



**SEETHALAKSHMI RAMASWAMI COLLEGE**

**(Autonomous)**

**Affiliated to Bharathidasan University  
Tiruchirappalli**

**Accredited with A+ by NAAC (4<sup>th</sup> Cycle)**



**M.Sc COMPUTER SCIENCE**

**Revised CBCS - OBE - BASED Curriculum Structure**

**(For Students admitted from 2024 onwards)**

SEM	COURSE	COURSE CODE	COURSE TITLE	HRS	CRD	INT/EXT	CIA	SE	TOTAL
I	Core course-I		Advanced Java Programming	6	5	EXT	25	75	100
	Core course-II		Linux Operating System	6	5	EXT	25	75	100
	Core course-III		Analysis and Design of Algorithm	6	5	EXT	25	75	100
	MBE-I		Artificial Intelligence and Machine Learning	6	4	EXT	25	75	100
	Core Practical-I		Practical-I:Linux	3	-	-	-	-	-
	Core Practical-II		Practical-II:Java and Visual C# Programming	3	-	-	-	-	-
			<b>Total credits and marks</b>	<b>30</b>	<b>19</b>				<b>400</b>

<b>SEM</b>	<b>COURSE</b>	<b>COURSE CODE</b>	<b>COURSE TITLE</b>	<b>HRS</b>	<b>CRD</b>	<b>INT/EXT</b>	<b>CIA</b>	<b>SE</b>	<b>TOTAL</b>
<b>II</b>	<b>Core course-IV</b>		Internet of Things	6	5	EXT	25	75	100
	<b>Core course-V</b>		Programming with Visual C#	6	5	EXT	25	75	100
	<b>MBE-II</b>		Software Testing	6	4	EXT	25	75	100
	<b>Core Practical-I</b>		Practical-I:Linux	3	4	EXT	40	60	100
	<b>Core Practical-II</b>		Practical-II:Java and Visual C# Programming	3	4	EXT	40	60	100
	<b>NME</b>		OFFERED BY OTHER DEPARTMENTS	6	4	EXT	25	75	100
			<b>Total credits and marks</b>	<b>30</b>	<b>26</b>				<b>600</b>
	<b>EXTRA CREDIT COURSE</b>		<b>Community Outreach Activity (during I Semester vacation- Report, Photo &amp; Feedback from beneficiaries) (MANDATORY)</b>		<b>1</b>	INT			<b>100</b>

SEM	COURSE		COURSE TITLE	HRS	CRD	INT/ EXT	INT	EXT	TOTAL
III	Core course-VI		Mobile Application Development	6	5	EXT	25	75	100
	Core course-VII		Computer Networks and Network Security	6	5	EXT	25	75	100
	Core course-VIII		Data Mining and Data Warehousing	6	5	EXT	25	75	100
	MBE-III		Distributed Technologies	6	4	EXT	25	75	100
	Core Practical-III		Practical-III:Data Mining	3	-	-	-	-	-
	Core Practical-IV		Practical-IV:Distributed Technologies and Internet of Things	3	-	-	-	-	-
			<b>Total credits and marks</b>	<b>30</b>	<b>19</b>				<b>400</b>
	Extra Credit Course		<b>Value Added Course –offered to the same department (beyond class hours) (MANDATORY)</b>	<b>2</b>	<b>2</b>	INT	25	75	<b>100</b>
		<b>Internship-I(during II Semester vacation) online/offline - certificate, Report &amp; Photo (MANDATORY)</b>	<b>-</b>	<b>2</b>	INT	-	-	<b>100</b>	
		<b>MOOC/SWAYAM/NPTEL-Before III Semester (OPTIONAL)</b>	<b>-</b>	<b>2</b>	INT	-	-	<b>100</b>	

