

**Central Washington University
Assessment of Student Learning
Department and Program Report**

Please enter the appropriate information concerning your student learning assessment activities for this year.

Academic Year of Report: 11-12 College: CEPS
Department ETSC Program: EET

1. What student learning outcomes were assessed this year, and why?

Attachment A - EET Program Educational Objectives an area required under the ABET guidelines and specifically developed with input from the EET Industrial Advisory Committee (IAC), IET faculty and staff, and the relevant CWU administration.

Attachment B - EET Program Outcomes that are prescribed specifically for all engineering technology programs by ABET. The interval and standard were agreed upon by the EET-IAC, EET faculty, and the relevant CWU administration.

Attachment C - EET Program Criteria which were developed based on the EET ABET program criteria model and were agreed upon by the EET-IAC, EET faculty, and the relevant CWU administration.

2. How were they assessed?

The EET Program Educational Objectives are assessed by graduate surveys. The EET Program Outcomes and EET Program Criteria are assessed using rubrics developed and approved by the EET-IAC and the EET faculty.

3. What was learned?

From a process stand point, the program needs to review the distribution of the rubrics so that there is a more even distribution of assessment work. This was initiated during the fall, 2012 Industrial Advisory Council meeting and will be reviewed by the council in the spring 2013 meeting.

No information was available from the graduate surveys for the 2011 – 2012 academic year. The data provided reflects the most recent data available.

Program outcomes associated with EET 323 were not assessed because the course was not offered.

Program Outcome 3.k was not evaluated in EET 324 during 2011 - 2012 because the course was taught in a lecture only format.

4. What will the department or program do as a result of that information?

A renewed effort will be made to solicit and incorporate feedback from Alumni and Industrial Advisory Committee for the 2012 – 2013 academic year.

The program outcomes and ABET criteria will be re-distributed to reflect re-distribution of the core as noted in section 5.

5. What did the department or program do in response to last year's assessment information?

The Electronics Engineering Technology program was re-evaluated. The faculty worked with the Industrial Advisory committee in the Fall of 2012 to develop a program format that would allow the students additional flexibility while eliminating the two specializations per the Academic Advisory Council.

6. Questions or suggestions concerning Assessment of Student Learning at Central Washington University:

Attachment A

EET Educational Objectives	Related Department Goals	Related College Goals	Related University Goals	How to Assess	When to Assess	AVG Data
1. CWU EET program graduates will be prepared for careers or educational opportunities of their choice.	Goal 1	Goal 1 Goal 2	Goal I Goal II Goal VI	Survey alumni and employers 1 to 5 years after graduation.	Fall	G=4.32 S=4.46
2. CWU EET program graduates will be able to communicate with their desired constituencies.	Goal 1 Goal 9	Goal 1 Goal 2	Goal I Goal II Goal VI	Survey alumni and employers 1 to 5 years after graduation.	Fall	G=4.44 S=3.92
3. CWU EET program graduates will be able to continue acquiring skills and expertise in their areas of interest.	Goal 1 Goal 9 Goal 10	Goal 1 Goal 2	Goal I Goal II Goal VI	Survey alumni and employers 1 to 5 years after graduation.	Fall	G=4.56 S=4.62
4. CWU EET program graduates will participate in professional community organizations.	Goal 1 Goal 9 Goal 10	Goal 1 Goal 2	Goal I Goal II Goal VI	Survey alumni and employers 1 to 5 years after graduation.	Fall	G=2.76
5. CWU EET program graduates will be able to use information from a variety of media and constituencies to develop practical methods and procedures to solve professional challenges.	Goal 1 Goal 9 Goal 10	Goal 1 Goal 2	Goal I Goal II Goal VI	Survey alumni and employers 1 to 5 years after graduation.	Fall	G=4.36 S=4.00

