Bachelor of Electrical Engineering Technology Program (B. Tech) 2023-2024

Curriculum Number –0216 - *Faculty: Stephen Frempong, Rashid Aidun, Raamitha Pillay, Shahrokh Sani*

Semester 1- Fall	Course Title	Credits	Term	Grade	Comment
ENGL 101	Composition & the Spoken Word [GER 10]	3			
MATH 123	**Pre-Calculus [GER 1]**	4			
SOET 116	Introduction to CAD and Design	2			
ELEC 161	**Electronic Fabrications**	**2**			
ELEC 101	Electric Circuits I	3			
ELEC 109	Electric Circuits I Lab	1			
		15			
Semester 2-Spring					
ELEC 141	**Industrial Controls**	2			
ELEC 102	Electric Circuits II	3			
ELEC 129	Electric Circuit II Lab	1			
MATH 161	**Calculus I**	4			
ELEC 165	Digital Fundamentals & Systems	3			
ELEC 166	Digital Fundamentals & Systems Lab	1			
		14			
Semester 3- Fall					
PHYS 121/131	College/University Physics I [GER 2]	3			
PHYS 125/135	College Physics I Lab/University Physics I Lab	1			
ELEC 213	Microprocessors	3			
ELEC 231	Electronic Circuits	4			
ENGS 102	**Programming for Engineers**	2			
MATH 162	**Calculus II**	4			
		17			
Semester 4- Spring					
ELEC 243	Computer Automated Control Systems	2			
PHYS 122/132	College/University Physics II	3			
PHYS 126/136	College Physics II Lab/University Physics II Lab	1			
ELEC 215	Electrical Energy Conversion	4			
ELEC 225	Telecommunications	3			
MATH 263	**Calculus III**	4			
		17			
Semester 5- Fall					
MATH 141	Statistics I	3			
ELEC 343	Advanced Circuit Analysis	3			
ELEC 332	Industrial Power Electronics	3			
GER (3)	**Diversity Elective Course**	3			
SOET 377	Engineering Ethics	1			
MATH 364	**Differential Equations**	4			
		17			

Semester 6- Spring					
ELEC 380	LAN/WAN Technology	3			
ELEC 385	Electronic Communications I	3			
ELEC 383	Power Transmission and Distribution	3			
SOET 348	Engineering Safety	1			
	Program Elective	3			
	GER course [4,5,6,7,8,9]	3			
		16			
Semester 7- Fall					
SOET 361	Project Management	3			
	Program Elective	3			
ELEC 386	Electronic Communications II	3			
ELEC 416	Microelectronics Circuit Design	3			
	GER course [4,5,6,7,8,9]	3			
		15			
Semester 8-Spring					
	Program Elective	3			
ELEC 477	Capstone Project	3			
ECON 370	Engineering Economics	3			
ELEC 436	Biomedical Electronics	3			
	GER course [4,5, 6,7,8,9]	3			
		15			
	Total Credits : 126				

Program Electives

ELEC 375 Fiber Optic Communications	MECH 342 Thermodynamics
PHYS 301 Introduction to Photonics	AREA 340 Geothermal Energy
SOET 373 Management Telecommunications	MATH Minor Courses: 341, 361, 351, 371, 461
ELEC 405 Satellite Communications MECH 351 Design of Experiments	SOET374 Industrial Management SOET 349 Industrial Safety and Health ELEC 355 Embedded Electronics
AREA 303 Wind Turbines	ELEC 379 Digital Signal Processing
Or Elective course approved by the program coordinator	

Graduation requirements: 126 semester credit hours with a G.P.A of 2.0 minimum

Name of Student …… Certified for Graduation (YES/No)

SN …… Certified by ……

Class of …….. Total G.P.A …….. Date ……..