

Course Name	Introduction to Architecture & Construction			
Course Number	17006			
Code	Current Standard	Code	Revised Standard	
IAC1.0	Observe rules and regulations to comply with personal and shop safety	IAC2.0	Introduce safety concepts in the architecture and construction industries	
		IAC2.1	Apply general shop safety principles	
		IAC2.2	Identify job site and career safety concepts	
		IAC2.3	Define OSHA (Occupational Safety Health Administration) and its role in the construction industries	
IAC1.1	Apply hand/power tool and shop safety	IAC2.4	Apply general hand and power tool safety procedures	
IAC1.2	Identify basic first aid procedures in emergency situations			
IAC1.3	Identify proper terminology and examine career possibilities	IAC1.0	Explore the different career opportunities involved in the architecture and construction industries	
		IAC1.1	Compare career possibilities in the drafting industry	
		IAC1.2	Investigate and examine career opportunities in cabinetry industry	
		IAC1.3	Research career opportunities in the architecture and construction field	
IAC 2.0	Study principles, characteristics and standards pertaining to woodworking materials	IAC4.0	Recognize the materials used in the architecture and construction industries	
		IAC4.2	Recognize proper application of fasteners, adhesives, and hardware	
		IAC4.3	Explore new upcoming materials used in building industry	
IAC2.1	Select variations of wood materials	IAC4.1	Identify wood species and engineered building materials	
IAC2.2	Describe the basics of math principles	IAC3.0	Apply basic math principles used in the architecture and construction industries	
		IAC3.1	Demonstrate proper use of appropriate math skills	
		IAC3.2	Demonstrate proper measuring and layout skills	
IAC3.1	Integrate woodworking technology to achieve finished woodworking project	IAC6.0	Display skills needed in architecture and construction industries	
		IAC6.1	Apply proper measuring and cutting techniques to perform job related tasks	
		IAC6.2	Display a working knowledge of tools and equipment used in the industry	
		IAC6.3	Construct a project using the assigned design process	
		IAC6.4	Demonstrate necessary job skills needed in architecture and construction industries	
		IAC5.0	Examine basic drafting skills used in architecture and construction	
		IAC5.1	Recognize basic drafting terms and abbreviations	
		IAC5.2	Differentiate between different drafting styles	
		IAC5.3	Identify different aspects of blueprints/project plans to show a working knowledge of specifications	
		IAC5.4	Classify the different styles of residential architectural structures	

Course Name	Introduction to Drafting & Design			
Course Number	21102			
Code	Current Standard		Code	Revised Standard
IDD 1.0	Examine basic drafting terminology and equipment		IDD1.0	Examine basic drafting terminology and equipment
IDD1.1	Recognize basic drafting terms and abbreviations		IDD1.1	Recognize basic drafting terms and abbreviations
IDD1.2	Differentiate basic drafting tools and their uses		IDD1.2	Differentiate basic drafting tools and their uses
IDD2.0	Apply basic math skills to design work		IDD2.0	Apply basic math skills to design work
IDD2.1	Apply algebraic and trigonometric formulas used in drafting and design		IDD2.1	Apply algebraic and trigonometric formulas used in drafting and design
IDD2.2	Understand the various drawing scales used in drafting		IDD2.2	Understand the various drawing scales used in drafting
IDD3.0	Examine basic drafting fundamental and technical skills		IDD3.0	Examine basic drafting fundamental and technical skills
IDD3.1	Integrate shapes, lettering and geometric symbology used on technical drawings		IDD3.1	Integrate symbols, lettering and geometric shapes used on technical drawings
IDD3.2	Illustrate line symbols recommended by American National Standard Institute (ANSI)		IDD3.2	Illustrate line types recommended by American National Standards Institute (ANSI)
IDD3.3	Define dimensioning styles and techniques on metric and imperial drawings		IDD3.3	Define dimensioning styles and techniques on metric and imperial drawings
IDD4.0	Apply drawing techniques to produce various technical plans		IDD4.0	Apply drawing techniques to produce various technical plans
IDD4.1	Create orthographic projections		IDD 4.1	Create orthographic projections
IDD4.2	Create isometric and pictorial drawings		IDD4.2	Create isometric and pictorial drawings
IDD5.0	Implement computer aided software into design work.		IDD5.0	Implement computer aided software into design work
IDD5.1	Identify CAD skills and applications of technical design		IDD5.1	Identify CAD skills and applications of technical design
IDD5.2	Apply CAD defaults and preferences to set up a drawing		IDD5.2	Apply CAD defaults and preferences to set up a drawing
IDD5.3	Generate drawings and projections using CAD software		IDD5.3	Generate drawings and projections using CAD software
IDD6.0	Explore career-ready practices		IDD6.0	Explore career-ready practices
IDD6.1	Understand professional drafting practices in the workplace and communication skills		IDD6.1	Understand professional drafting practices in the workplace and communication skills