* G is Graduate

*S is the graduates supervisor

Attachment B

Table 4-2								
Program Outcome Data Sheet								
ABET Program Outcomes	Course	Standard	07-08	08-09	09-10	10-11	11-12	AVG
3.a. an appropriate mastery of the knowledge, techniques, skills and modern tools of their disciplines	EET 221	Beginning	1.29	2.03	2.54	2.88	2.61	2.27
	EET 312	Developing	ND	2.00	3.38	ND	ND	2.69
	EET 323	Accomplished	2.88	3.78	ND	3.41	ND	3.36
	EET 324	Accomplished	3.33	ND	4.00	ND	3.25	3.53
3.b. an ability to apply current knowledge and adapt to emerging applications of mathematics, science, engineering and technology.	EET 221	Beginning	3.20	1.70	ND	2.49	2.65	2.51
	EET 324	Accomplished	3.50	ND	3.86	ND	2.50	3.29
	EET 342	Accomplished	ND	2.75	3.43	4.29		3.49
3.c. an ability to conduct, analyze and interpret experiments and apply experimental results to improve processes.	EET 312	Developing	2.71	2.36	ND	3.01	ND	2.69
	EET 376	Developing	ND	2.70	2.60	3.13	2.83	2.81
	EET 323	Accomplished	ND	ND	ND	ND	ND	###
3.d. an ability to apply creativity in the design of systems, components, or processes appropriate to program objectives.	EET 323	Developing	3.88	3.75	ND	3.12	ND	3.58
	EET 370	Developing	ND	3.36	3.17	2.80	2.67	3.11
	EET 372	Accomplished	ND	ND	2.13	3.33	N/A	2.73
3.e. an ability to function effectively on teams	EET 372	Developing	ND	ND	2.63	3.33	2.53	2.98
3.f. an ability to identify, analyze and solve technical problems.	EET 370	Beginning	ND	2.93	3.29	3.33	2.92	3.18
	EET 323	Accomplished	2.63	2.75	ND	3.24	ND	2.87
	EET 324	Accomplished	2.57	ND	2.79	ND	ND	2.68
	EET 375	Accomplished	3.50	2.67	3.00	2.67	2.83	2.96
3.g. an ability to communicate effectively.	EET 323	Developing	2.00	2.50	ND	ND	ND	2.25
	EET 376	Developing	ND	1.70	2.50	3.00	2.33	2.40
	EET 478	Developing	ND	ND	3.00	3.00	2.80	3.00
	EET 479	Accomplished	ND	ND	2.38	2.17	3.50	2.28
	EET 489	Accomplished	ND	ND	2.60	2.86	3.50	2.73
3.h. a recognition of the need for, and an ability to engage in lifelong learning.	EET 478	Developing	ND	ND	2.67	2.17	2.40	2.42
	EET 479	Developing	ND	ND	3.00	2.33	2.83	2.67
	EET 489	Accomplished	ND	ND	2.40	2.57	3.25	2.49
3.i. an ability to understand professional, ethical and social responsibilities.	IET 301	Developing	ND	2.90	2.91	3.03	3.42	2.95
	EET 478	Developing	ND	ND	2.78	2.67	2.67	2.73
	EET 479	Accomplished	ND	ND	2.75	2.00	3.33	2.38
	EET 489	Accomplished	ND	ND	2.50	2.29	4.00	2.40
3.j. a respect for diversity and a knowledge of contemporary professional, societal and global	EET 221	Developing	3.50	3.20	2.76	ND	3.19	3.16
	EET 478	Accomplished	ND	ND	ND	2.63	3.33	2.63
3.k. a commitment to quality, timeliness, and continuous improvement.	IET 380	Developing	ND	3.42	ND	2.84		3.13
	EET 324	Accomplished	ND	ND	ND	ND	ND	###

