



**DHANALAKSHMI SRINIVASAN  
COLLEGE OF ARTS AND SCIENCE(W)  
AUTONOMOUS**

(Affiliated to Bharathidhasan Uuniversity, Tiruchirappalli)  
(Nationally Re - Accredited with 'A' Grade by NAAC)  
PERAMBALUR



**DEPARTMENT OF PHYSICS**

**M,Sc., PHYSICS COURSE STRUCTURE UNDER CBCS**

(For the candidates admitted from the academic year 2018-2019 onwards)

Sem.	Course	Course Title	Course Code	Ins.Hrs/ week	credit	Exam Hours	Mark		Total	
							Int	Ext		
I Sem	Core Course -I	Mathamatical Physics								
	Core Course- II	Classical Mechanics								
	Core Course -III	Electronic Devices and Circuits								
	Core Course- IV	Physics Practical-I (General Practicals)								
	Elective Course- I		Numerical Methods & "C" Programming							
			Spectroscopy							
Application Oriented Course - I		Electronic communication								
<b>Total</b>										
II Sem	Core Course - V	Quantum Mechanics								
	Core Course - VI	Electroincs								
	Core Course - VII	Condensed Matter Physics								
	Core Course - VIII	Physics Practical-II (Microprocessor and " C "Programming )								
	Elective Course - II		Microprocessor and Communication Electronics							
			Statistical Mechanics							
Application Oriented Course II		Fiberoptic Communication								
<b>Total</b>										
III Sem	Core Course -IX	Electromagnetic theory								
	Core Course - X	solid state Physics								
	Core Course - XI	Nuclear and Practical Physics								
	Core Course - XII	Physics practical-III ;Advanced Electronics-I								
	Elective Course - III		Crystal Growth and thin film Physics							
Non-linear optics										
<b>Total</b>										
IV Sem	CoreCourse XIII	Atomic and molecular Physics								
	Core Course XIV	Physics practical-IV; Advanced Electronics-II								
	Elective Course IV		Nano science and Nano technology							
			Medical Physics							
Project work XV		Project work								
<b>Total</b>										
<b>GRAND TOTAL</b>										





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**DEPARTMENT OF PHYSICS**

(For the candidates admitted from the academic year 2018-2019 onwards)



year/ sem	Part	Course	course Title	Course code	Ins.Hrs/ week	credit	Exam Hours	Mark		Total
								Int	Ext	
I Year ISem	III	First Allied course I (Maths student)	General Physics - I							
	III	First Allied Course Practical II	General Physics Practical-I							
I year II sem	III	First Allied course III(Maths student)	General Physics-III							
	III	First Allied Course Practical II(Maths student)	General Physics Practical-I							
<b>total</b>										
II Year IIISem	III	Second Allied course I (Maths student)	General Physics - I							
	III	Second Allied Course Practical II(Maths student)	General Physics Practical-I							
II year IV sem	III	Second Allied course III(Maths student)	General Physics-III							
	III	Second Allied Course Practical II(Maths student)	General Physics Practical-I							
<b>total</b>										







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**DEPARTMENT OF PHYSICS**

**B,Sc., PHYSICS COURSE STRUCTURE UNDER CBCS**

(For the candidates admitted from the academic year 2018-2019 onwards)

year/ sem	Part	Course	Course Title	Course Code	Ins.Hrs/ week
1	I	Language Course - I	Cheyyul (IkkalaIlakkiyam), Sirukathai, IlakkiyaVaralaru		6
2	I	Language Course – II	Cheyyul (IdaikalaIlakkiyam), Puthinam		6
3	I	Language Course – III	Cheyyul (Kappiyangal), Vurainadai, AluvalMuraiMadalgal, IlakkiyaVaralaru		6
4	I	Language Course – IV	Cheyyul (SangaIlakkiyam, NeedhiIlakkiyam, Nadagam, IlakkiyaVaralaru, PodhuKatturai		6
1	II	English Language Course – I	English For Communication - I		6
2	II	English Language Course – II	English For Communication - II		6
3	II	English Language Course – III	English Through Literature		6
4	II	English Language Course – IV	English For Competitive Examinations		6
1	III	Core Course – I	Properties of matter and Acoustics		6
2	III	Core Course –II	Major practical-I; (General Practicals)-I		4
3	III	Core Course – III	Mechanics and Relativity		6
4	III	Core Course –IV	Major practical-II; (General Practicals)-II		4
5	III	Core Course – V	Electricity and Magnetism and Electromagnetism		6
6	III	Core Course – VI	Major practical-III; (General Practicals)-III		4
7	III	Core Course – VII	Thermal Physics		6
8	III	Core Course – VIII	Major practical-IV; (General Practicals)-IV		4
9	III	Core Course IX	Optics		5
10	III	Core Course X	Atomic Physics		5
11	III	Core Course XI	Analog Electronics		5

