Syllabus

Bachelor of Science/ Bachelor of Science Honors (Physics)		
First Semester		**Credit =23**
Sr. No.	**Subjects**	Credit
1	Fundamental Physics-1 (Theory)	3
2	Physics Practical 1	2
3	(Choose any one Minor Theory subject) • Fundamental Chemistry - 1 (Theory) • Calculus-1 (Theory)	3
4	(Choose any one Minor Practical subject similar to theory subject) • Fundamental Chemistry - 1 (Practical) • Calculus-1 (Practical)	2
5	(Choose any one Multidisciplinary Theory subject other than Minor) • Fundamental Chemistry - 1 (Theory) • Introduction to plant science (Theory) • Calculus-1 (Theory)	3
6	(Choose any one Multidisciplinary Practical similar to theory subject other than Minor) • Fundamental Chemistry - 1 (Practical) • Calculus-1 (Practical)	2
7	Communicative English	3
8	Fundamentals of Computer Science	3
9	Environmental Studies	2
Second Semester		**Credit =23**
Sr. No.	**Subjects**	
1	Fundamental Physics-2 (Theory)	3
2	Physics Practical 2	2
3	(Choose any one Minor Theory subject) • Fundamental Chemistry - 2 (Theory) • Matrices and Co-ordinate Geometry (Theory)	3

4	(Choose any one Minor Practical subject like theory subject) • Fundamental Chemistry - 2 (Practical) • Matrices and Co-ordinate Geometry (Practical)	2
5	(Choose any one Multidisciplinary Theory subject other than Minor) • Fundamental Chemistry - 2 (Theory) • Basics in Plant Science (Theory) • Matrices and Co-ordinate Geometry (Theory)	3
6	(Choose any one Multidisciplinary Practical like theory subject other than Minor) • Fundamental Chemistry - 2 (Practical) • Basics in Plant Science (Practical) • Matrices and Co-ordinate Geometry (Practical)	2
7	English for Career Development	3
8	Personality Development	3
9	Life Lessons from Bhagavad Geeta	2

Note: Students exiting the programme after securing 46 credits will be awarded UG Certificate in the relevant Discipline /Subject, provided they secure 4 credits in work based vocational courses earned during summer term internship / Apprenticeship in addition to 6 credits from skill-based courses earned during first and second semester

Bachelor of Science/ Bachelor of Science Honors (Physics)		
Third Semester		**Credit =24**
Sr. No.	**Subjects**	Credit
1	Advance Physics-1	3
2	Advance Physics Practical 1	2
3	Advance Physics-2	3
4	Advance Physics Practical 2	2
5	(Choose any one Minor Theory subject same as previous semester) • Organic and Analytical Chemistry-1/ Inorganic and Physical Chemistry-1 (Theory) • Linear Algebra (Theory)	3
6	(Choose any one Minor Practical subject like theory subject) • Organic and Analytical Chemistry-1/ Inorganic and Physical Chemistry-1 (Practical) • Linear Algebra (Practical)	2
7	(Choose any one Multidisciplinary Theory subject same as previous semester other than Minor) • Organic and Analytical Chemistry-1/ Inorganic and Physical Chemistry-1 (Theory) • Economic Botany (Theory) • Linear Algebra (Theory)	3
8	(Choose any one Multidisciplinary Practical like theory subject other than Minor) • Organic and Analytical Chemistry-1/ Inorganic and Physical Chemistry-1 (Practical)	2

	• Economic Botany (Practical) • Linear Algebra (Practical)	
9	Business Communication 1	2
10	Universal Human Value	2
Fourth Semester		**Credit =24**
Sr. No.	**Subjects**	
1	Advance Physics-3 (Theory)	3
2	Advance Physics Practical 3	2
3	Advance Physics-4 (Theory)	3
4	Advance Physics Practical 4	2
5	Advance Physics-5 (Theory)	3
6	Advance Physics Practical 5	2
7	(Choose any one Minor Theory subject same as previous semester) • Organic and Analytical Chemistry-2/ Inorganic and Physical Chemistry-2 (Theory) • Numerical Methods (Theory)	3
8	(Choose any one Minor Practical subject like theory subject) • Organic and Analytical Chemistry-2/ Inorganic and Physical Chemistry-2 (Practical) • Numerical Methods (Practical)	2
9	Business Communication 2	2
10	Universal Human Value	2

Note: Students exiting the programme after securing 94 credits will be awarded UG Diploma in the relevant Discipline /Subject provided they secure additional 4 credit in skill based vocational courses offered during first year or second year summer term.

Bachelor of Science/ Bachelor of Science Honors (Physics)		
Fifth Semester		**Credit =24**
Sr. No.	**Subjects**	Credit
1	Modern Physics-1 Mathematical methods in Physics-1, Classical and Quantum Mechanics-1 (Theory)	3
2	Modern Physics Practical 1 (Practical)	2
3	Modern Physics-2 Molecular Spectroscopy, Statistical Mechanics-1 and Solid state Physics-1 (Theory)	3
4	Modern Physics Practical 2 (Practical)	2
5	Modern Physics-3 Electromagnetics and Nuclear Physics-1 (Theory)	3
6	Modern Physics Practical 3 (Practical)	2
7	(Choose any one Minor Theory subject same as previous semester) • Inorganic Chemistry-3/ Organic Chemistry-3/ Physical Chemistry-3 (Theory) • Real Analysis-1 (Theory)	3

8	(Choose any one Minor Practical subject like theory subject) • Inorganic Chemistry-3/ Organic Chemistry-3/ Physical Chemistry-3 (Practical) • Real Analysis-1 (Practical)	2
9	Internship	4
Sixth Semester		**Credit =25**
Sr. No.	**Subjects**	
1	Modern Physics-4 Mathematical methods in Physics-2, Classical and Quantum Mechanics-2 (Theory)	3
2	Modern Physics Practical 4 (Practical)	2
3	Modern Physics-5 Electronic Spectroscopy, Statistical Mechanics-2 and Solid state Physics-2 (Theory)	3
4	Modern Physics Practical 5 (Practical)	2
5	Modern Physics-6 Plasma Physics-1 and Nuclear Physics-2 (Theory)	3
6	Modern Physics Practical 6 (Practical)	2
7	Modern Physics 7-Electronics (Theory)	3
8	Modern Physics Practical 7 (Practical)	2
9	(Choose any one Minor Theory subject same as previous semester) • Organic Chemistry-4/ Inorganic Chemistry-4/Physical Chemistry-4/ Analytical Chemistry-4 (Theory) • Ordinary Differential Equations (Theory)	3
10	(Choose any one Minor Practical subject like theory subject) • Organic Chemistry-4/ Inorganic Chemistry-4/Physical Chemistry-4/ Analytical Chemistry-4 (Practical) • Ordinary Differential Equations (Practical)	2

Note: Students who want to undertake 3-year UG programme will be awarded UG Degree in the relevant Discipline /Subject upon securing 143 credits