

**RANIGANJ GIRLS' COLLEGE**  
**BSC HONOURS IN PHYSICS**  
**&**  
**BSC PROGRAM IN PHYSICS**  
**PROGRAM OUTCOMES**

- Demonstrate (i) a fundamental/systematic or coherent understanding of the academic field of Physics, its different learning areas and applications, and its linkages with related disciplinary areas/subjects; (ii) procedural knowledge that creates different types of professionals related to the disciplinary/subject area of Physics, including professionals engaged in research and development, teaching and government/public service; (iii) skills in areas related to one's specialisation area within the disciplinary/subject area of Physics and current and emerging developments in the field of Physics.
- Demonstrate the ability to use Physics skills such as formulating and tackling Physics related problems and identifying and applying appropriate physical principles and methodologies to solve a wide range of problems associated with Physics.
- Recognise the importance of mathematical modeling and computing, and the role of approximation and mathematical approaches to describing the physical world.
- Plan and execute physics-related experiments or investigations, analyse and interpret data/information collected using appropriate methods, including the use of appropriate software such as programming languages and purpose-written packages, and report accurately the findings of the experiment/investigations while relating the conclusions/ findings to relevant theories of Physics.
- Demonstrate relevant generic skills and global competencies such as (i) problem-solving skills that are required to solve different types of physics-related problems with well-defined solutions, and tackle open-ended problems that may cross disciplinary-area boundaries; (ii) investigative skills, including skills of independent investigation of physics-related issues and problems; (iii) communication skills involving the ability to listen carefully, to read texts and research papers analytically and to present complex information in a concise manner to different groups/audiences; (iv) analytical skills involving paying attention to detail and ability to construct logical arguments using correct

technical language related to physics; (v) ICT skills; (vi) personal skills such as the ability to work both independently and in a group.

- Demonstrate professional behaviour such as (i) being objective, unbiased and truthful in all aspects of work and avoiding unethical behavior such as fabricating, falsifying or misrepresenting data or to committing plagiarism; (ii) the ability to identify the potential ethical issues in work-related situations; (iii) appreciation of intellectual property, environmental and sustainability issues; and (iv) promoting safe learning and working environment.

Source: <https://www.ugc.gov.in/e-book/locf.pdf>