

## MS IN SOFTWARE TECHNOLOGIES (MSST)

2 years, full-time and residential



**“The number one benefit of information technology is that it empowers people to do what they want to do. It lets people be creative. It lets people be productive. It lets people learn things they didn't think they could learn before, and so in a sense it is all about potential.” - Steve Ballmer**

With changing trends in global businesses, software requirements in terms of support, maintenance and growth are also required to change. Newer frameworks to develop sturdy applications for the web and the enterprise are a need for high-quality business solutions. The software itself, now comes as a service utility, where customers can use it on their small devices and pay as per usage. Massive data generation through transactional systems should give meaningful information to businesses to strategize future investments. With almost all applications having customer accesses over the internet, security requirements are vital. The traditional Indian software services are now eyeing the bigger global market as software products. In such scenarios, the way software is taught and learned needs a radical change with more focus on research and development approach rather than only the technology itself.

The Master of Science (MS) in Software Technologies is a comprehensive program to give students a thorough foundation in the theory, concepts, methodology, and techniques in software technology areas. The program aims at imparting comprehensive knowledge with equal emphasis on theory and practice. The curriculum focuses on the analytical ability of the students. Students will gain skills and experience in up-to-date approaches to analysis, design, development, implementation, validation, and documentation of software. Along with a sturdy foundation, students would also learn the recent developments, keeping them abreast with the industry trends by learning the new software concepts and products. With these skills they will be well qualified for technical, professional, or managerial positions in the industry or can go for higher education.

### ELIGIBILITY

Graduate Degree of minimum three years in the areas related to Computer and Information Science / Technology with minimum 55 percent marks.

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## COURSE STRUCTURE

SEMESTER	CODE	COURSE NAME	CREDITS
<b>SEMESTER I</b>			
	MIN-007	Mathematical Foundation of Computer Science	6
	MINI-071	Web Science	6
	MINI-072	Object Oriented Analysis & Design with UML	6
	MINI-073	Data Management Systems	6
		Select any one from the Core Electives	6
		Select any one from the Core Electives	6
	MIN-001	Life Skills Development I	6
		<b>Total</b>	<b>42</b>
		<b>Core Elective (Students to choose any two from the list below)</b>	
	MINE-062*	Web Programming Framework and Tools I	6
	MINE-063*	Web Programming Framework and Tools II	6
	MINE-004*	Mobile Computing	6
	MINE-064*	Integrated Resource Planning & Management (ERP) I	6
	MINE-008*	Open Source Development Techniques	6
	MINE-009*	Parallel Algorithms	6
	MINE-012*	Enterprise Application Integration	6
	MINE-025*	Service Oriented Architecture	6
	MINE-065*	Computer Security	6
<b>SEMESTER II</b>			
	MINI-074	Software Engineering & Project Management	6
	MINI-075	Intelligent Data Systems	6
	MIN-008	Executive Information Systems	6
		Select any one from the Advanced Electives	6
		Select any one from the Advanced Electives	6
		Select any one from the Advanced Electives	6
	MIN-009	Research Seminar	4
	MIN-002	Life Skills Development II	6
		<b>Total</b>	<b>46</b>
		<b>Advanced Electives (Students to choose any three from the list below)</b>	
	MINE-066*	Enterprise Application Development I	6
	MINE-067*	Enterprise Application Development II	6
	MINE-068*	Advanced Web Application Development	6
	MINE-017*	Database Administration	6
	MINE-069*	Integrated Resource Planning & Management (ERP) II	6
	MINE-070*	Business Intelligence Tools and Techniques	6
	MINE-023*	Parallel Programming	6
	MINE-071*	Software Development Processes	6
	MINE-072*	Business Lifecycle Management	6
<b>SEMESTER III</b>			
	MINP-017	Project Phase I	36
<b>SEMESTER IV</b>			
	MINP-018	Project Phase II	48
<b>Total Credits</b>			<b>172</b>

Delivery of an elective will be subject to availability of domain expert / faculty as well as minimum number of students for that particular elective