12	III	Core Course XII	Major Practical V; (General Practicals)-V		5
13	III	Core Course – XIII	Material science		6
14	III	Core Course –XIV	Digital Electronics		6
15	III	Core Course – XV	Major Practical VI: Electronics Practical		6
1	III	Allied Course– I	General Chemistry - I		3
2	III	Allied Course –II	General Chemistry Practical-I (Volumetric and Organic Qualitative Analysis)		6
3	III	Allied Course –III	General Chemistry - II		3
4	III	Allied Course – IV	Calculus and Vector analysis		4
5	III	Allied Course – V	Algebra,Analytical geometry and Trigonometry		4
6	III	Allied Course – VI	ODE, Laplace Transform and Fourier Series		4
1	III	Major Based Elective - I	Opto electronics and fiber optic communication		4
			Spectroscopy		
			Communication system		
2	III	Major Based Elective – II	Nuclear Physics		5
			Instrumentation		
			Statistical mechanics		
3	III	Major Based Elective – III	Fundamentals of Microprocessor		6
			Astrophysics		
			Programming in "C"		
1	IV	Non Major Elective – I	Basics in Astrophysics		2
			Renewable Energy sources		
			Laser Physics		
2	IV	Non Major Elective - II	Energy Physics		2
			Everyday Physics		
			Basic electronics		
1	IV	Skill Based Elective – I	TV repair and maintenance		2
			Electronics Appliances		
			Energy Physics		
			Cell Phone Servicing		

2	IV	Skill Based Elective – II	Electrical Wiring		2
			Laser Physics		
1	IV	Environmental Studies	Environmental Studies		2
1	IV	Value Education	Value Education		2
1	IV	Soft Skill Development	Soft Skill Development		2
1	IV	Gender Studies	Gender Studies		1
1		Extension Activities	Extension Activities		-





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**DEPARTMENT OF PHYSICS  
B,Sc., PHYSICS COURSE STRUCTURE UNDER CBCS**

(For the candidates admitted from the academic year 2021-2022 onwards)

year/ sem	Part	Course	Course Title	Course Code	Ins.Periods/ week	credit	Exam Hours	Mark		Total
								Int	Ext	
I Year I sem	I	Language Course - I	Cheyyl (Ikkalallakkiyam),Sirukathai, IlakkiyaVaralaru/French/ Hindi/Sanskrit/Arabic	21U1LT1/ 21U1LF1/ 21U1LH1/ 21U1LS1/ 21U1LA1	6	3	3	25	75	100
	II	English Language Course – I	English for Communication - I	21U1EL1	6	3	3	25	75	100
	III	Core Course – I	Properties of Matter and Acoustics	21UPH1C1	6	5	3	25	75	100
	III	Core Course –II	Major Practicals -I (General)	21UPH1C2P	4	3	3	40	60	100
	III	Allied Course– I	General Chemistry - I	21UPH1A1	3	3	3	25	75	100
	III	Allied Course –II	General Chemistry Practical-I (Volumetric and Organic Qualitative Analysis)	21UPH1A2P	3	-	-	-	-	-
	IV	Environmental Studies	Environmental Studies	21U1EVS	2	2	3	25	75	100
Total					<b>30</b>	<b>19</b>		165	435	<b>600</b>
I Year II Sem	I	Language Course – II	Cheyyl (Idaikalallakkiyam), Puthinam/French/Hindi/ Sanskrit/Arabic	21U2LT2/ 21U2LF2/ 21U2LH2/ 21U2LS2/ 21U2LA2	6	3	3	25	75	100
	II	English Language Course – II	English for Communication - II	21U2EL2	6	3	3	25	75	100
	III	Core Course – III	Mechanics and Relativity	21UPH2C3	6	5	3	25	75	100
	III	Core Course –IV	Major Practicals -II (General)	21UPH2C4P	4	3	3	40	60	100
	III	Allied Course –II	General Chemistry Practical-I (Volumetric and Organic Qualitative Analysis)	21UPH1A2P	3	3	3	40	60	100
	III	Allied Course –III	General Chemistry - II	21UPH2A3	3	3	3	25	75	100
	IV	Value Education	Value Education	21U2VED	2	2	3	25	75	100
Total					<b>30</b>	<b>22</b>		205	495	<b>700</b>

