ICFAI Tech School

The ICFAI University, Dehradun

Electronics and Communication Engineering Department
M.Tech. Microelectronics &VLSI Design (2015 – 17)

Year	First Semester	Units	Second Semester	Units
1	**MEL 601 HDL –based Digital Design**	4	**MEL 605 CMOS Analog VLSI Design**	4
	MEL 501 Microelectronics Devices and Circuits	4	**MEL 604 Testing and Verification of VLSI Circuits**	4
	MEL 602 Advanced VLSI Technology	4	**IUT 604 Advanced Project-1**	5
	MEL 603 VLSI Physical Design Lab	4	**IUT 602 Professional Practice-1**	4
	IUT 601 Technical Communication	4	**Elective I**	4

Year	Third Semester	Units	Fourth Semester	Units
2	**MEL 608 CAD Algorithms for VLSI Design**	4	**TS 602 Seminar**	5
	IUT 605 Advanced Project-11	5	**TS 601 Dissertation**	25
	Elective II	4		
	Elective III	4		
	IUT 603 Professional Practice -11	4		

II Semester - List of Elective courses

Course Code	Course Title	Units
MEL 502	Advanced Computer Architecture	4
MEL 503	Advanced Digital Signal Processing	4
MEL 607	Introduction to MEMS	4
MEL 609	**Microcontroller and Microprocessor**	**4**

III Semester - List of Elective courses

Course Code	Course Title	Units
MEL 610	**Low Power VLSI Design**	**4**
MEL 611	**Biomedical Electronics**	**4**
MEL 612	Embedded System Design	4
MEL 613	CMOS Mixed signal Circuit Design	4
MEL 614	Memory Circuit Design	4
MEL 615	CMOS RF circuit design	4
MEL 616	Nano Technology and Nano Electronics	4
MEL 617	High Speed VLSI Design	4