

Management of Information Systems in Healthcare (D013388)

Course size *(nominal values; actual values may depend on programme)*

Credits 5.0

Study time 125 h

Course offerings and teaching methods in academic year 2025-2026

A (semester 1)

English

Gent

independent work
lecture

Lecturers in academic year 2025-2026

Coorevits, Pascal

GE39

lecturer-in-charge

Kalra, Dipak

GE39

co-lecturer

Staelens, Frank

GE39

co-lecturer

Offered in the following programmes in 2025-2026

[Master of Science in Nursing and Midwifery](#)(main subject [Implementation Science in Health Care](#))

crdts

5

offering

A

Teaching languages

English

Keywords

Data, information, information systems

Position of the course

The aim of the course is to give insights into the possibilities and restrictions of governing information and knowledge in a company or organisation by means of information systems. The courses are focussed towards healthcare.

Contents

- Introduction eHealth and mHealth
- Digital innovations in healthcare
- Introduction to (relational) databases
- Data quality and quality of electronic medical record systems
- Business Intelligence
- Data protection and GDPR
- Information security
- Challenges and opportunities of the primary and secondary (re-)use of health data

Initial competences

- Basic digital literacy
- Basic knowledge of English

Final competences

- 1 To have insights into the possibilities and restrictions of governing information and knowledge in healthcare companies or healthcare organisations by means of information systems
- 2 To know eHealth and mHealth aspects regarding innovations in healthcare
- 3 To know important aspects of data quality and quality of electronic medical record systems
- 4 To know the foundations of (relational) databases
- 5 To know important aspects of the General Data Protection Regulation (GDPR) and data protection in healthcare
- 6 To know the introductory principles of information security
- 7 To have insights into the challenges and opportunities of the primary and

secondary (re-)use of health data

8 To know what business intelligence encompasses and to reflect upon practical use-cases in healthcare

Conditions for credit contract

Access to this course unit via a credit contract is unrestricted: the student takes into consideration the conditions mentioned in 'Starting Competences'

Conditions for exam contract

This course unit cannot be taken via an exam contract

Teaching methods

Lecture, Independent work

Study material

Type: Slides

Name: Presentations on the electronic learning platform

Indicative price: Free or paid by faculty

Optional: no

References

Course content-related study coaching

Via the electronic learning platform Ufora

Assessment moments

end-of-term and continuous assessment

Examination methods in case of periodic assessment during the first examination period

Written assessment

Examination methods in case of periodic assessment during the second examination period

Examination methods in case of permanent assessment

Presentation

Possibilities of retake in case of permanent assessment

examination during the second examination period is possible in modified form

Calculation of the examination mark

This course contains two parts:

- Management of information systems in healthcare (75%)
- Presentation (25%)

If a student passes for both parts (10 or more on 20), the end result is the weighted average of both parts. If a student has two or more shortage* points he/she cannot pass for this course. If the weighted average would be 10 or more on 20, the score will be lowered to 9 on 20.

If a student on purpose withdraws from one of the two parts, he/she cannot pass for the course. In case the score would be 8 or more on 20, the score will be lowered to 7 on 20.

*Shortage points are the number of points below 10 on 20, for each part of the course