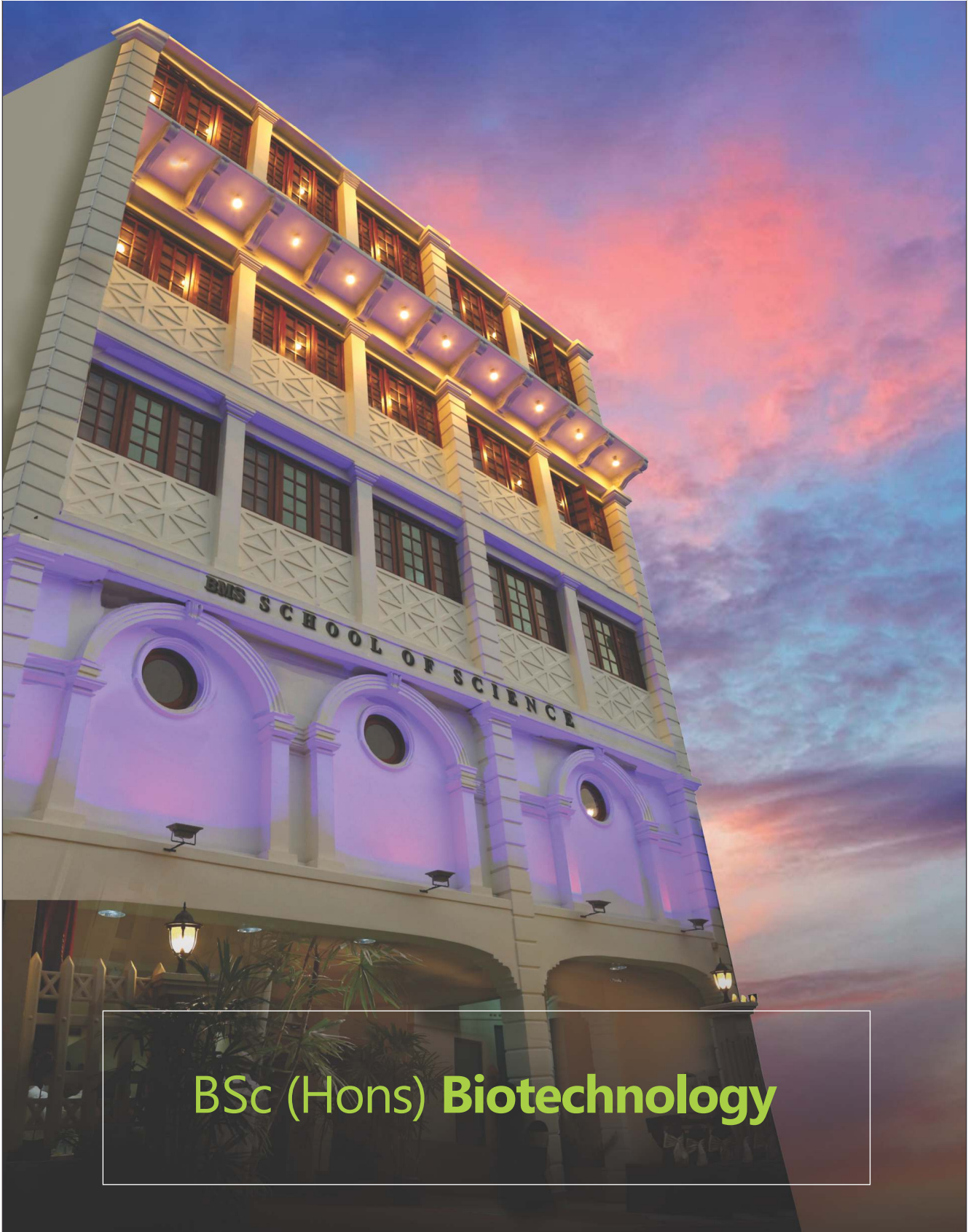




School of
Science



BSc (Hons) Biotechnology



Northumbria University Vice Chancellor, Professor Andrew Wathey with students at BMS

BSc (Hons) Biotechnology

Final Year in Sri Lanka or UK

Programme Structure

Code	Module	Credits
AP 0607	Molecular Cell Interactions	20
AP 0609	Advanced Analytical Techniques	20
AP 0612	The Impact of Science on Society	20
AP 0614	Applied Bioinformatics and Post Genomics	20
AP 0606	Research Project	40

Programme Modules

Molecular Cell Interactions

This module teaches about mammalian cell signalling processes correlated with their role in disease pathogenesis and cellular responses to toxic compounds. The module provides an understanding of molecular mechanisms underpinning carcinogenesis, molecular basis of bacterial signalling, bacterial pathogenesis, therapeutic strategies designed to alleviate disease/pathogenesis and the molecular basis of therapeutic design including drug action, chemotherapy and gene therapy.

The Impact of Science on Society

This module gives the opportunity to explore the changing ELSI (Ethical, Legal and Social Issues) implications of bioscience research and the subsequent impact within modern society. The aim of the module is to develop graduates who are ready to talk about science, interpret its influences in society and analyse contemporary science and technology based issues.

Advanced Analytical Techniques

This module explores scientific principles of essential advanced analytical techniques used in modern Biotechnological applications in both industry and research. It gives an understanding of genetic engineering strategies along with purification of recombinant proteins for analysis and advanced separation techniques. This module provides an insight into innovative technologies such as next generation sequencing and microarray technologies.

Applied Bioinformatics and Post Genomics

This module explains the application of computer based tools in the management and analysis of biological data and it will enable you to gain an understanding and practical experience of state of the art bioinformatics techniques. This focuses on the application of bioinformatics to eukaryotic genomes and human genome and its analysis using microarrays and next generation sequencing techniques. You will gain experience in CRISPR-Cas applications, Gene set identification and annotation with machine learning concepts related to Computing.

Research Project

The module enables the students to design and carry out an extended individual research project with the guidance and support from an appointed supervisor. The project incorporate development of research skills and discussion of results to compile a written report with literature survey and findings.

BMS Graduation Ceremony 2021



**Northumbria
University**
NEWCASTLE

**Northumbria University and BMS
celebrate 20 years of partnership**

Northumbria University and BMS partnership has provided high quality British Degrees in Sri Lanka for the last twenty years. Northumbria - BMS partnership has contributed to the development of graduates in the fields of Biotechnology as well as Biomedical Science.

Northumbria University is a research-rich, business-focused, professional university with a global reputation for academic excellence. It is based in the heart of Newcastle upon Tyne, which is regularly voted as the best place for students in the UK. Northumbria is among the top ten in the UK for the number of graduates entering professional employment.



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