

UNIVERSITY OF ALASKA FAIRBANKS
Student Learning Outcomes Assessment Plan
Instrumentation Technology Certificate
Community & Technical College/ CRCD

Expanded Statement of Institutional Purpose	Intended Objectives/Outcomes	Assessment Criteria and Procedures	Implementation (what, when, who)
MISSION STATEMENT: The Instrumentation Technology program is designed for students to gain employment skills to work in the instrumentation technology industry. To earn a certificate in instrumentation technology. GOAL STATEMENT: The Certificate degree in Instrumentation Technology provides future instrumentation technicians needed skills and training to compete for positions in current and future industry employment opportunities. Students will gain a practical understanding of the various instrumentation and control systems, instrumentation equipment and	The graduates of the CTC-UAF Instrumentation Technology program will be able to: 1. Each graduate will understand the physics of pressure, temperature, level and flow measurement; mechanical and electrical aspects of instruments used to control dynamics of processes. Dynamics of automatic control including proportional control, automatic reset, derivative action and integral timing.	Specific test results from PRT 140, PRT 144 compiled and evaluated by subject area. In addition to these scores, key skill evaluations will be compiled from each of these courses to determine an overall rating for student demonstrated performance.	Review results annually with PRT and ELT faculty group to determine results and recommendations. Document overall results and continuous improvement recommendations.

troubleshooting skills used in the industry.	2. Each graduate will demonstrate knowledge of commonly used process measurement devices, control methods and strategies, and the proper selection, identification, design, installation and operation of instrumentation.	Specific test results from PRT 240 and ELT 246 compiled and evaluated by subject area. In addition to these scores, key skill evaluations will be compiled from each of these courses to determine an overall rating for student demonstrated performance.	Review results annually with PRT and ELT faculty group to determine results and recommendations. Document overall results and continuous improvement recommendations.
	3. Each graduate will demonstrate knowledge of industrial process valve maintenance and instrumentation, Including calibration, configuration, troubleshooting, and use of valves with instrumentation	Specific test results from PRT 248 compiled and evaluated by subject area. In addition to these scores, key skill evaluations will be compiled from this course to determine an overall rating for student demonstrated performance.	Review results annually with PRT and ELT faculty group to determine results and recommendations. Document overall results and continuous improvement recommendations.

	4. Each graduate will demonstrate knowledge of basic fundamentals, terms, and units of DC and AC electrical theory. Graduates will have the ability to use test equipment, hand tools and techniques of soldering.	Specific test results from ELT 101 and ELT 102 compiled and evaluated by subject area. In addition to these scores, key skill evaluations will be compiled from each of these courses to determine an overall rating for student demonstrated performance.	Review results annually with PRT and ELT faculty group to determine results and recommendations. Document overall results and continuous improvement recommendations.
	5. Each graduate will demonstrate the knowledge and ability to develop, construct, and function check a student team created process control loop. This is a capstone project for Instrumentation Technology certificate students.	Specific capstone project results from PRT 240, and ELT 246 compiled and evaluated. In addition to these scores, key skill evaluations will be compiled from the capstone projects to determine an overall rating for student demonstrated performance.	Review results annually with PRT and ELT faculty group to determine results and recommendations. Document overall results and continuous improvement recommendations.

	Prepared for Instrumentation Technology career	Alumni and employer surveys. Written and/or oral assessment by employers, graduates, and Advisory Committee members about sufficiency of students/graduates to carry out job functions. Written assessment of employers or employer group about skills of employed graduates.	Program head will conduct survey annually and provide information to the program review committee
	Students will meet expected outcomes in communications, computation, and human relations as listed by the core.	Student outcomes provided by core curriculum faculty in WRTNG 111x, WRTNG 213x, COJO 131/141x, MATH 105, SOC 100x, ABUS 154.	Program Head will annually review listed programs to verify that student outcomes meet program requirements. Program review committee will annually assess that student's core curriculum skills are reflected in their PRT and ELT work.

<reviewed 2023 Brian Ellingson>