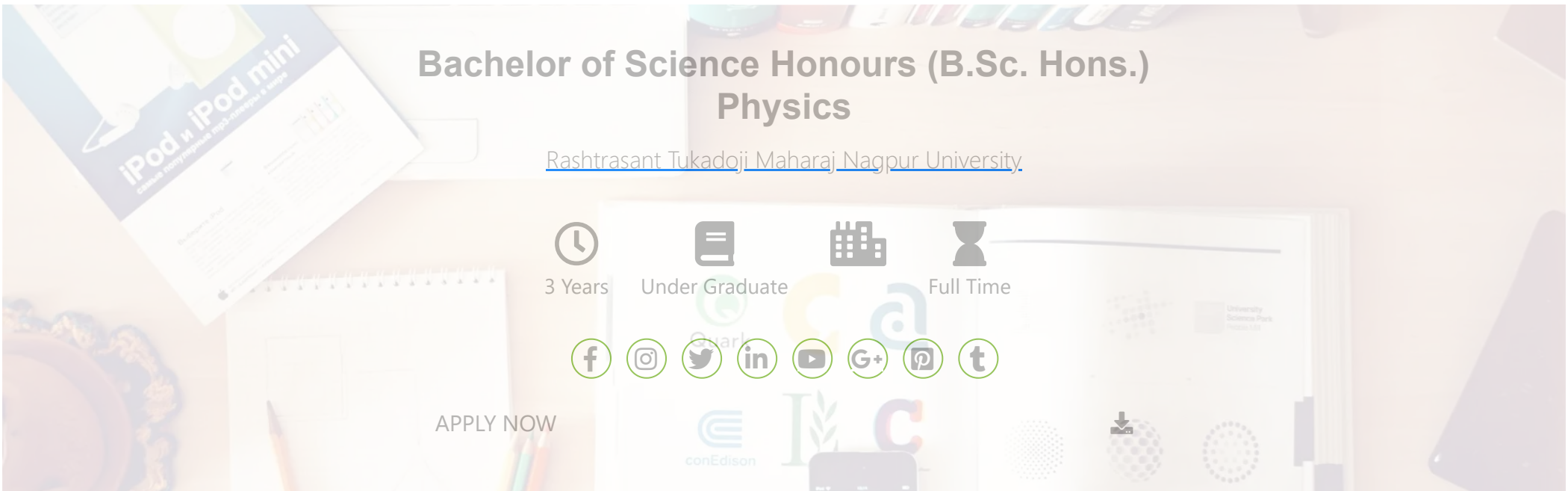

Bachelor of Science Honours (B.Sc. Hons.) Physics

Rashtrasant Tukadoji Maharaj Nagpur University

3 Years | Under Graduate | Full Time

Bachelor of Science Honours (B.Sc. Hons.) Physics

What is Bachelor of Science Honours (B.Sc. Hons.) Physics ?

B.Sc. Hons. in Physics is a study of physics, a natural and fundamental science that involves studying the matter and its motion across space and time. The study of matter and its movements across space and time is known as physics. This course covers all of the relevant concepts, such as energy and force, and the standard bachelor's topics, such as mathematics and chemistry. Physics degrees encompass a vast spectrum of phenomena, from subatomic particles to galaxies. Many specialities are available in the B.Sc. (Hons.) Physics programmes, such as acoustic physics, astrophysics, astronomy, biophysics, fluid physics, etc.

This undergraduate curriculum consists mostly of theory and experimental courses from Physics, with a few multidisciplinary courses from Chemistry, Mathematics, and Computer Science are added in for good measure.

The programme emphasises the foundations of Physics while introducing contemporary topics such as Quantum Mechanics and Relativity. Classical Mechanics along with Electrodynamics Optics and Waves. Topics on Statistical Mechanics and Thermodynamics are also covered.

After completing this course, applicants will have a wide range of work prospects in power generation, pyrotechnics manufacturing, research and development organisations, technical publications, Indian government services, and so on. There are also many employment kinds accessible, such as professor, radiation oncologist, consultant physicist, etc.

