

Construction Technology Assessment Plan Rev. 4/21/2020

Construction Technology	16-17	17-18	18-19	19-20	20-21	21-22
CNSTB1 - Introduction to Construction						
• Upon completion the student will be able to: Describe the construction process including the construction industry management organization and the subcontracting elements.					P	
• Upon completion the student will be able to: Describe the bidding process, contract award process and construction labor management relations.					P	
• Upon completion the student will be able to: Identify the different types of construction.					P	
CNSTB2 - Estimating and Scheduling						
• 1. Upon successful completion of the course, the student will be able to examine and evaluate the plans and specifications of a particular structure and describe the associated construction materials and costs.						P
• 2. Upon successful completion of the course, the student will be able to interpret and construct accurate isometric drawings, oblique drawings and orthographic projections as utilized in the construction industry.					P	
• 3. Upon successful completion of the course, the student will be able to solve practical math problems and assignments related to construction estimating and management.					P	
• 4. Upon successful completion of the course, the student will be able to use various computer applications, design and construct project management tools, spreadsheets and estimates					P	
• Upon completion the student will be able to: Examine and contrast effective construction project management techniques and applications as evaluated by written assignments and examination.				P		
CNSTB3 - Construction Supervision and Project Management						
• 1. Upon completion the student will be able to: Describe the distribution of responsibilities in the construction industry management organization and with subcontractors.				P		
• 2. Upon completion the student will be able to: Describe construction planning, scheduling, bidding and contract award process.				P		
CNSTB4 - Contractor's License Law						
• 1. Upon completion of the course, the student will be able to Describe the history and purpose of the California State license law and the development of the three contractor classifications.					P	
• 2. Upon completion of the course, the student will be able to Describe the Contractor's State License Board and the Registrar's influence and control on contractors.					P	
• 3. Upon completion of the course, the student will be able to Identify the civil code, the labor code and contract law and their respective influences on a contractor's activities.				P		
CNSTB5 - Building Construction I						
• 1. Upon completion the student will: Survey and "stake-out" a house for foundation trenching.					P	
• 2. Upon completion the student will: Construct forms for residential concrete foundation.					P	
• 3. Upon completion the student will: Construct raised floor underpinning with sub-flooring materials.					P	
• 4. Upon completion the student will: Construct residential wood framed walls that are vertical and straight for the next level of framing and other trades.				P		
CNSTB6 - Building Construction II						
• 1. Upon completion of the course, the student will be able to Calculate and lay out roof rafters.					P	
• 2. Upon completion of the course, the student will be able to Layout and assemble code compliant ceiling joist systems.					P	
• 3. Upon completion of the course, the student will be able to Assemble code compliant conventional rafter systems including eaves, frieze, verges and roof sheathing.					P	
• 4. Upon completion of the course, the student will be able to Assemble a simple engineered roof truss system.				P		

Construction Technology	16-17	17-18	18-19	19-20	20-21	21-22
-------------------------	-------	-------	-------	-------	-------	-------

CNSTB7 - Residential Finish Construction

• 1.Upon completion of the course, the student will be able to Design the layout and construct an open carriage set of wood stairs.					P	
• 2.Upon completion of the course, the student will be able to Install a flange mounted sliding window; assemble and install a door jamb and interior door with hardware; and apply the interior trim mouldings.					P	
• 3.Upon completion of the course, the student will be able to Install and finish interior gypsum wallboard.					P	
• 4.Upon completion of the course, the student will be able to Install stucco plaster lathe and apply the plaster coats for residential exterior finishes.					P	
• 5.Upon completion of the course, the student will be able to Apply exterior house siding and trim.				P		

CNSTB8 - Plumbing I

• 1.Upon completion of the course, the student will be able to Demonstrate competency when using the hand tools, power tools, and special trade tools of the plumbing industry.					P	
• 2.Upon completion of the course, the student will be able to Size, design and assemble/install the different types of household sanitary plumbing drainage system and water supply systems to meet the plumbing code requirements.					P	
• 3.Upon completion of the course, the student will be able to Size, design and assemble/install the different types of gas appliance supply systems to meet the mechanical and plumbing code requirements.				P		

CNSTB9 - Residential Electrical Wiring

• 1.Upon completion of the course, the student will be able to Properly install a branch circuit with all the components sized per the NEC (National Electrical Code) and install any type of switching, receptacle or light fixture that will be on that circuit.					P	
• 2.Upon completion of the course, the student will be able to Determine the difference between 120 volt circuits and 240 volt circuits in any type of electrical panel and be able to calculate the appropriate size in amps with the use of electrical math equations.					P	

CNSTB10 - Plumbing II

• 1.Upon completion of the course, the student will be able to Identify and use the hand tools, power tools, and special trade tools of the plumbing industry.					P	
• 2.Upon completion of the course, the student will be able to Explain the regulations governing the construction, location, and installation of residential plumbing systems, fixtures and appliances.					P	
• 3.Upon completion of the course, the student will be able to Demonstrate the code compliant installation of common residential plumbing systems, fixtures and appliances.				P		

CNSTB11 - Residential Light Steel Frame Construction

• 1.Upon completion of the course, the student will be able to Demonstrate knowledge of blueprint reading, building codes, and the methods and procedures used in the construction of a steel frame home.					P	
• 2.Upon completion of the course, the student will be able to Physically construct a steel frame residential structure including underpinning, wall framing, conventional roof system and a roof truss systems using the appropriate power tools and fasteners.					P	
• 3.Upon completion of the course, the student will be able to Demonstrate awareness of job safety and the ability to work as a team.				P		

Construction Technology	16-17	17-18	18-19	19-20	20-21	21-22
CNSTB48WE - Occupational Work Experience Education/Internship						
<ul style="list-style-type: none"> • 1. Upon successful completion of the course, the student will be able to Articulate the specific work experience objectives in construction as described by employer and identify the various skills, knowledge and attitudes necessary to the accomplishment of those objectives 					P	
<ul style="list-style-type: none"> • 2. Upon successful completion of the course, the student will be able to demonstrate the acquisition of the various skills, knowledge and attitudes necessary to the completion of the work experience objectives in construction and the ability to effectively meet employer's job expectations 					P	
<ul style="list-style-type: none"> • 3. Upon successful completion of the course, the student will be able to Identify and analyze the application of acquired skills, knowledge and attitudes to career opportunities in construction. 				P		