Curriculum

of M.Tech Course in

ELECTRONICS DESIGN TECHNOLOGY

of

Kerala Technological University

(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.	EDT 15 101	System Design using Embedded Processors	3	1	0	50	50	3	100	4
2.	EDT 15 102	Advanced Engineering Mathematics	3	1	0	50	50	3	100	4
3.	EDT 15 103	Embedded Programming	3	1	0	50	50	3	100	4
4.	EDT 15 104	Advanced Digital System Design	3	0	0	50	50	3	100	3
5.	EDT 15 105	Elective I	3	0	0	50	50	3	100	3
6.	EDT 15 106	Research Methodology	1	1	0	100	0	0	100	2
7.	EDT 15 107	Seminar	0	0	2	100	0	0	100	2
8.	EDT 15 108	System Design using Embedded Processors - Laboratory	0	0	2	100	0	0	100	1
		Total	**16**	**3**	**4**	**550**	**250**		**800**	**23**
		Elective I					-			
1.	A	Electronic System Design								
2.	B	Wireless Sensor Networks								
3.	C	Advanced Data Communications								
4.	D	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.	EDT 15 201	Embedded OS & RTOS	3	1	0	50	50	3	100	4
2.	EDT 15 202	High Speed Digital Design	3	0	0	50	50	3	100	3
3.	EDT 15 203	Product Design & Development	3	0	0	50	50	3	100	3
4.	EDT 15 204	Elective - II	3	0	0	50	50	3	100	3
5.	EDT 15 205	Elective - III	3	0	0	50	50	3	100	3
6.	EDT 15 206	Mini Project	0	0	4	100	0	0	100	2
7.	EDT 15 207	Embedded OS & RTOS - Laboratory	0	0	2	100	0	0	100	1
		Total	**15**	**1**	**6**	**450**	**250**		**700**	**19**
		Elective II & III								
1.	A	Internet of Things (IoT)								
2.	B	Multimedia Compression Techniques								
3.	C	Information Security								
4.	D	ASIC & SOC								
5.	E	Design of Digital Signal Processing Systems								
6.	F	Embedded Applications in Power Conversion								
7.	G	Advanced Networking Technologies								
8.	H	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.	EDT 15 301	Elective IV	3	0	0	50		50	3	100	3
2.	EDT 15 302	Elective V	3	0	0	50		50	3	100	3
3.	EDT 15 303	Seminar	0	0	2	100		0	0	100	2
4.	EDT 15 304	Master Research Project Phase I	0	0	16	Guide	EC	0	0	50	6
						20	30				
		Total	**6**	**0**	**18**	**250**		**100**		**350**	**14**
		Elective IV & V									
1.	A	Wireless Technologies									
2.	B	Automotive Electronics									
3.	C	Mixed Signal System Design									
4.	D	Robotics and Machine Vision									
5.	E	Electronic Instrumentation Design									
6.	F	Advanced Digital Communications									
7.	G	VLSI Signal Processing									
8.	H	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.	EDT 15 401	Master Research Project Phase II	0	0	24	Guide	Ext expert	EC	0	0	100	12
						30	30	40				
		Total	0	0	24	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