

13.1.2 BACHELOR OF SCIENCE (BIOCHEMISTRY)

Entry Requirements

- i. The University and the School of Pure and Applied Sciences admission regulations shall apply.
- ii. A candidate for the degree of B.Sc. in Biochemistry must satisfy the minimum requirements for entry to the School of Pure and Applied Sciences and Kenyatta University.
- iii. In addition, they must have passed with a minimum of C+ in the overall average aggregate and attained the grades in the following subjects:

Alternative A:	Alternative B:	
Biology	B-	Biological Sciences B
Chemistry	B-	Physical Sciences B
Mathematics/Physics	C+	Mathematics C+

- iv. Mean grade of C- (minus) at KCSE and progressed from certificate to Diploma at Kenyatta University or any other recognized/accredited Institutions.

Programme of Study and Degree Pattern

Students taking B.Sc. (Biochemistry) must complete 49 departmental units in addition to three university common units. At both the 100 level and the 200 levels all the twenty five (25) units are core, while at levels 300 and 400, first semester unit are core and second semester units electives.

Examinations

The general university regulations shall apply.

Certification

Graduates of this programme will be awarded a Bachelor of Science degree in Biochemistry (B.Sc. Biochemistry).

Unit Code and Title

Level 100

- SBC 100: Structure of Bio-molecules
- SBC 101: The Cell and its External Environment
- SBC 103: Proteins and Enzymes I
- SBC 104: Carbohydrate Metabolism
- SBC 120: Introduction to Genetics
- SBC 121: Quantitative Genetics
- SBT 101: Survey of Plant Kingdom

SBT 102: Plant Morphology and Anatomy
SCH 100: Fundamentals of Inorganic Chemistry
SCH 101: Introduction to Physical Chemistry
SCH 102: Organic Chemistry 1
SMA 100: Mathematics for Science I
SZL 100: General Zoology
UCU Unit

Level 200

SBC 200: Lipid Metabolism
SBC 201: Proteins and Enzymes II
SBC 202: Analytical Techniques I
SBC 203: Bio-membranes and Sub-cellular Organelles
SBC 204: Amino acid and Nucleotide Metabolism
SBC 205: Medical Biochemistry I SBC
207: Cytology and Histology SBC
209: Reproductive Biochemistry
SBC 220: Fundamentals and Applications of Biotechnology
SBC 221: Cellular and Molecular Biology I
SBC 222: Introduction to Immunology
SCH 202: Organic Chemistry II
UCU Unit

Level 300

SBC 300: Biochemistry of Microorganisms
SBC 301: Metabolism and Respiration in Plants
SBC 302: Analytical Techniques II
SBC 304: Signal Transduction and Cell Communication
SBC 305: Applied Microbial Biochemistry
SBC 306: Biochemical Pharmacology
SBC 307: Pharmacognosy
SBC 308: Biostatistics and Research
SBC 309: Ecological Biochemistry
SBC 310: Regulation and Integration of Metabolism
SBC 311: Attachment in Biochemistry
SBC 375: Cellular and Molecular Biology II
SBC 390: Drug Bioscreening
SBC 391: Plant Biochemistry I
UCU Unit

Level 400

SBC 400: Biochemical Endocrinology
SBC 401: Medical Biochemistry II
SBC 403: Advanced Immunology
SBC 404: Nutritional Biochemistry
SBC 405: Plant Biochemistry II
SBC 406: Pharmaceutical Chemistry
SBC 407: Biochemical Toxicology (prerequisite SBC 306)
SBC 408: Food Biochemistry

SBC 409: Fermentation Technology

SBC 410: Research Project in Biochemistry (2 units equivalent) SBC

420: Gene Technology

SBC 421: Bio-processing

SBC 427: Fundamentals of Bioinformatics

SBC 445: Applied immunology