



School of Electronics Engineering (SENSE)
M.Tech - Embedded Systems

CURRICULUM

[Curriculum for Applied Learning (CAL)]

S. No.	Category	Total number of credits
1	University Core (UC)	27
2	University Elective (UE)	06
3	Programme Core (PC)	19
4	Programme Elective (PE)	18
Total Credits		70

University Core - 27 Credits

S. No	Course Code	Course Title	L	T	P	J	C
1	MAT6001	Advanced statistical methods	2	0	2	0	3
2	ENG5001	Fundamentals of Communication Skills	0	0	2	0	2
3	ENG5001 and ENG5002 or EFL5097	Technical English I and Technical English II (or) (Foreign Language)	{0 0 2}	{0 0 0}	{2 2 0}	{0 0 0}	2
4	STS6777	Soft Skills	0	0	0	0	2
5	SET5001	SET Project-I	0	0	0	0	2
6	SET5002	SET Project-II	0	0	0	0	2
7	ECE6099	Master's Thesis	0	0	0	0	16
Total							27

University Elective – 6 Credits

S.No	Course Code	Course Title	L	T	P	J	C
6		University Elective	-	-	-	-	6
Total							6

L – Lecture T – Tutorial

P – Practical

J – Project

C - Credits

Programme Core – 19 Credits

S.No	Course Code	Course Title	L	T	P	J	C
7	ECE5041	Embedded System Design	3	0	0	0	3
8	ECE5042	Microcontroller Architecture and Organization	2	0	2	4	4
9	ECE5053	Electronic Hardware System Design	2	0	2	4	4
10	ECE5043	Embedded Programming	3	0	2	0	4
11	ECE5054	Real Time Operating System	3	0	2	0	4
Total							19

L – Lecture T – Tutorial P – Practical J – Project C - Credits

Programme Electives - 18 Credits

S.No	Course Code	Course Title	L	T	P	J	C
12	ECE6041	Automotive Electrical Systems	3	0	0	0	3
13	ECE6036	In Vehicle Networking	3	0	0	0	3
14	ECE6042	Wireless and Mobile Communication	3	0	0	0	3
15	ECE6043	Advanced Processors and its applications	2	0	0	4	3
16	ECE6044	Electromagnetic Interference and Compatibility in ESD	3	0	0	0	3
17	ECE5045	Advanced Digital Image Processing	3	0	0	0	3
18	ECE6045	Neural networks and Fuzzy Systems	2	0	0	4	3
19	ECE6037	Fault Tolerance and Dependable Systems	2	0	0	0	2
20	ECE6046	Advanced Embedded Programming	3	0	0	0	3
21	ECE6047	Design and Analysis of Algorithms	3	0	0	4	4
22	ECE6038	Virtual Instrumentation Systems	0	0	4	4	3
23	ECE6048	Embedded System design using FPGA	2	0	0	4	3
24	ECE5044	Hardware Software Co-design	3	0	0	0	3
25	ECE6049	Modern automotive electronics systems	2	0	0	4	3
26	CSE6052	Parallel Processing and Computing	3	0	0	0	3