

Department of Electronics and Communication Engineering
Faculty of Engineering and Technology
Jamia Millia Islamia, New Delhi
M. Tech. in Electronics and Communication

Course Structure under the Choice Base Credit System (CBCS) with effective from July 2026

Category of Courses

DC: Departmental Core
CBCS: Choice Based Credit System
SEC: Skill Enhancement Courses
DE: Departmental Electives

Abbreviation

L Lecture
T Tutorial
P Practical
CCA Continuous Class Assessment
MSE Mid Semester Evaluation

M. Tech. in Electronics and Communication Engineering –I Year

First Semester												
S. No	Course No.	Course Name	Type of Course	CREDIT	Periods Per week			Examination Scheme (Distribution of Marks)				
					L	T	P	Mid Semester Evaluation			End Semester Evaluation	Total Marks
								CCA	MSE-1	MSE-2		
01	MEC-101	Semiconductor Device Modeling	DC	4	3	1	-	10	15	15	60	100
02	MEC-102	Electronics System Design and Verification using HDL	CBCS	4	3	1	-	10	15	15	60	100
03	MEC-103	Telecommunication Switching & Networks	DC	4	3	1	-	10	15	15	60	100
04	Elective-I	Elective – I	DE	4	3	1	-	10	15	15	60	100
05	Elective-II	Elective – II	DE	4	3	1	-	10	15	15	60	100
PRACTICAL (LAB.)												
06	MEC-151	Advanced VLSI Lab	SEC	2	-	-	4	30	-	-	20	50
07	MEC-152	Advanced Communication Systems Lab	SEC	2	-	-	4	30	-	-	20	50
Total				24								600

Elective –I: MEC-104 Software Defined Network, MEC-105 Information Theory and Coding
Elective –II: MEC-106 Emerging Nanoelectronic Devices, MEC-107 Nanoscale Materials and Devices

Second Semester												
S. No	Course No.	Course Name	Type of Course	CREDIT	Periods Per week			Examination Scheme (Distribution of Marks)				
					L	T	P	Mid Semester Evaluation			End Semester Evaluation	Total Marks
								CCA	MSE-1	MSE-2		
01	MEC-201	Advanced Analog Signal Processing	DC	4	3	1	-	10	15	15	60	100
02	MEC-202	Advanced Digital Signal Processing	CBCS	4	3	1	-	10	15	15	60	100
03	MEC-203	Advanced Computer Networks	DC	4	3	1	-	10	15	15	60	100
04	MEC-204	Optical Communication and Networks	DC	4	3	1	-	10	15	15	60	100
05	Elective-III	Elective – III	DE	4	3	1	-	10	15	15	60	100
PRACTICAL (LAB.)												
06	MEC-251	Optoelectronics and Optical Communication Lab	SEC	2	-	-	4	30	-	-	20	50
07	MEC-252	Seminar	SEC	2	-	-	4	30	-	-	20	50
Total				24								Total 600

Elective –III: MEC-205 Low Power VLSI Design, MEC-206 RF Circuits and Systems

Third Semester												
S. No	Course No.	Course Name	Type of Course	CREDIT	Periods Per week			Examination Scheme (Distribution of Marks)				
					L	T	P	Mid Semester Evaluation			End Semester Evaluation	Total Marks
								CCA	MSE-1	MSE-2		
01	MEC-301	Embedded Systems and IoT	CBCS	4	3	1	-	10	15	15	60	100
02	Elective –IV	Elective –IV	SEC	4	3	1	-	10	15	15	60	100
PRACTICAL (LAB.)												
03	MEC-351	Minor Project	DC	6	-	-	12	90	-	-	60	150
04	MEC-352	Advanced Digital Signal Processing Lab	SEC	2	-	-	4	30	-	-	20	50
Total				16								400

Elective –IV: MEC-302 Mobile Communication and Networks, MEC-303 5G and Beyond Communication Systems

Fourth Semester												
S. No	Course No.	Course Name	Type of Course	CREDIT	Periods Per week			Examination Scheme (Distribution of Marks)				
S. No	Course No.	Course Name	Type of Course	CREDIT	L	T	P	Mid Semester Evaluation			End Semester Evaluation	Total Marks
								CCA	MSE-1	MSE-2		
01	MEC-401	Dissertation	DC	12	-	-	24	180	-	-	120	300
Total				12								Total 300

Total Credits (24+24+16+12) = 76

अध्यक्ष / Head
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Website: www.jmi.ac.in

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