



SEETHALAKSHMI RAMASWAMI COLLEGE

(Autonomous)

Affiliated to Bharathidasan University
Tiruchirappalli

Accredited with A+ by NAAC (4th Cycle)



B.Sc. Electronics

CBCS - OBE - BASED 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		Semiconductor and Electronic Devices	7	6	EXT	25	75	100	
	III	Core Practical-I		Practical-I: Semiconductor Devices and Digital Electronics	3	-	INT	-	-	-	
	III	First Allied Course-I		Mathematical Techniques-I (offered by Mathematics Department)	4	3	EXT	25	75	100	
	III	First Allied Practical		Field work on Mathematics for Electronics (offered by Mathematics Department)	2	-	-	-	-	-	
	IV	VBE		Value Based Education	2	2	EXT	25	75	100	
	TOTAL					30	17				500
			EXTRA CREDIT COURSE		Communication and Functional English (offered by Department of English) Mandatory	2	2	INT	25	75	100

SEM	PART	COURSE	COURSE CODE	COURSE TITLE	HRS	CRD	INT/ EXT	CIA	SE	TOT
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		Digital Electronics	7	6	EXT	25	75	100
	III	Core Practical-I		Practical-I: Semiconductor Devices and Digital Electronics	3	4	INT	40	60	100
	III	First Allied Course-II		Mathematical Techniques-II (offered by Mathematics Department)	4	3	EXT	25	75	100
	III	First Allied Practical		Field work on Mathematics for Electronics (offered by Mathematics Department)	2	3	INT	40	60	100
	IV	EVS		Environmental Studies	2	2	EXT	25	75	100
					TOTAL	30	24			

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		Electrical Circuits and Machines	6	6	EXT	25	75	100
	III	Core Practical-II		Practical-II: Electrical Circuits and Operational Amplifier	2	-	INT	-	-	-
	III	Second Allied Course-I		Robotics	4	3	EXT	25	75	100
	III	Second Allied Practical		Practical: Arduino Robotics Experiments	2	-	INT	-	-	-
	IV	NME-I*		Offered by other Departments	2	2	EXT	25	75	100
	IV	SBE-I		Mobile Phone Servicing	2	2	EXT	25	75	100
					TOTAL	30	19			
		EXTRA CREDIT COURSE		Internship -I (II Semester Vacation) 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		Analogue Circuits	6	6	EXT	25	75	100	
	III	Core Practical-II		Practical-II: Electrical Circuits and Operational Amplifier	2	4	INT	40	60	100	
	III	Second Allied Course-II		Control System	4	3	EXT	25	75	100	
	III	Second Allied Practical		Practical: Arduino Robotics Experiments	2	3	INT	40	60	100	
	IV	NME-II*		Offered by other Departments	2	2	EXT	25	75	100	
	IV	SBE-II		Entrepreneurial Electronics	2	2	EXT	25	75	100	
				TOTAL	30	26				800	
			EXTRA CREDIT COURSE		Certificate Course (IKS) *- Electricity Production through Nature (Mandatory)	2	2	INT	25	75	100
					Internship – II (III Semester vacation) – Both Online/Offline Certificate, Report & Photo (optional)	-	1	INT	-	-	100
				Office Automation (Mandatory)	2	2	INT	25	75	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		Management and Functional Behavior	5	5	EXT	25	75	100
	III	Core Course-VI		Microprocessor and Microcontrollers	5	5	EXT	25	75	100
		Core Course-VII		Embedded System and Embedded C	5	5	EXT	25	75	100
	III	Core Practical-III		Practical-III: C,C++ and Embedded C	4	4	INT	40	60	100
				Practical-IV: Microprocessor, Communication and Power Electronics	2	-	INT	-	-	-
	III	MBE-I		Programming in C and C++	5	4	EXT	25	75	100
	IV	SBE-III		Laptop Servicing and Troubleshooting	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-Introduction to IOT and NEMS(Mandatory)	2	2	INT	25	75
				Internship – III (IV Semester vacation) – Both Online/Offline Certificate, Report & Photo (optional)	-	1	INT	-	-	100
				Web Designing (Mandatory)	2	2	INT	25	75	100
				Online Course (MOOC/Swayam /NPTEL)- Before V Semester(optional)	-	2	INT	25	75	100

SEM	PART	COURSE	COURSE CODE	COURSE TITLE	HRS	CRD	INT/EXT	CIA	SE	TOT
VI	III	Core Course-VIII		Industrial Electronics	6	5	EXT	25	75	100
	III	Core Practical-IV		Practical-IV: Microprocessor, Communication and Power Electronics	4	4	INT	40	60	100
	III	MBE-II		Sensors, Transducers and Measurement	5	4	EXT	25	75	100
	III	MBE-III		Communication System	5	4	EXT	25	75	100
	III			In-Plant Training	6	5	INT	40	60	100
	III	Project		Group Project	3	3	EXT	20	80	100
	V	GS		Gender Studies	1	1	INT	25	75	100
	V	Extension		Extension Activity(NSS/NCC/YRC/Sports & Exnora)	-	1	INT	-	-	100
TOTAL					30	27				800
GRAND TOTAL					180	140				4100
	EXTRA CREDIT COURSE			Capacity Building for Professional placement training and skill training- offered by the department (Mandatory)	-	2	INT	-	-	100
				Internet Concepts (Mandatory)	2	2	INT	25	75	100