

# Master of Computer Science and Engineering

## FIRST SEMESTER

Theoretical Courses	Subjects		Periods/Weeks		Marks		Credit Points
	Subject Code	Subject Name	Lecture	Sessional	Examination	Sessional	
Departmental / Specialization Basket							
Paper-I	PG / CSE / T / 111A	Theory of Computing	3		100		3
Paper-II	PG / CSE / T / 112A	Advanced Algorithms	3		100		3
Paper-III	PG / CSE / T / 113A	High Performance Architecture	3		100		3
	PG / CSE / T / 113B	Advanced Operating Systems					

**Note: The students have to select 3 subjects from the departmental/ specialization basket, i.e. one subject each from the list given in the baskets of Paper-I, Paper-II and Paper-III**

Inter-Disciplinary Basket	Subject Code		Subject Name		Lecture	Sessional	Examination	Sessional	Credit Points
	Subject Code	Subject Name							
Paper-IV	PG / CSE / T / 114A	Advances in Artificial Intelligence	3		100			3	
	PG / CSE / T / 114B	Embedded & Real-time Systems							
	PG / CSE / T / 114C	Computer Communication Network							
	PG / CSE / T / 114D	Advanced Database System Concepts							
Paper-V	PG / CSE / T / 115A	Object oriented Design & Techniques	3		100			3	
	PG / CSE / T / 115B	VLSI System Design							
	PG / CSE / T / 115C	Wireless Communication & Mobile Computing							
	PG / CSE / T / 115D	Machine Learning							
Paper-VI	PG / CSE / T / 116A	Image Processing	3		100			3	
	PG / CSE / T / 116B	Modeling and Simulation							
	PG / CSE / T / 116C	Information and Coding Theory							

**Note: The students have to select 3 subjects from the inter-departmental basket, i.e. one subject each from the list given in the baskets of Paper-IV, Paper-V and Paper-VI**

Sessional Courses	Subject Code	Subject Name	Lecture	Sessional	Examination	Sessional	Credit Points
Sessional 1	PG / CSE / S / 111	Assignment		4		100	3
Sessional 2	PG / CSE / S / 112	Seminar		3		100	3
			<b>18</b>	<b>7</b>	<b>600</b>	<b>200</b>	<b>24</b>

**Total Periods/Week = 25**

**Total Marks = 800**

**SECOND SEMESTER**

Theoretical Courses	Subjects		Periods/Weeks		Marks		Credit Points
	Subject Code	Subject Name	Lecture	Sessional	Examination	Sessional	
Departmental / Specialization Basket							
Paper-VII	PG / CSE / T/ 127A	Distributed Operating Systems	3		100		3
	PG / CSE / T/ 127B	Distributed Systems					
	PG / CSE / T/ 127C	Pattern Recognition					
	PG / CSE / T/ 127D	Computational Geometry					
Paper-VIII	PG / CSE / T/ 128A	Complexity of Computation	3		100		3
	PG / CSE / T/ 128B	Information Security					
	PG / CSE / T/ 128C	Soft Computing					
	PG / CSE / T/ 128D	Software Engineering					
	PG / CSE / T/ 128E	High Speed Networking					
Paper-IX	PG / CSE / T/ 129A	Combinatorial Algorithm	3		100		3
	PG / CSE / T/ 129B	Natural Language Processing					
	PG / CSE / T/ 129C	Data Warehousing & Data Mining					
	PG / CSE / T/ 129D	VLSI Testing & Verification					
	PG / CSE / T/ 129E	Cryptography					

**Note: The students have to select 3 subjects from the departmental/ specialization basket, i.e. one subject each from the list given in the baskets of Paper-VII, Paper-VIII and Paper-IX**

Inter-Disciplinary Basket	Subject Code	Subject Name	Lecture	Sessional	Examination	Sessional	
Paper-X	PG / CSE / T/ 1210A	Service Oriented Architecture	3		100		3
	PG / CSE / T/ 1210B	Multimedia Technologies					
	PG / CSE / T/ 1210C	Network Security					
	PG / CSE / T/ 1210D	Parallel Computing Techniques					
	PG / CSE / T/ 1210E	Bioinformatics					

**Note: The students have the freedom to choose one subject from the list under Paper-X.**

Sessional Courses							
Sessional 1	PG / CSE / S/ 121	Term Paper Leading to Thesis		3		100	3
Sessional 2	PG / CSE / S/ 122	Seminar		3		100	3
			<b>12</b>	<b>6</b>	<b>400</b>	<b>200</b>	<b>18</b>

**Total Periods/Week = 18**

**Total Marks = 600**

**THIRD and FOURTH SEMESTER**

Courses						
1	PG / CSE / TH/ 21	Thesis Work		16		300
2	PG / CSE / VV/ 22	Viva-Voce on Thesis				100
				<b>16</b>		<b>400</b>

**Total Periods/Week = 16**

**Total Marks = 400**