

MDM Credit System AY 25-26 onwards

1. MDM in Communication System and Networks

S. N.	Semester	Course Title	Code	L	T	I	P	C	MSE/LA1	ISE/LA2	ESE
1	IV	Fundamentals of Digital Communication and Networking	7MD251	2	0	1	0	3	30	20	50
2	V	IoT, Cloud and Edge Communication Protocols	7MD311	2	0	1	0	3	30	20	50
3	VI	5G Systems	7MD351	2	0	1	0	3	30	20	50
4	A/B	Embedded Systems Integration with 5G	7MD401	2	0	0	2	3	30	20	50
5	A/B	Mini Project	7MD451	0	0	0	4	2	30	30	40
Total				8	0	3	6	14			

2. MDM in Semiconductor Technology

S. N.	Semester	Course Title	Code	L	T	I	P	C	MSE/LA1	ISE/LA2	ESE
1	IV	Solid State Electronic Devices	7MD252	2	0	1	0	3	30	20	50
2	V	Semiconductor Material and Device Characterization	7MD312	2	0	1	0	3	30	20	50
3	VI	Semiconductor Nanofabrication	7MD352	2	0	1	0	3	30	20	50
4	A/B	Microelectromechanical Systems	7MD402	2	0	1	0	3	30	20	50
5	A/B	Mini Project	7MD452	0	0	0	4	2	30	30	40
Total				8	0	4	4	14			

3. MDM in VLSI Design

S. N.	Semester	Course Title	Code	L	T	I	P	C	MSE/LA1	ISE/LA2	ESE
1	IV	Introduction to Verilog Programming	7MD253	2	0	0	2	3	30	20	50
2	V	Verilog based System Design	7MD313	2	0	1	0	3	30	20	50
3	VI	Digital System Architecture	7MD353	2	0	1	0	3	30	20	50
4	A/B	Testing and Verification of VLSI Circuits	7MD403	2	0	1	0	3	30	20	50
5	A/B	Mini Project	7MD453	0	0	0	4	2	30	30	40
Total				8	0	3	6	14			



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4. MDM in Embedded Systems & RTOS

S. N.	Semester	Course Title	Code	L	T	I	P	C	MSE/LA1	ISE/LA2	ESE
1	IV	Digital Systems and Microprocessors	7MD254	2	0	1	0	3	30	20	50
2	V	Microcontroller A/Based Systems	7MD314	2	0	0	2	3	30	20	50
3	VI	Embedded System Design	7MD354	2	0	0	2	3	30	20	50
4	A/B	Real Time Operating Systems	7MD404	2	0	1	0	3	30	20	50
5	A/B	Mini Project	7MD454	0	0	0	4	2	30	30	40
Total				8	0	2	8	14			

5. MDM in Geomatics Engineering

S. N.	Semester	Course Title	Code	L	T	I	P	C	MSE/LA1	ISE/LA2	ESE
1	IV	Surveying and Mapping	7MD255	2	0	1	0	3	30	20	50
2	V	Digital Image Processing and Remote Sensing	7MD315	2	0	0	2	3	30	20	50
3	VI	Geographic Information System	7MD355	2	0	0	2	3	30	20	50
4	A/B	Geospatial Data Analytics and Applications	7MD405	2	0	1	0	3	30	20	50
5	A/B	Mini project	7MD455	0	0	0	4	2	30	30	40
Total				8	0	2	8	14			

6. MDM in Art and Technology

S. N.	Semester	Course Title	Code	L	T	I	P	C	MSE/LA1	ISE/LA2	ESE
1	IV	Principles of Drawing and Sketching	7MD256	2	0	0	2	3	30	20	50
2	V	History of Indian Art	7MD316	2	0	1	0	3	30	20	50
3	VI	2D Animation and multimedia techniques	7MD356	2	0	1	0	3	30	20	50
4	A/B	3D Product design development	7MD406	2	0	0	2	3	30	20	50
5	A/B	Mini Project	7MD456	0	0	0	4	2	30	30	40
Total				8	0	2	8	14			



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7. MDM in Cloud Infrastructure & Automation

S. N.	Semester	Course Title	Code	L	T	I	P	C	MSE/LA1	ISE/LA2	ESE
1	IV	Cloud Network & Fundamentals	7MD257	2	0	1	0	3	30	20	50
2	V	Virtualization Technologies	7MD317	2	0	0	2	3	30	20	50
3	VI	Cloud Computing Systems	7MD357	2	0	1	0	3	30	20	50
4	A/B	Enterprise Cloud Platforms: AWS & Azure	7MD407	2	0	0	2	3	30	20	50
5	A/B	Mini Project	7MD457	0	0	0	4	2	30	30	40
Total				8	0	2	8	14			

