

Bachelor of Biomedical Science With Honours Program

Introduction

The Bachelor of Biomedical Sciences with Honours at Universiti Kebangsaan Malaysia (UKM) is a four (4)-year degree program. Biomedical Sciences is a field that explores the science of human biology and medical science. This program was established to meet the need for manpower who can serve in health related sectors. Biomedical Science graduates are trained to serve in medical diagnostic laboratories, as researchers in the field of medicine and health and as officers in any sector/industry related to health and medicine. The learning process ensures graduates function as members of a health team who aspire to provide quality health services in accordance with the Malaysian Allied Health Professions Act 2016. Biomedical Science graduates are also exposed to the internet of things with the application of digital communication skills.

Objective

The main objective of the Biomedical Science Program is to produce graduates with good knowledge and skills in biomedical science, who are ethical, able to lead and communicate well. The learning process ensures graduates are able to execute responsibilities related to disease diagnosis and prevention as well as maintaining community health. The program also aims to produce graduates who can carry out scientific and research work related to human diseases, drug effects, harmful effects of pollution, poison, pesticides and be able to work in any health or medical related sector.

Curriculum Components and Total Credits

The faculty has set the required credits for the program as 120. The curriculum components are as follows :

Component	Course Status	Course Name	Unit
Citra Education courses	Required Citra (CW)	i. LMCW1022 – Basic Entrepreneurship and Innovation ii. LMCW2143 – Philosophy and Current Issues iii. LMCW2153 – Ethics Appreciation and Civilisation iv. LMCW2022 – Data Management and Analytics	10 units
	Cross Citra (CR)	<u>Internal Citra (equivalent courses):</u> C1 – NNNB3684 (4 unit) & NNPD1022 (2 unit) C2 – NNNB2692 (2 unit) & NNNB4442 (2 unit) C3 – NNNB3074 (4 unit) & NNNB4884 (4 unit) C4 – NNNB3262 (2 unit) C5 – NNNB2244 (4 unit) C6 – NNNB3442 (2 unit)	10 units <i>(not counted as equivalent to program required course WJ)</i>

		<u>External Citra :</u> English courses (5 units) LMCR1052 – Self Development I (2 unit) LMCR1062 – Self Development II (2 unit) Citra LMCR course (1 unit)	10 units
Faculty Courses	Faculty Required (WF)	<u>English courses :</u> MUET Level 3 (LMCE1062, LMCE2082, LMCE3061) MUET Level 4 (LMCE1072, LMCE2092, LMCE3071) MUET Tahap 5 – 6 (LMCE1082, LMCE2103)	5 units <i>(Not counted as equivalent to external Citra courses)</i>
Program Courses	Program Required (WJ)	Core Program Courses	112 units
Elective Courses	Elective (P)	Elective Program Courses	8 units
Total program credits			140 units

Program Structure

Year 1: Semester I

Course Code	Course Title	Status	Unit
NNNB1234	ANATOMY AND HEALTH PHYSIOLOGY I	WJ	4
NNNB1232	BASIC BIOCHEMISTRY	WJ	2
NNNB1433	GENETIC BIOCHEMISTRY AND MOLECULES	WJ	3
NNBB1252	BASIC MICROBIOLOGY	WJ	2
LMCR1052	SELF DEVELOPMENT I	CR/C1	2
LMCR***1	University Citra course	CR	1
Total credits			14

Year 1: Semester II

Course Code	Course Title	Status	Unit
NNNB1262	HISTOLOGY	WJ	2
NNNB1284	ANATOMY AND HEALTH PHYSIOLOGY II	WJ	4
NNNB1423	METABOLISM BIOCHEMISTRY	WJ	3
NNNB1422	BIOCHEMISTRY LABORATORY TECHNIQUES	WJ	2
NNPD1022	BEHAVIORAL SCIENCE	WF/C1	2
LMCE1062 /	ACADEMIC INTERACTIONS (MUET BAND 3) /	WF	2
LMCE1072 /	ACADEMIC LITERACY (MUET BAND 4) /		

LMCE1082	PAGE TO STAGE (MUET BAND 5 & 6)		
LMCR1062	SELF DEVELOPMENT II	CR/C4	2
LMCW1022	BASIC ENTREPRENEURSHIP AND INNOVATION COURSE	CW	2
Total credits			19

Year 2: Semester I

Course Code	Course Title	Status	Unit
NNNB2253	MEDICAL BACTERIOLOGY	WJ	3
NNNB2293	PARASITES AND HUMANS	WJ	3
NNNB2234	CLINICAL BIOCHEMISTRY	WJ	4
NNNB2433	BASIC PATHOLOGY	WJ	3
NNNB2233	BIOMEDICAL SCIENCE INSTRUMENTATION	WJ	3
LMCW2153	ETHICS APPRECIATION AND CIVILIZATION	CW	3
Total credits			19

