7.4	When lab fees are collected, they are expended for supplies used by students enrolled in the course/program	1	2	3	4
7.5	A written reporting and auditing system is used to account for all student expenses	1	2	3	4
Additional Information and/or Comments. Use back of sheet if necessary.					

STANDARD 8	Proper equipment and adequate supplies are available to maintain and support the program				
QUALITY INDICATORS		Rating			
8.1	Equipment provided is consistent with program objectives	1	2	3	4
8.2	Established procedures for the maintenance, repair, and replacement of equipment are followed	1	2	3	4
8.3	Supplies or an annual supply budget is provided for the program	1	2	3	4
8.4	Current inventory of equipment is on file and updated annually	1	2	3	4
8.5	Each classroom and/or lab has at least one computer with Internet access and E-mail capability for instructors	1	2	3	4
8.6	All shields, guards, and other safety devices are in place, operable and used where required, regardless of age	1	2	3	4
8.7	The tools and equipment exist in the quantity needed for efficient and effective instruction	1	2	3	4
8.8	The tools and equipment used in the training program reflect what is used in industry	1	2	3	4
Additional Information and/or Comments. Use back of sheet if necessary.					

INSTRUCTIONAL RESOURCES

Achievement Rating			
1 **Major** Improvement Needed	**2** **Minor** Improvement Needed	**3** Good	**4** Superior

Programs with identified deficiencies will be asked to develop a CTE Program Improvement Plan.

STANDARD 9	Appropriate instructional materials are available to achieve the goals and objectives of the program				
QUALITY INDICATORS				Rating	
9.1	Instructional materials support state approved standards and objectives	1	2	3	4
9.2	Adequate instructional materials are available for all students in all courses	1	2	3	4
9.3	Instruction is enriched with appropriate instructional technology and related resources such as computers and software, CD-ROM, access to Internet, audiovisual aids, etc	1	2	3	4
9.4	The instructional materials utilized in the department are five years old or less and are on the school purchase rotation schedule	1	2	3	4
9.5	Materials are available in the school for students to become aware of a broad range of careers, continued education and/or training opportunities	1	2	3	4
Additional Information and/or Comments. Use back of sheet if necessary.					

FACILITIES

Achievement Rating			
1 **Major** Improvement Needed	**2** **Minor** Improvement Needed	**3** Good	**4** Superior

Programs with identified deficiencies will be asked to develop a CTE Program Improvement Plan.

STANDARD 10	**Classrooms, laboratories, and storage areas provide adequate, quality, and safe learning environments**				
QUALITY INDICATORS			Rating		
10.1	Facilities provided for the program are consistent with program standards and objectives	1	2	3	4
10.2	Environmental factors, such as air and water temperature, noise, ventilation, light, and particulate control are maintained at appropriate levels	1	2	3	4
10.3	Storage space is functional and sufficient for instructional materials, supplies, and equipment	1	2	3	4
10.4	Classrooms and laboratories are safe, clean, properly maintained, and in good repair to provide an environment conducive to learning	1	2	3	4
10.5	Facility repairs and improvement requests are submitted and resolved in a timely manner	1	2	3	4
10.6	Instructional workstations are adequate and appropriately equipped	1	2	3	4
10.7	Hazardous areas are identified with signs	1	2	3	4
10.8	Fire extinguishers have regular, current inspection tags and meet fire codes for different types of fires	1	2	3	4
10.9	In materials processing labs, an appropriate electrical disconnect system is available to shut down all equipment in case of an emergency	1	2	3	4
10.10	All shields, guards, and other safety devices are in place, operable, and used where required, regardless of age	1	2	3	4
10.11	Consumables are recycled where possible	1	2	3	4

Additional Information and/or Comments. Use back of sheet if necessary.

