



SEETHALAKSHMI RAMASWAMI COLLEGE

(Autonomous)

Affiliated to Bharathidasan University

Tiruchirappalli

Accredited with A+ by NAAC (4th Cycle)



BACHELOR OF COMPUTER APPLICATIONS

CBCS - OBE Curriculum Structure

(For students admitted from 2024 onwards)

SEM	PART	COURSE	COURSE CODE	COURSE TITLE	HRS	CRD	INT/ EXT	CIA	SE	TOT	
I	I	Language - I		Course - I	6	3	EXT	25	75	100	
	II	English - I		Course - I	6	3	EXT	25	75	100	
	III	Core Course - I		Programming in C and Data Structures	7	6	EXT	25	75	100	
	III	Core Practical - I		Practical-I : Programming in C and Python	3	-	INT	-	-	-	
	III	First Allied Course - I		Offered by the Department of Mathematics	4	3	EXT	25	75	100	
	III	First Allied Practical		Offered by the Department of Mathematics	2	-	INT	-	-	-	
	IV	VBE		Value Based Education	2	2	EXT	25	75	100	
	Total					30	17				500
			EXTRA CREDIT COURSE		Communicative and Functional English offered by Department of English (MANDATORY)	2	2	INT	25	75	100
II	I	Language – II		Course – II	6	3	EXT	25	75	100	
	II	English – II		Course – II	6	3	EXT	25	75	100	
	III	Core Course – II		Programming in Python	7	6	EXT	25	75	100	
	III	Core Practical – I		Practical-I: Programming in C and Python	3	4	INT	40	60	100	
	III	First Allied Course - II		Offered by the Department of Mathematics	4	3	EXT	25	75	100	
	III	First Allied Practical		Offered by the Department of Mathematics	2	3	INT	40	60	100	
	IV	EVS		Environmental Studies	2	2	EXT	25	75	100	
	Total					30	24				700

SEM	PART	COURSE	COURSE CODE	COURSE TITLE	HRS	CRD	INT/ EXT	CIA	SE	TOT	
III	I	Language – III		Course – III	6	3	EXT	25	75	100	
	II	English – III		Course – III	6	3	EXT	25	75	100	
	III	Core Course – III		Programming in Java	6	6	EXT	25	75	100	
	III	Core Practical - II		Practical-II: Programming in Java and MySQL	2	-	INT	-	-	-	
	III	Second Allied Course – I		Offered by the Department of Commerce	4+2 / 4	3	EXT	25	75	100	
	III	Second Allied Practical		Offered by the Department of Commerce	2	-	INT	-	-	-	
	IV	NME - I*		Offered by other Departments	2	2	EXT	25	75	100	
	IV	SBE –I		VB.NET Programming	2	2	EXT	25	75	100	
	Total					30	19				600
			EXTRA CREDIT COURSE		Internship – I - (II Semester vacation) Online/Offline - Certificate, Report & Photo (MANDATORY)	-	1	INT	-	-	100
				Community outreach activity (II Semester vacation – Report, Photo & Feedback) (OPTIONAL)	-	1	INT	-	-	100	

SEM	PART	COURSE	COURSE CODE	COURSE TITLE	HRS	CRD	INT/ EXT	CIA	SE	TOT	
IV	I	Language – IV		Course – IV	6	3	EXT	25	75	100	
	II	English – IV		Course – IV	6	3	EXT	25	75	100	
	III	Core Course - IV		Database Systems	6	6	EXT	25	75	100	
	III	Core Practical - II		Practical-II: Programming in Java and MySQL	2	4	INT	40	60	100	
	III	Second Allied Course – II		Offered by the Department of Commerce	4	3	EXT	25	75	100	
	III	Second Allied Practical		Offered by the Department of Commerce	2 / 2	3 / 3	INT	40	60	100	
	IV	NME - II*		Offered by other Departments	2	2	EXT	25	75	100	
	IV	SBE – II		Fundamentals of R Programming	2	2	EXT	25	75	100	
	Total					30	26				800
			EXTRA CREDIT COURSE		Certificate Course (IKS) – Offered by other Departments (beyond class hours) (MANDATORY)	2	2	INT	25	75	100
				Office Automation (MANDATORY)	2	2	INT	25	75	100	
				Internship – II (III Semester vacation) - Online/Offline - Certificate, Report & Photo (OPTIONAL)	-	1	INT	-	-	100	

