

**Syllabi & Scheme**  
**for M.Tech Course in**  
**EMBEDDED SYSTEMS**  
**of Calicut University**

**Scheme of M.Tech. Programme in EMBEDDED SYSTEMS  
(With Effect from the Academic Year 2010 onwards)**

**FIRST SEMESTER**

Sl No	Course Code	Name of the Subject	Hours / Week			Internal	Sem End	Total	Sem-End Exam Duration	Credits
			L	T	P					
1.	ES 10 101	System Design using Embedded Processors	3	1	0	100	100	200	3	4
2.	ES 10 102	Advanced Digital System Design	3	1	0	100	100	200	3	4
3.	ES 10 103	Embedded Programming	3	1	0	100	100	200	3	4
4.	ES 10 104	Advanced Mathematics	3	1	0	100	100	200	3	4
5.	ES 10 105	Elective 1	3	1	0	100	100	200	3	4
6.	ES 10 106(P)	Seminar	0	0	2	100	0	100	-	2
7.	ES 10 107(P)	System Design using Embedded Processors- Laboratory/ Mini Project	0	0	2	100	0	100	-	2
		<b>Total</b>	<b>15</b>	<b>5</b>	<b>4</b>	<b>700</b>	<b>500</b>	<b>1200</b>		<b>24</b>
		<b>Elective 1</b>					-	-		
1.	ES 10 105A	Electronic System Design								
2.	ES 10 105B	Software Engineering								
3.	ES 10 105C	Data Communications and Networking								

**L – Lecture, T- Tutorial, P – Practical,**

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**SECOND SEMESTER**

Sl No	Course Code	Name of the Subject	Hours / Week			Internal	End-Sem	Total	End-Sem Exam Duration	Credits
			L	T	P					
1.	ES 10 201	Design of Digital Signal Processing Systems	3	1	0	100	100	200	3	4
2.	ES 10 202	Embedded OS & RTOS	3	1	0	100	100	200	3	4
3.	ES 10 203	Product Design and Quality Management	3	1	0	100	100	200	3	4
4.	ES 10 204	Elective - II	3	1	0	100	100	200	3	4
5.	ES 10 205	Elective - III	3	1	0	100	100	200	3	4
6.	ES 10 206 (P)	Seminar	0	0	2	100	0	100	-	2
7.	ES 10 207(P)	Design of Digital Signal Processing Systems - Laboratory/ Mini Project	0	0	2	100	0	100	-	2
		<b>Total</b>	<b>15</b>	<b>5</b>	<b>4</b>	<b>700</b>	<b>500</b>	<b>1200</b>		<b>24</b>
		<b>Elective II</b>					-	-		
1.	ES 10 204A	Embedded Applications in Power Conversion								
2.	ES 10 204B	Modern Control Systems Design								
3.	ES 10 204C	Information Security								
		<b>Elective III</b>								
1.	ES 10 205A	High Speed Digital Design								
2.	ES 10 205B	ASIC & SOC								
3.	ES 10 205C	Multimedia Compression Techniques								

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**FOURTH SEMESTER**

SI No	Course Code	Name of the Subject	Hours / Week			Internal Evaluation		ESE*		Total	Credits
			L	T	P	Guide	Evaluation	External Guide	Viva Voce		
1.	ES 10 401(P)	Master Research Project Phase II	0	0	30	150	150	150	150	600	12
Total			-	-	30	150	150	150	150	600	12
			* The student has to undertake the departmental work assigned by HOD								
										<b>Marks</b>	<b>Credits</b>
								<b>Grand Total</b>		<b>3750</b>	<b>75</b>