List of study units offered in to Bachelor of Engineering (Honours) in Electrical and Electronic Engineering (part time course)

Year 1

Semester 1

Compulsory Units (All students **must** register for this/these unit/s)

ENR1120	Fundamentals of Mechanical Engineering	6 ECTS	**(NC)**
EPC1101	Electrical Circuit Theory 1	5 ECTS	**(NC)**
MAT1801	Mathematics for Engineers 1	4 ECTS	**(NC)**
SOR1211	Probability	2 ECTS	**(NC)**

Semester 2

Compulsory Units (All students **must** register for this/these unit/s)

EPC1201	Electrical Circuit Theory 2	5 ECTS	**(NC)**
EPC1202	Introduction to Electrical Energy System	5 ECTS	**(NC)**
MAT1802	Mathematics for Engineers 2	4 ECTS	**(NC)**

Year 2

Semester 1

Compulsory Units (All students **must** register for this/these unit/s)

CIS1113	Introduction to C Programming	4 ECTS	**(NC)**
ENR1112	Technical Report Writing	2 ECTS	**(NC)**
ESE1102	Fundamentals of Electronics	8 ECTS	**(NC)**

Semester 2

Compulsory Units (All students **must** register for this/these unit/s)

ENR2201	Public Speaking	2 ECTS	**(NC)**
ESE1201	Transistor Amplifier Circuits	5 ECTS	**(NC)**
ESE1203	Combinational Logic Circuits	4 ECTS	**(NC)**
SCE1201	Dynamic Systems and Signals 1	5 ECTS	**(NC)**

Year 3

Semester 1

Compulsory Units (All students **must** register for this/these unit/s)

CCE2013	Introduction to Computer Architecture	5 ECTS	**(NC)**
EPC2101	Electrical Machines	5 ECTS	**(NC)**
ESE2103	Operational Amplifiers	5 ECTS	**(NC)**

Semester 2

Compulsory Units (All students **must** register for this/these unit/s)

EPC2102	Electrical Power 1	5 ECTS	**(NC)**
EPC2201	Power Electronics 1	5 ECTS	**(NC)**
SCE2201	Numerical Methods for Engineers	4 ECTS	**(NC)**
SOR1221	Sampling and Estimation	2 ECTS	**(NC)**

Year 4

Semester 1

Compulsory Units (All students **must** register for this/these unit/s)

CIS2111	Introduction to Object Oriented Programming	2 ECTS	**(NC)**
ESE2104	Sequential Logic Circuits	5 ECTS	**(NC)**
MAT2803	Laplace and Fourier Transforms	2 ECTS	**(NC)**
SCE2111	Automatic Control Systems 1	5 ECTS	**(NC)**

Semester 2

Compulsory Units (All students **must** register for this/these unit/s)

ESE2202	Introduction to Microcontrollers	5 ECTS	**(NC)**
ESE2203	Electronic Feedback Circuits	5 ECTS	**(NC)**
SCE2213	Automatic Control Systems 2	5 ECTS	**(NC)**

Year 5 (to choose 3 electives)

Year (this/these study unit/s start/s in Semester 1 and continue/s in Semester 2)

Compulsory Units (All students **must** register for this/these unit/s)

ENR3008	Team Project	5 ECTS	**(NC)**

Semester 1

Compulsory Units (All students **must** register for this/these unit/s)

MAT3815	Mathematics for Engineers 3	4 ECTS

Elective Units (Elective units are offered subject to availability, a minimum number of student registrations and time-table constraints)

ENR3101	Properties and Applications of Electrical and Electronic Materials	5 ECTS
EPC3102	Electrical Power 2	5 ECTS
EPC3103	Power Electronics 2	5 ECTS
ESE3102	Microcontrollers and Interfacing 1	5 ECTS
ESE3103	Introduction to FPGAs	5 ECTS
ESE3106	Electronic Systems 1	5 ECTS
MNE3501	Mixed Mode VLSI	5 ECTS
SCE3113	Automatic Control Systems 3	5 ECTS
SCE3115	Autonomous Robotic Systems	5 ECTS

Semester 2

Compulsory Units (All students **must** register for this/these unit/s)

CCE3320	Communications Theory for Electrical Engineers	6 ECTS	**(NC)**

Elective Units (Elective units are offered subject to availability, a minimum number of student registrations and time-table constraints)

CCE2411	Computer Networks for Electronic Engineering	5 ECTS
CPS1014	Operating Systems	5 ECTS
EPC3104	Electromechanical Drives	5 ECTS
EPC3201	Power Quality	5 ECTS
EPC3202	Industrial Systems	5 ECTS

ESE3203	Digital Design with FPGAs 1	5 ECTS
ESE3204	RF Electronics	5 ECTS
ESE3207	Instrumentation and Data Acquisition Systems 1	5 ECTS
SCE3204	Image Analysis and Computer Vision	5 ECTS
SCE3205	Dynamic Systems and Signals 3	5 ECTS
SCE3216	Automatic Control Systems 4	5 ECTS

Year 6 (to choose 3 electives)

Semester 1

Compulsory Units (All students **must** register for this/these unit/s)

