



PhD in Genomics and Precision Medicine

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An academic program catering to the needs of Qatar's growing healthcare sector. It provides theoretical and practical knowledge in genomics and precision medicine, and integrates patient-focused solutions.



Qatar is well positioned to become a world leader in the provision of healthcare services, but to do so it needs to ensure that the next generation of healthcare professionals possess the knowledge and skills required to make the most of recent scientific developments – technological developments that are enabling experts to understand the biology of individuals at the molecular and genomics level as never before.

Mindful of the need to bring fresh thinking to graduate programs in the life sciences, Hamad Bin Khalifa University (HBKU) has created programs that, in a world first, provide advanced teaching across all aspects of genomics and precision medicine alongside extensive hands-on research and practical experience.

By offering its innovative new programs in this field, HBKU is supporting the significant efforts being made towards developing efficient, personalized medicine and patient-focused healthcare solutions in Qatar, and the world.

Overview:

HBKU's Genomics and Precision Medicine (GPM) programs are multidisciplinary graduate programs that have been designed to prepare the next generation of professionals and leaders, who will help implement the use of precision and personalized medicine in the healthcare system.

The Doctor of Philosophy (PhD) degree path in GPM offers students advanced knowledge and training in state-of-the-art information gathering and analysis technologies in order to integrate “omics” – the branch of biology that deals with data on global changes at the molecular level in patients – with clinical data, thereby enabling the design and implementation of precision medicine principles in healthcare within Qatar and the region.

Graduate students are given a unique opportunity to study all key elements of genomics and precision medicine in one innovative, multidisciplinary program.

Having completed their graduate studies at HBKU, students will be well prepared to take leading roles in the healthcare sector as well as in academia, industry, business, public service and many other exciting career paths.

Program Focus

The exploration of a rigorous curriculum and practical training designed to provide a strong foundation as well as cutting-edge knowledge in both theoretical and applied aspects of genomics and precision medicine

The development of vital professional skills, such as clear verbal and written communication, integrated team work, critical evaluation of others' work, as well as each student's own work

Students will be exposed to the latest advancements in the field of genomics and precision medicine and will explore state-of-the-art basic, clinical, technological, computational, and legal and ethical aspects of a fascinating, fast-expanding sector of the life sciences

Throughout their studies, students will examine aspects of the four main pillars of genomics and precision medicine: clinical aspects, technology, "omics", and bioethics

Curriculum

A program consisting of a minimum of 54 credits, taught in English, typically over four to five years that includes:

- **Five mandatory foundation courses**
 - **A minimum of three elective courses**
 - **Participation in departmental seminars**
 - **Participation in the GPM journal club**
 - **Thesis work and laboratory training (a minimum of six semesters)**
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Attend an Info Session



Register now

The information sessions provide a great opportunity to learn about the programs and meet faculty members and the admissions team.

- [February 21: College of Islamic Studies](#)
- [February 22: College of Humanities and Social Sciences](#)
- [February 27: College of Science and Engineering](#)
- [February 28: College of Law and Public Policy](#)