8. MDM in Cyber security and Digital Forensics

S. N.	Semester	Course Title	Code	L	T	I	P	C	MSE/LA1	ISE/LA2	ESE
1	IV	Cybersecurity Essentials	7MD258	2	0	1	0	3	30	20	50
2	V	Digital Forensics & Incident Response	7MD318	2	0	1	0	3	30	20	50
3	VI	Advanced Cyber Threats & Defence	7MD358	2	0	0	2	3	30	20	50
4	A/B	Cybersecurity Policy, Governance & Ethics	7MD408	2	0	1	0	3	30	20	50
5	A/B	Mini Project	7MD458	0	0	0	4	2	30	30	40
Total				8	0	3	6	14			

9. MDM in AIML

S. N.	Semester	Course Title	Code	L	T	I	P	C	MSE/LA1	ISE/LA2	ESE
1	IV	Essentials of AI	7MD259	2	0	1	0	3	30	20	50
2	V	Searches and Logic in AI	7MD319	2	0	1	0	3	30	20	50
3	VI	Machine Learning using Python	7MD359	2	0	0	2	3	30	20	50
4	A/B	Deep learning and Generative AI	7MD409	2	0	1	0	3	30	20	50
5	A/B	Mini Project	7MD459	0	0	0	4	2	30	30	40
Total				8	0	3	6	14			



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10. MDM in AgriTech

S. N.	Semester	Course Title	Code	L	T	I	P	C	MSE/LA1	ISE/LA2	ESE
1	IV	<u>Precision Agriculture</u>	7MD260	2	0	1	0	3	30	20	50
2	V	Mechanization in Agriculture	7MD320	2	0	1	0	3	30	20	50
3	VI	Post-harvest Management	7MD360	2	0	1	0	3	30	20	50
4	A/B	AI-Enabled Agriculture	7MD410	2	0	0	2	3	30	20	50
5	A/B	Mini Project	7MD460	0	0	0	4	2	30	30	40
Total				8	0	3	6	14			

11. MDM in Sustainability

S. N.	Semester	Course Title	Code	L	T	I	P	C	MSE/LA1	ISE/LA2	ESE
1	IV	<u>Sustainable Energy Transition in India</u>	7MD261	2	0	1	0	3	30	20	50
2	V	Sustainable Electronics	7MD321	2	0	1	0	3	30	20	50
3	VI	Design Thinking for Sustainability	7MD361	2	0	1	0	3	30	20	50
4	A/B	Green Computing	7MD411	2	0	1	0	3	30	20	50
5	A/B	Mini Project in Sustainability	7MD461	0	0	0	4	2	30	30	40
Total				8	0	4	4	14			

12. MDM in Industry 4.0

S. N.	Semester	Course Title	Code	L	T	I	P	C	MSE/LA1	ISE/LA2	ESE
1	IV	<u>Cyber-Physical Manufacturing</u>	7MD262	2	0	1	0	3	30	20	50
2	V	Digital Twin and Robotics	7MD322	2	0	1	0	3	30	20	50
3	VI	Next-Gen Manufacturing	7MD362	2	0	1	0	3	30	20	50
4	A/B	Reliability and Industrial Automation	7MD412	2	0	1	0	3	30	20	50
5	A/B	Mini Project	7MD462	0	0	0	4	2	30	30	40
Total				8	0	4	4	14			



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13. MDM in Industrial Engineering and Operations Research

S. N.	Semester	Course Title	Code	L	T	I	P	C	MSE/LA1	ISE/LA2	ESE
1	IV	<u>Introduction to Industrial Engineering</u>	7MD263	2	0	1	0	3	30	20	50
2	V	Operations Research Methods	7MD323	2	0	1	0	3	30	20	50
3	VI	Quality Control and Reliability	7MD363	2	0	1	0	3	30	20	50
4	A/B	Inventory and Supply Chain Management	7MD413	2	0	1	0	3	30	20	50
5	A/B	Mini Project	7MD463	0	0	0	4	2	30	30	40
Total				8	0	4	4	14			

