

CTE Course Description and Standards Crosswalk

Course Information

Course Name	Architectural Drafting 3
Course Number	86070
Number of High School Credits	.5
Sequence or CTEPS (You must first have the Sequence or CTEPS entered into the EED-CTE system.)	Architect, Carpenter,
Date of district Course Revision	September 2014

Career & Technical Student Organization (CTSO)

CTSO embedded in this sequence	SkillsUSA
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Occupational Standards

Source of Occupational Standards	United States National CAD Standards Version #6 (NCS) SkillsUSA
Names/Numbers of Occupational Standards	CAD Standards Version#6 / Architectural Drafting (AD) 1 - 12

Registration Information

Course Description (brief paragraph – as shown in your student handbook or course list)	Architectural Drafting 3 covers single family and multi-family dwellings. Emphasis is placed on individual design problems. Students will explore 3D modeling design. Students who are interested in careers in construction; for example, architects, computer-aided drafters, surveyors, planners, realtors and designers would benefit from this course.
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Instructional Topic Headings (please separate each heading by a semi-colon)	Design and Planning for Multi-family Structures; Commercial Area Planning; Advanced Architectural Practices and Techniques; Technical and Specialty Architectural Plans; Load and Structure; Advanced AutoCAD Applications; School to Work Internships; Participation in Professional Organization; Encourage Career and Technical Student Organization (CTSO) Involvement
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Summative Assessments and Standards

Technical Skills Assessment (TSA)	SkillsUSA
Course addresses:	Architectural Drafting
New Alaska ELA and Math Standards	Yes
Alaska Cultural Standards	Yes
All Aspects of Industry (AAI)	Yes
Core Technical Standards	Yes
Employability Standards	Yes

Employability Standards

Source of Employability Standards	State of Alaska
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Tech Prep

Current Tech Prep Articulation Agreement? (Y/N)	Yes – With Arc Drafting 4
Date of Current Agreement	12/2014
Postsecondary Institution Name	University of Alaska Anchorage

DISTRICT NAME: Mat-Su Borough School District

Postsecondary Course Name	Intermediate CAD for Building Construction
Postsecondary Course Number	AET 181
# of Postsecondary Credits	4

Additional CTE Course Information

Author	
Course developed by	Ray Jensen, Tom Lord, Paul Moma, Revised by: Justin Aulie, Bryan Kirby, Chris Taylor, Brad Drake, Bryan Kirby, Ray Jensen
Course adapted from	Architectural Drafting 1
Date of previous course revision	June 2006
Course Delivery Model	
Is the course brokered through another institution or agency? (Y/N)	No

Standards Alignment

Student Performance Standards (Learner Outcomes or Knowledge & Skill Statements)	Specific Occupational Skills Standard	Common Technical Core Standards	New Alaska ENG/LA Standards	New Alaska Math Standards	Alaska Cultural Standards	Employability/ Career Readiness Standards	All Aspects of Industry/ Systems	Assessment
Analyze single and multi-family architectural design and planning.	AD 2.3; AD 2.6; AD 3.0	AC-DES 6	RST 9-12.2; RST 9-12.3	GCO 1,2,5,12; NQ 1,2,3	B 1, 4	A2	Planning Mgmt Technical Skills Technology	SkillsUSA AD Assessment
Utilize design factors affecting construction and planning.	AD 3.5; AD 2.6	AC 2, 6 AC-DES 6, 7	RST 9-12.2; RST 9-12.3	A-REI-1; NQ 1-3	B 1, 4	A2	Planning Mgmt Technical Skills Technology	SkillsUSA AD Assessment
Incorporate room design criteria in development of functional floor plans.	AD 3.5 NCS 4.3.2.5	AC 2 AC-DES 6	RST 9-12.2; RST 9-12.3	A-REI-1; NQ1,2,3	B 1, 4	A2	Planning Mgmt Technical Skills Technology	SkillsUSA AD Assessment
Establish knowledge of building codes as they relate to the Americans with Disabilities Act (ADA).	AD 1.1; AD 2.4 NCS 8.0	AC 2, 3 AC-DES 6	RST 9-12.2; RST 9-12.3	A-REI-1; NQ1,2,3; GCO 1,4	B 1, 4	A2	Planning Mgmt Technical Skills	SkillsUSA AD Assessment

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							Technology	
Adapt schedules and specifications that meet architectural standards.	NCS 3.0-3.8.5 AD 2.5.8; AD 2.4	AC 2, 6 AC-DES 6, 7	RST 9-12.2; RST 9-12.3; L 11-12.2 a, b	NQ1,2,3; GCO 1,4	B 1, 4	A2	Planning Mgmt Technical Skills Technology	SkillsUSA AD Assessment
Discuss Cost Estimation in floor plan development utilizing both square footage and actual cost methods.	AD 2.5.3; AD 2.5.7; AD 2.5.8	AC1, 2, 4, 6, 7 AC-DES1, 2, 5, 6, 8	RST 9-12.4; RST 9-12.2	ASSE 4; NQ 1-3; GCO 1-4	B2,3,4	A2,5	Finance Planning Technology	SkillsUSA AD Assessment
Explain Site plan that meets architectural graphic standards.	NCS 4.3.2.2 AD 2.6; AD 2.5.6	AC1,2,3,4,6 AC-DES1,2,3,4,5,6,7,8	RST 9-12.3; WHST 9-12.7	NQ 1,2,3; GCO 1,2,3	B2,3,4	A2,5	Planning Mgmt Technical Skills Technology	SkillsUSA AD Assessment
Explain Electrical, Plumbing, and HVAC plans that meet architectural graphic standards.	NCS 3.8.5-3.8.7 AD 2.6; AD 2.5.6	AC1,2,3,4,6 AC-DES1,2,3,4,5,6,7,8	RST 9-12.3; WHST 9-12.7	NQ 1,2,3; GCO 1,2,3	B2,3,4	A2,5	Planning Mgmt Technical Skills Technology	SkillsUSA AD Assessment
Design and develop architectural plans for community design projects (Mat-Su Construction Trades, Habitat For Humanity and other local community organizations).	NCS 4.3.2 AD 3.0	AC 6	WHST 9-12.7	GCO 1-4; NQ 1-3	A 1, 4, B 4	A5	Planning Labor Community Wk Habits	SkillsUSA AD Assessment
Differentiate career opportunities in architectural drafting.	EAP 1.0; EAP 1.2; EAP 2.0	AC 5, 7	L 11-12.2 a, b	GCO-1	B 1, 4	A2	Planning Labor Community Wk Habits	SkillsUSA AD Assessment
Follow professional ethics including software licensing, copyright and intellectual property laws in producing and monitoring web pages and sites.	NCS 0.2	AC 3, 5	WHST 9-12.8		C 4	A 1, 2, 6	Wk Habits Mgmt	SkillsUSA AD Assessment
Participate and integrate CTSO classroom projects.	EAP 1,2,3	AC 2, 5, 7	L 9-12.6; SL 9-12.1	GCO 1,2,4,5	C 4	A 2, 5	Technical Skills	

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			a-d					

Instructional Resources

List the major instructional resources used for this course: (websites, textbooks, essential equipment, reference materials, supplies)

Books and Resources:

Architecture, French and Swenson;

Architecture Residential Drawing and Design, Clois Kicklighter, Scott Thomas, Goodheart-Willcox