

2020/2021 Student Competency Record
Drafting I
8530 - 36 weeks, 140 hours

Student	School Year
School	Teacher Signature

Traditional letter or numerical grades do not provide adequate documentation of student achievement in competency-based education; therefore, the Virginia Standards for CBE require a recording system to provide information about competencies achieved to employer, student-employee, and teacher. The Student Competency Record provides a means for keeping track of student progress. Ratings are assigned by the teacher for classroom competency achievement and by the teacher-coordinator in conjunction with the training sponsor when competence is evaluated on the job.

Tasks/competencies designated "Required" are considered essential statewide and are required of all students. In some courses, all tasks/competencies have been identified as required. Tasks/competencies marked "Optional" are considered optional; they and/or additional tasks/competencies may be taught at the discretion of the school division. Tasks/competencies marked with an asterisk (*) are considered sensitive, and teachers should obtain approval by the school division before teaching them. Student competency records should be kept as long as the student is enrolled in the school and for five years after the student graduates/leaves the school.

Note: Students with an Individualized Education Program (IEP) or an Individualized Student Alternative Education Plan (ISAEP) will be rated, using the following scale, only on the competencies identified in their IEP or ISAEP.

Students will be expected to achieve a **satisfactory rating** (one of the three highest marks) on the Student Competency Record (SCR) rating scale on at least 80% of the required (essential) competencies in a CTE course.

...RATING SCALE...

- 1 - Can teach others**
- 2 - Can perform without supervision**
- 3 - Can perform with limited supervision**
- 4 - Can perform with supervision**
- 5 - Cannot perform**

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	Demonstrating Personal Qualities and Abilities			
Required	1	Demonstrate creativity and innovation.		
Required	2	Demonstrate critical thinking and problem solving.		
Required	3	Demonstrate initiative and self-direction.		
Required	4	Demonstrate integrity.		
Required	5	Demonstrate work ethic.		
	Demonstrating Interpersonal Skills			
Required	6	Demonstrate conflict-resolution skills.		
Required	7	Demonstrate listening and speaking skills.		
Required	8	Demonstrate respect for diversity.		
Required	9	Demonstrate customer service skills.		
Required	10	Collaborate with team members.		
	Demonstrating Professional Competencies			
Required	11	Demonstrate big-picture thinking.		
Required	12	Demonstrate career- and life-management skills.		
Required	13	Demonstrate continuous learning and adaptability.		
Required	14	Manage time and resources.		
Required	15	Demonstrate information-literacy skills.		
Required	16	Demonstrate an understanding of information security.		
Required	17	Maintain working knowledge of current information-technology (IT) systems.		
Required	18	Demonstrate proficiency with technologies, tools, and machines common to a specific occupation.		
Required	19	Apply mathematical skills to job-specific tasks.		
Required	20	Demonstrate professionalism.		
Required	21	Demonstrate reading and writing skills.		
Required	22	Demonstrate workplace safety.		
	Examining All Aspects of an Industry			
Required	23	Examine aspects of planning within an industry/organization.		
Required	24	Examine aspects of management within an industry/organization.		

Required	25	Examine aspects of financial responsibility within an industry/organization.		
Required	26	Examine technical and production skills required of workers within an industry/organization.		
Required	27	Examine principles of technology that underlie an industry/organization.		
Required	28	Examine labor issues related to an industry/organization.		
Required	29	Examine community issues related to an industry/organization.		
Required	30	Examine health, safety, and environmental issues related to an industry/organization.		
Addressing Elements of Student Life				
Required	31	Identify the purposes and goals of the student organization.		
Required	32	Explain the benefits and responsibilities of membership in the student organization as a student and in professional/civic organizations as an adult.		
Required	33	Demonstrate leadership skills through participation in student organization activities, such as meetings, programs, and projects.		
Required	34	Identify Internet safety issues and procedures for complying with acceptable use standards.		
Exploring Work-Based Learning				
Required	35	Identify the types of work-based learning (WBL) opportunities.		
Optional	36	Reflect on lessons learned during the WBL experience.		
Required	37	Explore career opportunities related to the WBL experience.		
Optional	38	Participate in a WBL experience, when appropriate.		
Practicing Safety				
Required	39	Follow general safety procedures.		
Required	40	Adjust equipment for maximum comfort and usability.		
Required	41	Describe ergonomic considerations.		
Preparing for a Career in Drafting				
Required	42	Describe career options for those with drafting skills.		
Required	43	Identify educational experiences and personal traits that benefit a drafter.		
Required	44	Describe potential barriers to career advancement and strategies for overcoming them.		
Getting Oriented to Drafting				

Required	45	Describe various types of drawings.		
Required	46	Care for basic drafting equipment and tools.		
Required	47	Use basic drafting equipment and tools.		
	Using Mathematics in Drafting			
Required	48	Perform metric to U.S. customary system conversions.		
Required	49	Perform conversions within a measurement system.		
Required	50	Apply basic mathematical skills to drafting operations.		
Required	51	Apply mathematical calculations involving practical geometry and trigonometry.		
	Performing Basic Drafting Operations			
Required	52	Demonstrate techniques for scale usage.		
Required	53	Prepare freehand sketches.		
Required	54	Perform freehand lettering.		
Required	55	Apply line conventions.		
Required	56	Adjust manual drafting equipment.		
Required	57	Apply geometric construction principles.		
Required	58	Prepare orthographic projections.		
Required	59	Create pictorial views from orthographic projections.		
Required	60	Dimension mechanical drawings.		
Required	61	Revise existing drawings.		
Required	62	Prepare sectional views (full, half, and offset).		
	Performing Basic Computer-Aided Design and Drafting (CADD) Operations			
Required	63	Identify basic components of a CADD system.		
Required	64	Perform fundamental computer skills.		
Required	65	Use CADD set-up commands.		
Required	66	Use CADD drawing commands.		
Required	67	Use CADD modifying commands.		
Required	68	Use CADD dimensioning commands.		
Optional	69	Use CADD 3-D modeling commands.		
Required	70	Use CADD file commands.		
Required	71	Prepare basic CADD drawings.		
	Performing Mechanical Drafting and Design Operations with Extensive Use of CADD			
Required	72	Use reference materials.		
Required	73	Use basic drafting standards.		

