



SEETHALAKSHMI RAMASWAMI COLLEGE

(Autonomous)

Affiliated to Bharathidasan University
Tiruchirappalli

Accredited with A+ by NAAC (4th Cycle)



M.Sc. Electronics

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		Microcontroller 8051 and Embedded system	6	5	EXT	25	75	100
	Core Course- II		Digital Control System	6	5	EXT	25	75	100
	Core Course-III		VLSI Design and VHDL Programming	6	5	EXT	25	75	100
	MBE-I		Nanotechnology and its Applications	6	4	EXT	25	75	100
	Core Practical-I		Practical-I: Embedded-C Programming	6	4	EXT	40	60	100
				Total Credits and Marks	30	23			

SEM	COURSE	COURSE CODE	COURSE TITLE	HRS	CRD	INT/EXT	CIA	SE	Total
II	Core Course-IV		Digital Signal Processing	7	5	EXT	25	75	100
	Core Course-V		Wireless Communication and Networks	6	5	EXT	25	75	100
	MBE-II		Medical Electronics	6	4	EXT	25	75	100
	NME		Offered by other departments	5	4	EXT	25	75	100
	Core Practical - II		Practical-II: Electronic Experiments	6	4	EXT	40	60	100
			Total Credits and Marks	30	22				500
	EXTRA CREDIT COURSE		Community Outreach Activity (during I Semester Vacation) Mandatory	-	1	INT	-	-	100

SEM	COURSE	COURSE CODE	COURSE TITLE	HRS	CRD	INT/EXT	CIA	SE	Total
	Core Course-VI		Solar Photovoltaics	6	5	EXT	25	75	100
III	Core Course-VII		PLC and SCADA	6	5	EXT	25	75	100
	Core Course-VIII		Microcontroller ATMEGA and Embedded system	6	5	EXT	25	75	100
	MBE-III		Computer System Architecture	6	4	EXT	25	75	100
	Core Practical-III		Practical-III: AVR Microcontroller Programming	6	4	EXT	40	60	100
			Total Credits and Marks	30	23				500
	EXTRA CREDIT COURSE		Value Added Course- Mobile Computing and Cloud Computing (Mandatory)	2	2	INT	25	75	100
			Online Course (MOOC/Swayam /NPTEL) (optional)	-	2	INT	25	75	100
			Internship- I (II Semester Vacation) Mandatory	-	2	INT	-	-	100

SEM	COURSE	COURSE CODE	COURSE TITLE	HRS	CRD	INT/EXT	CIA	SE	Total
IV	Core Course- IX		Research Methodology	6	5	EXT	25	75	100
	Core Course- X		MEMS and their Applications	6	5	EXT	25	75	100
	Industry Based Course		Automotive Electronics	6	4	EXT	25	75	100
			In-Plant Training	6	4	INT	40	60	100
			Project	6	4	EXT	20	80	100
			Total Credits and Marks		30	22			
Grand Total				120	90				2000
	EXTRA CREDIT COURSE		Certificate Course (IKS) - Energy generation using Natural Resources (Mandatory)	2	2	INT	25	75	100
			Internship- II (III Semester Vacation) (Optional)	-	2	INT	-	-	100