Electrical and Computer Engineering Technology

Curricular Matrix

The matrix in Figure 3 shows which course(s) from the curriculum are strongly connected (marked with a 2) or loosely connected (marked with a 1) to a specific student outcome.

Course	Title	a	b	c	d	e	f	g	h	i	j	k
ETCS 105	Career Discovery	1				2	2	2		2		
Computer Technology courses (28 credits)												
CTEC 204	Prog. Techniques I	2						2				
CTEC 206	Prog. Techniques II	2						2				
CTEC 216	Digital Electronics			2			2	1				2
CTEC 235	Microcomputers I	2				2	2	1				1

CTEC 241	Circuit Design and Fab.	2	2					2				2
CTEC 243	Applied Computational Analysis I	2	2				2					
CTEC 247	Applied Computational Analysis II	2	2				1	2				
CTEC 335	Microcomputers II			2			2	1				1
CTEC 350	Microcontroller Based Sys.				2		2	1	2			
Electrical Technology courses (27 credits)												
ETEC 110	Electrical Technology I			2		2	1	2				
ETEC 120	Electrical Technology II			2		2	2					
ETEC 131	Electronics Technology I	2		2		2						1
ETEC 231	Electronics Technology II			1		1	2					1
ETEC 310	Communication Circuits	2		1			2	1			1	
ETEC 410	Control System Technology	2	2		2	1	2					

ETEC 495	Seminar Project	1		1			2	2	2	2		2
Electrical and Computer Technology Elective courses (9 credits)												
CTEC 430	Digital Signal Processing	2			1		2	2				
CTEC 460	Computer Networking Tech.	1						2	2			
CTEC 471	Internet Dev.	2			2		2	1	2			2
ETEC 240	Energy Technology	1	2									
ETEC 420	Communication Circuits II			2		1						
MTEC 210	Intro. To CAD	1					2	2				
Industrial Engineering Courses (9 credits)												
IENG 240	Engineering Economics	2	2						2			
IENG 251	Project Design		2			2						2
IENG 400	Ethics & Global Issues						1	2	2	2	2	

Key: 1 = Minor Contribution to Outcome; 2 = Major Contribution to Outcome

Figure 3: Matrix of relationships between courses and student outcomes (updated)

As for program criteria, the following matrix highlights the relationship course –program criteria.

Course	Title	l	m	n
ETEC 495	Capstone Course Seminar project	2	2	1
IENG 251	Project Engineering		2	
CTEC 247	Computational Analysis II			2
CTEC 241	Circuit Design and Fab.	2		
CTEC 410	Control Systems Tech.	2		2

CTEC 471	Circuit Design and Fab.	2		
CTEC 335	Microcomputers II	2		
CTEC 430	Digital Signal processing	2		2

Figure 4 : Matrix Program criteria-Courses

Legend : (1) Loosely connected , (2) : Strongly Connected