IDD6.2	Compare career possibilities in the drafting industry		IDD6.2	Compare career possibilities in the drafting industry

Course Name	Architectural Drafting & Design			
Course Number	21103			
Code	Current Standard		Code	Revised Standard
ADD1.0	Understand architectural design fundamental and history		ADD1.0	Understand architectural design fundamentals and history
			ADD1.1	Identify architectural products and styles
ADD1.2	Interpret the fundamentals of framing plans		ADD1.2	Interpret the fundamentals of framing plans
ADD1.3	Identify building codes and governing bodies		ADD1.3	Identify building codes and governing bodies
ADD1.4	Identify residential building materials		ADD1.4	Identify residential building materials
ADD2.0	Understand drawing management, dimensioning, and notations		ADD2.0	Understand drawing management, dimensioning, and notations
ADD2.1	Examine drawing identification and management techniques used in architectural drafting		ADD2.1	Examine drawing identification and management techniques used in architectural drafting
ADD2.2	Illustrate proper dimensioning and notation practices used in architectural drafting		ADD2.2	Illustrate proper dimensioning and notation practices used in architectural drafting
ADD3.0	Develop residential plot and foundation system plan		ADD3.0	Develop a residential plot and foundation system plan
ADD3.1	Create a plot/site plan for a residence		ADD3.1	Create a plot/site plan for a residence
ADD3.2	Design footing and foundation for a residence		ADD3.2	Design footings and foundation for a residence
ADD4.0	Generate the necessary construction plans to build a residence		ADD4.0	Generate the necessary construction plans to build a residence
			ADD4.1	Develop a floor plan using accepted symbols and techniques
ADD4.2	Prepare a working drawing of the residences HVAC, lights and electrical needs		ADD4.2	Prepare a working drawing of the residence HVAC, lights and electrical needs
ADD4.3	Design a residential roof plan		ADD4.3	Design a residential roof plan
ADD4.4	Understand the use of elevations in design of a residence		ADD4.4	Understand the use of elevations in the design of a residence
ADD4.5	Draw interior and exterior stair details appropriate to those found in a residence		ADD4.5	Draw interior and exterior stair details appropriate to those found in a residence
ADD4.6	Develop door, window, and finishing schedules		ADD4.6	Develop door, window, and finishing schedules
ADD4.7	Understand basic estimating practices used in the construction industry		ADD4.7	Understand basic estimating practices used in the construction industry
ADD4.8	Generate final presentation drawings and three dimensional computer model.		ADD4.8	Generate final presentation drawings and three dimensional computer model

Course Name	Cabinetry			
Course Number	17007			
Code	Current Standard		Code	Revised Standard
CM1.0	Observe rules and regulation to comply with personal and shop safety		C1.0	Observe and apply rules and regulations to comply with personal and shop safety
CM1.1	Apply hand/power tool and lab safety		C1.1	Apply hand/power tool and lab safety standards
			C1.2	Describe and wear appropriate personal protective equipment (PPE) when needed
			C1.3	Indicate a knowledge of government regulations regarding health and safety in the shop
CM1.2	Identify basic first aid procedures in emergency situations			
CM2.0	Study principles, characteristics and standards pertaining to cabinetmaking		C4.1	Identify wood species and engineered materials
			C4.4	Identify various types of hardware, fasteners, and adhesives used in the cabinet industry
			C5.0	Recognize various cabinetry joinery and assembly techniques
CM2.1	Select variation of cabinets		C4.0	Identify various materials and apply project planning
CM2.2	Describe the basics of math principles		C3.0	Apply basic math principles used in the industry
			C3.1	Demonstrate proper use of appropriate math skills
			C3.2	Demonstrate an understanding of the difference between board feet and linear feet
			C3.3	Demonstrate proper measuring and layout skills
CM2.3	Identify proper terminology and examine career possibilities		C2.0	Explore the different career opportunities in the industry
			C2.1	Investigate and examine career opportunities in the cabinetry industry
			C2.2	Demonstrate an understanding of necessary job skills needed in cabinetry careers
CM3.0	Integrate cabinetmaking technology to achieve finished woodworking project		C4.2	Analyze design elements of a project plan
			C4.3	Create and implement a bill of materials and cut list from a project drawing
			C5.1	Demonstrate common joinery techniques
			C5.2	Demonstrate knowledge of industry concepts to assemble projects
			C6.0	Recognize and apply surface preparation and finishing techniques
			C6.1	Apply surface preparation techniques
			C6.2	Apply finishing products
CM3.1	Design a blueprint for the finish project		C4.0	Identify various materials and apply project planning
CM3.2	Illustrate the construction of the project			

Course Name	Advanced Cabinetry			
Course Number	17013			
Code	Current Standard	Code	Revised Standard	
	No current standards exist	AC1.0	Demonstrate proper rules and regulations to comply with personal and shop safety.	