Year 2: Semester II

Course Code	Course Title	Status	Unit
NNNB2244	SYSTEMIC PATHOLOGY AND HISTOPATHOLOGY	WJ/C5	4
NNNB2264	GENERAL PHARMACOLOGY	WJ	4
NNNB2423	MEDICAL ENTOMOLOGY	WJ	3
LMCE2082 /	PRO TALK ENGLISH (MUET BAND 3) /	WF	2
LMCE2092 /	SPEAK TO PERSUADE (MUET BAND 4) /		
LMCE2103	ADVANCED COMMUNICATION PROJECT (MUET BAND 5 & 6)		3
LMCW2143	PHILOSOPHY AND CURRENT ISSUES	CW	3
LMCW2022	DATA MANAGEMENT AND ANALYTICS	CW	2
Total credits			18/19

Year 3: Semester I

Course Code	Course Title	Status	Unit
NNNB3433	BASIC BIOSTATISTICS	WJ	3
NNNB3453	MEDICAL VIROLOGY AND MYCOLOGY	WJ	3
NNNB3473	HEALTH TOXICOLOGY	WJ	3
NNNB3274	DIAGNOSTIC LABORATORY SKILLS I	WJ	4
NNNB3434	CLINICAL HEMATOLOGY	WJ	4
NNNB3212	BASIC PHLEBOTOMY	WJ	2
Total credits			19

Year 3: Semester II

Course Code	Course Title	Status	Unit
NNNB3443	MEDICAL IMMUNOLOGY	WJ	3
NNNB3262	BIOMEDICAL SCIENCE LABORATORY MANAGEMENT	WJ/C4	2
NNNB3463	BLOOD TRANSFUSION	WJ	3

NNNB3284	DIAGNOSTIC LABORATORY SKILLS II	WJ	4
NNNB3422	BIOMEDICAL RESEARCH METHODS	WJ	2
NNNB3482	BIOMEDICAL SCIENCE RESEARCH PROPOSAL	WJ	2
NNNB3**2	ELECTIVE COURSE	P	2
Total credits			18

Year 3: Semester III

Course Code	Course Title	Status	Unit
NNNB3692	SCIENTIFIC COMMUNICATION	WJ/C2	2
NNNB3432	CURRENT TRENDS IN BIOMEDICAL SCIENCES	WJ	2
NNNB3**2	ELECTIVE COURSE	P	2
Total credits			6

Year 4: Semester I

Course Code	Course Title	Status	Unit
NNNB4432	CYTOLOGY	WJ	2
NNNB4232	INTRODUCTION TO COMMUNITY HEALTH	WJ	2
NNNB4454	BIOMEDICAL SCIENCE RESEARCH I	WJ	4
NNNB4**2	ELECTIVE COURSE	P	2
NNNB4**2	ELECTIVE COURSE	P	2
LMCE3061 /	Corporate Storytelling (MUET Band 3)	WF	1
LMCE3071	Professional Communication (MUET Band 4)		
Total credits			13/12

Year 4: Semester II

Course Code	Course Title	Status	Unit
NNNB4884	CASE STUDY	WJ/C3	4
NNNB4242	INFECTIOUS DISEASE MANAGEMENT	WJ	2
NNNB4464	BIOMEDICAL SCIENCE RESEARCH II	WJ	4
NNNB4264	INDUSTRIAL TRAINING	WJ	4
Total credits			14

ELECTIVE COURSES

Elective Courses*** 8 units of elective courses must be completed

Course Code	Course Title	Status	Unit
NNNB3362	ENVIRONMENTAL AND HEALTH MICROBIOLOGY	P	2
NNNB3532	BIOMEDICAL SCIENCE STATISTIC	P	2
NNNB3332	HUMAN EMBRYOLOGY	P	2

NNNB3142	MEDICAL PARASITOLOGY AND ENTOMOLOGY METHODS	P	2
NNNB3312	GENETIC BIOCHEMISTRY DISORDERS AND DISEASES	P	2
NNNB3352	ENDOCRINE BIOCHEMISTRY DISEASES	P	2
NNNB4152	APPLICATION OF MOLECULAR BIOLOGY IN BIOMEDICAL SCIENCES	P	2
NNNB4332	CHEMICAL PATHOLOGY	P	2
NNNB4352	APPLIED BIOCHEMISTRY	P	2
NNNB4512	ADVANCED MICROBIOLOGY LABORATORY METHODS	P	2
Total credits			8