



Central Washington University

Student Learning Outcome Assessment Plan

Department: Industrial and Engineering Technology
 Degree Program: BS-Mechanical Engineering Technology

Student Learning Outcome (performance, knowledge, attitudes)	Related CWU Strategic Outcome(s) http://www.cwu.edu/strategic-planning/	Method(s) of Assessment (What is the assessment?)*	Who Assessed (Students from what courses - population)**	When Assessed (term, dates)***	Standard of Mastery/ Criterion of Achievement (How good does performance have to be?)
3.a. an appropriate mastery of the knowledge, techniques, skills and modern tools of their disciplines	1.1.1 Students will achieve programmatic learning outcomes.	Fund. Exam pass rate	All MET Sr	April of SrYr	50% Nat'l Norm
3.b. an ability to apply current knowledge and adapt to emerging applications of mathematics, science, engineering and technology.	1.1.1 Students will achieve programmatic learning outcomes.	Fund. Exam PM score Application Support	All MET Sr	April of SrYr	50% Nat'l Norm
3.c. an ability to conduct, analyze and interpret experiments and apply experimental results to improve processes.	1.1.1 Students will achieve programmatic learning outcomes.	Rubric TBD	MET426	Spr, Juniors	Formative
3.d. an ability to apply creativity in the design of systems, components, or processes appropriate to program objectives.	1.1.1 Students will achieve programmatic learning outcomes.	Rubric TBD	MET495	MET Seniors	Summative

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3.e. an ability to function effectively on teams	1.1.1 Students will achieve programmatic learning outcomes.	Rubric TBD	MET418	Fall/Spring	Formative
3.f. an ability to identify, analyze and solve technical problems.	1.1.1 Students will achieve programmatic learning outcomes.	Rubric TBD	MET495	Spr., Seniors	Summative
3.g. an ability to communicate effectively.	1.1.1 Students will achieve programmatic learning outcomes.	Rubric TBD	COMM345 MET495	Wtr, Junior Spr, Senior	Formative Summative
3.h. a recognition of the need for, and an ability to engage in lifelong learning.	1.1.1 Students will achieve programmatic learning outcomes.	Rubric TBD	ASME participation	All MET Stds	Summative
3.i. an ability to understand professional, ethical and social responsibilities.	1.1.1 Students will achieve programmatic learning outcomes.	Fund. Exam PM Codes(3) Rubric TBD	April exam MET418	Spr, Seniors Fall, Seniors	Summative Formative
3.j. a respect for diversity and a knowledge of contemporary professional, societal and global issues.	1.1.1 Students will achieve programmatic learning outcomes.	Rubric TBD	MET418	Fall, Seniors	Formative
3.k. a commitment to quality, timeliness, and continuous improvement.	1.1.1 Students will achieve programmatic learning outcomes.	Rubric TBD	MET495	Wtr, Seniors	Formative

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ABET 9.a Students must design, analyze mechanical systems (statics, strengths, dynamics)	1.1.1 Students will achieve programmatic learning outcomes.	StaticsRubric Str. Rubric Dyn. Rubric FE Stat/Dyn	IET311 IET312 MET327 NCEES	Fall, Soph Wtr, Junior Spr, Soph All MET Sr	Formative Criteria Formative Criteria Formative Criteria Summative 50%
ABET 9.b Students must select, design and specify materials and processing to support mechanical systems	1.1.1 Students will achieve programmatic learning outcomes.	Rubric TBD	MET351 Metallurgy	Fall, Junior	Formative
ABET 9.c Students must create and communicate effective in a CAD (3D) environment.	1.1.1 Students will achieve programmatic learning outcomes.	CAD Portfolio CAD Portfolio CAD Portfolio	IET160 IET265 MET495C	Fall, Fresh. Spr, Soph Spr, Senior	Formative Formative Summative
ABET 9.d Students must evaluate materials using standards for experiments and test procedures	1.1.1 Students will achieve programmatic learning outcomes.	Rubric TBD	ME426	Spring, Juniors	Formative
ABET 9.e Students must design, analyze and optimize thermal systems	1.1.1 Students will achieve programmatic learning outcomes.	Rubric TBD	MET314	Fall, Juniors	Formative
ABET 9.f Students must design, analyze and optimize fluid systems	1.1.1 Students will achieve programmatic learning outcomes.	Rubric TBD	MET315	Wtr, Juniors	Formative
ABET 9.g Students must design, analyze and optimize electro-mechanical and machine systems	1.1.1 Students will achieve programmatic learning outcomes.	Rubric TBD	MET419	Wtr, Seniors	Summative

*Method(s) of assessment should include those that are both direct (tests, essays, presentations, projects) and indirect (surveys, interviews) in nature

**Data needs to be collected and differentiated by location (Ellensburg campus vs University Centers) and modality (face-to-face, online)

***Timing of assessment should ideally be at different transition points of program (i.e., admission, mid-point, end-of-program, post-program)

Assessment Cycle

Analysis and Interpretation: December
Improvement Actions: Completed by June
Dissemination: Completed by June

All Mechanical Engineering Technology outcomes are assessed and reported annually.

Assessment Oversight

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