



Shri Shivaji Education Society Amravati's
**Science College,
Congress Nagar, Nagpur**



Program Outcomes (POs) for B. Sc Programme

After completing the graduation studies in science, students will be able to

PO1: Execute strong theoretical and practical understanding generated from the specific graduate programme in the area of work.

PO2: analyse simple as well as complex situations involving applications of scientific concepts in real life situations.

PO3: garner skill sets which can be in turn be an asset to the nation at large.

PO4: Imbibe industry specific skills to remain competent in the dynamic global environment. To inculcate ethical, moral and social values in personal and social life leading to highly cultured and civilized persons.

PO5: apply skills to design and conduct independent experiments, interpret, establish hypothesis and inquisitiveness towards research. Students are trained to think out of the box.

PO6: Understand the impact of the scientific solutions in societal and environmental contexts and demonstrate the knowledge of and need for sustainable development. It also aims to impart holistic education ensuring all round development of students.

PO7: All the science subjects offer skill enhancement courses and value added courses so that learners have a better edge over their counterparts especially in the global world scenario.

Program Outcomes (POs) for Postgraduates Programme

After completing the post-graduation studies in any subject belonging to science (Physics, Biochemistry and Biotechnology, Chemistry, Computer Science and Law), student will be able to

PO1: apply the knowledge of the respective domain of knowledge and specialization to the solution of complex problems in professional, social and personal life.

PO2: Develop a multidisciplinary perspective and contribute to the knowledge capital of the world in general and the country in particular.

PO3: Acquire communication and presentation skills and become employable in the job market.

PO4: Develop sensitivity for social issues and become proactive citizens.

PO5: Examine and explain how the subject has influence the progress in the other areas of science and technology useful in the betterment of life of common people and development of society.

PO6: Acquire high level skills in laboratory experimentation and inferring the logical conclusions.

PO7: Participate in Project works, doing independent designing & execution of the research work.

PO8: Recognize the areas which needs further research work and could take up an independent research project in a R & D organization or in any industrial organization.

PO9: Demonstrate in-depth knowledge both conceptual and applied pertaining to their core discipline.

PO10: Students become well equipped to be placed in health care organizations, data science laboratories, environmental organizations, higher educational institutions, food, dairy and beverage industries and pharmaceutical industries

Program Outcomes (POs) for Ph.D. Programme

After completing the doctoral studies in science (Physics, Chemistry and Biochemistry), students will be able to

PO1: Critically review research literature and pursue socially relevant research to solve problems with sustainable approach and create new knowledge in their respective domain.

PO2: students will acquire expertise in their chosen area of research and contribute new knowledge to their respective domain.

PO3: Demonstrate research-based knowledge and skills for the advancement of arts and science.

PO4: Engage in research devoid of plagiarism and develop original ideas and approaches

PO5: Develop a global perspective and collaborate with institutes of international eminence and exchange the best practices in the field of research.

PO6: acquaint with new knowledge, process, procedure, methods, systems and service that will develop the living conditions of disadvantaged people.

PO7: discover, interpret and communicate new knowledge through original research of publishable quality which satisfies peer review Personal effectiveness The personal qualities, career and self-management skills required to take ownership for and engage in professional development.

PO8: apply a significant range of advanced and specialised skills and be able to act autonomously in the planning and implementation of research

PO9: practice a proactive, self-critical and self-reflective approach based on research and develop professional relationships with others where appropriate

PO10: demonstrate leadership and originality in tackling and resolving problems and issues, through communication and working effectively with others Research governance and organisation The knowledge of the standards, requirements and professional conduct that are needed for the effective management of research.

PO11: present and defend original research outcomes which extend the forefront of a discipline or relevant area of professional practice

PO12: critically and creatively evaluate current issues, research and advanced scholarship in the discipline

PO13: manage complex ethical and professional issues and make informed judgements on ethical codes and practices Engagement, influence and impact the knowledge, understanding and skills needed to engage with, influence and impact on the academic, social, cultural, economic and broader context on completion of the programme, research students should have shown evidence of being able to:

PO14: work collaboratively with all stakeholders to create, develop and exchange research knowledge to influence and benefit society and the economy

Add on Programs & Career Oriented Programs

Besides the traditional education, college run various certificate course. Through such add on programs, student will

PO1: get the chance to learn new skills or build understanding.

PO2: learn valuable soft skills such as organization and critical thinking. Additionally, some certificate programs allow students to gain important technical skills or enhance their understanding of their field as well as society.

PO3: These addon/certificate courses can allow students to pursue a variety of career paths.

PO4: Many employers prefer candidates with educational credentials, and a certificate can provide an edge to those who are seeking competitive positions.

PO5: Additionally, addon/certificate courses can provide an excellent foundation for further study, should a student choose to continue his or her education.