STANDARD 11	**Safe practices are understood and implemented**				
QUALITY INDICATORS			Rating		
11.1	State and/or district health and safety policies and procedures are utilized	1	2	3	4
11.2	Appropriate training on equipment has been acquired by the instructor to insure proper instruction to students and maintenance of the equipment	1	2	3	4
11.3	A safety evaluation of the program's facility and equipment is conducted on an annual basis and requests have been made to the district administration for correction of any safety deficiencies	1	2	3	4
11.4	Where appropriate, evidence of hazardous material handling instructions are retained on file to verify the appropriate training has taken place	1	2	3	4

FACILITIES

Achievement Rating			
1 **Major** Improvement Needed	**2** **Minor** Improvement Needed	**3** Good	**4** Superior

Programs with identified deficiencies will be asked to develop a CTE Program Improvement Plan.

11.5	Electrical cords are arranged outside of traffic patterns to prevent accidents	1	2	3	4
11.6	Students must successfully complete a safety test before they are allowed to work in the laboratory	1	2	3	4
11.7	Where applicable, standard precautions as set forth by OSHA and Risk Management are implemented	1	2	3	4
11.8	Where applicable, laboratory floors are properly marked using the proper color-coding	1	2	3	4
11.9	Where applicable, Material Safety Data Sheets are properly displayed and located for easy access for review	1	2	3	4
11.10	Eye and Ear protection are worn where they are required	1	2	3	4

Additional Information and/or Comments. Use back of sheet if necessary.

PLANNING & ADVISING

Achievement Rating			
1 **Major** Improvement Needed	**2** **Minor** Improvement Needed	**3** Good	**4** Superior

Programs with identified deficiencies will be asked to develop a CTE Program Improvement Plan.

STANDARD 12	There is a three- to five-year written plan that provides program direction and improvement				
QUALITY INDICATORS		| Rating			
12.1	Instructors have developed a three- to five-year program plan that is reviewed and updated annually. Plans may include strategies for articulation with other education institutions; establishing and maintaining industry and education partnerships; achieving skills certificates or recognized credentials; repairing, replacing and purchasing equipment; recruiting and mentoring students, etc	1	2	3	4
12.2	Recommendations and suggestions provided by district and school administrators, accreditation teams, counselors, and advisory committees are considered in developing the plan	1	2	3	4
12.3	Strategies to promote positive public perceptions, local community relations, and student recruitment are part of the plan	1	2	3	4
Additional Information and/or Comments. Use back of sheet if necessary.					

STANDARD 13	High School programs utilize an advisory committee that provides program direction and improvement				
QUALITY INDICATORS		| Rating			
13.1	Program utilizes an advisory committee with appropriate representation, such as business, industry, education, community, government agencies, and special population groups	1	2	3	4
13.2	The advisory committee provides input and recommendations for program improvement	1	2	3	4
13.3	The advisory committee meets two or more times per year and has minutes on file	1	2	3	4
Additional Information and/or Comments. Use back of sheet if necessary.					

ADMINISTRATION

Achievement Rating			
1 **Major** Improvement Needed	**2** **Minor** Improvement Needed	**3** Good	**4** Superior

Programs with identified deficiencies will be asked to develop a CTE Program Improvement Plan.

STANDARD 14	District and school administration understand and demonstrate support for the program				
QUALITY INDICATORS			Rating		
14.1	Innovative instruction and program enhancements are encouraged and supported	1	2	3	4
14.2	Faculty input is considered prior to determining teaching assignments and schedules in an effort to facilitate efficient classroom/lab management and utilization	1	2	3	4
14.3	The instructor ensures that counselors are familiar with the goals, objectives, activities, prerequisites, enrollment guidelines and curriculum of the program	1	2	3	4
14.4	The instructor ensures that administrators are familiar with the goals, objectives, activities, prerequisites, enrollment guidelines and curriculum of the program	1	2	3	4
14.5	Counselors register students based on the goals, objectives, activities, prerequisites, and enrollment guidelines of the program	1	2	3	4
Additional Information and/or Comments. Use back of sheet if necessary.					

STANDARD 15	Reasonable enrollment and appropriate student/instructor ratios are maintained, ensuring program objectives are safely and effectively met				
QUALITY INDICATORS			Rating		
15.1	Enrollment in laboratory courses does not exceed the available workstations	1	2	3	4
15.2	Enrollment in all courses ensures that the program objectives are met in a safe and effective manner	1	2	3	4
Additional Information and/or Comments. Use back of sheet if necessary.					