SEM	COURSE		COURSE TITLE	HRS	CRD	INT/ EXT	INT	EXT	TOTAL
IV	Core course-IX		Compiler Design	6	5	EXT	25	75	100
	Core course-X		Principles of Big Data	6	5	EXT	25	75	100
	Industrial Based Course		Web Services	6	4	EXT	25	75	100
	Core Practical-III		Practical-III:Data Mining	3	4	EXT	40	60	100
	Core Practical-IV		Practical-IV:Distributed Technologies and Internet of Things	3	4	EXT	40	60	100
	Project		Project	6	4	EXT	20	80	100
			<b>Total credits and marks</b>	<b>30</b>	<b>26</b>				<b>600</b>
			<b>GRAND TOTAL</b>	<b>120</b>	<b>90</b>				<b>2000</b>
	EXTRA CREDIT COURSE		<b>Certificate Course (IKS) offered by other departments (beyond class hours) (MANDATORY)</b>	<b>2</b>	<b>2</b>	INT	25	75	100
		<b>Internship-II (during III Semester vacation) online/offline - certificate, Report &amp; Photo (OPTIONAL)</b>	<b>-</b>	<b>2</b>	INT	<b>-</b>	<b>-</b>	<b>100</b>	

<b>TOTAL DISTRIBUTION OF HOURS, CREDITS &amp; MARKS FOR PGPROGRAMME</b>			
<b>SEMESTER</b>	<b>HOURS</b>	<b>CREDITS</b>	<b>TOTAL MARKS</b>
I	30	19	400
II	30	26	600
III	30	19	400
IV	30	26	600
<b>TOTAL</b>	<b>120</b>	<b>90</b>	<b>2000</b>

### **LIST OF MAJOR BASED ELECTIVE COURSES**

<b>SEM</b>	<b>COURSE</b>	<b>COURSE CODE</b>	<b>COURSE TITLE</b>
<b>I</b>	<b>I</b>		(A) <b>Artificial Intelligence and Machine Learning</b> (B) Advanced Software Engineering (Optional)
<b>II</b>	<b>II</b>		(A) <b>Software Testing</b> (B) Advanced Database Management Systems (Optional)
<b>III</b>	<b>III</b>		(A) <b>Distributed Technologies</b> (B) Parallel Processing (Optional)

### INDUSTRIAL BASED COURSE

SEM	COURSE CODE	COURSE TITLE
IV		(A) Web Services
IV		(B) Embedded Systems (Optional)

### NON MAJOR BASED ELECTIVE COURSE OFFERED TO OTHER DEPARTMENTS

SEM	COURSE	COURSE CODE	COURSE TITLE
II	I		Principles of Java Programming

### VALUE ADDED COURSE

*Extra Credit Course for Skill Development*

SEM	COURSE	COURSE CODE	COURSE TITLE
III	I		Data Analytics with R Programming

### CERTIFICATE COURSE (IKS) OFFERED TO OTHER DEPARTMENTS

*Extra Credit Course for Skill Development*

SEM	COURSE	COURSE CODE	COURSE TITLE
IV	I		Digital Literacy

**M.Sc. Computer Science  
(CBCS System)**

**(For Students admitted from June 2024 onwards)**

**MANDATORY EXTRA CREDIT COURSES FOR SKILL DEVELOPMENT**

<b>SEM</b>	<b>COURSE CODE</b>	<b>COURSE TITLE</b>	<b>HRS</b>	<b>CRD</b>	<b>INT/ EXT</b>	<b>CIA</b>	<b>SE</b>	<b>TOT</b>
II		Community Outreach activity (I Semester vacation ) – <b>Report, Photo &amp; Feedback from beneficiaries</b>	-	1	INT	-	-	100
III		<b>Internship – I - (II Semester vacation) Online/Offline - Certificate, Report &amp; Photo</b>	-	2	INT	-	-	100
III		Value Added Course – <b>Offered to the same department – (beyond Class hours)</b>	2	2	INT	25	75	100
IV		Certificate Course (IKS) – <b>offered to other departments(beyond class hours)</b>	2	2	INT	25	75	100
		<b>TOTAL NO OF COURSES</b>	<b>4</b>	<b>7</b>				<b>400</b>