GITAM UNIVERSITY

(Declared as Deemed to be University U/S 3 of UGC Act, 1956)

Scheme of Instruction
OF

M.Tech. (VLSI Design)

(w.e.f 2009 -10 admitted batch)

Gandhi Nagar Campus, Rushikonda
VISAKHAPATNAM – 530 045
Website: www.gitam.edu

M.Tech (VLSI Design)
Programme Code: EPRVD 200801
I Semester

Course Code	Name of the Course	Credits	Hours per Week	Continuous Evaluation	Semester End Examination	Total Marks
EPRVD101	VLSI Technology	4	4L	40	60	100
EPRVD102	Digital IC Design	4	4L	40	60	100
EPRVD103	Digital Logic Design	4	4L	40	60	100
EPRVD104	Analog IC Design	4	4L	40	60	100
EPRVD121 EPRVD122 EPRVD123 EPRVD124 EPRVD125	Elective-I	4	4L	40	60	100
EPRVD111	Technical Seminar I	2	2L	100	-	100
EPRVD112	HDL Programming and EDA Tools Laboratory	2	6P	100	-	100
	Total	24	25	400	300	700

Elective-1

EPRVD121 : Digital Signal Processing
EPRVD122 : Microcontrollers and Applications
EPRVD123 : Wireless Communications and Networks
EPRVD124 : DSP Processors and Architectures
EPRVD125 : Semiconductor Device Modeling

II semester

Course Code	Name of the Course	Credits	Hours per Week	Continuous Evaluation	Semester End Examination	Total Marks
EPRVD201	Analog System Design	4	4L	40	60	100
EPRVD202	Advanced Digital IC Design	4	4L	40	60	100
EPRVD203	VLSI Physical Design	4	4L	40	60	100
EPRVD204	Digital Systems Testing and Testability	4	4L	40	60	100
EPRVD231 EPRVD232 EPRVD233 EPRVD234	Elective –II	4	4L	40	60	100
EPRVD211	Technical Seminar-II	2	2L	100	--	100
EPRVD212	VLSI Design Laboratory	2	6P	100	-	100
EPRVD213	Comprehensive Viva Voce	2	--	--	100	100
	Total	26	25	400	400	800

Elective-II

EPRVD231: Operating Systems
EPRVD232: Advanced Computer Architecture
EPRVD233: Image and Video Processing
EPRVD234: Communication Networks
EPRVD235: Advanced Digital Signal Processing

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III Semester

Course Code	Name of the Course	Credits	Continuous Evaluation	Semester End Examination	Total Marks
EPRVD311	Project Work	8	50	50	100
	Total	8	50	50	100

IV Semester

Course Code	Name of the Course	Credits	Continuous Evaluation	Semester End Examination	Total Marks
EPRVD411	Project work	16	50	50	100
	Total	16	50	50	100

Total Credits 74

M.Tech (VLSI Design)

In the first semester the student learns about VLSI technology, Digital IC technology, VLSI CAD and HDL Lab. In the second semester, the student learns about Analog IC design, Advanced Digital IC design, VLSI physical design and VLSI simulation lab. In the third semester and fourth semesters, he/she has to undergo a project, which is industry oriented. The response from the students is very good and encouraging. Number of students admitted during academic year 2008-09 is 29 and in 2009-10 is 32