SEETHALAKSHMI RAMASWAMI COLLEGE

(Autonomous)

Affiliated to Bharathidasan University

Tiruchirappalli

Accredited with A+ by NAAC (4th Cycle)

M.Sc., Physics - Revised CBCS - OBE - BASED Curriculum Structure

(For Students admitted from June 2021 onwards)

SEM	COURSE	COURSE CODE	COURSE TITLE	HRS	CRD	INT/ EXT	CIA	SE	TOTAL
I	Core course-I	P211PHMT01	Classical Mechanics & Relativity	6	5	EXT	25	75	100
	Core course-II	P211PHMT02	Mathematical Physics	6	5	EXT	25	75	100
	Core course-III	P211PHMT03	Numerical methods and Programming in C++	6	5	EXT	25	75	100
	MBE-I	P211PHME01:1	Analog and Digital Electronics	4	4	EXT	25	75	100
	Core Practical-I	P212PHMP01	Practical-I : General Experiments and Programming in C++	4	-	-	-	-	-
	Core Practical-II	P212PHMP02	Practical-II : Electronics Experiments	4	-	-	-	-	-
Total credits and marks				**30**	**19**				**400**

II	Core course-IV	P212PHMT04	Electromagnetic Theory	6	5	EXT	25	75	100
	Core course-V	P212PHMT05	Statistical Mechanics	6	5	EXT	25	75	100
	MBE-II	P212PHME02:1	Crystal growth and Thin film Physics	5	4	EXT	25	75	100
	Core Practical-I	P212PHMP01	Practical-I : General Experiments and Programming in C++	4	4	EXT	40	60	100
	Core Practical-II	P212PHMP02	Practical-II : Electronics Experiments	4	4	EXT	40	60	100
	NME		OFFERED BY OTHER DEPARTMENTS	5	4	EXT	25	75	100
			Total credits and marks	**30**	**26**				**600**
III	Core course-VI	P213PHMT06	Condensed Matter Physics	6	5	EXT	25	75	100
	Core course-VII	P213PHMT07	Quantum Mechanics	6	5	EXT	25	75	100
	Core course-VIII	P213PHMT08	Nuclear and Particle Physics	6	5	EXT	25	75	100
	MBE-III	P213PHME03:1	Microprocessors and Microcontroller	4	4	EXT	25	75	100
	Core Practical-III	P214PHMP03	Practical-III : Advanced Experiments	4	-	-	-	-	-
	Core Practical-IV	P214PHMP04	Practical-IV : Digital Electronics and Microprocessor Experiments	4	-	-	-	-	-

			Total credits and marks	**30**	**19**				**400**
IV	Core course-IX	P214PHMT09	Atomic and Molecular Spectroscopy	6	5	EXT	25	75	100
	Core course-X	P214PHMT10	Nano Physics	6	5	EXT	25	75	100
	MBE-IV	P214PHME04:1	Communication Electronics	4	4	EXT	25	75	100
	Core Practical-III	P214PHMP03	Practical-III : Advanced Experiments	4	4	EXT	40	60	100
	Core Practical-IV	P214PHMP04	Practical-IV : Digital Electronics and Microprocessor Experiments	4	4	EXT	40	60	100
	Project	P214PHPJ01	Project	6	4	EXT	20	80	100
			Total credits and marks	**30**	**26**				**600**
			GRAND TOTAL	**120**	**90**				**2000**

NEC OFFERED BY THE DEPARTMENT TO OTHER DEPARTMENT STUDENTS									
II	NME	P212PHNE01	Modern Communication Systems	5	4	EXT	25	75	100

LIST OF MAJOR BASED ELECTIVE COURSES

SEMESTER	COURSE	TITLE OF THE COURSE
SEMESTER I	MBE-I	Analog and Digital Electronics / Advanced Physics
SEMESTER II	MBE-II	Crystal growth and Thin film Physics / Ultrasonic Study
SEMESTER III	MBE-III	Microprocessors and Microcontroller / Mathematical Analysis
SEMESTER IV	MBE-IV	Communication Electronics / Solar energy and its utilization

TOTAL DISTRIBUTION OF HOURS, CREDITS & MARKS FOR PG PROGRAMME

SEMESTER	HOURS	CREDITS	TOTAL MARKS
I	**30**	**19**	**400**
II	**30**	**26**	**600**
III	**30**	**19**	**400**
IV	**30**	**26**	**600**
TOTAL	**120**	**90**	**2000**

BEYOND CURRICULUM

(a) CERTIFICATE COURSES				
SEM	**PART**	**COURSE**	**COURSE CODE**	**SUBJECT TITLE**
II		CC I	21PPHIICC2:1	Mobile Computing
IV		CC II	21PPH1VCC2:2	Research and Teaching Methodology

(b) VALUE ADDED COURSES				
SEM	**PART**	**COURSE**	**COURSE CODE**	**SUBJECT TITLE**
I		VAC I	21PPHIVAC2:1	Physics for CSIR - JRF, NET/SET Exam - I
III		VAC II	21PPHIIIVAC2:2	Physics for CSIR - JRF, NET/SET Exam - II