



SCANS Matrix

Program: Electronics Engineering Technology AAS Program: Electronics Engineering Technology
CIP: 15.0303

LIST ALL COURSES REQUIRED AND IDENTIFIED COMPETENCIES

Competencies								Course Number	Course Title
1	2	3	4	5	6	7	8		
X				X	X	X		CETT 1321	Electronic Fabrication
X	X	X	X	X		X		CETT 1403	D. C. Circuits
X	X	X	X	X		X		CETT 1425	Digital Fundamentals
X	X	X	X	X		X		CETT 1405	A. C. Circuits
X	X			X	X	X	X	CETT 1331	Programming for Discrete Electronic Devices
X	X	X	X	X	X	X		CETT 1341	Solid State Circuits
X		X		X		X		CETT 1429	Solid State Devices
X	X			X		X	X	CETT 1345	Microprocessors
X	X	X	X	X		X		CETT 1457	Linear Integrated Circuits
X	X	X	X	X	X	X		EECT 2339	Communication Circuits
X	X	X		X		X	X	ELMT 1301	Prog. Logic Controllers
X	X	X	X	X	X	X		CETT 2349	Research and Project Design
X	X	X					X	ELMT 2433	Industrial Electronics
X	X							ENGL 1301	English
		X						MATH 1314	College Algebra
		X						Math 1316	Trigonometry
								Elective	Social Behavioral Science
								Elective	Humanities/Fine Arts

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: 2018-2019

SCANS COMPETENCIES FOR PROGRAM: Electronics Engineering Technology

Competency	Course where Competency is Assessed	Method of Assessment	Improvements as a Result of Assessment Findings
1 READING: Locate, understand, and interpret written information in prose and in documents such as manuals, graphs, and schedules.	Technical courses throughout the program curriculum. Final assessment in CETT 2439 Capstone.	Departmental Exams, Laboratory Exercises	Reading skills are satisfactory. The department will continue to integrate reading comprehension assignments into the curriculum.
2 WRITING: Communicate thoughts, ideas, information, and messages in writing, and create documents such as letters, directions, manuals, reports, graphs, and flow charts.	Technical courses throughout the program curriculum. Final assessment in CETT 2439 Capstone.	Departmental Exams, Laboratory Exercises, Writing assignments	The department incorporates writing assignments-technical documentation, journal entries, and procedural documentation into the technical courses. 80%of students were proficient in writing procedure and operations manuals
3 ARITHMETIC OR MATHEMATICS: Perform basic computations and approach practical problems by choosing appropriately from a variety of mathematical techniques.	Technical courses throughout the program curriculum. Final assessment in CETT 2439 Capstone.	Departmental Exams, Laboratory Exercises	Mathematical problems are implemented on lab work and exams. 88% of students were able to correctly calculate current, resistance, voltage and power. 78% of students correctly solved a bandpass RLC circuit
4 SPEAKING AND LISTENING: Organize ideas and communicate orally; receive, attend to, interpret, and respond to verbal messages and other cues.	Technical courses throughout the program curriculum. Final assessment in CETT 2439 Capstone.	Departmental Exams, Laboratory Exercises	Speaking skills and the ability to explain a concept need improvement. Students will be required to verbally explain concepts throughout the program. 85% of students were proficient in writing procedure and operations manuals and verbally detailing their work.
5 THINKING SKILLS: A worker must think creatively, make decisions, solve problems, visualize, know how to learn, and reason effectively.	Technical courses throughout the program curriculum. Final assessment in CETT 2439 Capstone.	Departmental Exams, Laboratory Exercises	Thinking and problem solving skills are stressed throughout the program. Students perform satisfactorily in problem solving skills. 87% of students demonstrated proficiency in critical thinking.
6 PERSONAL QUALITIES: A worker must display responsibility, self-esteem, sociability, self-management,	Technical courses throughout the program curriculum. Final assessment in CETT 2439	Departmental Rubric based on students' performance in both the classroom and laboratory setting.	Students overall performance was satisfactory. All students supported each other and

Competency	Course where Competency is Assessed	Method of Assessment	Improvements as a Result of Assessment Findings
integrity, and honesty.	Capstone.		worked well together in the lab and on the final project.
7 WORKPLACE COMPETENCIES: resources; interpersonal skills; information; systems; and technology	Technical courses throughout the program curriculum. Final assessment in CETT 2439 Capstone.	Departmental Rubric based on students' performance in both the classroom and laboratory setting.	Students performed above average as a group. The project leader did a good job coordinating and the project choice allowed everyone to contribute. Some students did contribute below the average for the class but this was their choice. All had equal opportunity to contribute. 75% of students contributed average or above. The project was very successful and incorporated both hardware and software pieces.
8 BASIC USE OF COMPUTERS	CETT1331,CETT1445, ELMT1301,ELMT2433	Software programming project	CETT 1331 spent more time on fundamentals of programming. Student success/retention improved from 72% to 84%. Microprocessor course added machine language projects. All student completed projects successfully. PLC course introduced Allen Bradley controllers and lessons.