

**<https://shu.edu.pk/Faculty-of-Science/>**



## **Faculty of**

## **Science**

The Faculty of Science at Salim Habib University offers programs in Biosciences, Microbiology, and Biotechnology, focusing on health, agriculture, and sustainability. With advanced research in genetics, immunology, and molecular biology, students gain hands-on experience in state-of-the-art labs. The faculty prepares graduates for careers in pharmaceuticals, biotechnology, and medical research, addressing global challenges through innovation and interdisciplinary learning.

- Undergraduate Program

## **BS Biotechnology**

[More Info](#)

[Apply](#)

- Undergraduate Program

## **BS Biotechnology**

[More Info](#)

[Apply](#)

- Undergraduate Program

## **BS Microbiology**

[More Info](#)

[Apply](#)

- Undergraduate Program

## **BS Microbiology**

[More Info](#)

[Apply](#)

- Undergraduate Program

## **BS Biosciences**

[More Info](#)

[Apply](#)

- Undergraduate Program

## **BS Biosciences**

[More Info](#)

[Apply](#)

- [Postgraduate Program](#)

## **M.Phil. Biosciences**

[More Info](#)

[Apply](#)

- [Postgraduate Program](#)

## **M.Phil. Biosciences**

[More Info](#)

[Apply](#)

- [Doctorate Program](#)

## **Ph.D. Biosciences**

[More Info](#)

[Apply](#)

- [Doctorate Program](#)

## **Ph.D. Biosciences**

[More Info](#)

[Apply](#)



## **Dean's Message**

Welcome to the Faculty of Science at Salim Habib University (SHU), where we are committed to excellence in education and research across both undergraduate and postgraduate levels. Currently, the faculty offers undergraduate programs in BS-Biosciences, BS-Microbiology, and BS-Biotechnology, as well as postgraduate programs, including M.Phil. and PhD in Biosciences. We are continuously exploring new frontiers in life sciences to further expand our academic offerings.

Pakistan faces a significant burden of diseases affecting humans, plants, and animals, which have a profound impact on our national economy and extend to global markets. These challenges not only strain healthcare systems and agricultural productivity but also disrupt the livelihoods of millions.

Addressing these issues on both a national and international scale is crucial to ensure economic stability, environmental sustainability, and improved public health.

The Biosciences, Biotechnology, and Microbiology programs at Salim Habib University are designed to equip students with marketable and entrepreneurial skills by integrating diverse scientific domains. Our programs focus on developing innovative solutions to health-related challenges, including disease mechanisms, prevention, control measures, and drug discovery, while also addressing issues in agriculture, livestock, food safety, and environmental protection. Together, these programs offer a comprehensive education that prepares students for real-world challenges across multiple sectors.

To ensure the highest quality of education and research, SHU is proud to have a highly qualified PhD faculty with extensive national and international research experience, bringing cutting-edge knowledge from globally renowned institutions. Our state-of-the-art infrastructure, including modern classrooms, advanced labs, and fully equipped computer facilities, ensures an optimal learning environment. We prepare students to integrate life sciences with other fields, fostering innovation and leadership to address today's global challenges. Join us at SHU to become a leader in the scientific community and make a meaningful impact on society.



## **Dr. Arshad Mahmood**

**Professor & Dean**

**Faculty of Sciences**

## **Departments Offered in Faculty of Science**

[View All Programs](#)

## **Department of Biosciences**

### **What is Biosciences ?**

Welcome to the BS Biosciences program, where science meets innovation to address some of the most pressing challenges in health, agriculture, and environmental sustainability. This interdisciplinary field blends biological sciences with cutting-edge technology to explore and solve complex problems across various domains.

As a diverse discipline, Biosciences focuses on various genetic, infectious, and chronic diseases in humans, animal and plants. In the field of agriculture biosciences focus on detecting plant diseases and enhancing immunity through genetic and biochemical methods, while veterinary research addresses

zoonotic diseases and improves livestock and wildlife health using molecular and immunological techniques. Understanding disease mechanisms is vital for developing effective treatments, with research spanning molecular pathways in humans, immune signaling in plants, and host-pathogen interactions in animals. Preventive strategies include vaccines, disease-resistant crops, and biosecurity measures, while control efforts involve designing therapies, using pesticides, and applying veterinary medicines. Biosciences drive advancements in production by enhancing pharmaceuticals, crop yields, and livestock productivity, while addressing fertility issues with advanced reproductive technologies.