		AC1.1	Apply hand/power/industrial tool and lab safety practices	
		AC1.2	Determine and wear appropriate personal protective equipment (PPE)	
		AC1.3	Comply with government regulations regarding health and safety in the shop	
		AC2.0	Evaluate the career market that surrounds the cabinetry industry	
		AC2.1	Acquire career information and demonstrate knowledge of the career-planning process	
		AC2.2	Identify individual career goals in the cabinetry industry	
		AC2.3	Enhance the development of employment skills	
		AC3.0	Utilize advanced math skills, formulas, and principles used in cabinetry	
		AC3.1	Apply geometric formulas to determine areas of various structures	
		AC3.2	Apply appropriate formulas to determine percentages/decimals	
		AC3.3	Apply appropriate formulas to determine ratios, fractions, and proportion measures	
		AC3.4	Apply appropriate formulas to determine measurement of dimensions, spaces, and structures	
		AC3.5	Develop a model that show the conceptual understanding of a three-dimensional from a two-dimensional drawing	
		AC3.6	Define the X, Y, Z coordinates involved in common computer numeric control (CNC) applications	
		AC4.0	Identify various materials and evaluate the proper application in project planning	
		AC4.1	Differentiate various cabinetry materials and their appropriate applications	
		AC4.2	Identify the common grades of lumber and sheet goods	
		AC4.3	Describe and identify natural defects in woods	
		AC4.4	Utilize proper storage and handling techniques	
		AC5.0	Demonstrate advanced skills and techniques used in the industry	
		AC5.1	Determine plumb, level, and square	
		AC5.2	Demonstrate proper techniques used in various sawing, shaping, carving, molding and routing applications	
		AC5.3	Apply fabricating techniques of various cabinet parts	
		AC5.4	Differentiate between different styles in cabinets, doors, and drawers	
		AC5.5	Identify and create the basic wood and mechanical joints used in cabinetry	
		AC6.0	Demonstrate the use of cabinet fasteners and hardware	
		AC6.1	Determine proper application and use of mechanical fasteners and adhesives	
		AC6.2	Analyze different hinge systems and their applications	
		AC6.3	Analyze various drawer glides and their appropriate applications	
		AC7.0	Demonstrate proper assembly and finish preparation techniques	
		AC7.1	Develop logical assembly process/procedure	
		AC7.2	Demonstrate various ways to remove excess adhesive	
		AC7.3	Apply surface preparation skills before finishing	
		AC8.0	Demonstrate the use of finishing materials and processes	
		AC8.1	Explain the purpose and applications of various types of finishes and finishing processes	
		AC8.2	Develop and follow a finishing schedule	
		AC8.3	Utilize safe and approved methods for cleanup and disposal (OSHA, EPA, DENR)	

Course Name	Building Trades													
Course Number	17002													
Code	Current Standard			Code	Revised Standard									
IBT1.0	Understand and apply industry safety procedures			BT1.0	Understand and apply industry safety procedures									
IBT1.1	Identify and demonstrate the proper industry safety standards			BT1.1	Identify and demonstrate the proper industry safety standards									
IBT2.0	Utilize appropriate industry math skills and formulas			BT2.0	Utilize appropriate industry math skills and formulas									
IBT2.1	Understand and demonstrate basic math skills			BT2.1	Understand and demonstrate basic math skills and formulas									
IBT3.0	Identify and correctly use appropriate hand, power and pneumatic tools			BT3.0	Identify and correctly use appropriate hand, power, and pneumatic tools									
IBT3.1	Demonstrate safe and proper use of hand tools			BT3.1	Demonstrate safe and proper use of hand tools									
IBT3.2	Demonstrate safe and proper use of power tools			BT3.2	Demonstrate safe and proper use of power tools									
IBT3.3	Demonstrate safe and proper use of pneumatic tools			BT3.3	Demonstrate safe and proper use of pneumatic tools									
IBT4.0	Understand blueprint reading and perform basic survey techniques			BT4.0	Understand blueprint reading and perform basic survey techniques									
IBT4.1	Demonstrate how to read blue prints			BT4.1	Demonstrate how to read blueprints									