14. MDM in Construction and Project Management

S. N.	Semester	Course Title	Code	L	T	I	P	C	MSE/LA1	ISE/LA2	ESE
1	IV	<u>Project Management for Infrastructure Development</u>	7MD264	2	0	1	0	3	30	20	50
2	V	Human Resource and Labour Management	7MD324	2	0	1	0	3	30	20	50
3	VI	Occupational Health and Safety Management	7MD364	2	0	1	0	3	30	20	50
4	A/B	Finance and Contract Management	7MD414	2	0	1	0	3	30	20	50
5	A/B	Mini Project	7MD464	0	0	0	4	2	30	30	40
Total				8	0	4	4	14			

15. MDM in Systems Engineering

S. N.	Semester	Course Title	Code	L	T	I	P	C	MSE/LA1	ISE/LA2	ESE
1	IV	<u>Data Interpretation and Analysis</u>	7MD265	2	0	1	0	3	30	20	50
2	V	Fundamentals of System Engineering and Architecture	7MD325	2	0	1	0	3	30	20	50
3	VI	System Dynamics	7MD365	2	0	1	0	3	30	20	50
4	A/B	Digital Twin Techniques	7MD415	2	0	1	0	3	30	20	50
5	A/B	Mini Project	7MD465	0	0	0	4	2	30	30	40
Total				8	0	4	4	14			


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16. MDM in Quantum Technology

S. N.	Semester	Course Title	Code	L	T	I	P	C	MSE/LA1	ISE/LA2	ESE
1	IV	<u>Foundations of Quantum Computing</u>	7MD266	2	0	1	0	3	30	20	50
2	V	Quantum Algorithms	7MD326	2	0	0	2	3	30	20	50
3	VI	Quantum Hardware, Error & Noise Mitigation	7MD366	2	0	1	0	3	30	20	50
4	A/B	Advances in Quantum Technology	7MD416	2	0	1	0	3	30	20	50
5	A/B	Mini Project	7MD466	0	0	0	4	2	30	30	40
Total				8	0	3	6	14			

17. MDM in Innovation and Entrepreneurship Development

S. N.	Semester	Course Title	Code	L	T	I	P	C	MSE/LA1	ISE/LA2	ESE
1	IV	<u>Fundamentals of Innovation and Entrepreneurship</u>	7MD267	2	0	1	0	3	30	20	50
2	V	Ideation to Prototyping – Designing for Success	7MD327	2	0	1	0	3	30	20	50
3	VI	Defining Your A/Business Strategy	7MD367	2	0	1	0	3	30	20	50
4	A/B	A/Business Acceleration and Scaling	7MD417	2	0	1	0	3	30	20	50
5	A/B	Creating your own Venture	7MD467	0	0	0	4	2	30	30	40
Total				8	0	4	4	14			

18. MDM in Smart Cities

S. N.	Semester	Course Title	Code	L	T	I	P	C	MSE/LA1	ISE/LA2	ESE
1	IV	<u>Introduction to Urban Planning</u>	7MD268	2	0	1	0	3	30	20	50
2	V	Smart Infrastructure	7MD328	2	0	1	0	3	30	20	50
3	VI	<u>Data Science and Analytics for Smart Cities</u>	7MD368	2	0	1	0	3	30	20	50
4	A/B	Green Technology and sustainability	7MD418	2	0	1	0	3	30	20	50
5	A/B	Mini project	7MD468	0	0	0	4	2	30	30	40
Total				8	0	4	4	14			



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19. MDM in EV

S. N.	Semester	Course Title	Code	L	T	I	P	C	MSE/LA1	ISE/LA2	ESE
1	IV	<u>Introduction to Electric Vehicles</u>	7MD269	2	0	1	0	3	30	20	50
2	V	Drives and Control for Electric Vehicles	7MD329	2	0	1	0	3	30	20	50
3	VI	<u>Embedded Systems for Automotive Applications</u>	7MD369	2	0	0	2	3	30	20	50
4	A/B	Intelligent EV Ecosystems	7MD419	2	0	1	0	3	30	20	50
5	A/B	Mini Project	7MD469	0	0	0	4	2	30	30	40
Total				8	0	3	6	14			

20. MDM in Fintech

S. N.	Semester	Course Title	Code	L	T	I	P	C	MSE/LA1	ISE/LA2	ESE
1	IV	<u>Introduction to Financial Markets</u>	7MD270	2	0	1	0	3	30	20	50
2	V	Risk Management and Compliance	7MD330	2	0	1	0	3	30	20	50
3	VI	<u>Financial Modelling</u>	7MD370	2	0	1	0	3	30	20	50
4	A/B	Data Science and analytics for FinTech	7MD420	2	0	1	0	3	30	20	50
5	A/B	Mini Project	7MD470	0	0	0	4	2	30	30	40
Total								14			