Attachment C

Table 4-2b Program Criteria Data Sheet								
ABET Program Criteria	Course	Standard	07-08	08-09	09-10	10-11	11-12	AVG
9.A.1. Application of circuit analysis to the building, testing, operation, and maintenance of electrical/ electronic circuits.	EET 221	Developing	2.06	2.12	2.54	2.99	2.76	2.49
	EET 312	Developing	ND	2.14	3.19	2.09	3.10	2.63
	EET 323	Accomplished	3.13	3.33	ND	3.21	ND	3.22
	EET 324	Accomplished	2.10	ND	3.29	ND	3.10	2.83
9.A.2. Application of circuit design to the building, testing, operation, and maintenance of electrical/ electronic circuits	EET 376	Developing	ND	2.70	3.30	3.50	3.00	3.17
	EET 478	Accomplished	ND	ND	ND	ND	ND	##
	EET 479	Accomplished	ND	ND	2.50	2.00	1.50	2.25
9.A.3. Application of computer programming to the building, testing, operation, and maintenance of electrical/ electronic circuits.	EET 370	Developing	ND	3.14	3.33	3.20	3.33	3.22
	EET 375	Developing	3.50	2.30	3.64	3.67	3.50	3.28
	EET 376	Accomplished	ND	2.70	2.90	3.44	2.83	3.01
9.A.4. Application of associated software to the building, testing, operation, and maintenance of electrical/ electronic circuits.	EET 312	Developing	ND	2.22	3.37	2.23	2.34	2.54
	EET 323	Developing	3.70	4.00	ND	3.58	ND	3.76
	EET 324	Accomplished	2.88	ND	2.79	ND	2.75	2.81
	EET 342	Accomplished	ND	2.42	3.48	2.50		2.80
9.A.5. Application of analog electronics to the building, testing, operation, and maintenance of electrical/ electronic circuits.	EET 312	Beginning	ND	3.39	3.85	2.50	3.28	3.26
	EET 323	Developing	3.50	2.89	ND	3.21	ND	3.20
	EET 324	Accomplished	ND	ND	ND	ND	ND	##
9.A.6. Application of digital electronics to the building, testing, operation, and maintenance of electrical/ electronic circuits.	EET 371	Developing	1.83	3.30	2.96	2.80	2.37	2.72
	EET 372	Accomplished	2.14	3.78	2.75	3.17	2.00	2.96
9.A.7. Application of microcomputers to the building, testing, operation, and maintenance of electrical/ electronic circuits.	EET 370	Developing	ND	2.93	3.29	2.70	2.67	2.97
	EET 375	Developing	3.50	2.50	2.73	3.67	3.50	3.10
	EET 376	Accomplished	ND	2.70	3.10	3.25	3.00	3.02
9.B. Application of physics to electrical/ electronic circuits.	EET 312	Developing	ND	3.05	3.81	2.23	3.34	3.11
	EET 342	Accomplished	ND	ND	3.14	2.57		2.86
9.a.1. The ability to analyze, design, and implement instrumentation systems.	EET 342	Developing	ND	ND	ND	3.00		3.00
	EET 376	Accomplished	ND	ND	ND	ND		###
9.a.2. The ability to analyze, design, and implement computer systems.	EET 375	Developing	3.50	2.67	2.36	3.00	2.50	2.88
	EET 452	Accomplished	ND	ND	ND	ND		###
9.b. The ability to apply project management techniques to electrical/ electronic systems.	IET 455	Beginning	ND	ND	ND	ND		###
	IET 301	Developing	ND	2.17	2.73	3.00	3.00	2.63
	EET 479	Developing	ND	ND	1.75	1.50	1.50	1.63
	EET 478	Accomplished	ND	ND	2.33	2.33	1.60	2.33
9.c. The ability to utilize statistics and probability in support of electrical/ electronic systems.	IET 380	Developing	ND	3.23	ND	2.84		3.04
9.d. The ability to utilize transform methods in support of electrical/ electronic systems.	EET 324	Accomplished	3.33	ND	3.86	ND	2.50	3.23