

**Curriculum
Scheme & Syllabi
for M.Tech Course in
ELECTRONICS DESIGN
TECHNOLOGY
of
Kerala Technological University**

Cluster No 09 : Calicut

(With Effect from the Academic Year 2015 onwards)

Scheme of M.Tech. Programme in ELECTRONICS DESIGN TECHNOLOGY

(With Effect from the Academic Year 2015 onwards)

Semester 1 (Credits 23)

Sl No	Course Code	Name of the Subject	Hours / Week			Internal Marks	End Semester Exam		Total Marks	Credits
			L	T	P		Marks	Dur (h)		
1.	09EC6511	System Design using Embedded Processors	3	1	0	40	60	3	100	4
2.	09EC6521	Advanced Engineering Mathematics	3	1	0	40	60	3	100	4
3.	09EC6531	Embedded Programming	3	1	0	40	60	3	100	4
4.	09EC6541	Advanced Digital System Design	3	0	0	40	60	3	100	3
5.	09EC65x5	Elective I	3	0	0	40	60	3	100	3
6.	09EC6551	Research Methodology	0	2	0	100	0	0	100	2
7.	09EC6561	Seminar	0	0	2	100	0	0	100	2
8.	09EC6571	System Design using Embedded Processors - Laboratory	0	0	2	100	0	0	100	1
		Total	16	3	4	500	300		800	23
		Elective I					-			
1.	09EC6515	Electronic System Design								
2.	09EC6525	Wireless Sensor Networks								
3.	09EC6535	Advanced Data Communications								
4.	09EC6545	Software Engineering								

Semester 2 (Credits 19)

Sl No	Course Code	Name of the Subject	Hours / Week			Internal Marks	End Semester Exam		Total Marks	Credits
			L	T	P		Marks	Dur (h)		
1.	09EC6512	Embedded OS & RTOS	3	1	0	40	60	3	100	4
2.	09EC6522	High Speed Digital Design	3	0	0	40	60	3	100	3
3.	09EC6532	Product Design & Development	3	0	0	40	60	3	100	3
4.	09EC65x6	Elective - II	3	0	0	40	60	3	100	3
5.	09EC65x6	Elective - III	3	0	0	40	60	3	100	3
6.	09EC6562	Mini Project	0	0	4	100	0	0	100	2
7.	09EC6572	Embedded OS & RTOS - Laboratory	0	0	2	100	0	0	100	1
		Total	15	1	6	400	300		700	19
		Elective II & III								
1.	09EC6516	Internet of Things (IoT)								
2.	09EC6526	Multimedia Compression Techniques								
3.	09EC6536	Information Security								
4.	09EC6546	ASIC & SOC								
5.	09EC6556	Design of Digital Signal Processing Systems								
6.	09EC6566	Embedded Applications in Power Conversion								
7.	09EC6576	Advanced Networking Technologies								
8.	09EC6586	Electronic Packaging								

L – Lecture, T- Tutorial, P – Practical

Semester 3 (Credits 14)

Sl No	Course Code	Name of the Subject	Hours / Week			Internal Marks	End Semester Exam		Total Marks	Credits	
			L	T	P		Marks	Dur (h)			
1.	09EC75x7	Elective IV	3	0	0	40	60	3	100	3	
2.	09EC75x7	Elective V	3	0	0	40	60	3	100	3	
3.	09EC7563	Seminar	0	0	2	100	0	0	100	2	
4.	09EC7583	Master Research Project Phase I	0	0	12	Guide 20	EC 30	0	0	50	6
		Total	6	0	14	230	120		350	14	
		Elective IV & V									
1.	09EC7517	Wireless Technologies									
2.	09EC7527	Automotive Electronics									
3.	09EC7537	Mixed Signal System Design									
4.	09EC7547	Robotics and Machine Vision									
5.	09EC7557	Electronic Instrumentation Design									
6.	09EC7567	Advanced Digital Communications									
7.	09EC7577	VLSI Signal Processing									
8.	09EC7587	Cloud Computing									

Semester 4 (Credits 12)

Sl No	Course Code	Name of the Subject	Hours / Week			Internal Marks	End Semester Exam		Total Marks	Credits		
			L	T	P		Marks	Dur (h)				
1.	09EC7584	Master Research Project Phase II	0	0	21	Guide 30	Ext expert 30	EC 40	0	0	100	12
		Total	0	0	21	100			0		100	12
		Grand Total				1350	600		1950	68		

EC-Evaluation Committee, L – Lecture, T- Tutorial, P – Practical

Teaching assistance of 6 hours/week in all semesters for GATE students