

Bachelor of Science (BSC)

Course Overview Institution: St. Anne's First Grade College for Women

Program Duration: 3 Years (6 Semesters)

Semester 6

Applied Chemistry

Applied Chemistry is the practical application of chemical principles to solve real-world problems. It focuses on using chemical knowledge to develop new materials, processes, and technologies in industries like pharmaceuticals, environmental science, and manufacturing. Topics include industrial chemistry, polymer science, and chemical engineering. Applied chemistry bridges the gap between theoretical chemistry and practical applications, enhancing innovations in product development and quality control.

Biochemistry

Biochemistry is the branch of science that explores the chemical processes within and related to living organisms. It combines biology and chemistry to study the molecular mechanisms that govern life, including metabolism, enzyme function, DNA replication, and protein synthesis. Biochemistry plays a key role in medical research, biotechnology, genetics, and the understanding of diseases at the molecular level.

Astrophysics

Astrophysics is the study of the physical properties and behavior of celestial objects and the universe as a whole. It applies principles from physics and mathematics to understand phenomena such as star formation, black holes, galaxies, and cosmic radiation. Astrophysics seeks to answer fundamental questions about the origin, evolution, and fate of the universe, combining observational data from telescopes with theoretical models.

Electronics

Electronics is the branch of physics and engineering that deals with the study, design, and application of devices and systems that use electric currents and electromagnetic fields. It covers topics like semiconductors, circuit design, microprocessors, and signal processing. Electronics is fundamental to modern technology, playing a critical role in communication, computing, automation, and consumer electronics.

Project Work

Project Work involves applying theoretical knowledge to practical tasks, aiming to solve a specific problem or create something innovative. It often requires research, experimentation, analysis, and presentation. In academic and professional contexts, project work helps develop skills like problem-solving, teamwork, critical thinking, and technical expertise. It can encompass areas like scientific experiments, software development, engineering prototypes, or social impact studies.