ESE3101	Signal Conditioning and Data Conversion	5 ECTS	**(NC)**
SCE3101	Dynamic Systems and Signals 2	5 ECTS	**(NC)**

Elective Units (Elective units are offered subject to availability, a minimum number of student registrations and time-table constraints)

ENR3101	Properties and Applications of Electrical and Electronic Materials	5 ECTS
EPC3102	Electrical Power 2	5 ECTS
EPC3103	Power Electronics 2	5 ECTS
ESE3102	Microcontrollers and Interfacing 1	5 ECTS
ESE3103	Introduction to FPGAs	5 ECTS
ESE3106	Electronic Systems 1	5 ECTS
MNE3501	Mixed Mode VLSI	5 ECTS
SCE3113	Automatic Control Systems 3	5 ECTS
SCE3115	Autonomous Robotic Systems	5 ECTS

Semester 2

Compulsory Units (All students **must** register for this/these unit/s)

ENR3201	Electromagnetic Theory	5 ECTS	**(NC)**

Elective Units (Elective units are offered subject to availability, a minimum number of student registrations and time-table constraints)

CCE2411	Computer Networks for Electronic Engineering	5 ECTS
CPS1014	Operating Systems	5 ECTS
EPC3104	Electromechanical Drives	5 ECTS
EPC3201	Power Quality	5 ECTS
EPC3202	Industrial Systems	5 ECTS
ESE3203	Digital Design with FPGAs 1	5 ECTS
ESE3204	RF Electronics	5 ECTS
ESE3207	Instrumentation and Data Acquisition Systems 1	5 ECTS
SCE3204	Image Analysis and Computer Vision	5 ECTS
SCE3205	Dynamic Systems and Signals 3	5 ECTS
SCE3216	Automatic Control Systems 4	5 ECTS

Year 7

Semester 1

Elective Units (Elective units are offered subject to availability, a minimum number of student registrations and time-table constraints) **Choose 3 Electives**

EPC4101	Electrical Power 3	5 ECTS	
EPC4102	Electrical Building Technology	5 ECTS	
EPC4103	Electrical Industrial Technology	5 ECTS	
EPC4104	Power Electronic Converters and Distributed Generation	5 ECTS	
EPC4105	Advanced Electrical Drives	5 ECTS	
ESE4105	Radio Electronic Systems	5 ECTS	
ESE4106	Instrumentation and Data Acquisition Systems 2	5 ECTS	
MNE3502	Analogue VLSI 1	5 ECTS	
SCE3112	Control Systems Technology and Automation	5 ECTS	
SCE4101	Computational Intelligence 1	5 ECTS	
SCE4102	Systems Theory	5 ECTS	
SCE4103	An Introduction to Biomedical Signal Analysis	5 ECTS	
SCE4104	Practical Applications in Computer Vision	5 ECTS	

Semester 2 (Choose 1 elective)

Compulsory Units (All students **must** register for this/these unit/s)

ENR4006	Professional Issues in Engineering	3 ECTS	**(NC)**
ENR4301	Engineering Management	5 ECTS	**(NC)**

Students are required to choose One of the following:

ENR4201	Entrepreneurship for Engineers	2 ECTS
IME4202	Industrial Process and Quality Management	2 ECTS

Elective Units (Elective units are offered subject to availability, a minimum number of student registrations and time-table constraints)

EPC4202	Electrical Power Systems Communications and Smart Grids	5 ECTS	
EPC4203	Electrical Transportation Technologies	5 ECTS	
MNE3503	Digital VLSI	5 ECTS	Study unit will be offered again in 2027/28

Year 8

Year (this/these study unit/s start/s in Semester 1 and continue/s in Semester 2)

Compulsory Units (All students **must** register for this/these unit/s)

ENR4200	Engineering Project	20 ECTS	**(NC)**

Semester 1

Elective Units (Elective units are offered subject to availability, a minimum number of student registrations and time-table constraints)

EPC4101	Electrical Power 3	5 ECTS
EPC4102	Electrical Building Technology	5 ECTS
EPC4103	Electrical Industrial Technology	5 ECTS
EPC4104	Power Electronic Converters and Distributed Generation	5 ECTS
EPC4105	Advanced Electrical Drives	5 ECTS
ESE4105	Radio Electronic Systems	5 ECTS
ESE4106	Instrumentation and Data Acquisition Systems 2	5 ECTS
MNE3502	Analogue VLSI 1	5 ECTS
SCE3112	Control Systems Technology and Automation	5 ECTS
SCE4101	Computational Intelligence 1	5 ECTS
SCE4102	Systems Theory	5 ECTS
SCE4103	An Introduction to Biomedical Signal Analysis	5 ECTS
SCE4104	Practical Applications in Computer Vision	5 ECTS

Semester 2

Elective Units (Elective units are offered subject to availability, a minimum number of student registrations and time-table constraints)

EPC4202	Electrical Power Systems Communications and Smart Grids	5 ECTS	
EPC4203	Electrical Transportation Technologies	5 ECTS	
MNE3503	Digital VLSI	5 ECTS	Study unit will be offered again in 2027/28