



Program: Process Technology CIP: 41.0301								2021-2022	
LIST ALL COURSES REQUIRED AND IDENTIFIED COMPETENCIES									
Competencies								Course Number	Course Title
1	2	3	4	5	6	7	8		
		X	X		X			PTAC 1302	INTRO TO PROCESS TECHNOLOGY
		X		X				CTEC 1401	Applied Petrochemical Technology
X	X		X		X	X		PTAC 1408	SAFETY, HEALTH, & ENVIRONMENT
						X		PTAC 1410	PROCESS TECHNOLOGY I -EQUIPMENT
X				X		X		PTAC 1432	PROCESS INSTRUMENTATION I
X		x			X			PTAC 2314	QUALITY
				X		X		PTAC 2436	PROCESS INSTRUMENTATION II
				X			X	PTAC 2420	PROCESS TECHNOLOGY II - SYSTEMS
X	X			X				PTAC 1454	INDUSTRIAL PROCESSES
				X	X		X	PTAC 2446	PROCESS TROUBLESHOOTING CAPSTONE COURSE
			X	X				PTAC 2438	PROCESS TECHNOLOGY III – OPERATIONS
			X	X	X	X		CTEC 1480	COOPERATIVE EDUCATION
		X		X				MATH 1314	ALGEBRA
		X		X				CHEM 1405	CHEMISTRY
							X	COSC 1301	INTRODUCTION TO COMPUTING
X	X							ENGL 1301	COMPOSITION
			X		X			SPCH 1315	SPEECH
								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 FOR PROGRAM 2021-2022			
Competency	Course where Competency is Assessed	Method of Assessment	Findings and Plans for Improvements
1 READING: Locate, understand, and interpret written information in prose and in documents such as manuals, graphs, and schedules.	PTAC 2314 PTAC 1432 ENGL 1301	Data charting projects in PTAC 2314 P&ID training in PTAC 1432	Average grade on student data charting projects was greater >80%. 70% is passing. Students demonstrated proficiency in reading a P&ID.
2 WRITING: Communicate thoughts, ideas, information, and messages in writing, and create documents such as letters, directions, manuals, reports, graphs, and flow charts.	PTAC 1302 PTAC 1408 ENGL 1301	Student reflection exercise What do operators do and when writing exercise. Resume and cover letter writing project	Average score on writing assignments was >80%. 70% is passing.
3 ARITHMETIC OR MATHEMATICS: Perform basic computations and approach practical problems by choosing appropriately from a variety of mathematical techniques.	CTEC 1401 MATH 1314 CHEM 1405	Percent of students passing courses	Course passing percentage was greater than 90% for CTEC 1401, Math 1314 and CHEM 1405
5 THINKING SKILLS: A worker must think creatively, make decisions, solve problems, visualize, know how to learn, and reason effectively.	PTAC 2446	Exam Simtronics troubleshooting hands on training	Average score on pre/post test was greater than 70%. 70% is passing criteria.
6 PERSONAL QUALITIES: A worker must display responsibility, self-esteem, sociability, self-management, integrity, and honesty.	CTEC 1480 SPEECH 1315 PTAC 2314 PTAC 1302 Hands on training	Hands on training team performance	In general students give satisfactory feedback on fellow students. Instructor observes student interaction in classroom and during hands on training exercises.
7 WORKPLACE COMPETENCIES: resources; interpersonal skills; information; systems; and technology	CTEC 1480 PTAC 2438 PTAC 2420	Student internship work performance Feedback from employer hiring program graduates	Very favorable student internship feedback from employers Very favorable student feedback from employers hiring program graduates
8 BASIC USE OF COMPUTERS	PTAC 2420 COSC 1301	Lab simulations interface and understanding Exams result in COSC 1301	Students demonstrated mastery of basic computer skills via the use of simulators COSC course passing percentage was greater than 90%.