21. MDM in Robotics and Automation

S. N.	Semester	Course Title	Code	L	T	I	P	C	MSE/LA1	ISE/LA2	ESE
1	IV	<u>Fundamentals of Robotics and Automation</u>	7MD271	2	0	1	0	3	30	20	50
2	V	Robot Kinematics and Dynamics	7MD331	2	0	1	0	3	30	20	50
3	VI	<u>Computer Vision in Robotics</u>	7MD371	2	0	1	0	3	30	20	50
4	A/B	Control of Robotics Systems	7MD421	2	0	1	0	3	30	20	50
5	A/B	Mini Project	7MD471	0	0	0	4	2	30	30	40
Total				8	0	4	4	14			


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22. MDM in Electronics Engineering

S. N.	Semester	Course Title	Code	L	T	I	P	C	MSE/LA1	ISE/LA2	ESE
1	IV	<u>Electronic Devices and Circuits</u>	7MD272	2	0	1	0	3	30	20	50
2	V	Digital Systems	7MD332	2	0	1	0	3	30	20	50
3	VI	Microprocessors and Microcontrollers	7MD372	2	0	0	2	3	30	20	50
4	A/B	Communication Engineering	7MD422	2	0	1	0	3	30	20	50
5	A/B	Mini Project	7MD472	0	0	0	4	2	30	30	40
Total				8	0	3	6	14			

23. MDM in Information Technology

S. N.	Semester	Course Title	Code	L	T	I	P	C	MSE/LA1	ISE/LA2	ESE
1	IV	<u>Data Structure and Algorithm</u>	7MD273	2	0	0	2	3	30	20	50
2	V	Operating System and Computer Networks	7MD333	2	0	1	0	3	30	20	50
3	VI	Database Engineering and Web Technology	7MD373	2	0	0	2	3	30	20	50
4	A/B	Open Source Software Engineering	7MD423	2	0	1	0	3	30	20	50
5	A/B	Mini-Project	7MD473	0	0	0	4	2	30	30	40
Total				8	0	2	8	14			

24. MDM in Computer Science and Engineering

S. N.	Semester	Course Title	Code	L	T	I	P	C	MSE/LA1	ISE/LA2	ESE
1	IV	<u>Data Structure and Algorithm</u>	7MD274	2	0	0	2	3	30	20	50
2	V	Software Engineering and Database Essentials	7MD334	2	0	0	2	3	30	20	50
3	VI	Professional Elective (Theory) AIML/Data Analytics/ Soft Computing	7MD374	2	0	0	2	3	30	20	50
4	A/B	Networking and security	7MD424	2	0	1	0	3	30	20	50
5	A/B	Mini-Project	7MD474	0	0	0	4	2	30	30	40
Total				8	0	3	6	14			


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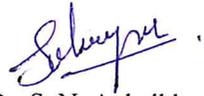

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25. MDM in Mechanical Engineering

S. N.	Semester	Course Title	Code	L	T	I	P	C	MSE/LA1	ISE/LA2	ESE
1	IV	<u>Elements of Mechanical Engineering</u>	7MD275	2	0	1	0	3	30	20	50
2	V	Manufacturing Systems	7MD335	2	0	1	0	3	30	20	50
3	VI	Thermal Engineering	7MD375	2	0	0	2	3	30	20	50
4	A/B	Industrial Engineering	7MD425	2	0	1	0	3	30	20	50
5	A/B	Mini Project	7MD475	0	0	0	4	2	30	30	40
Total				8	0	3	6	14			

26. MDM in Civil Engineering

S. N.	Semester	Course Title	Code	L	T	I	P	C	MSE/LA1	ISE/LA2	ESE
1	IV	<u>Modern A/Built Environment</u>	7MD276	2	0	1	0	3	30	20	50
2	V	Urban planning	7MD336	2	0	1	0	3	30	20	50
3	VI	Sustainable construction	7MD376	2	0	1	0	3	30	20	50
4	A/B	Civil Infrastructure Systems	7MD426	2	0	1	0	3	30	20	50
5	A/B	Mini Project	7MD476	0	0	0	4	2	30	30	40
Total				8	0	4	4	14			



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