IBT4.2	Demonstrate basic survey techniques			BT4.2	Demonstrate basic survey techniques									
IBT5.0	Apply basic organizational, spatial, structural construction principles of carpentry			BT5.0	Apply basic organizational, spatial, structural and construction principles of carpentry									
IBT5.1	Illustrate constructing a structural project			BT5.1	Demonstrate the understanding of the building process by the building of a construction project									
IBT6.0	Study principles, standards and applications of plumbing			BT6.0	Study principles, standards and applications of plumbing									
IBT6.1	Define safety procedures for plumbing			BT6.1	Define safety procedures for plumbing									
IBT6.2	Distinguish pipe sizes, fittings, adapters, and coupling			BT6.2	Distinguish pipe sizes, fittings, adapters, and coupling									
IBT6.3	Demonstrate the use of plumbing materials			BT6.3	Demonstrate the use of plumbing materials									
IBT7.0	Employ basic knowledge and methods of electrical wiring			BT7.0	Employ basic knowledge and methods of electrical wiring									
IBT7.1	Select safety uses of electrical materials			BT7.1	Select electrical materials considering safety									
IBT7.2	Identify electrical materials			BT7.2	Identify electrical materials									
IBT7.3	Illustrate uses of electrical materials			BT7.3	Illustrate uses of electrical materials									
IBT8.0	Integrate concrete technology to achieve thorough construction background			BT8.0	Employ basic knowledge and methods of concrete technology									
IBT8.1	Identify safe use of concrete materials			BT8.1	Identify safe practice associated with concrete materials									
IBT8.2	Calculate the component parts of concrete and cement			BT8.2	Calculate the various required ingredients used in concrete									
IBT8.3	Employ application of concrete in different situations			BT8.3	Employ application of concrete in different situations									
IBT9.0	Understand drafting design concepts													
IBT9.1	Choose computer programs to acquire skills in drafting													
IBT9.2	Create a floor plan design													
IBT9.3	Complete a floor plan design using accepted symbols and techniques													
IBT10.0	Student will participate in career exploration activities			BT9.0	Student will participate in career exploration activities									
IBT10.1	Research career opportunities in the architecture and construction fields			BT9.1	Research career opportunities in the architecture and construction fields									

Course Name	Residential Construction			
Course Number	17003			
Code	Current Standard	Code	Revised Standard	
RC1.0	Understand and apply industry safety procedures	RC1.0	Understand and apply industry safety procedures	
RC1.1	Demonstrate the proper industry safety standards	RC1.1	Demonstrate proper industry safety standards	
RC2.0	Utilize appropriate industry math skills and formulas	RC2.0	Utilize appropriate industry math skills and formulas	
RC2.1	Understand and demonstrate basic math skills	RC2.1	Understand and demonstrate basic math skills	
RC3.0	Understand concepts of blueprint reading and perform basic survey techniques	RC3.0	Understand concepts of blueprint reading and perform basic survey technique:	
RC3.1	Demonstrate how to read blue prints	RC3.1	Demonstrate how to read blueprints	
RC3.2	Demonstrate basic survey techniques and site layout	RC3.2	Demonstrate survey techniques and site layout	
RC4.0	Identify and understand wood building materials, fasteners, and adhesives	RC4.0	Identify and understand wood building materials, fasteners, and adhesives	
RC4.1	Understand and demonstrate the use of wood building materials	RC4.1	Understand and demonstrate the use of wood building materials	
RC4.2	Understand and demonstrate the use of fasteners and adhesives	RC4.2	Understand and demonstrate the use of fasteners and adhesives	
RC5.0	Identify and correctly use appropriate hand, power, and pneumatic tool:	RC5.0	Identify and correctly use appropriate hand, power, and pneumatic tool:	
RC5.1	Demonstrate safe and proper use of hand tools	RC5.1	Demonstrate safe and proper use of hand tools	
RC5.2	Demonstrate safe and proper use of power tools	RC5.2	Demonstrate safe and proper use of power tools	
