

## 6.3.2 BACHELOR OF SCIENCE (BIOMEDICAL ENGINEERING)

### Unit Code and Title

#### Level 100

UCU100: Communication skills  
EEE 100: Engineering Drawing I  
ECU 100: Chemistry for Engineers I  
UCU 101: Development Studies  
ECU 101: Physics For Engineers I  
ECU 109: Fundamental of Computing  
ECU 104: Engineering Mathematics I  
ECU 105: Engineering Mathematics II  
EEE101: Engineering Drawing II  
EEE 102: Computer Programming I  
ECU 102: Chemistry for Engineers II  
ECU 103: Physics for Engineers II  
ECU 106: Engineering Mathematics III  
ECU 107: Engineering Mathematics IV  
ECU 108: Introduction to the Engineering Profession  
EBM 110: Basic Trauma & Life Support Management

#### Level 200

ECU 200: Engineering Mathematics V  
ECU 201: Engineering Mathematics VI  
EBM 200: Biomaterials  
EEE 201: Thermodynamics  
EEE 202: Computer Programming II  
EEE 203: Circuit Theory I  
EEE 205: Physical Electronics  
EEE 212: Mechanics of Machines  
ECU 202: Engineering Mathematics VII  
ECU 203: Engineering Mathematics VIII  
EEE 204: Circuit Theory II  
EEE 206: Electrical Machines I  
EBM 202: Health Database Management Systems  
EEE 208: Electrical Measurements  
EEE 209: Fluid Mechanics  
EEE 210: AutoCAD  
EBM 203: BME Workshop Practice

#### Level 300

EBM 300: Foundations of Human Biology  
ECU 300: Engineering Mathematics IX  
ECU 302: Innovation & Entrepreneurship for Engineers

EEE 302: Electromagnetic Fields  
 EBM 301: Properties of Engineering Materials  
 EEE 305: Digital Electronics I  
 EEE 308: Analogue Electronics I  
 EBM 302: Basics of Medical Biochemistry  
 CU 301: Engineering Mathematics X  
 EEE 303: Power Systems I  
 EEE 306: Digital Electronics II  
 EEE 307: Network Analysis and Synthesis  
 EEE 309: Analogue Electronics II  
 EBM 303: Control Systems Engineering  
 EBM 304: Human Anatomy for Biomedical Engineers 1  
 EBM 305: Special Topics in Biochemistry  
 ECU 303: Industrial Practical Attachment I  
 EBM 306: Log Book Assignment (BME Comprehensive II)

#### Level 400

EBM 400: Communication Systems (Existing as SCE 430)  
 ECU 401: Project Management  
 EEE 402: Complex Analysis for Engineers  
 EBM 401: Human Anatomy for Biomedical Engineers II  
 EBM 402: Medical Physiology for Biomedical Engineers 1  
 EEE 405: Power Electronics  
 EEE 406: Microprocessor Systems and Applications  
 EEE 410: Signals Systems and Systems  
 ECU 400: Research Methods  
 EBM 403: Medical Physiology for Biomedical Engineers II  
 ECU 402: Engineering Economics  
 ECU 403: Industrial Practical Attachment II  
 EEE 407: Operational Research  
 EBM 404: Biomedical Engineering Project I  
 EBM 405: Biomedical Instrumentation I  
 EBM 406: Hospital Engineering Management  
 EBM 407: Machine Design  
 EBM 408: Log Book Assignment (BME Comprehensive Assignment II)

#### Level 500

ECU 500: Engineering Practice and Ethics  
 EBM 500: Biomedical Engineering Project II  
 EBM 501: Biomedical Instrumentation II  
 EBM 502: Introduction to Bioinformatics  
 EBM 503: Digital Imaging Processing  
 EBM 504: Biosensors  
 EBM 505: Medical Physiology for Biomedical Engineers III  
 EBM 506: Medical Physiology for Biomedical Engineers IV  
 EBM 507: Biomechanics  
 EBM 508: Industrial & Hospital Management  
 EBM 509: Biomedical equipment design & manufacturing of techniques  
 EBM 512: Basics of Human Pathology

EBM 510: Electric Motor Drive Systems EBM 511:  
Biomedical Instrumentations III EBM 500:  
Biomedical Engineering Project II  
EBM 513: Research Project (Health data management & programming; Software for biological and  
health systems development; Tissue engineering; Image processing; Special biomed re- search areas)