

## ABET Definitions of Terms

**Program Outcomes** – Statements that describe what students and graduates are expected to know and be able to do by the time of graduation. These relate to the skills, knowledge and behaviors that students acquire in their matriculation through the program. The outcomes of ABET accredited programs must embrace the eleven (a) through (k) requirements of Criterion 2, and achievement of these outcomes by each student should be verified before certification for graduation. This does not imply that program outcomes should simply be a restatement of the eleven elements. Outcomes must be unique to the program, and then it is sufficient to show that achievement of the unique outcomes will meet the required eleven elements.

## ABET Program Outcomes

- a. an appropriate mastery of the knowledge, techniques, skills and modern tools of their disciplines,
  - b. an ability to apply current knowledge and adapt to emerging applications of mathematics, science, engineering and technology,
  - c. an ability to conduct, analyze and interpret experiments and apply experimental results to improve processes,
  - d. an ability to apply creativity in the design of systems, components or processes appropriate to program objectives,
  - e. an ability to function effectively on teams,
  - f. an ability to identify, analyze and solve technical problems,
  - g. an ability to communicate effectively,
  - h. a recognition of the need for, and an ability to engage in lifelong learning,
  - i. an ability to understand professional, ethical and social responsibilities,
  - j. a respect for diversity and a knowledge of contemporary professional, societal and global issues, and
  - k. a commitment to quality, timeliness, and continuous improvement.
- a(A) the application of circuit analysis and design, computer programming, associated software, analog and digital electronics, and microcomputers to the building, testing, operation, and maintenance of electrical/electronic(s) systems.
- b(B) the applications of physics or chemistry to electrical/electronic(s) circuits in a rigorous mathematical environment at or above the level of algebra and trigonometry.
- a(C) the ability to analyze, design, and implement control systems, instrumentation systems, communications systems, computer systems, or power systems.
- b(D) the ability to apply project management techniques to electrical/electronic(s) systems.
- c(E) the ability to utilize statistics/probability, transform methods, discrete mathematics, or applied differential equations in support of electrical/electronic(s) systems.

## Objectives to ABET Outcome Links

Objective	ABET Outcomes
be prepared to apply mathematics, established scientific and engineering knowledge, for the development and implementation of a broad range of electronic systems	a, b, c, d, f, A, B, C, E
be knowledgeable about current technologies and be prepared to adapt to technology advances and ensure professional growth through an appreciation for lifelong learning.	a, b, d, f, h
be prepared to have strong communication skills and work as an individual or as a member of a team.	e, g, k, D
have a well rounded education in order to understand their professional and ethical responsibility and the impact of engineering solutions in a global and societal context	g, i, j

## Course distribution of outcomes

**P – Primary to the purpose of the course. Course contains significant instruction and opportunities for practice.**

**S – Secondary to the purpose of the course. Course contains limited instruction and opportunities for practice.**

**N – Not a significant part of this course.**

EET Course	a	b	c	d	e	f	g	h	i	j	k	A	B	C	D	E
ET270 - Electronics Seminar	N	N	N	N	N	N	S	S	N	N	S	N	N	N	N	N
ET271 - Circuit Analysis I	P	S	S	N	N	P	N	N	S	N	S	P	N	N	N	N
ET272 - Elec. Circuits & Devices	P	N	S	N	N	P	N	N	N	N	S	P	N	N	N	N
ET273 – Digital Electronics	P	N	S	N	N	P	N	N	N	N	S	P	N	N	N	S
ET274 - Fundamentals of MPUs	P	N	S	N	N	P	N	N	N	N	S	P	N	N	N	N
ET371 - Circuit Analysis II	P	P	P	N	N	P	S	N	N	N	N	P	P	N	N	N
ET372 – Elect. Anal. & Design	P	N	S	N	N	P	N	N	N	N	N	P	N	N	N	N
ET373 - Digital Systems	P	P	P	S	N	P	S	N	S	N	S	P	S	S	N	S
ET374 - MPU Applications	P	S	P	P	N	P	S	N	S	N	S	P	N	S	N	N
ET375 - Electronic Systems	P	P	P	N	N	P	N	N	N	N	N	P	P	N	N	N
ET376 - Elec Power & Machines	P	P	P	N	S	P	P	N	S	N	S	P	S	S	N	N
ET377 - Instrumentation	P	P	P	P	P	P	P	S	S	N	S	P	S	P	S	S
ET378 - Network Analysis	P	S	S	N	N	P	N	N	N	N	N	P	N	S	N	P
ET379 - Act Linear & Non-Linear	P	P	S	P	N	P	S	S	N	N	S	P	N	S	N	P
ET405 - Communication Cir	P	P	P	N	N	P	N	S	N	N	N	P	S	P	N	S
ET454 – Embedded Systems	P	S	P	P	N	P	S	N	S	N	S	P	N	P	N	N
ET455 – Communication Sys	P	P	S	N	N	P	N	N	N	N	N	P	P	P	N	S
ET457 - Auto Control Systems	P	P	P	P	N	P	P	N	N	N	S	P	S	P	N	N
ET471 - Project Definition	S	S	S	P	P	S	P	S	S	S	S	S	N	N	S	N
ET474 - MCU-Based Design	S	P	S	P	P	P	P	S	S	S	P	P	N	S	S	N
ET475 - Digital Communications	P	P	N	N	N	S	N	S	N	N	S	S	S	P	N	P