Electronics and Communication Engineering Department

National Institute of Technology Delhi

Proposed Curriculum (2015 Onwards)

Master of Technology
(VLSI Design)

Semester I:

Course Code	Course Title	L	T	P	Credit
EVL 561	Semiconductor Devices	3	0	0	3
EVL 562	Digital IC Design	3	0	0	3
EVL 563	Analog IC Design	3	0	0	3
HMP501	Technical Communication	0	0	2	1
EVL 511	Elective-I: Digital Signal Processing	3	0	0	3
EVP 564	Design Laboratory (Digital and Analog)	0	0	6	5
	Total Credit	12	0	8	18

Semester II:

Course Code	Course Title	L	T	P	Credit
EVL 576	System-on-ProgrammableChip Design	3	0	0	3
EVL5xx	Elective-II	3	0	0	3
EVL 5xx	Elective-III	3	0	0	3
EVP 577	High Level Design Lab Chip Design Lab.	0	0	6	3
EVP 578	System-on-Programmable Chip Design Lab	0	0	2	1
EVP 650	Seminar	0	0	2	1
EVP 651A	Project	0	0	8	4
	Total Credit	9	0	12	18

Semester III:

Course Code	Course Title	L	T	P	Credit
ECL 5xx	Elective-IV	3	0	0	3
EVP 651B	Project	0	0	30	13
	Total Credit	3	0	30	16

Semester IV:

Course Code	Course Title	L	T	P	Credit
EVP 651C	Project	0	0	36	16
	Total Credit	0	0	36	16

List of Elective Subjects

Category I: Programme Electives

Course Code	Course Title	L	T	P	Credit
EVL 511	Digital Signal Processing	3	0	0	3
EVL 512	VLSI Systems Design	3	0	0	3
EVL 513	Embedded Systems & RTOS	3	0	0	3
EVL 514	Mixed Signal IC Design	3	0	0	3
EVL 515	VLSI Testing	3	0	0	3
EVL 516	RF IC Design	3	0	0	3
EVL 517	VLSI Technology	3	0	0	3

Category II: General or Related Electives

Course Code	Course Title	L	T	P	Credit
EVL 521	Low Power Design Techniques	3	0	0	3
EVL 522	Mapping Signal Processing Algorithms on DSP Architectures	3	0	0	3
EVL 523	MOS Device Modeling and Characterization	3	0	0	3
EVL 524	Architectural Design of IC's	3	0	0	3
EVL 525	High Speed system (board level) Design- (includes PCB design, thermal management, power supply)	3	0	0	3