MSc Genomic Medicine

[Genomic Medicine, MSc / PGDip / PGCert - Swansea University](https://www.swansea.ac.uk/postgraduate/taught/medicine/genomic-medicine-msc-pgdip-pgcert/)

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| **Tuition Fees:**  September 2024: £21,650 | **Entry points:**  September **(In-person only)** |
| **Suitable Academic Background:** minimum UK 2:2 degree [(check equivalencies for your country)](https://www.swansea.ac.uk/media/2023-Country-specific-information-for-international--EU-PG-applicants.pdf)   * Biochemistry * Biological Sciences * Genetics * Medical Biosciences/ Laboratory Science * Pharmacy/ Pharmacology * Medicine/Nursing | |
| **English Language Requirement**: IELTS 6.5 with no less than 6.0 in all components (or Swansea University Recognised equivalents) [Check Swansea University Approved Tests and Qualifications here](https://www.swansea.ac.uk/admissions/english-language-requirements/) | |

***Suitable degree background as guidance – eligibility can only be confirmed once a full application has been received and reviewed.***

**What is the Programme about?**

* Genomics is intrinsic in all aspect of health – a requirement for highly trained health professionals to implement in the healthcare system, the pharmaceutical industry and the broader biomedical sector.
* On this programme students will be introduced to the fundamentals of human genetics and genomics along with techniques required for DNA and RNA sequencing to study genomic variation observed in the clinical setting
* This programme is designed for those wishing to work in the clinical settings – to understand the fundamentals of human genetics and genomics
* This course based on the curriculum of Health Education England, NHS England and Genomics England LTD
* Designed to equip students with; knowledge and skills to understand and interpret genomic data, an understanding of genetic and genomic techniques in a clinical setting, bioinformatic approaches required for analysis of genomic data, and advanced knowledge and skills to improve service delivery to patients.

**Important Things To Note**

* We are (Ranked 4th in UK) Top 5 for overall research quality (Research Excellence Framework 2021)
* 97% of our research outputs rated as world-leading or internationally excellent (Research Excellence Framework 2021)

**Modules within the Programme**

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| [Introduction to Human Genetics and Genomics](https://intranet.swan.ac.uk/catalogue/default.asp?type=moddetail&dept=any&mod=PMGM11&ayr=23%2F24&psl=YR&detailOnly=false) | [Omics Techniques and their Application to Genomic Medicine](https://intranet.swan.ac.uk/catalogue/default.asp?type=moddetail&dept=any&mod=PMGM12&ayr=23%2F24&psl=YR&detailOnly=false) |
| [Ethical, Legal and Societal Issues (ELSI) in Applied Genomics](https://intranet.swan.ac.uk/catalogue/default.asp?type=moddetail&dept=any&mod=PMGM13&ayr=23%2F24&psl=YR&detailOnly=false) | [Cancer Genomics](https://intranet.swan.ac.uk/catalogue/default.asp?type=moddetail&dept=any&mod=PMGM14&ayr=23%2F24&psl=YR&detailOnly=false) |
| [Application of Genomics in Infectious Disease](https://intranet.swan.ac.uk/catalogue/default.asp?type=moddetail&dept=any&mod=PMGM15&ayr=23%2F24&psl=YR&detailOnly=false) | [Genomics of Common and Rare Inherited Disease](https://intranet.swan.ac.uk/catalogue/default.asp?type=moddetail&dept=any&mod=PMGM16&ayr=23%2F24&psl=YR&detailOnly=false) |
| [Pharmacogenomics & Stratified Healthcare](https://intranet.swan.ac.uk/catalogue/default.asp?type=moddetail&dept=any&mod=PMGM21&ayr=23%2F24&psl=YR&detailOnly=false) | [Bioinformatics for Genome Analysis](https://intranet.swan.ac.uk/catalogue/default.asp?type=moddetail&dept=any&mod=PMGM00&ayr=23%2F24&psl=TB2&detailOnly=false) |

**Employability - examples of roles after graduation**

* Graduate Entry Medicine
* NHS Scientist and Clinical Scientist Training programme
* PhD
* Medical and scientific writing
* Research Assistant