Bachelor of Technology in Electronics and Communication Engineering (Embedded Systems)
School of Electronics Engineering

Programme Credit Structure	Credits
University Core Courses	**80**
Programme Core Courses	**40**
Programme Elective / Spl. Elective	**20**
University Elective	**20**
Total Graded Credit Requirement	**160**

University Core				**80**
		T	**P**	**C**
MAT1001	Calculus for Engineers	3	2	4
MAT1002	Applications of Differential and Difference Equations	3	2	4
MAT1011	Applied Statistics	3	2	4
PHY1008	Modern Physics	3	2	4
CHY1009	Chemistry and Environmental Studies	3	2	4
CSE1012	Problem Solving using Python	3	2	4
CSE2005	Object Oriented Programming using JAVA	3	2	4
CSE2001	Data Structures and Algorithms	3	2	4
ECE1002	Fundamentals of Electrical and Electronics Engineering	3	2	4
ENG1001/ ENG1002	English for Essential Communication/ English for Effective Communication	2	2	3
ENG1002/ ENG2001	English for Effective Communication / English for Professional Communication	2	2	3
FRLxxxx	Foreign Language	2	0	2
MGT1040	Entrepreneurship	2	0	4
MGT1001	Ethics and Values	2	0	2
	Indian Studies	2	0	2
STSxxxx	Qualitative and Quantitative Skills Practice I	3	0	1
STSxxxx	Qualitative and Quantitative Skills Practice II	3	0	1
BIC4002	Industrial Internship/ Senior Design Project	0	0	12
CAP4001	Capstone	0	0	6
SIT1001	Summer Internship	0	0	2
ECS2002	Engineering Clinics - System Design	0	4	2
ECS3001	Engineering Clinics - Real Time System	0	4	2
EXCXXXX	Extracurricular Activities			2
Programme Core				**40**
PHY1002	Semiconductor Devices and Circuits	4	0	4
ECE2001	Analog Devices and Circuits	3	2	4
ECE1003	Digital Logic Design	3	2	4
ECE2005	Signals and Systems	4	0	4
PHY2001	Applied Electromagnetics	4	0	4
ECE2014	Microprocessors and Microcontrollers	3	2	4
ECE1010	Probability and Random Processes	4	0	4
ECE2006	Communication Systems	3	2	4
ECE3001	Linear Integrated Circuits and Applications	3	2	4
ECE2003	Control Systems Engineering	2	2	4
Programme Electives				**20**
ECE1007	Sensor Systems	3	2	4
ECE2009	Data Acquisition and Transmission Systems	3	2	4
ECE3004	Embedded Hardware Software System Design	3	2	4
ECE3023	Scripting Languages	3	3	4
ECE4003	Embedded C Programming and Linux Development	3	2	4
ECE4007	IoT System Architecture	4	0	4
ECE4011	Robotics and Automation	4	0	4

University Electives **20**

Engineering |Sciences | Humanities | Social Sciences | Liberal arts | Economics | Finance | Management

Honours Degree (20 credits) - Students can opt for an Honours Degree" in the same discipline by earning 20 credits in addition to the minimum credit requirement of the Undergraduate Degree from the courses listed in the Honours options

Minors Degree (20 credits) - Students can opt for a "Minor Degree" in other disciplines 20 credits in addition to the mini-mum credit requirement of the Undergraduate Degree from the courses listed in the Minor options

Double Major Degree (40 credits) -Students can opt for a “Double Major" in other disciplines by earning 40 credits in addition to the minimum credit requirement of the Undergraduate Degree from the courses listed in the Second Major options.