This interdisciplinary field contributes to problem-solving on both national and global scales—evident in initiatives like disease-resistant crop development and innovative medical treatments—and offers diverse career opportunities in industries such as pharmaceuticals, agriculture, and biotechnology. Entrepreneurial projects, such as biotech startups and agricultural tech innovations, exemplify the sector's dynamic potential, fostering job placement and growth in both local and international markets.

[Image failed:

[https://shu.edu.pk/assests/Programs\\_Images/biosc16.jpg](https://shu.edu.pk/assests/Programs_Images/biosc16.jpg)

[Learn More](#)

## Quick Links

Add a header to begin generating the table of contents

## Vision

To become the top ranked department recognized both nationally and internationally.

## Mission

To produce skilled graduates with a comprehensive knowledge in life sciences through experiential learning and problem solving abilities. We aim to foster an exciting learning environment, which provide intellectual development and stimulate our students to serve as leaders of the world.

## **Pioneering Features of Faculty of Science**

- We offer an internationally recognized and cutting-edge curriculum designed to meet global standards.
- We offer well-equipped laboratories and state-of-the-art research facilities, including a tissue culture and immunology lab with bio-safety cabinets and the latest in-vitro cell culture techniques for specialized courses and advanced research, a chemistry lab, a biochemistry lab, an environmental lab, a microbiology, bioscience, biochemistry, and physiology lab equipped with power labs.
- Through experiential and project-based learning, we prepare students for scientific and biotech innovations and enhance their understanding of biological principles, theories, and applications in technology and industry.
- We encourage student engagement in research projects to enhance their ability to conduct and interpret experiments to develop career-focused marketable, and entrepreneurial skills.
- We offer tailored industry mentorship programs to cultivate and develop entrepreneurial ideas.
- There are opportunities for international exposure and mobility through engagement in global competitions and exhibitions.
- Students can gain support and guidance from highly experienced and well-qualified faculty members.
- Students engaged in 84 projects in 2024 related to Pharmaceutical & Biotechnology Innovations, Sustainable Health & Environmental Solutions, Nutritional Science &



Wellness, Neuroscience & Cognitive Research, and  
Computational & Analytical Tools.

## **Faculty**

**Dr. Arshad Mahmood**

**Professor & Dean**

- Faculty of Science, Department of Biosciences

**[View Profile](#)**

**Dr. Arshad Mahmood**

**Dr. Muhammad Shakeel Ahmed Khan**

**Professor & Direct ORIC**

- Faculty of Science, Department of Biosciences

**[View Profile](#)**

**Dr. Muhammad Shakeel Ahmed  
Khan**

**Dr. Shaheena Anwar**

**Assistant Professor**

- Faculty of Science, Department of Biosciences

**[View Profile](#)**

**Dr. Shaheena Anwar**

**Dr. Madiha Kanwal**

**Assistant Professor**

- Faculty of Science, Department of Biosciences

**View Profile**

**Dr. Madiha Kanwal**

**Dr. Aqeel Ahmed**

**Professor**

- Faculty of Science, Department of Biosciences

**View Profile**

**Dr. Aqeel Ahmed**

**Dr. Marriam Yamin**

**Assistant Professor**

- Faculty of Science, Department of Biosciences

**View Profile**

**Dr. Marriam Yamin**

**Dr. Afira Waqar**

## **Assistant Professor**

- Faculty of Science, Department of Biosciences

### **[View Profile](#)**

**Dr. Afira Waqar**

**Dr. Affhan Shoaib**

## **Associate Professor**

- Faculty of Science, Department of Biosciences

### **[View Profile](#)**

**Dr. Affhan Shoaib**

**Ms. Hajira Kareem**

## **Lecturer**

- Faculty of Science, Department of Biosciences

### **[View Profile](#)**

**Ms. Hajira Kareem**

## **Student Projects**

Content will be provided.

## **Gallery**

Content will be provided.

## Events

ast-container