Rashtreeya Sikshana Samithi Trust

R. V. College of Engineering

(Autonomous Institution Affiliated to Visvesvaraya Technological University, Belagavi)

Department of Electronics & Communication Engineering

Master of Technology (M. Tech.)

VLSI DESIGN
&
EMBEDDED SYSTEMS
(MVE)

Scheme and Syllabus of
Autonomous System w.e.f 2016

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Department of Electronics & Communication Engineering

M. Tech. VLSI Design & Embedded Systems

Sl. No	Course Code	Course Title	BoS	CREDIT ALLOCATION				Total Credits
		FIRST SEMESTER						
				Lecture L	Tutorial T	Practical P	Self Study S	
1	16MEM11R	Research Methodology	IM	3	1	0	0	4
2	16MVE12	Digital IC Design (Theory and Practice)	ECE	4	0	1	0	5
3	16MVE13	Advanced Embedded System Design	ECE	4	0	0	1	5
4	16MVE14	Digital System Design using Verilog	ECE	4	0	0	0	4
5	16MVE15x	Elective 1	ECE	4	0	0	0	4
6	16HSS16	Professional Skill Development	HSS	0	0	2	0	2
		Total		**19**	**1**	**3**	**1**	**24**

Elective-1			
16MVE151	Advanced Embedded Processors	16MVE152	ASIC Design

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				Lecture L	Tutorial T	Practical P	Self Study S	
1	16MEM21P	Project Management	IM	3	1	0	0	4
2	16MVE22	Analog IC Design (Theory and Practice)	ECE	4	0	1	0	5
3	16MVE23x	Elective-2	ECE	4	0	0	0	4
4	16MVE24x	Elective-3	ECE	4	0	0	0	4
5	16MVE25x	Elective-4	ECE	4	0	0	0	4
6	16XXX26	Minor Project	Resp	0	0	5	0	5
		Total		**19**	**1**	**6**	**0**	**26**

(Table title: SECOND SEMESTER)

Elective-2			
16MVE231	CAD Tools for VLSI	16MVE232	Real Time Embedded Systems
Elective-3			
16MVE241	Low Power VLSI Design	16MVE242	Advanced Embedded Programming
Elective-4			
16MVE251	High Speed VLSI Design	16MVE252	MEMS and Smart Systems

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THIRD SEMESTER				CREDIT ALLOCATION				
1	16MVE31	Synthesis & Optimization of Digital Circuits (Theory and Practice)	ECE	4	0	1	0	5
2	16MVE32x	Elective-5	ECE	4	0	0	0	4
3	16MVE33x	Elective-6	ECE	4	0	0	0	4
4	16MVE34x	Elective-7	ECE	4	0	0	0	4
5	16MVE35	Internship/Industrial Training	ECE	0	0	3	0	3
6	16MVE36	Technical Seminar	ECE	0	0	2	0	2
		Total		16	0	6	0	22

Elective-5			
16MVE321	Optimization in Embedded Systems	16MVE322	VLSI testing & Verification
Elective-6			
16MVE331	VLSI for Signal Processing	16MVE332	Mixed Signal IC Design
Elective-7			
16MVE341	Reconfigurable Computing	16MVE342	RFIC Design

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				CREDIT ALLOCATION				
1	16MVE41	Major Project	ECE	0	0	26	0	26
2	16MVE42	Seminar	ECE	0	0	2	0	2
		Total		**0**	**0**	**28**	**0**	**28**