

Curriculum

COURSE CODE	COURSE TITLE	COURSE CODE	COURSE TITLE	COURSE CODE	COURSE TITLE
General Education Requirements: 18 Credit Hours					
ENG200	English II	ISL100	Islamic Culture	FWS205	UAE and GCC Society
STT100	General Statistics	FWS305	Technical Communication for the Workplace	FWS310	Fundamentals of Innovation and Entrepreneurship
College Requirements: 20 Credit Hours					
BIO205	General Biology I	BIO205L	General Biology Laboratory I	CHE207	Organic Chemistry
CHE205	General Chemistry I	CHE201L	General Chemistry Laboratory I	HSC 101	Medical Terminology
HSC205	Biostatistics	HSC410	Healthcare Research Methodology		
Major Requirements: 93 Credit Hours					
BMS131	Introduction to Biochemistry	BMS211	Comprehensive Biochemistry	BMS212	Biotechniques
BMS213	Molecular Genetics	MMG211	Human Anatomy and Physiology I	BMS231	Clinical Biochemistry I
BMS232	Metabolic Diseases	MMG231	Human Anatomy and Physiology II	MMG232	Principles of Medical Genetics
BMS233	Basic Medical Microbiology	MMG311	Genomics	MMG313	Epidemiology and Public Health Genetics
BMS311	General Pharmacology	MMG312	Human and Evolutionary Genetics	MMG314	Introduction to Pharmacogenomics
MMG331	Cancer Biology	MMG332	Neurobiology	BMS331	Bioinformatics
MMG395	Molecular and Medical Genetics Placement 1	MMG411	Medical Genetic Counselling	BMS411	Immunology and Serology
BMS412	Clinical Lab Management and Instrumentation	MMG412	Complex Inherited Diseases	MMG495	Molecular and Medical Genetics Placement 2
MMG499	Human Genetics Research Report				
Open Elective Courses: 12 Credit Hours					
OE 1	Open Elective 1	OE 2	Open Elective 2	OE 3	Open Elective 3
OE 4	Open Elective 4				



BACHELOR OF SCIENCE IN MOLECULAR AND MEDICAL GENETICS

Program Overview

Molecular and Medical Genetics is the field of biology that studies the genetic basis of diseases, with the intention of developing improved diagnostics to prevent or treat genetic disorders. ADU's Bachelor of Science in Molecular and Medical Genetics is a degree, accredited by the UAE Commission for Academic Accreditation (CAA). The program will equip you with the knowledge and technical skills in molecular biology and human genetics needed to succeed in the medical genetics field. The four-year program includes intensive laboratory practical training within the university and two integrated supervised placements with affiliated organizations in the UAE, including Cleveland Clinic Abu Dhabi (CCAD), and regional medical centers.

Graduates of the program will acquire the following knowledge and skills

You will be able to address issues relating to the application of experimental analysis to solving problems in genetics, follow a career involving genomics and clinical genetics, as well as be prepared for advanced study with an MSc in Genomics and Precision Medicine, which will be offered soon at Abu Dhabi University.

Student's Testimonial

Fathima Hasnain Nadeem Hussain - Alumni

It is an honor being a student in the Molecular and Medical Genetics program under the College of Health Sciences, Abu Dhabi University. The entire faculty including the Dean of the College are accessible, supportive, well equipped, patient, and understanding in resolving the key issues and requirements. The serene environment of the University helps me to focus and achieve challenging goals. It has been a right platform to transform myself through gaining knowledge under the expertise of renowned faculty. The courses enable me to widen my horizons in various aspects of genetics. I am looking forward in understanding the human genome better in the following years. This fascinates me as an opener to visualize how a small change in the human genome can make us live longer or age slowly. I would highly recommend this program to the future generations who are passionate in learning more about genetics. The day is not far where a thorough understanding of the human genome will enable us in treating many incurable diseases.



Career Prospects

The BSc in Molecular and Medical Genetics offers you the opportunity to receive training in a discipline growing in demand in today's society. You will acquire the theoretical and practical skills needed to work in both the public and private sectors and develop yourself professionally in both applied and clinical research in genomics, biomedicine, biotechnology, or pharmaceuticals. You will be equipped to work in universities, hospitals, government departments, research institutes, biotechnology, and the pharmaceutical industry. Roles include:

- Molecular Genetics Technologist
- Molecular Laboratory Technologist
- Clinical Laboratory Technician
- Scientific Laboratory Technician
- Cytogeneticist
- Academic Researcher
- Biotechnologist
- Embryologist
- Pharmacologist
- Immunogeneticist
- Medical Sales Representative
- Health Ministry Officer