



LIST ALL COURSES REQUIRED AND IDENTIFIED COMPETENCIES

Competencies								Course Number	Course Title
1	2	3	4	5	6	7	8		
X		X	X	X				DFTG 1405	Introduction to Technical Drawing
X		X	X	X		X	X	DFTG 1409	Basic Computer-Aided Drafting
X		X	X	X		X	X	DFTG 1410	Specialized Basic Computer-Aided Drafting (CAD)
X		X	X	X	X	X	X	DFTG 1417	Architectural Drafting, Residential
X		X	X	X	X	X	X	DFTG 1430	Civil Drafting I
X	X	X	X	X	X	X	X	DFTG 2319	Intermediate Computer-Aided Drafting
X	X	X	X	X	X	X	X	DFTG 2338	Final Project – Advanced Drafting
X	X	X	X	X	X	X	X	DFTG 2406	Machine Design
X	X	X	X	X	X	X	X	DFTG 2407	Electrical Drafting
X	X	X	X	X	X	X	X	DFTG 2423	Pipe Drafting
X	X	X	X	X	X	X	X	DFTG 2432	Advanced Computer-Aided Drafting
X	X	X	X	X	X	X	X	ARCE 1352	Structural Drafting
								MATH 1314	College Algebra
								MATH 1316	Plane Trigonometry
								ENGL 1301	Composition I
									Language, Philosophy, & Culture or Creative Arts
									Social & Behavioral Science

COMPETENCY REFERENCES

	8 Basic use of computers
	7 Workplace Competencies: resources; interpersonal skills; information; systems; and technology.
	6 Personal Qualities: A worker must display responsibility, self-esteem, sociability, self-management, integrity, and honesty.
	5 Thinking Skills: A worker must think creatively, make decisions, solve problems, visualize, know how to learn, and reason effectively.
	4 Speaking and Listening: Organize ideas and communicate orally; receive, attend to, interpret, and respond to verbal messages and other cues.
	3 Arithmetic or Mathematics: Perform basic computations and approach practical problems by choosing appropriately from a variety of mathematical techniques.
	2 Writing: Communicate thoughts, ideas, information, and messages in writing, and create documents such as letters, directions, manuals, reports, graphs, and flow charts.
	1 Reading: Locate, understand, and interpret written information in prose and in documents such as manuals, graphs, and schedules.

SCANS Competencies Checklist

Academic Year: 2022-2023

SCANS COMPETENCIES FOR PROGRAM: Engineering Design: AAS

Competency	Course where Competency is Assessed	Method of Assessment	Improvements as a Result of Assessment Findings
<p>1 READING: Locate, understand, and interpret written information in prose and in documents such as manuals, graphs, and schedules.</p>	DFTG2319 – Intermediate Computer Aided-Drafting	<p>Assignment: Subdivision Lab Students will use external referencing of multiple drawings to construct a composite drawing.</p>	100% of students met expectations. Criteria was met, continue to monitor.
<p>2 WRITING: Communicate thoughts, ideas, information, and messages in writing, and create documents such as letters, directions, manuals, reports, graphs, and flow charts.</p>	DFTG2407 – Electrical Drafting	<p>Assignment: One-Line diagram Students will create fundamental electrical drawings, using standardized symbology: One-Line diagrams, Riser Diagrams, Ladder Diagrams, and Raceway Layouts.</p>	100% of students met expectations. Criteria was met, continue to monitor.
<p>3 ARITHMETIC OR MATHEMATICS: Perform basic computations and approach practical problems by choosing appropriately from a variety of mathematical techniques.</p>	DFTG2407 – Electrical Drafting	<p>Assignment: NEC calculation worksheet Students will demonstrate the ability to use the National Electrical Code to properly select or calculate appropriate electrical specifications for working drawings.</p>	88% of students met expectations.
<p>4 SPEAKING AND LISTENING: Organize ideas and communicate orally; receive, attend to, interpret, and respond to verbal messages and other cues.</p>	DFTG1417 – Architectural Drafting – Residential	<p>Assignment: Building Section Lab Students will be able to create a building section plan.</p>	100% of students met expectations. Criteria was met, continue to monitor.
<p>5 THINKING SKILLS: A worker must think creatively, make decisions, solve problems, visualize, know how to learn, and reason effectively.</p>	DFTG2319 – Intermediate Computer Aided – Drafting	<p>Assignment: Baseball Field Students will import and extract data utilizing attributes.</p>	100% of students met expectations. Criteria was met, continue to monitor.

Competency	Course where Competency is Assessed	Method of Assessment	Improvements as a Result of Assessment Findings
<p>6 PERSONAL QUALITIES: A worker must display responsibility, self-esteem, sociability, self-management, integrity, and honesty.</p>	<p>DFTG1410 – Special Topics in Computer Aided-Drafting</p>	<p>Assignment: Creating a File Hierarchy Students will use file management techniques to organize drawing files.</p>	<p>100% of students met expectations. Criteria was met, continue to monitor.</p>
<p>7 WORKPLACE COMPETENCIES: resources; interpersonal skills; information; systems; and technology</p>	<p>DFTG2319 – Intermediate Computer Aided – Drafting</p>	<p>Assignment: 2D Book End Students will produce 2D and 3D drawings and pictorial drawings.</p>	<p>100% of students met expectations. Criteria was met, continue to monitor.</p>
<p>8 BASIC USE OF COMPUTERS</p>	<p>DFTG1417 – Architectural Drafting – Residential</p>	<p>Assignment: Building Render Students will be able to render a project.</p>	<p>100% of students met expectations. Criteria was met, continue to monitor.</p>