



BON SECOURS COLLEGE FOR WOMEN (AUTONOMOUS)

Accredited with NAAC A⁺⁺ Grade in Cycle II

UGC Recognized 2(f) and 12(B) Institution

Affiliated with Bharathidasan University, Tiruchirappalli

Vilar Bypass, Thanjavur – 613006.

DEPARTMENT OF BIOTECHNOLOGY

M.Sc., BIOTECHNOLOGY

PROGRAMME OUTCOMES

On successful completion of the M.Sc., Programme, students will be able to:

PO1: Scientific Knowledge and Expertise: Demonstrate in-depth understanding of scientific theories, principles, and methodologies within their specialized discipline and recognize its impact on societal advancement.

PO2: Experimental and Problem-Solving Skills: Apply scientific reasoning and laboratory skills to design experiments, analyse data, and develop solutions to complex scientific and technological challenges.

PO3: Research and Innovation: Engage in innovative, interdisciplinary research to address contemporary scientific issues, contributing to advancements in knowledge and technology with a focus on real-world applications.

PO4: Environmental and Ethical Awareness: Act responsibly with a commitment to environmental sustainability, ethical standards in research, and social responsibility in scientific pursuits.

PO5: Digital and Technical Proficiency: Utilize digital tools, programming, and scientific software to conduct advanced research, data analysis, and problem-solving in their field.

PO6: Lifelong Learning and Collaboration: Commit to lifelong learning, fostering teamwork and leadership skills to work effectively in diverse and collaborative scientific environments.

PROGRAMME SPECIFIC OUTCOMES

PSO 1: Demonstrate a deep understanding of biotechnology principles and apply advanced techniques in molecular biology, genetic engineering, and bioinformatics.

PSO 2: Develop proficiency in laboratory techniques and conduct independent research, including designing, executing, and analysing experiments.

PSO 3: Integrate knowledge across multiple disciplines to conduct research and develop biotechnological applications that provide solutions.

PSO 4: Ideate and apply entrepreneurial and IPR skills for innovations, address ethical, legal, and social issues in biotechnology, and develop sustainable, eco-friendly solutions.

PSO 5: Prepare for careers in biotechnology industries, academia, and research by developing project management, teamwork, and leadership skills, and commit to lifelong learning

PROGRAMME EDUCATIONAL OBJECTIVES

The programme will enable the graduates to

PEO1: Enrich learners with in-depth disciplinary knowledge and essential skills to contribute to societal development and transformation.

PEO2: Enhance professional, employability, and entrepreneurial skills to achieve sustainability in a dynamic global environment.

PEO3: Foster values of environmental consciousness and responsibilities, promoting the empowerment and upliftment of rural communities.