



Bharatiya Vidya Bhavan's

Sardar Patel Institute of Technology

(Empowered Autonomous Institute Affiliated to University of Mumbai)
Bhavan's Campus, Munshi Nagar, Andheri (West), Mumbai-400058-India

Multidisciplinary Minor (MDM) Programs offered to undergraduate students

In accordance with the directives from the Government of Maharashtra, Autonomous Colleges are encouraged to revise their curriculum to align with the provisions of the National Education Policy (NEP) 2020. As part of this transformative initiative, the 'Minor Program' has been introduced which strongly advocates for the integration of multidisciplinary learning at the undergraduate level. These minor programs are designed to equip students with interdisciplinary expertise in emerging domains, preparing them to meet the dynamic demands of the global job market while complementing their core academic disciplines.

At S.P.I.T., minor programs across various disciplines have been introduced to offer students the opportunity to explore areas beyond their primary B.Tech curriculum. These programs are designed to allow students from specific disciplines to broaden their expertise. For instance, students pursuing Electrical Engineering can earn a Minor in Computer Science, thereby gaining valuable interdisciplinary knowledge that enhances their academic and professional versatility.

At present, we are offering 16 MDM courses for the 2023-2027 batch as in Table below:

The detailed curriculum of these Minor programs is provided in the file "SPIT_MDM_2023-24" attached.

Guidelines:

1. Common Rules:

- 1.1. The entry point to any MDM program is in the 4th semester.
- 1.2. A student can opt for only one track /minor program from the given list of MDM courses.
- 1.3. A student must continue with the selected track consistently for all four semesters.
- 1.4. No change of the track will be allowed under any circumstances.
- 1.5. Course allotment will be based on the CGPA obtained in the last semester.

2. Submission of Preferences Form:

2.1. All students are required to fill the Google form indicating their preferences within the specified timeline. The details of the form will be communicated via email.

2.2 Any failure to submit the form within the given deadline will result in a penalty being imposed.

2.3. Students should ensure that they provide their accurate CGPA in the Google form to prevent any discrepancies.

3. Attendance Policy:

Attendance requirement for External Courses

3.1. **100% Attendance** is compulsory for all minor courses offered by external institutions or bodies outside SPIT.

3.2. Students must seek prior approval from the concerned faculty member before missing any lectures. Failure to comply with this requirement may lead to the cancellation of their admission to the course.

Attendance requirement for S.P.I.T. Courses

3.3. The attendance requirements for minor courses offered by SPIT will follow the institute's academic norms.

4. Payment of Additional Fees

4.1. Students are required to pay the *additional fees for external courses* within the specified deadline.

4.2. Failure to make timely payment may result in penalties or the cancellation of course enrolment.

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List of Multidisciplinary Minor (MDM) courses offered at SPIT w.e.f. 2023-24

