

**JAYPEE UNIVERSITY  
ANOOPSHAHR  
Faculty of Science**



**Course Structure  
B.Sc. (Honours) Physics  
Academic Batch: 2022-2025, 2023-2026**

**B.Sc (Physics) 2023-2026****I Semester**

<b>Sl. No.</b>	<b>Category</b>	<b>Course Code</b>	<b>Course Title</b>	<b>L</b>	<b>T</b>	<b>P</b>	<b>Credits</b>	<b>Category</b>
<b>1</b>	Core	17H11PH111	Mathematical Physics I	3	1	0	4	CORE
<b>2</b>	GE	17H11CS111	Programming Fundamentals	3	1	0	4	CORE
<b>3</b>	DSE	17H11MA111	Numerical Methods	3	1	0	4	CORE
<b>4</b>	CORE	17H11EC111	Basic Electronics	3	1	0	4	CORE
<b>5</b>	AECC	17H11HS111	English Enhancement I	3	1	0	4	CORE
<b>6</b>	GE	17H17CS171	Computer Programming Lab	0	0	4	2	CORE
			<b>Total</b>	<b>15</b>	<b>5</b>	<b>4</b>	<b>22</b>	

**II Semester**

<b>Sl. No.</b>	<b>Course Type</b>	<b>Course Code</b>	<b>Course Title</b>	<b>L</b>	<b>T</b>	<b>P</b>	<b>Credits</b>	<b>Category</b>
<b>1</b>	CORE	17H11PH211	Mathematical Physics II	3	1	0	4	CORE
<b>2</b>	CORE	17H11PH212	Optics and Wave Phenomenon	3	1	0	4	CORE
<b>3</b>	CORE	17H11PH213	Electricity and Magnetism	3	1	0	4	CORE
<b>4</b>	GE	17H11MA211	Calculus	3	1	0	4	CORE
<b>5</b>	AECC	17H11HS211	English Enhancement II	3	1	0	4	CORE
<b>6</b>	CORE	17H17PH271	Physics Lab I	0	0	4	2	CORE
		<b>Total</b>	<b>15</b>	<b>5</b>	<b>4</b>	<b>24</b>	<b>22</b>	

### III Semester

Sl.No.	Category	Course Code	Course Title	L	T	P	Credits	Category Univ.
1	Core	17H11PH311	Mechanics	3	1	0	4	Core
2	Core	17H11PH312	Elements of Modern Physics	3	1	0	4	Core
3	GE	17H11MA312	Differential Equations	3	1	0	4	Elective
4	GE	17H11GE311	Environmental Sciences	3	1	0	4	Core
5	DSE	17H11PH313	Laser and Applications	3	1	0	4	Elective
6	SEC	17H17PH371	Physics Lab II	0	0	4	2	Core
7	SEC	17H19PH391	Term Paper	0	0	4	2	Core
			<b>Total</b>	15	5	8	<b>24</b>	

### IV Semester

Sl. No.	Category	Course Code	Course Title	L	T	P	Credits	Category Univ.
1	Core	17H11PH411	Electromagnetic Theory	3	1	0	4	Core
2	Core	17H11PH412	Quantum mechanics	3	1	0	4	Core
3	GE	17H11MA411	Multivariate Calculus	3	1	0	4	Elective
4	DSE	17H11PH413	Theory of Relativity and Astrophysics	3	1	0	4	Elective
5	CORE	17H11EC412	Digital Electronics	3	1	0	4	Elective
6	SEC	17H17PH471	Physics Lab III	0	0	4	2	Core
7	SEC	17H19PH491	Seminar	0	0	4	2	Core
			<b>Total</b>	15	5	8	<b>24</b>	

### V Semester

Sl. No.	Category	Course Code	Course Title	L	T	P	Credits	Category Univ.
1	Core	17H11PH511	Semiconductor Physics	3	1	0	4	Core
2	Core	17H11PH512	Nuclear and Particle Physics	3	1	0	4	Core
3	Core	17H11PH513	Statistical Physics	3	1	0	4	Core
4	DSE III	17H11PH514	Atomic and Molecular Physics	3	1	0	4	Elective
5	DSE IV	17H11PH515	Nanomaterials and Applications	3	1	0	4	Elective
6	SEC	17H17PH571	Physics Lab IV	0	0	4	2	Core
7	SEC	17H19PH591	Project- Part I	0	0	8	4	Core
<b>Total</b>				15	5	12	<b>26</b>	

### VI Semester

Sl. No.	Category	Course Code	Course Title	L	T	P	Credits	Category Univ.
1	Core	17H11PH611	Thermal Physics	3	1	0	4	Core
2	Core	17H11PH612	Solid State Physics	3	1	0	4	Core
3	Core	17H11PH613	Basic Electronics and Devices	3	1	0	4	Core
4	DSE V	17H11PH614	Material Science	3	1	0	4	Elective
5	DSE VI	17H11PH615	Optical Fibre Communications	3	1	0	4	Elective
6	SEC	17H17PH671	Physics Lab V	0	0	4	2	Core
7	SEC	17H19PH691	Project- Part II	0	0	8	4	Core
<b>Total</b>				15	5	12	<b>26</b>	