II Year III Sem	I	Language Course – III	Cheyul (Kappiyangal), Urainadai, AluvalMuraiMadalgal, IlakkiyaVaralaru/French/ Hindi/Sanskrit/Arabic	21U3LT3/ 21U3LF3/ 21U3LH3/ 21U3LS3/ 21U3LA3	6	3	3	25	75	100
	II	English Language Course – III	English Through Literature	21U3EL3	6	3	3	25	75	100
	III	Core Course – V	Thermal Physics	21UPH3C5	6	5	3	25	75	100
	III	Core Course – VI	Major practical-III (General)	21UPH3C6P	4	4	3	40	60	100
	III	Allied Course – IV	Calculus and Vector analysis	21UPH3A4	4	3	3	25	75	100
	III	Allied Course – V	Algebra, Analytical geometry and Trigonometry	21UPH3A5	2	-	-	-	-	-
	IV	Non Major Elective – I	Basics in Astrophysics	21UPH3N1A	2	2	3	25	75	100
	Renewable Energy sources		21UPH3N1B							
	Laser Physics		21UPH3N1C							
Total					<b>30</b>	<b>20</b>		165	435	<b>600</b>
II Year IV Sem	I	Language Course – IV	Cheyul (SangaIlakkiyam, NeedhiIlakkiyam) Nadagam, IlakkiyaVaralaru, PodhuKatturai/French/Hindi/ Sanskrit/Arabic	21U4LT4/ 21U4LF4/ 21U4LH4/ 21U4LS4/ 21U4LA4	6	3	3	25	75	100
	II	English Language Course – IV	English for Competitive Examinations	21U4EL4	6	3	3	25	75	100
	III	Core Course – VII	Optics	21UPH4C7	6	5	3	25	75	100
	III	Core Course – VIII	Major Practical-IV(General)	21UPH4C8P	4	4	3	40	60	100
	III	Allied Course – V	Algebra, Analytical geometry and Trigonometry	21UPH3A5	2	3	3	25	75	100
	III	Allied Course – VI	ODE, Laplace Transform and Fourier Series	21UPH4A6	4	3	3	25	75	100
	IV	Non Major Elective - II	Energy Physics	21UPH4N2A	2	2	3	25	75	100
	Everyday Physics		21UPH4N2B							
	Basic electronics		21UPH4N2C							
Total					<b>30</b>	<b>23</b>		190	510	<b>700</b>
	III	Core Course IX	Electricity and Magnetism	21UPH5C9	5	5	3	25	75	100

III Year V sem	III	Core Course X	Atomic Physics	21UPH5C10	5	5	3	25	75	100
	III	Core Course XI	Analog Electronics	21UPH5C11	5	5	3	25	75	100
	III	Core Course XII	Major Practical -V (General)	21UPH5C12P	5	4	3	40	60	100
	III	Major Based Elective - I	Laser Physics	21UPH5M1A	4	4	3	25	75	100
			Spectroscopy	21UPH5M1B						
			Opto electronics and fiber optic communication	21UPH5M1C						
	IV	Skill Based Elective – I	TV repair and maintenance	21UPH5S1A	2	2	3	25	75	100
			Instrumentation -I	21UPH5S1B						
			Communication System	21UPH5S1C						
	IV	Skill Based Elective – II	Cell Phone Servicing	21UPH5S2A	2	2	3	25	75	100
			Instrumentation -II	21UPH5S2B						
			Electrical Appliances	21UPH5S2C						
	IV	Soft Skill Development	Soft Skill Development	21U5SS	2	2	3	25	75	100
Total					<b>30</b>	<b>29</b>		215	585	<b>800</b>
III Year VI Sem	III	Core Course – XIII	Material Science	21UPH6C13	6	6	3	25	75	100
	III	Core Course –XIV	Digital Electronics	21UPH6C14	6	6	3	25	75	100
	III	Core Course – XV	Major Practical- VI (Electronics)	21UPH6C15P	6	5	3	40	60	100
	III	Major Based Elective – II	Energy Sources	21UPH6M2A	5	4	3	25	75	100
			Nuclear Physics	21UPH6M2B						
			Fundamentals of Microprocessor	21UPH6M2C						
	III	Major Based Elective – III	Astrophysics	21UPH6M3A	6	4	3	25	75	100
			Statistical Mechanics	21UPH6M3B						
			Computer Programming in "C" language	21UPH6M3C						
	IV	Gender Studies	Gender Studies	21U6GS	1	1	3	25	75	100
V	Extension Activities	Extension Activities		-	1	-	-	-	-	
Total					<b>30</b>	<b>27</b>		165	435	<b>600</b>
Grand total					<b>180</b>	<b>140</b>		<b>1090</b>	<b>2910</b>	<b>4000</b>

