MSc Health Data Science

[Health Data Science, MSc / PGDip / PGCert - Swansea University](https://www.swansea.ac.uk/postgraduate/taught/medicine/health-data-science-msc-pgdip-pgcert/)

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| **Tuition Fees:**  January 2024: £19,800 or September 2024: £20,800 | **Entry points:**  September and January **(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)   * Engineering (Communications; Computational; Computational Mechanics; Electronic & Electrical; Nanoscience/Nanotechnology) * Mathematics * Computer Science (Computer Applications; Software Engineering/Technology; Information Technology; Computer Engineering) * Statistics * Bioinformatics/Epidemiology   ***Applicants must demonstrate good programming ability/ experience – either from additional professional certificate or in existing degree transcripts.*** | |
| **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 the Programme about?**

* This programme is designed to develop the essential skills and knowledge you’ll need as a Health Data Scientist.
* Data Scientists are those working in healthcare with roles involving the analysis of health data and computer scientists working with data from the healthcare domain.
* Our degree offers strong emphasis on practical and analytical skills
* Incorporates technical elements such as programming and coding in the curriculum
* Students will learn how processing health data to extract valuable information about a population (epidemiological applications) has the potential to improve quality of life on a large scale
* Students will develop a better understanding of patient data and focus on the science and art of generating data-driven solutions
* State-of-the-art facilities including the [Data Science Building](https://www.swansea.ac.uk/medicine-health-life-science/facilities/data-science-building/) which attracted £30M of UK Government Funding. The Data Science Building is a secured building across 6 floors, as one of the main Data linkage sites for anonymised health data.

**Important Things To Note**

* 75% of our impact rated as internationally excellent. (Research Excellence Framework 2021)
* This degree involves programming and coding

**Modules within the programme**

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| [Scientific Computing and Health Care](https://intranet.swan.ac.uk/catalogue/default.asp?type=moddetail&dept=any&mod=PMIM102&ayr=23%2F24&psl=TB1&detailOnly=false) | [Health Data Modelling](https://intranet.swan.ac.uk/catalogue/default.asp?type=moddetail&dept=any&mod=PMIM202&ayr=23%2F24&psl=TB1&detailOnly=false) |
| [Introductory Analysis of Linked Health Data](https://intranet.swan.ac.uk/catalogue/default.asp?type=moddetail&dept=any&mod=PMIM302&ayr=23%2F24&psl=TB1%2B2&detailOnly=false) | [Health Data Visualisation](https://intranet.swan.ac.uk/catalogue/default.asp?type=moddetail&dept=any&mod=PMIM502&ayr=23%2F24&psl=TB1&detailOnly=false) |
| [Machine Learning in Healthcare](https://intranet.swan.ac.uk/catalogue/default.asp?type=moddetail&dept=any&mod=PMIM402&ayr=23%2F24&psl=TB2&detailOnly=false) |  |
| OPTIONAL: [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) | OPTIONAL: [Advanced Analysis of Linked Health Data](https://intranet.swan.ac.uk/catalogue/default.asp?type=moddetail&dept=any&mod=PMIM602&ayr=23%2F24&psl=TB1%2B2&detailOnly=false) |

**Employability - examples of roles after graduation**

* Data Scientist
* Application Developer
* Business Intelligence Manager
* Business Intelligence Analyst
* Data Risk Analyst