* Offered by the Department to the students of other disciplines

SEM	PART	COURSE	COURSE CODE	COURSE TITLE	HRS	CRD	INT/ EXT	CIA	SE	TOT	
V	III	Core Course - V		Programming in ASP.NET	5	5	EXT	25	75	100	
	III	Core Course - VI		Computer Networks	5	5	EXT	25	75	100	
	III	Core Course - VII		Data Mining and Warehousing	5	5	EXT	25	75	100	
	III	Core Practical- III		Practical-III: ASP.NET Programming	6	4	INT	40	60	100	
	III	MBE – I		Cloud Computing	5	4	EXT	25	75	100	
	IV	SBE – III		Photo Editing and Animation	2	2	EXT	25	75	100	
	IV	SSD		Soft Skill Development	2	2	INT	25	75	100	
				Total	30	27				700	
			EXTRA CREDIT COURSE		Value Added Course – offered to the same department (beyond class hours) (MANDATORY)	2	2	INT	25	75	100
					Web Designing (MANDATORY)	2	2	INT	25	75	100
					Internship – III (IV Semester vacation) – Online/Offline - Certificate, Report & Photo (OPTIONAL)	-	1	INT	-	-	100
				Online Course (MOOC/ Swayam / NPTEL) – Before V Semester (OPTIONAL)	-	2	INT	-	-	100	

SEM	PART	COURSE	COURSE CODE	COURSE TITLE	HRS	CRD	INT/ EXT	CIA	SE	TOT	
VI	III	Core Course - VIII		Programing in PHP	5	5	EXT	25	75	100	
	III	Core Course - IX		Operating Systems	5	5	EXT	25	75	100	
	III	Core Practical - IV		Practical-IV: PHP Programming	6	4	INT	40	60	100	
	III	MBE- II		Software Engineering	5	4	EXT	25	75	100	
	III	MBE - III		Internet of Things	5	4	EXT	25	75	100	
	III	Project		Group project	3	3	EXT	20	80	100	
	V	GS		Gender Studies	1	1	INT	25	75	100	
	V	Extension		Extension Activities (NSS/NCC/YRC/Sports and Exnora)	-	1	INT	-	-	100	
	Total					30	27				800
	Grand Total					180	140				4100
			EXTRA CREDIT COURSE		Capacity Building for Enhancing Professional Skills – Offered by the Department (MANDATORY)	2	2	INT	-	-	100
				Internet Concepts (MANDATORY)	2	2	INT	25	75	100	

TOTAL DISTRIBUTION OF HOURS, CREDITS & MARKS FOR UG PROGRAMME			
SEMESTER	HOURS	CREDITS	TOTAL MARKS
I	30	17	500
II	30	24	700
III	30	19	600
IV	30	26	800
V	30	27	700
VI	30	27	800
TOTAL	180	140	4100

LIST OF MAJOR BASED ELECTIVE COURSES

SEM	GROUP	COURSE CODE	COURSE TITLE
V	I (Choose any one course)		(A) Cloud Computing (B) Data Science (Optional)
VI	II (Choose any one course)		(A) Software Engineering (B) Computer Graphics (Optional)
	III (Choose any one course)		(A) Internet of Things (B) Robotics (Optional)

LIST OF SKILL BASED ELECTIVE COURSES

SEM	GROUP	COURSE CODE	COURSE TITLE
III	I (Choose any one course)		(A) VB.NET Programming (B) Programming in Oracle (Optional)
IV	II (Choose any one course)		(A) Fundamentals of R Programming (B) Visual Basic Programming (Optional)
V	III (Choose any one course)		(A) Photo Editing and Animation (B) Shell Programming (Optional)