  
**Dr. A. SAKTHIVELU, Ph.D.,**  
 Assistant Professor in Physics  
 Periyar E.V.R. College  
 Trichy - 620 023.

  
**Dr. P. ANANDAN, M.Sc., B.Ed., M.Phil., Ph.D.**  
 Assistant Professor  
 PG & Research Department of Physics  
 Thiru Kolanjiappar Government Arts College  
 Vriddhachalam - 606 001.





(Industry/Corporate Sector/Allied area representative)  
Chief executive,  
Hi-Tech electronics,  
Trichy .

*O. Nalathay*

Alumnae

*Thiruv*  
**Head of the Department**  
**Department of Physics**  
**Dhanalakshmi Srinivasan**  
**College of Arts and**  
**Science for Women,**  
**Perambalur.**

**Members:**

*G. Suresh*

*P. D. J.*

*R. M.*

*R. R.*

*B. S.*

*M. S.*

*C. S.*











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PERAMBALUR

**DEPARTMENT OF PHYSICS**

**B.Sc., ALLIED PHYSICS COURSE STRUCTURE UNDER CBCS**

(For the candidates admitted from the academic year 2021-2022 onwards)



year/ sem	Part	Course	Course Title	Course Code	Ins.Hrs/ week	credit	Exam Hours	Mark		Total
								Int	Ext	
I Year ISem	III	Allied Course- I (Maths student)	General Physics - I	21UMM1A1	3	3	3	25	75	100
	III	Allied Course -II (Maths student)	General Physics Practical-I	21UMM1A2P	3	-	-	-	-	-
I year II sem	III	Allied Course- II (Maths student)	General Physics Practical-I	21UMM1A2P	3	3	3	40	60	100
	III	Allied Course- III (Maths student)	General Physics-II	21UMM2A3	3	3	3	25	75	100
<b>Total</b>					<b>12</b>	<b>9</b>	<b>-</b>	<b>90</b>	<b>210</b>	<b>300</b>
II Year IIISem	III	Allied Course- IV (Chemistry student)	General Physics - I	21UCH3A4	3	3	3	25	75	100
	III	Allied Course Practical -V (Chemistry student)	General Physics Practical-I	21UCH3A5P	3	-	-	-	-	-
II year IV sem	III	Allied Course Practical-V (Chemistry student)	General Physics Practical-I	21UCH3A5P	3	3	3	40	60	100
	III	Allied Course VI (Chemistry student)	General Physics-II	21UCH4A6	3	3	3	25	75	100
<b>Total</b>					<b>12</b>	<b>9</b>	<b>-</b>	<b>90</b>	<b>210</b>	<b>300</b>
II Year IIISem	III	Allied Course -IV (C.S student)	Applied Physics - I	21UCS3A4	3	3	3	25	75	100
	III	Allied Course Practical -V (C.S student)	Applied Physics Practical-I (ELECTRONICS)	21UCS3A5P	3	-	-	-	-	-
II year IV sem	III	Allied Course Practical -V (C.S student)	Applied Physics Practical-I (ELECTRONICS)	21UCS3A5P	3	3	3	40	60	100
	III	Allied Course-VI (C.S student)	Applied Physics-II	21UCS4A6	3	3	3	25	75	100
<b>Total</b>					<b>12</b>	<b>9</b>	<b>-</b>	<b>90</b>	<b>210</b>	<b>300</b>
I Year ISem	III	Allied Course- I (Forensic science student)	Allied Physics - I	21UFS1A1	3	3	3	25	75	100
	III	Allied Course -II (Forensic science student)	Physics Practical-I	21UFS1A2P	3	-	-	-	-	-
<b>Total</b>					<b>6</b>	<b>3</b>	<b>-</b>	<b>25</b>	<b>75</b>	<b>100</b>

*D. Sakthivelu*  
**Dr. A. SAKTHIVELU, Ph.D.,**  
Assistant Professor in Physics  
Periyar E.V.R. College  
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*Dr. P. Anandan*  
**Dr. P. ANANDAN, M.Sc., B.Ed., M.Phil., Ph.D.**  
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Vriddhachalam - 606001.

