

## M.Sc. (Software Technology)

Course Code	Title of the Course	Instructions Hours/ week	Duration of Exam (Hrs)	Marks			
				IA	SEE	Total	Credits
<b>Semester – I</b>							
IT3FPHC500	Data Structures and Analysis of Algorithms	4	2 ½	40	60	100	4
IT3FPHC501	Relational Database Management Systems	4	2 ½	40	60	100	4
IT3FPHC502	Object Oriented Programming with Java	4	2 ½	40	60	100	4
IT3FPHC503	Foundations of Web Development using Angular and Node JS	4	2 ½	40	60	100	4
IT3FPHP500	DBMS and Java Lab	6	6 (3+3)	40	60	100	3
IT3FPSC521	Software Engineering with UML	3	2 ½	40	60	100	3
IT3FPSP521	Data Structures AOA & Web Design Lab	6	6 (3+3)	40	60	100	3
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							<b>25</b>
<b>Semester – II</b>							
IT3FPHC550	Programming with Python	4	2 ½	40	60	100	4
IT3FPHC551	Mobile Application Development with Android	4	2 ½	40	60	100	4
IT3FPHP550	Python and Android Lab	6	6 (3+3)	40	60	100	3
IT3FPSC571a	Foundations of Data Science	3	2 ½	40	60	100	3
IT3FPSC571b	Enterprise level Data Warehousing and Data Mining						
IT3FPSC572a	Artificial Intelligence & Cognitive Computing	3	2 ½	40	60	100	3
IT3FPSC572b	Foundations of Machine Learning						
IT3FPSP571	Machine Learning and Data Science Lab	6	6 (3+3)	40	60	100	3
IT3FPSC573	Decision Making through Value Focused Thinking	1	-	50	-	50	1
IT3FPRM550	Research Methodology	1	-	50	-	50	1
IT3FPOE589	Enterprise Information System	2	1 ½	20	30	50	2
IT3FPOE590	Introduction to Java Programming and DBMS						
							<b>24</b>

<b>Semester – III</b>							
<b>Course Code</b>	<b>Title of the Course</b>	<b>Instructions Hours/ week</b>	<b>Duration of Exam (Hrs)</b>	<b>Marks</b>			<b>Credits</b>
				<b>IA</b>	<b>SEE</b>	<b>Total</b>	
IT3FPHC600	Cloud Computing and Amazon Web Services	4	2 ½	40	60	100	4
IT3FPHC601	Web Technologies and .NET Framework	4	2 ½	40	60	100	4
IT3FPHP600	AWS and .NET Lab	6	6 (3+3)	40	60	100	3
IT3FPSC621a	Deep Learning and Generative AI	3	2 ½	40	60	100	3
IT3FPSC621b	Natural Language Processing & Large Language Models						
IT3FPSC622a	Big Data Analytics with Spark	3	2 ½	40	60	100	3
IT3FPSC622b	Big Data Analytics with MapReduce and Hadoop						
IT3FPSP621	Big Data Analytics and Research Lab	6	6 (3+3)	40	60	100	3
IT3FPOE639	Social Media Analytics	2	1 ½	20	30	50	2
IT3FPOE640	Streaming Analytics						
							<b>22</b>
<b>Semester – IV</b>							
IT3FPPR686a	Project Formulation & Planning	-	-	100	-	100	3
IT3FPPR686b	Interim Evaluation & Learning Review	-	-	100	-	100	4
IT3FPPR686c	Project Execution & Defense	-	-	-	100	100	4
IT3FPPR686d	Project Report & Documentation	-	-	-	150	150	6
IT3FPPR687	Domain Knowledge Project	-	-	-	100	100	4
							<b>21</b>