RC5.3	Demonstrate safe and proper use of pneumatic tools	RC5.3	Demonstrate safe and proper use of pneumatic tools	
RC6.0	Integrate concrete technology to achieve thorough construction background	RC6.0	Integrate concrete technology to achieve thorough construction background	
RC6.1	Understand and demonstrate the uses of concrete and reinforcing materials	RC6.1	Understand and demonstrate the uses of concrete and reinforcing materials	
RC7.0	Understand and perform framing or flooring systems, wall and ceilings and roofing system:	RC7.0	Understand and perform framing or flooring, wall, ceiling and roofing system:	
RC7.1	Understand and demonstrate framing of flooring systems	RC7.1	Understand and demonstrate framing and flooring systems	
RC7.2	Understand and demonstrate framing of wall and ceiling systems	RC7.2	Understand and demonstrate framing of wall and ceiling system	
RC7.3	Understand and demonstrate framing of a roofing system	RC7.3	Understand and demonstrate framing of a roofing system	
RC8.0	Understand and demonstrate installation of windows and exterior doors	RC8.0	Understand and demonstrate installation of windows and exterior door:	
RC8.1	Understand and demonstrate installation of windows	RC8.1	Understand and demonstrate installation of windows	
RC8.2	Understand and demonstrate installation of exterior doors	RC8.2	Understand and demonstrate installation of exterior doors	
RC9.0	Identify and perform different exterior finishing methods	RC9.0	Identify and perform different exterior finishing methods	
RC9.1	Understand and demonstrate installation of exterior finish	RC9.1	Understand and demonstrate installation of exterior finish	
RC10.0	Identify and understand different roofing applications	RC10.0	Identify and understand roofing applications	
RC10.1	Understand and demonstrate installation of roofing materials	RC10.1	Understand and demonstrate installation of roofing materials:	
RC11.0	Understand the importance and properly install thermal and moisture protector	RC11.0	Understand the importance of and properly install thermal and moisture protector	
RC11.1	Understand and demonstrate installation of thermal and moisture protector	RC11.1	Understand and demonstrate installation of thermal and moisture protector	
RC12.0	Properly perform drywall installation and finishing techniques	RC12.0	Perform drywall installation and finishing techniques	
RC12.1	Understand and demonstrate drywall installation	RC12.1	Understand and demonstrate drywall installation	
RC12.2	Understand and demonstrate drywall finishing	RC12.2	Understand and demonstrate drywall finishing	
RC13.0	Understand methods and complete interior finish work	RC13.0	Understand methods and complete interior finish work	
RC13.1	Understand and demonstrate interior finishing	RC13.1	Understand and demonstrate interior finishing	
RC14.0	Understand cabinet manufacturing process and install cabinets, countertops and back splashes	RC14.0	Understand the cabinet manufacturing process and install cabinets	
RC14.1	Understand cabinet design and installation	RC14.1	Understand basic cabinet design and installation	
RC15.0	Using appropriate math formula, calculate the number and sizes of risers and treads for a stairway and layout and cut stringers and identify the various types and parts of stairs	RC15.2	Using appropriate math formula calculate the number and sizes of risers and treads for a stairway	
		RC15.1	Identify the various types and parts of stairs	
RC15.1	Understand and demonstrate installation of stairs	RC15.0	Understand and demonstrate installation of stairs	
		RC15.3	Layout and cut stringers	
RC16.0	Study the principles and standards of basic residential electric and plumbing application:	RC16.0	Study the principles and standards of basic residential electric and plumbing application:	
RC16.1	Understand and demonstrate basic residential electric and plumbing application:	RC16.1	Understand and demonstrate basic residential electric and plumbing application:	
RC17.0	Students will participate in career exploration activities	RC17.0	Student will participate in career exploration activities	
RC17.1	Research career opportunities in the Architecture & Construction field:	RC17.1	Research career opportunities in the architecture and construction field:	