NON MAJOR ELECTIVE COURSES OFFERED TO OTHER DEPARTMENTS

SEM	COURSE	COURSE CODE	COURSE TITLE
III	I		Fundamentals of Computers
IV	II		Introduction to e-Commerce

VALUE ADDED COURSE
Extra Credit Course for Skill Development

SEM	COURSE	COURSE CODE	COURSE TITLE
V	I		Angular JS

CERTIFICATE COURSE OFFERED TO OTHER DEPARTMENTS
Extra Credit Course for Skill Development (IKS)

SEM	COURSE	COURSE CODE	COURSE TITLE
IV	I		Cryptography in Ancient and Modern India

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BACHELOR OF COMPUTER APPLICATIONS
(CBCS System)
(For Students admitted from June 2024 onwards)

Subject	Number of Courses	Hours	Credit
Language	4	24	12
English	4	24	12
Core Course	9	51	49(4x6=24 + 5x5=25)
Core Practical	4	22	16(4x4=16)
Allied Course: Mathematics Commerce	4	16	12
Allied Practical: Mathematics Commerce	2	8	6
Major Based Elective Course (3x4)	3	15	12
Skill Based Elective Course	3	6	6
Non Major Elective Course	2	4	4
Value Based Education	1	2	2
Environmental Studies	1	2	2
Soft Skill Development	1	2	2
Gender Studies	1	1	1
Extension Activities	1	0	1
Group Project	1	3	3
Total	41	180	140

**BACHELOR OF COMPUTER APPLICATIONS
(CBCS System)
(For Students admitted from June 2024 onwards)**

EXTRA CREDIT COURSES FOR SKILL DEVELOPMENT*

Subject	Common/Subject Specific	Number of Courses	Credit
**Office Automation (MANDATORY)	Common to All	1	2
**Web Designing (MANDATORY)	Common to All	1	2
**Internet Concepts (MANDATORY)	Common to All	1	2
**Online Course (MOOC/SWAYAM/NPTEL) (OPTIONAL)	Subject Specific	1	2
Communicative and Functional English (MANDATORY)	Common to All	1	2
Community outreach activity (OPTIONAL)	Subject Specific	1	1
Certificate Course (IKS - Indian Knowledge System) (MANDATORY)	Subject Specific (offered to other departments)	1	2
Value Added Course (MANDATORY)	Subject Specific	1	2
Internship – I To be completed during II Semester Vacation (MANDATORY) Internship – II & III (OPTIONAL)	Subject Specific	3	3
Capacity Building for Enhancing Professional Skills (MANDATORY)	50%Common to All (Placement Training) 50% Subject Specific(Career Guidance Workshop by the respective Departments)	1	2
TOTAL	12	12	20

*The extra credit courses have been introduced in the OBE-CBCS Curriculum pattern to be implemented from 2024 onwards based on the recommendations of the apex bodies namely TANSICHE, UGC, Bharathidasan University (Parent University), NAAC in lieu of the National Education Policy.

