

RATHINAM COLLEGE OF ARTS & SCIENCE (AUTONOMOUS)

Scheme of Curriculum for B.Sc Physics for the Batch admitted during 2017-2018 Onwards

Sem	Part	Type	Sub Code	Subject	Credit	Per Week	CIA	ESE	Total	Exam Hours
1	1	L1	LANG1	Language – I	3	6	40	60	100	3
1	2	E1	17BGE12E	English for Communication	3	6	40	60	100	3
1	3	C1	17BPH13A	Core - I : Mechanics, properties of matter and sound	5	6	40	60	100	3
1	3	CP1	17BPH13P	Core Practical – I : Major Practical - I	4	3	40	60	100	3
1	3	A1	17BPH1AA	Allied – I : Mathematics - I	4	7	40	60	100	3
1	4	AEC1	17BGE1FA	Ability Enhancement Compulsory Course-I : Environmental Studies @	2	2	50	-	50	3
1	6	VAC	17BPH1VA	Value Added Course - I@	2	-	100	-	100	3
2	1	L2	LANG2	Language – II	3	6	40	60	100	3
2	2	E2	17BPH22E	Technical English	3	6	40	60	100	3
2	3	C2	17BPH23A	Core - II : Heat and Thermodynamics	5	6	40	60	100	3
2	3	CP2	17BPH23P	Core Practical - II : Major Practical - II	4	3	40	60	100	3
2	3	A2	17BPH2AB	Allied – II : Mathematics - II	4	7	40	60	100	3
2	4	AEC2	17BGE2FB	Ability Enhancement Compulsory Course-II –Value Education Human Rights @	2	2	50	-	50	3
2	6	VAC	17BPH2VA	Value Added Course - II@	2	-	100	-	100	3
3	3	C3	17BPH33A	Core III : Optics	5	7	40	60	100	3
3	3	CP3	17BPH33P	Core Practical – III : Major Practical – III	4	3	40	60	100	3
3	3	A3	17BPH3AC	Allied - III: Chemistry – I	4	7	40	60	100	3
3	3	AP1	17BPH3AP	Allied Practical - I: Allied Chemistry Lab – I	4	3	40	60	100	3
3	4	S1	17BPH3ZA	Skill Enhancement Courses – I : MS Office & C	4	6	40	60	100	3
3	4	AEC3	17BGE3FC	Ability Enhancement Compulsory Course-III – (Tamil / Advanced Tamil (OR) Non-major elective-1 (Yoga for Human Excellence) / Women’s Rights / Career Enhancement – I) @	2	2	50	-	50	3
3	6	VAC	17BPH3VA	Value Added Course - III@	2	-	100	-	100	3

3	6	IDL	IDL1	Inter Department Learning – I#	2	2	-	100	100	3
4	3	C4	17BPH43A	Core - IV : Electricity and Magnetism	4	6	40	60	100	3
4	3	CP4	17BPH43P	Core Practical – IV : Major Practical – IV	4	4	40	60	100	3
4	3	A4	17BPH4AD	Allied - IV : Chemistry – II	4	6	40	60	100	3
4	3	AP2	17BPH4AP	Allied Practical - II: Allied Chemistry Lab – II	4	4	40	60	100	3
4	4	SP1	17BPH4ZP	Skill Enhancement Courses lab – II : Ms- office and Programming in C	4	6	40	60	100	3
4	4	AEC4	17BGE4FD	Ability Enhancement Compulsory Course-IV - (Tamil / Advanced Tamil (OR) Non-major elective-II (General Awareness) / Career Enhancement – II) @	2	2	50	-	50	3
4	6	VAC	17BPH4VA	Value Added Course - IV@	2	-	100	-	100	3
4	6	IDL	IDL2	Inter Department Learning – II#	2	2	-	100	100	3
5	3	C5	17BPH53A	Core - V : Mathematical Physics	5	6	40	60	100	3
5	3	C6	17BPH53A	Core - VI: Solid state physics	5	5	40	60	100	3
5	3	EL1	ELE1	Elective - I	3	5	40	60	100	3
5	3	EL2	ELE2	Elective - II	3	6	40	60	100	3
5	3	CP5	17BPH53P	Core Practical – V : Major Practical - V	4	3	40	60	100	3
5	3	CP6	17BPH53V	Core Practical – VI : Industrial Training Report	2	-	-	50	50	3
5	4	S3	17BPH5ZC	Skill Enhancement Courses – III : Scientific facts in physics	4	5	40	60	100	3
5	6	VAC	17BPH5VA	Value Added Course - V@	2	-	100	-	100	3
6	3	C7	17BPH63A	Core - VII: Quantum mechanics and relativity	5	6	40	60	100	3
6	3	C8	17BPH63B	Core - VIII : Atomic and Nuclear Physics	4	5	40	60	100	3
6	3	EL3	ELE3	Elective – III	4	5	40	60	100	3
6	3	CP7	17BPH63P	Core Practical – VI :Major Practical - VI	4	3	40	60	100	3
6	3	CP9	17BPH63V	Core Project	4	5	40	60	100	3
6	4	S4	17BPH6ZD	Skill Enhancement Courses – IV: Internet of Things and	4	6	40	60	100	3
6	5	EX	17BGE65A	Extension Activity	2		50		50	
TOTAL					154	180	2030	2170	4200	

Elective	Sub code	Subject
Elective-I	17BPH5EA	1. Electronics
	17BPH5EB	2. Fibre optic communication system
	17BPH5EC	3. Principles of communication system
Elective-II	17BPH5ED	1. Nanoscience
	17BPH5EE	2. Energy physics
	17BPH5EF	3. Characterization of Nanomaterials and its Applications
Elective-III	17BPH6EA	1. Biophysics
	17BPH6EB	2. Digital electronics and microprocessor
	17BPH6EC	3. Geophysics

Inter Department Learning

IDL	Sub Code	Subject
SEM3	17BPH3LA	Scientific facts in Physics
	17BPH3LB	Basic embedded system and microcontroller
	17BPH3LC	Digital electronics
	17BPH3LD	Basic Electrical wire
SEM4	17BPH4LA	Applied electronics
	17BPH4LB	Astrophysics
	17BPH4LC	Biomedical instrumentation
	17BPH4LD	Agriculture physics