

Curriculum

COURSE CODE	COURSE TITLE
MGPM 501	Ethics and Research Integrity
MGPM 502	Advanced Biostatistics
MGPM 503	Molecular Pathology
MGPM 504	Advanced Genetics
MGPM 505	AI, Bioinformatics, and Data Analysis
MGPM 506	Applied Precision Medicine
MGPM 507	Genomic Diagnostics
MGPM 508	Advanced Pharmacogenomics
MGPM 609	Cancer Precision Medicine
MGPM 699A	Thesis in Genomics and Precision Medicine - A
MGPM 699B	Thesis in Genomics and Precision Medicine - B



MSC IN GENOMICS AND PRECISION MEDICINE

Program Overview

The Master of Science in Genomics and Precision Medicine is an advanced interdisciplinary program designed to prepare the next generation of professionals in the rapidly evolving fields of genomic medicine, molecular diagnostics, bioinformatics, and personalized healthcare.

The program provides students with comprehensive knowledge and practical skills in human genomics, next-generation sequencing technologies, genomic data analysis, pharmacogenomics, molecular pathology, and precision medicine applications. Through research-driven learning and hands-on laboratory experiences, students develop the expertise required to interpret genomic information and contribute to innovative solutions for disease prevention, diagnosis, and targeted therapies.

Graduates will be equipped to support the transformation toward personalized, data-driven healthcare and contribute to developments in biotechnology, biomedical research, and precision medicine.



Career Prospect

Graduates of the MSc in Genomics and Precision Medicine will be prepared for diverse career opportunities across healthcare, research, biotechnology, the pharmaceutical industry, and governmental sectors. Potential roles include:

- Genomics Specialist
- Molecular Diagnostics Specialist
- Bioinformatics Analyst
- Genomic Data Scientist
- Precision Medicine Researcher
- Biomedical Research Scientist
- Pharmacogenomics Specialist
- Public Health Genomics Specialist
- Medical Science Liaison (Precision Medicine/Biotechnology)
- Research Associate
- PhD and advanced research pathways in genomics, biomedical sciences, and precision medicine

Graduates may contribute to leading areas such as genetic testing, biomarker discovery, AI-driven genomics, personalized therapeutics, biotechnology innovation, and national genomic healthcare initiatives.