**Courses with Credit Transfer provision

**BACHELOR OF COMPUTER APPLICATIONS
(CBCS System)
EXTRA CREDIT COURSE FOR SKILL DEVELOPMENT***

SEM	COURSE	COURSE CODE	COURSE TITLE	HRS	CRD	INT/EXT	CIA	SE	TOT
I	EXTRA CREDIT COURSES		Communicative and Functional English offered by Department of English (MANDATORY)	2	2	INT	25	75	100
III			Community outreach activity (II Semester vacation – Report, Photo & Feedback) (OPTIONAL)	-	1	INT	-	-	100
III			Internship – I - (II Semester vacation) Online/Offline - Certificate, Report & Photo (MANDATORY)	-	1	INT	-	-	100
IV			Certificate Course (IKS) – Offered to other Department (beyond class hours) (MANDATORY)	2	2	INT	25	75	100
IV			Internship – II (III Semester vacation) - Online/Offline -Certificate, Report & Photo (OPTIONAL)	-	1	INT	-	-	100
IV			Office Automation (MANDATORY)	2	2	INT	25	75	100
V			Value Added Course – Offered to the same department (beyond class hours) (MANDATORY)	2	2	INT	25	75	100
V			Internship – III (IV Semester vacation) – Online/Offline - Certificate, Report & Photo (OPTIONAL)	-	1	INT	-	-	100
V			Web Designing (MANDATORY)	2	2	INT	25	75	100
V			Online – Course (MOOC/Swayam/NPTEL) – Before V Semester (OPTIONAL)	-	2	INT	-	-	100
VI			Capacity Building for Enhancing Professional Skills – Offered by the Department (MANDATORY)	2	2	INT	-	-	100
VI			Internet Concepts (MANDATORY)	2	2	INT	25	75	100
				TOTAL		20			

BACHELOR OF COMPUTER APPLICATIONS
(CBCS System)
MANDATORY EXTRA CREDIT COURSE FOR SKILL DEVELOPMENT*

SEM	COURSE CODE	COURSE TITLE	HRS	CRD	INT/EXT	CIA	SE	TOT
I		Communicative and Functional English offered by Department of English	2	2	INT	25	75	100
III		Internship – I - (II Semester vacation) Online/Offline - Certificate, Report & Photo	-	1	INT	-	-	100
IV		Certificate Course (IKS) – Offered to other Department (beyond class hours)	2	2	INT	25	75	100
IV		Office Automation	2	2	INT	25	75	100
V		Value Added Course – Offered to the same department (beyond class hours)	2	2	INT	25	75	100
V		Web Designing	2	2	INT	25	75	100
VI		Capacity Building for Enhancing Professional Skills – Offered by the Department	2	2	INT	-	-	100
VI		Internet Concepts	2	2	INT	25	75	100
		TOTAL NO OF COURSES 8	14	15				800

**BACHELOR OF COMPUTER APPLICATIONS
(CBCS System)
OPTIONAL EXTRA CREDIT COURSE FOR SKILL DEVELOPMENT***

SEM	COURSE CODE	COURSE TITLE	HRS	CRD	INT/ EXT	CIA	SE	TOT
III		Community outreach activity (II Semester vacation – Report, Photo & Feedback)	-	1	INT	-	-	100
IV		Internship – II (III Semester vacation) - Online/Offline -Certificate, Report & Photo	-	1	INT	-	-	100
V		Internship – III (IV Semester vacation) – Online/Offline - Certificate, Report & Photo	-	1	INT	-	-	100
V		Online – Course (MOOC/Swayam/NPTEL) – Before V Semester	-	2	INT	-	-	100
		TOTAL NO OF COURSES	4	5				400

**BACHELOR OF COMPUTER APPLICATIONS
(CBCS System)**

(For Students admitted from June 2024 onwards)

EXTRA CREDIT COURSES FOR SKILL DEVELOPMENT(Common/Subject Specific)

Subject	Common/Subject Specific
**Office Automation (MANDATORY)	Common to All
**Web Designing (MANDATORY)	Common to All
**Internet Concepts (MANDATORY)	Common to All
**Online Course (MOOC/SWAYAM/NPTEL) (OPTIONAL)	Subject Specific
Communicative and Functional English (MANDATORY)	Common to All
Community outreach activity (OPTIONAL)	Subject Specific
Certificate Course (IKS - Indian Knowledge System) (MANDATORY)	Subject Specific (offered to other departments)
Value Added Course (MANDATORY)	Subject Specific
Internship – I To be completed during II Semester Vacation (MANDATORY) Internship – II & III (OPTIONAL)	Subject Specific
Capacity Building for Enhancing Professional Skills (MANDATORY)	50%Common to All (Placement Training) 50% Subject Specific(Career Guidance Workshop by the respective Departments)
TOTAL	12