VIT UNIVERSITY
(Estd. u/s 3 of UGC Act 1956)
VELLORE ▪ CHENNAI
www.vit.ac.in

M. Sc BIOTECHNOLOGY (5 year Integrated)

University Core	
Course Title	**Credits**
BASIC ENGLISH	3
FUNCTIONAL ENGLISH	3
FOREIGN LANGUAGE	2
APPLIED PHYSICS	3
ALLIED CHEMISTRY	3
MATHEMATICAL BIOLOGY	3
INTRODUCTION TO COMPUTERS	3
ENVIRONMENTAL STUDIES	3
ETHICS AND VALUES	3
STUDENT PROJECT	20

University Elective Courses	
Course Title	**Credits**
University Elective	6

Programme Core	
Course Title	**Credits**

CELL BIOLOGY	5
FUNDAMENTAL BIOCHEMISTRY	5
FUNDAMENTALS OF GENETICS	3
GENERAL MICROBIOLOGY	5
BIODIVERSITY AND BIORESOURCES CONSERVATION	3
MOLECULAR BIOLOGY	5
ANATOMY AND PHYSIOLOGY	3
MEDICAL BIOCHEMISTRY	3
MICROBIAL GENETICS	3
DEVELOPMENTAL BIOLOGY	3
IMMUNOLOGY	5
ENZYMOLOGY	5
BIOPHYSICS	3
BIOSTATISTICS	3
FUNDAMENTALS OF CHEMICAL ENGINEERING	3
MOLECULAR ENDOCRINOLOGY	3
ENVIRONMENTAL GENETICS	3
BIOINFORMATICS	5
CONCEPTS IN BIOTECHNOLOGY	3
GENETIC ENGINEERING	5
FOOD SCIENCE	5
GENOMICS AND PROTEOMICS	3
BEHAVIORAL SCIENCES	3
BIOLOGICAL DATABASES	3
ENZYME TECHNOLOGY	3

ANALYTICAL TECHNIQUES	3
BIOPROCESS PRINCIPLES	3
PLANT BIOTECHNOLOGY	5
ANIMAL BIOTECHNOLOGY	5
FOOD BIOTECHNOLOGY	3
PROTEIN ENGINEERING	3
INDUSTRIAL BIOTECHNOLOGY	3
PHARMACEUTICAL BIOTECHNOLOGY	3
FERMENTATION TECHNOLOGY	3
TECHNIQUES IN BIOTECHNOLOGY	5
DOWNSTREAM PROCESSING	5
NANOBIOTECHNOLOGY	3
MEDICAL BIOTECHNOLOGY	3
ENVIRONMENTAL BIOTECHNOLOGY	5
BIOETHICS AND IPR	3
RESEARCH METHODOLOGY	3

Credits under Programme Electives - 15

Course Title	**Credits**
GENETICS	3
ADVANCED BIOCHEMISTRY	3
AQUATIC BIOTECHNOLOGY	3
BIOLOGICAL SPECTROSCOPY	3
BIORESOURCE MANAGEMENT	3
MOLECULAR MODELING AND DRUG DESIGN	3

SYSTEMS BIOLOGY	3
TRANSGENIC ENGINEERING	3
CANCER BIOLOGY	3
NEUROBIOLOGY	3
VACCINOLOGY	3
STEM CELL TECHNOLOGY	3
BIOREMEDIATION	3
ENVIRONMENTAL HEALTH	3
BIOBUSINESS	3
GENE THERAPY	3
ASSISTED REPRODUCTIVE TECHNOLOGY	3

CREDIT SUMMARY	
MINIMUM QUALIFYING CREDITS	220
UC	46
UE	6
PC OFFERED	153
PE NEEDED	15