

## 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
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**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**

	<b>crdts</b>	<b>offering</b>
<a href="#">Master of Science in Nursing and Midwifery(main subject Implementation Science in Health Care)</a>	5	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