BRAINWARE UNIVERSITY
School of Engineering
Department of Electronics & Communication Engineering
Programme Structure: Master of Technology in Electronics & Communication Engineering - VLSI Design
2021

Semester –I

Course Code	Course Name	L – T – P	Credits	Total Marks
PCC-MVLSI101	Semiconductor Physics and Devices	3 – 0– 0	3	100
PCC-MVLSI102	Digital IC Design	3 – 0– 0	3	100
PCC-MVLSI103	Analog IC Design	3 – 0– 0	3	100
PEC-MVLSI101	**Elective I** A. Nano-Scale Devices: Modelling and Circuits B. High Speed System Design	3 – 0– 0	3	100
PCC-MVLSI191	HDL Based Design and Simulation Lab	0 – 0 – 4	2	100
PCC-MVLSI192	Semiconductor Device Simulation Laboratory	0 – 0 – 4	2	100
HSMC-MVLSI101	Research Methodology and IPR	2 – 0 – 0	2	100
	Total		**18**	**700**
MC-MVLSI181	A. Disaster Management B. Constitution of India	2 – 0 – 0	0	100

Semester –II

Course Code	Course Name	L – T – P	Credits	Total Marks
PCC-MVLSI201	IC Fabrication Technology	3 – 0– 0	3	100
PEC-MVLSI201	**Elective – II** A. Low power VLSI Design B. SoC Design	3 – 0– 0	3	100
PEC-MVLSI202	**Elective – III** A. Mixed signal Circuit Design B. RF IC Design	3 – 0– 0	3	100
PEC-MVLSI203	**Elective – IV** A. Testability of Analog / Mixed-Signal Circuits and High Speed Circuit Design B. RF MEMS	3 – 0– 0	3	100
PCC-MVLSI291	Analog IC Design LAB	0 – 0 – 4	2	100
PCC-MVLSI292	ASIC CAD Laboratory	0 – 0 – 4	2	100
PROJ-MVLSI281	Term paper leading to thesis	2 – 0 – 0	2	100
	Total		**18**	**700**
MC-MVLSI281	A. Value Education B. Research Paper Writing	2 – 0 – 0	0	100

BRAINWARE UNIVERSITY
School of Engineering
Department of Electronics & Communication Engineering
Programme Structure: Master of Technology in Electronics & Communication Engineering - VLSI Design
2021

Semester –III

Course Code	Course Name	L – T – P	Credits	Total Marks
PEC-MVLSI301	**Elective – V** A. Digital Signal Processing B. VLSI Signal Processing	3 – 0– 0	3	100
OEC-MVLSI301	A. Business Analytics B. Industrial Safety C. Operations Research D. Cost Management of Engineering Projects E. Composite Materials F. Waste to Energy	3 – 0– 0	3	100
PROJ-MVLSI381	Dissertation Phase – I	0 – 0– 20	10	100
	Total		**16**	**300**

Semester - IV

Course Code	Course Name	L – T – P	Credits	Total Marks
PROJ-MVLSI481	Dissertation Phase – II	0 – 0– 32	16	100
	Total		**16**	**100**

Total Credits: 68