ADAMAS UNIVERSITY
KOLKATA
PURSUE EXCELLENCE

Couse Name: Master of Technology (M. Tech.) in VLSI Design

Course Structure

FIRST YEAR

SEMESTER I								
Sl. No	**Type**	**Course code**	**Course Title**	**L**	**T**	**P**	**Contact Hrs/wk**	**Credits**
1	Theory	EEC61131	Core-I: Advances in VLSI Design	3	0	0	3	3
2	Theory	EEC61133	Core-II: VLSI for Digital Signal Processing	3	0	0	3	3
3	Theory		Elective I	3	0	0	3	3
4	Theory		Elective II	3	0	0	3	3
5	Theory		Elective III	3	0	0	3	3
6	Practical	EEC61231	Core I Lab: VHDL Programming Laboratory	0	0	3	3	2
7	Practical	EEC61233	Core II Lab: VLSI for Digital Signal Processing Laboratory	0	0	3	3	2
8	Seminar	EEC61301	Seminar and Technical Writing-I	0	0	2	2	2
			Total	**15**	**0**	**8**	**23**	**21**

SEMESTER II								
Sl. No	**Type**	**Course code**	**Course Title**	**L**	**T**	**P**	**Contact Hrs/wk**	**Credits**
1	Theory	EEC61132	Core III: Electronic Design Automation Tools	3	0	0	3	3
2	Theory	EEC61134	Core IV: Low Power VLSI System Design	3	0	0	3	3
3	Theory		Elective IV	3	0	0	3	3
4	Theory		Elective V	3	0	0	3	3
5	Theory		Elective VI	3	0	0	3	3
6	Practical	EEC61234	Core III Lab: ASIC – CAD Laboratory	0	0	3	3	2

7	Seminar	EEC61302	Seminar and Technical Writing-II	0	0	2	2	2
			Total	**15**	**0**	**5**	**20**	**19**

Total Credit (First Year): 40

SECOND YEAR

SEMESTER III								
Sl. No	**Type**	**Course code**	**Course Title**	**L**	**T**	**P**	**Contact Hrs/wk**	**Credits**
1	Dissertation	EEC62401	Thesis Part I	0	0	24	24	16
2	Seminar	EEC62301	Seminar and Technical Writing III	0	0	2	2	2
			Total	**0**	**0**	**26**	**26**	**18**

SEMESTER IV								
Sl. No	**Type**	**Course code**	**Course Title**	**L**	**T**	**P**	**Contact Hrs/wk**	**Credits**
1	Dissertation	EEC62402	Thesis Part II	0	0	24	24	16
2	Seminar	EEC62302	Seminar and Technical Writing IV	0	0	2	2	2
3	Sessional	EEC62502	Grand Viva					4
			Total	**0**	**0**	**26**	**26**	**22**

Specializations: VLSI Design

EEC61135	Secured Digital System Design
EEC61137	Modelling and Synthesis with Verilog HDL
EEC61139	Internet of Things
EEC61123	Bio Medical System Engineering
EEC61125	CMOS Analog VLSI Design
EEC61126	Visual Sensors and interfaces
EEC61116	VLSI Signal Processing
EEC61151	Fiber Optic Sensors
ECS61153	Artificial Intelligence
EEC61132	Analog and Digital CMOS VLSI Design
EEC61134	Embedded System Design
EEC61136	High Speed System Design
EEC61138	Mixed-Signal Circuit Design
EEC61140	Functional Verification using Hardware Description Languages
EEC61142	Image and Video Processing
EEC61144	Advanced Semiconductor Device Modelling
EEC61146	RF IC design
ECS61148	Soft Computing