



Bachelor of Electrical & Electronics Engineering

The Bachelor of Engineering in Electrical and Electronics is a degree programme designed to equip the learner with theoretical and practical knowledge. The graduates of this programme will demonstrate a keen understanding in the fields of electrical and electronics engineering, applying a systematic approach in areas such as design, operations, planning and consulting.

Career opportunities in this field include: Mining, Building Services, Power Systems, Transmission & Distribution, Digital Systems, Electronics, Maintenance Engineering, Consulting Engineering.

LEVEL 100 - SEMESTER 3

Code	Title	Credits	Core\Elective	Pre-requisite	Co-requisite
MAT111	Mathematics for Engineers I	4	C		
EEL111	Electronics and Electrical Workshop	3	C		
CMS111	Professional Communication Studies	2	C		
EEL112	Electricity and Magnetism	3	C		
ENG111	Engineering Science	3	C		

LEVEL 100 - SEMESTER 4

Code	Title	Credits	Core\Elective	Pre-requisite	Co-requisite
MAT121	Engineering Mathematics II	4	C	MAT111	
CMS121	Engineering Ethics	3	C		
EEL121	DC Principles	3	C		
EEL122	Architecture of Digital Systems	3	C		
EEL123	Introduction to Signals and Communication	3	C		

LEVEL 200 - SEMESTER 5

Code	Title	Credits	Core\Elective	Pre-requisite	Co-requisite
MAT211	Engineering Mathematics III	4	C	MAT121	
EEL211	AC Principles	3	C	EEL121	
EEL212	Digital Electronic Systems	3	C		
EEL213	Introduction to Programming	3	C		
EEL214	Software Engineering Principles	3	C		

LEVEL 200 - SEMESTER 6

Code	Title	Credits	Core\Elective	Pre-requisite	Co-requisite
EEL221	Electrical Measurements	3	C		
EEL222	Signal & Systems	3	C		
EEL223	Electronic Devices	3	C		
EEL224	C++ Programming	3	C	EEL223	
EEL225	Electrical Machines	3	C		

LEVEL 300 - SEMESTER 7

Code	Title	Credits	Core\Elective	Pre-requisite	Co-requisite
EEL311	Analogue Circuit Design	3	C	EEL223	
EEL312	Engineering Electromagnetics	4	C	MAT221	
EEL313	Digital Signal Processing	3	C	EEL222	
EEL314	Power Electronics & Drives	3	C	EEL225	
EEL315	Control Theory I	3	C	MAT221	

LEVEL 300 - SEMESTER 8

Code	Title	Credits	Core\Elective	Pre-requisite	Co-requisite
EEL321	Group Project	6	C		
EEL322	Power Systems	3	C		
EEL323	Control Theory II	3	C	EEL315	
EEL324	Microprocessor Based Systems	3	C		

LEVEL 400 - SEMESTER 9

Code	Title	Credits	Core\Elective	Pre-requisite	Co-requisite
PEEL411	Individual Project	6	C	All year 3 courses	
EEL411	Embedded Systems Design	3	C	EEL324	
EEL412	Power System Analysis	3	C	EEL322	
EEL413	Network Engineering	3	C		

LEVEL 400 - SEMESTER 10

Code	Title	Credits	Core\Elective	Pre-requisite	Co-requisite
PEEL421	Individual Project	6	C	PEEL411	
EEL421	Digital System Design	3	C	EEL222	
EEL422	Network Planning and Optimization	3	C		
EEL423	Power System Design	3	C	EEL412	

Bachelor of Electrical & Electronics Engineering

New Era College's degree programmes have been designed to respond timely and adequately to the ever-growing requirements of the technical industry. The College has brought into fruition, its own Bachelor of Engineering programme in Electrical and Electronics to further enhance the educational skills and knowledge of its learners. Our engineering programmes are designed to reflect and respond to local and regional demands while upholding international industry standards. New Era College's programmes are structured to produce highly specialized engineers for the Electrical and Electronics industry, whose rapidly evolving environment demands the need for a high performance and technically skilled workforce.



About New Era College

New Era College is located in one of Gaborone's up and coming real estate sectors. Constructed on more than eight hectares of land, New Era College's state-of-the-art campus infrastructure facilitates a conducive learning environment and encourages a holistic approach in the development of its students.

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