Eligibility Criteria for Bachelor of Science Honours (B.Sc. Hons.) Physics

Candidates who have finished their 12th-grade schooling with science as their primary field and have attained a minimum aggregate mark in their

examinations are eligible for this course. Some schools examine the admission test results depending on the subjects covered and may consider those scores.
Candidates must have passed the Senior Secondary Examination (10+2) with a minimum of 55% in PCM/PCB.
Communication in English is a must.
Students from Other Countries: For foreign candidates, the eligibility requirement for all programmes is a minimum of 50% in the qualifying examination and having studied the pre-requisite topics for admission to the selected degree.

Benefits and Scope of Bachelor of Science Honours (B.Sc. Hons.) Physics

Physics is a fundamental science that attempts to explain how the universe operates. Advances in physics have a direct correlation with technological advancements. A physics degree enables students to improve logical thinking, reasoning, and intellectual thinking skills. Physics as a discipline provides access to some of the most fascinating and rewarding careers in the world. In the future years, total employment is anticipated to rise.
Students with a bachelor's degree can find work in a variety of professions. Because of the rapid progress of technology, there is always room for advancement in the subject of physics. Students can work as researchers, instructors, technicians, lab assistants, physicists, and other positions.

Career and Job Prospects after Bachelor of Science Honours (B.Sc. Hons.) Physics

Candidates who complete this course are qualified to work in various fields such as agriculture research, astronomy, aircraft, colleges, construction businesses, cryptography, demolition squads, education firms, hospitals, labs, and so on. They are also open to many employment kinds and positions such as aerodynamic specialist, astronomist, assistant scientist, consultant physicist, lab supervisor, professor, etc.
There are also open forums for advanced courses in the same field, such as M.Sc. Physics, M.Phil. Physics, and PhD in Physics.
A content developer earns about 2.42 LPA each year.
A lab supervisor earns approximately 3 LPA each year.
A radiologist assistant earns about 6 LPA each year.
A statistician earns about 4.5 LPA each year.
A senior physicist earns approximately 7 LPA each year.
A researcher's yearly pay is about 6 LPA.
A radiation oncologist earns approximately ten LPA each year.
A consulting physicist earns about 8 LPA each year.
A research associate earns approximately 3.5 LPA each year.
A high school teacher earns about 4.86 LPA each year.

Course Duration & Fees Structure of Bachelor of Science Honours (B.Sc. Hons.) Physics

The BSc programme is broken into six semesters.Fees range between 5000 and 60000 dollars on average.

Campus	University	Delivery Mode
Nagpur	Rashtrasant Tukadoji Maharaj Nagpur	

Eligibility	Duration	Type of Course
12 with Science	3 Years	Under Graduate

Syllabus of Bachelor of Science Honours (B.Sc. Hons.) Physics

Syllabus of Bachelor of Science Honours (B.Sc. Hons.) Physics

Year 1

S.No	Subjects
1	Mathematical Physics
2	Mechanics
3	Waves and Optics
4	Mathematical Physics
5	Digital Systems and Applications
6	Mathematical Physics
7	Elements of Modern Physics
8	Quantum Mechanics and Applications
9	Solid State Physics
10	Electromagnetic Theory

Year 2

S.No	Subjects
1	Elements of Modern Physics
2	Solid State Physics
3	Embedded System: Introduction to microcontroller
4	Biological physics
5	Digital Signal processing
6	Nuclear and Particle Physics
7	Astronomy and Astrophysics

Year 3

S.No	Subjects
1	Electromagnetic Theory
2	Statistical Physics

3	Electronic Devices : Physics and Applications
4	Physics Lab
5	Project & Practical

Rashtrasant Tukadoji Maharaj Nagpur University Highlights

Established in	1923
University Type	State University
Recognized by	UGC , AICTE , AIU , NAAC ,
Courses	39