S.No.	Name of the Company	MDM (No.)	Course Code	Course Names	Applicable to	Paid/Free	Conducted Online/Offline	Video Link
1	SPIT	Industrial IoT (MDM-01)	M011	Introduction to Internet of Things	CE & CSE	Free	Offline	
			M012	Embedded "C" and Micro Python for IoT				
			M013	Communication Protocol for IoT				
			M014	IoT Applications and Analytics				
2	SPIT	Signal Processing (MDM-02)	M021	Digital Signal Processing	CE & CSE	Free	Offline	
			M022	Digital Image Processing				
			M023	Multimedia Signal Processing				
			M024	Digital Signal Processor System Design				
3	SPIT	Electronics Communication (MDM-03)	M031	Linear Electronics Circuit	CE & CSE	Free	Offline	
			M032	Principles of Communication & Systems				
			M033	Data Compression and Encryption				
			M034	Wireless Communication and Networks				
4	SPIT	VLSI (MDM-04)	M041	Hardware Description Language	CE & CSE	Free	Offline	https://drive.google.com/file/d/1EENIDHffkH_XG9W-uypfjD8rUUwSivEB/view?usp=sharing
			M042	Basic CMOS VLSI Design				
			M043	Advanced VLSI Design				
			M044	ASIC Verification				
5	SPIT	Computer Engineering (MDM-05)	M051	Database Management Systems	EXTC	Free	Offline	
			M052	Data Structures and Algorithms				
			M053	Cloud Computing				
			M054	Internet and Web Technology + DevOps (Project)				
6	SPIT	Artificial Intelligence and Machine Learning (MDM-06)	M061	Fundamentals of NNFL (NN, Fuzzy)	EXTC	Free	Offline	https://drive.google.com/file/d/1WDJP80LHYjGVL1Pa5kr3p0bthNSITk3/view?usp=sharing
			M062	Artificial Intelligence Machine Learning (AI, ML,				
			M063	Natural Language Processing				
			M064	Image Processing and Pattern Recognition +				
7	SPIT	Data Science (MDM-07)	M071	Fundamentals of Data Science	EXTC	Free	Offline	
			M072	Data Analytics and Visualization				
			M073	Decision Making and Business Intelligence				
			M074	Social Media Analytics				
8	SPIT	Interface and Experience Design (MDM-08)	M081	UI/UX Fundamentals	EXTC	Free	Offline	
			M082	Design Thinking and Innovations				
			M083	Human Computer Interaction				
			M084	Total Experience Design				
9	Vizuara Technologies Pvt Ltd	AI (For Non CS Students) (MDM-09)	M091	Foundations in AI and ML	EXTC	Paid	Online	
			M092	Machine Learning and Deep Learning Mastery				
			M093	NLP and CV Mastery, Capstone Project				
			M094	Large Language Models Theory and Deployment, Capstone Project				
10	Six Ladders	Entrepreneurship & Innovation (MDM-10)	M101	Entrepreneurship And Innovation	All the Branches	Paid	Offline	https://drive.google.com/file/d/1wHQBHaFMIDtzNRaaPemOrrg5nq5JzI0/view?usp=share_link
			M102	Entrepreneurship and Socio Cultural Environment of Businesses in India				
			M103	Entrepreneurial Finance & Management				
			M104	Innovation: Learning By Doing				
11	Six Ladders	Financial & Strategic Management (MDM-11)	M111	Economics and Strategic Management	All the Branches	Paid	Offline	https://drive.google.com/file/d/1t_uvio5WHpB8jyO2OCvbko_dNcTA9gu/view?usp=share_link
			M112	Introduction to Financial Analysis				
			M113	Introduction to Finance				
			M114	Industry Project (FNSM)				
12	Six Ladders	AI in Digital Marketing (MDM-12)	M121	Digital Marketing	All the Branches	Paid	Not Decided	https://drive.google.com/file/d/10_OTGH9eM6v1dmP_6s69xAFKLyndmPOH/view?usp=share_link
			M122	Advanced Digital Marketing Techniques				
			M123	Introduction to AI for Digital Marketing				
			M124	Industry Project (AIDM)				
13	Pearl Academy Pvt Ltd	UI/UX Design Programme (MDM-13)	M131	Foundations of UI/UX Design	All the Branches	Paid	Not Decided	
			M132	Intermediate UI/UX Design				
			M133	Advanced UI/UX Design and Specializations				
			M134	Advanced Research and Emerging Practices in Programming ARM : The bare metal way				
14	Skills Universe Technologies	Time triggered reliable engineering systems (MDM-14)	M141	Foundations of Time Triggered architectures	CE/CSE	Paid	Offline	https://skillsuniverse.in/courses/minor-degree/lesson/minor-degree-introduction-video/
			M142	Advanced Time-Triggered Systems Design				
			M143	Engineering Reliable Time Triggered Systems				
			M144	Engineering Reliable Time Triggered Systems				
15	SPJIMR Management	Management (MDM-15)	M151	Finance & Cost Management	All the Branches	Paid	Offline	
			M152	Supply Chain Management				
			M153	IT for Business				
			M154	Marketing Management				
16	Barclays	Barclays Minor in Banking Technology (MDM-16)	M161	BFSI , Data Management & Analytics	All the Branches	Free	Online	
			M162	Enterprise Risk Management & Applied cyber security				
			M163	Agile Methodology				
			M164	Academic-Industry collab Project				