

M.Tech (ECE- Communication and Signal Processing)

Semester I				
Course Type	L-T-P	Credits	Name of the Course	Course Code
DC 1	3 1 0	4	Emerging Communication Systems	NECC501
DC 2	3 1 0	4	Mathematics for Communication Theory	NECC502
DC 3	3 1 0	4	Wireless Networks	NECC503
DE 1	3 0 0	3	--	
DE 2	3 0 0	3	--	
DP 1	0 0 3	1.5	5G Communication Systems Lab	NECC515
DP 2	0 0 3	1.5	Communication Networks Lab	NECC516
DP 3	0 0 3	1.5	Modeling and Simulation Lab-I	NECC517
Total Credits 22.5				

Semester III				
Course Type	L-T-P	Credits	Name of the Course	Course Code
TU 1	0 0 0	20	Thesis	NECC597
Total Credits 20				

Semester II				
Course Type	L-T-P	Credits	Name of the Course	Course Code
DC 4	3 1 0	4	Statistical Signal Processing	NECC532
DC 5	3 1 0	4	Optimization Theory and Techniques	NECC504
DC 6	3 1 0	4	Estimation and Detection Theory	NECC533
DE 3	3 0 0	3	--	
RM	3 0 0	3	Research Methodology	NECC595
DP 4	0 0 3	1.5	Signal Processing Lab	NECC518
DP 5	0 0 3	1.5	Optimization and Machine Learning Lab	NECC519
DP 6	0 0 3	1.5	Modeling and Simulation Lab-II	NECC520
Total Credits 22.5				

Semester IV				
Course Type	L-T-P	Credits	Name of the Course	Course Code
TU 2	0 0 0	20	Thesis	NECC598
Total Credits 20				

M.Tech (ECE - Optical Communication and Integrated Photonics)

Semester I				
Course Type	L-T-P	Credits	Name of the Course	Course Code
DC 1	3 1 0	4	Emerging Communication Systems	NECC501
DC 2	3 1 0	4	Optical Fiber Communications	NECC505
DC 3	3 1 0	4	Wireless Networks	NECC503
DE 1	3 0 0	3	--	
DE 2	3 0 0	3	--	
DP 1	0 0 3	1.5	5G Communication Systems Lab	NECC515
DP 2	0 0 3	1.5	Optical Communication Lab	NECC521
DP 3	0 0 3	1.5	Communication Networks Lab	NECC516
Total Credits 22.5				

Semester III				
Course Type	L-T-P	Credits	Name of the Course	Course Code
TU 1	0 0 0	20	Thesis	NECC597
Total Credits 20				

Semester II				
Course Type	L-T-P	Credits	Name of the Course	Course Code
DC 4	3 1 0	4	Optoelectronic and Photonic Devices	NECC506
DC 5	3 1 0	4	Optimization Theory and Techniques	NECC504
DC 6	3 1 0	4	Photonic Integrated Circuits	NECC507
DE 3	3 0 0	3	--	
RM	3 0 0	3	Research Methodology	NECC595
DP 4	0 0 3	1.5	Optoelectronic and Photonic Devices Lab	NECC522
DP 5	0 0 3	1.5	Photonic IC CAD Lab	NECC523
DP 6	0 0 3	1.5	Photonics Project Lab	NECC524
Total Credits 22.5				

Semester IV				
Course Type	L-T-P	Credits	Name of the Course	Course Code
TU 2	0 0 0	20	Thesis	NECC598
Total Credits 20				

M.Tech (ECE- RF and Microwave Engineering)

Semester I				
Course Type	L-T-P	Credits	Name of the Course	Course Code
DC 1	3 1 0	4	Emerging Communication Systems	NECC501
DC 2	3 1 0	4	Advanced Engineering Electromagnetics	NECC508
DC 3	3 1 0	4	Microwave Measurements	NECC509
DE 1	3 0 0	3	--	
DE 2	3 0 0	3	--	
DP 1	0 0 3	1.5	5G Communication Systems Lab	NECC515
DP 2	0 0 3	1.5	RF and CAD Laboratory	NECC525
DP 3	0 0 3	1.5	Microwave Measurements Lab	NECC526
Total Credits 22.5				

Semester III				
Course Type	L-T-P	Credits	Name of the Course	Course Code
TU 1	0 0 0	20	Thesis	NECC597
Total Credits 20				

Semester II				
Course Type	L-T-P	Credits	Name of the Course	Course Code
DC 4	3 1 0	4	Microwave Circuits and Networks	NECC535
DC 5	3 1 0	4	Advanced Antenna Theory	NECC534
DC 6	3 1 0	4	Microwave Transmission Lines and Matching Networks	NECC510
DE 3	3 0 0	3	--	
RM	3 0 0	3	Research Methodology	NECC595
DP 4	0 0 3	1.5	RF Circuits and Networks Simulation Lab	NECC538
DP 5	0 0 3	1.5	Antenna Simulation Lab	NECC539
DP 6	0 0 3	1.5	RF Project Lab	NECC540
Total Credits 22.5				

Semester IV				
Course Type	L-T-P	Credits	Name of the Course	Course Code
TU 2	0 0 0	20	Thesis	NECC598
Total Credits 20				

M.Tech (ECE- VLSI Design)

Semester I				
Course Type	L-T-P	Credits	Name of the Course	Course Code
DC 1	3 1 0	4	Analog IC Design	NECC511
DC 2	3 1 0	4	Digital IC Design	NECC512
DC 3	3 1 0	4	CAD for VLSI	NECC513
DE 1	3 0 0	3	--	
DE 2	3 0 0	3	--	
DP 1	0 0 3	1.5	Circuit Simulation Lab	NECC531
DP 2	0 0 3	1.5	HDL-based System Design Lab	NECC527
DP 3	0 0 3	1.5	VLSI Design and Project Lab-I	NECC528
Total Credits 22.5				

Semester II				
Course Type	L-T-P	Credits	Name of the Course	Course Code
DC 4	3 1 0	4	MOS Device Physics and Modeling	NECC514
DC 5	3 1 0	4	Current Mode Analog Circuits	NECC536
DC 6	3 1 0	4	Embedded System Design	NECC537
DE 3	3 0 0	3	--	
RM	3 0 0	3	Research Methodology	NECC595
DP 4	0 0 3	1.5	Device Simulation Lab	NECC529
DP 5	0 0 3	1.5	Embedded System Design Lab	NECC541
DP 6	0 0 3	1.5	VLSI Design and Project Lab-II	NECC530
Total Credits 22.5				

Semester III				
Course Type	L-T-P	Credits	Name of the Course	Course Code
TU 1	0 0 0	20	Thesis	NECC597
Total Credits 20				

Semester IV				
Course Type	L-T-P	Credits	Name of the Course	Course Code
TU 2	0 0 0	20	Thesis	NECC598
Total Credits 20				