Global Master's Programme in

Health Informatics

- a joint programme between Karolinska Institutet and Stockholm University

2 years, 120 credits



Karolinska Institutet is one of the world's leading medical universities. Stockholm University is one of the largest universities in Sweden. Both universities are leading in their respective domains.



Studying health informatics is a way of learning how to improve modern healthcare through efficient management of health information and knowledge.

A field of study for healthcare safety and quality

The Master's Programme in Health Informatics is aimed at students who are interested in information technology and want to apply this to the medicine or healthcare fields.

You will learn methods to make healthcare safer, more efficient and of higher quality through computer based information and knowledge management. Professionals with expertise in health informatics play a key role in hospitals and other healthcare settings and as suppliers of health information systems and services.

This programme is given as a joint programme between Karolinska Institutet and Stockholm University.

Profiling your education

The first semester establishes a common ground. Students with a technical background take courses in basic medical science and healthcare organisation and management at Karolinska Institutet, while students with a background in healthcare take

courses in basic computer and systems sciences at Stockholm University.

The second semester focuses on health informatics methodology. You will gain proficiency in requirements engineering, evaluation, health informatics standards and clinical decision support. Case studies as well as a project course will provide opportunities for practise.

In the third semester, you have the opportunity to profile your education by studying a number of elective courses, and in the fourth semester you will complete a scientific degree project resulting in a master's thesis.

IT projects in the healthcare field require professionals with a solid understanding of both the needs of the health sector and the strengths and limitations of technology. The health informatician's unique interdisciplinary expertise makes them particularly suited to assume a coordinating and bridging role between these two areas. Many health informaticians work as project managers. Other common roles are IT managers, clinical informaticians, application experts, requirement analysts, system specialists, system developers, interaction designers, evaluators and researchers.

Why study Health Informatics at Karolinska Institutet and Stockholm University?

- You have a background in computer science and would like to gain the expertise to develop stateof-the-art health information systems.
- You have a background in healthcare and/or biomedicine, and would like to take a leading role in developing healthcare using IT.
- You would like to obtain a joint degree from two major universities.



Specific entry requirements

- A bachelor's degree or a professional degree equivalent to a Swedish bachelor's degree of at least 180 credits in healthcare, biomedicine, medical technology, computer and systems sciences, informatics or equivalent field.
- Proficiency in the English language (equivalent to English
 B at Swedish upper secondary school) should be documented by an internationally recognised test such as
 TOEFL, IELTS, or the equivalent.

Applicants from China

Applicants need a 4-year bachelor's degree to meet the general requirement. Applicants must submit a bachelor degree certificate, a certificate of graduation, and transcripts (for each year of study). All documents should be in Chinese, and in officially certified translations.

Applicants from India

Applicants with a degree in medicine, pharmacy, science, engineering, computer science, computer applications, or technology, are exempted from submitting an English language proficiency test. Please note that college-issued mark sheets/ transcripts will not be accepted unless they are from an autonomous Indian college.

For further information about requirements and application procedures visit ki.se/masterstudies.



Aminul Islamhealth informatics student

'Nowadays I feel my dreams are not constrained by any boundaries and that is a great feeling. I came here and found out that it is possible to help other people as long as you are in the right environment. For me Karolinska Institutet is that kind of place.'



Elena Eftimovska health informatics student

'I was amazed at how international our class was, with people from China, India, Jordan, Iran, Ethiopia, Pakistan, Uzbekistan, Sweden, Macedonia etc., people with different backgrounds (mainly medical or technical) that enrich every discussion by giving a multifaceted face to healthcare problems.'

Read more at ki.se/studentblogs

| Semester 1 | Semester 2 | Semester 3 | Semester 4 |
|--|---|---|---------------------|
| Health informatics. Computer systems science/Healthcare management and organisation + Basic medical science. Computer applications in health care and biomedicine. | User needs and requirements engineering. Standardisation in health informatics. Evaluation methods. Clinical decision support. Project: Case studies. | Modelling, simulation and visualization. Project. Elective courses. | Degree project. |
| | | | (Subject to change) |



Facts on Karolinska Institutet

Karolinska Institutet is one of the world's leading medical universities and home of the Nobel Assembly. The president, Harriet Wallberg-Henriksson, is one of 50 professors that each year select the Nobel Laureate in Physiology or Medicine. The university has held this honourable task since 1901.

Karolinska Institutet was founded by King Karl XIII in 1810 as an academy for the training of skilled army surgeons. Today, Karolinska Institutet is a modern medical university and one of the foremost in the world. Karolinska Institutet accounts for over 40 per cent of the medical academic research conducted in Sweden and offer the country's broadest range of education in medicine and health sciences.

With a close relationship to the clinical milieu, a well established infrastructure and a stable financial situation, Karolinska Institutet has excellent prerequisites for sustaining high quality research and education.

Karolinska Institutet offers seven Global Master's Programmes in medicine and health sciences. A master's degree at Karolinska Institutet may very well be the first step towards a PhD at the same or another well renowned partner university somewhere in the world.

Karolinska Institutet in numbers:

- 22 departments
- 3 944 employees
- 597 research units
- 1 509 senior researchers
- 331 professors
- 2 076 postgraduate students
- 5 524 undergraduate and master students (full-time)

Facts on Stockholm University

Stockholm University is one of Sweden's largest institutions for higher education, and it offers education and research at the highest level. Several of the world's most renowned researchers and scientists are active here.

Stockholm University offers a broad spectrum of educational programmes and a large number of free standing courses within the fields of humanities, law, social sciences and science. Stockholm University is characterised by a dynamic crossover between teaching and research, which gives powerful advantages in professional and academic life.

Studying at Stockholm University enables you to gain the international perspective that today's world demands.

The Department of Computer and Systems Sciences is located in the middle of Sweden's largest job market, and one of the world's largest ICT clusters, Kista Science City in Stockholm. There are more companies in this limited geographical area than anywhere else in Sweden. Our extensive and long-term cooperation with the Kista Science City provides us with unique opportunities to link to the public and private sectors in all aspects of our academic activities.

Stockholm University in numbers:

- 4 faculties
- 74 institutions and research centres
- 6 300 employees
- 443 professors
- 50 000 students in total
- 1 803 postgraduate students
- 30 755 undergraduate and master students (full-time)

For further information visit ki.se/masterstudies

Contact the Admissions Office at **admissions@ki.se** if you have questions about entry requirements or application procedures.

For other queries related to studies at Karolinska Institutet, contact a study advisor at **study-guidance@ki.se**