M. Jeyaraj

(Industry/Corporate Sector/Allied area representative)  
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O. Vithya

Alumnae

Thil

**Head of the Department**  
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**Members:**

B. Srinivasan

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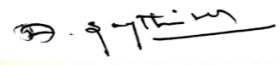
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M.Sc., PHYSICS COURSE STRUCTURE UNDER CBCS  
(For the candidates admitted from the academic year 2020-2021 onwards)**


Sem.	Course	Course Title	Course Code	Ins.Periods / week	credit	Exam Hours	Mark	
							Int	Ext
I Sem	Core Course - I	Mathematical Physics	20PPH1C1	5	5	3	25	75
	Core Course- II	Classical Dynamics	20PPH1C2	5	4	3	25	75
	Core Course -III	Spectroscopy	20PPH1C3	5	4	3	25	75
	Core Course -IV	Physics Practical-I (General Practicals)	20PPH1C4P	7	4	4	40	60
	ElectiveCourse - I	Numerical Methods & "C" Programming	20PPH1E1A	5	4	3	25	75
		Electronic Devices and Circuits	20PPH1E1B					
Application Oriented Course- I	Electronic Communication	20PPH1A1	3	3	3	25	75	
<b>Total</b>				<b>30</b>	<b>24</b>	<b>-</b>	<b>165</b>	<b>435</b>
II Sem	Core Course -V	Quantum Mechanics	20PPH2C5	5	4	3	25	75
	Core Course- VI	Electronics	20PPH2C6	5	4	3	25	75
	Core Course -VII	Statistical Mechanics	20PPH2C7	5	5	3	25	75
	Core Course VIII	Physics Practical-II (Microprocessor and C Programming)	20PPH2C8P	7	4	4	40	60
	Elective Course- II	Microprocessor and Communication Electronics	20PPH2E2A	5	4	3	25	75
		Condensed Matter Physics	20PPH2E2B					
Application Oriented Course- II	Fiberoptic Communication	20PPH2A2	3	3	3	25	75	
<b>Total</b>				<b>30</b>	<b>24</b>	<b>-</b>	<b>165</b>	<b>435</b>
III Sem	Core Course -IX	Electromagnetic Theory	20PPH3C9	6	5	3	25	75
	Core Course -X	Solid State Physics	20PPH3C10	6	4	3	25	75
	Core Course -XI	Nuclear and Particle Physics	20PPH3C11	6	4	3	25	75
	Core Course -XII	Physics Practical-III (Advanced Electronics)	20PPH3C12P	7	5	4	40	60
	Elective Course -	Crystal Growth and thin Film Physics	20PPH3E3A	5	4	3	25	75

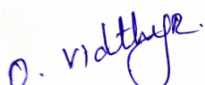
	III	Nano science and Nano Technology	20PPH3E3B	30	22	-	140	360
<i>Total</i>				<b>30</b>	<b>22</b>	<b>-</b>	<b>140</b>	<b>360</b>
IV Sem	Core Course -XIII	Atomic and Molecular Physics	20PPH4C13	6	5	3	25	75
	Project work	Project Work	20PPH4PW	24	15	-	-	-
<i>Total</i>				<b>30</b>	<b>20</b>	<b>-</b>	<b>25</b>	<b>75</b>
<i>Grand Total</i>				<b>120</b>	<b>90</b>	<b>-</b>	<b>495</b>	<b>1305</b>

  
**Dr. A. SAKTHIVELU, Ph.D.,**  
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**Dr. P. ANANDAN, M.Sc., B.Ed., M.**  
 Assistant Professor  
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 Vriddhachalam - 606 001.

  
 (Industry/Corporate Sector/Allied area representative)  
 Chief executive,  
 Hi-Tech electronics,  
 Trichy .

  
**Head of the Depart**  
**Department of Phys**  
**Dhanalakshmi Sriniva**  
**College of Arts and**  
**Science for Wome**  
**Perambalur.**

  
 Alumnae

**Members:**













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