

Enterprise Architecture (F000897)

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

Credits 4.0 Study time 120 h Contact hrs 45.0 h

Course offerings and teaching methods in academic year 2018-2019

A (semester 1)	English	lecture	30.0 h
		lecture: plenary	6.25 h
		exercises	
		group work	8.75 h

Lecturers in academic year 2018-2019

Poels, Geert EB24 lecturer-in-charge

Offered in the following programmes in 2018-2019

	crdts	offering
Master of Science in Complementary Studies in Business Economics (main subject Business Economics)	4	A
Master of Science in Business Engineering (main subject Data Analytics)	4	A
Master of Science in Business Engineering (main subject Finance)	4	A
Master of Science in Business Engineering (main subject Operations Management)	4	A
Exchange programme in Economics and Business Administration	4	A

Teaching languages

English

Keywords

IT Management, Business/IT Alignment, Enterprise Modeling, Enterprise Architecture, Disruptive impact of IT

Position of the course

A specialized course focusing on the use of ICT-based systems in organisations. The course builds upon earlier acquired knowledge and skills with respect to Business Informatics and Computer Science. The perspective taken is that of enterprise engineering, i.e., the joint conception, design, engineering and evolution of business, application and technological infrastructures.

Contents

Course topics:

- 1 Conceptual framework for IT Management - the core concept of Business/IT Alignment
 - 2 Value of IT for organisations - disruptive impact of IT
 - 3 Enterprise modeling - conceptual analysis of the use/value of IT in organisations
 - 1 goal modeling
 - 2 value modeling & business model representation
 - 3 capability modeling & service modeling
 - 4 Enterprise architecture - conceptual design of IT-based enterprise infrastructure
 - 1 concepts, frameworks and methods
 - 2 ArchiMate - a standard language for EA
 - 3 Case-study
- Guest lectures on actual topics of ICT Management

Initial competences

- Knowledge of the fundamental concepts and techniques of Computer Science and Information and Communication Technologies (ICT)
- Knowledge of the development of information systems and the role that information

- systems play in the operation and management of organisations
- Knowledge of and being able to work with a general-purpose modeling language like UML

Final competences

- 1 Having acquired an understanding of the complex relation between business, IT, strategy and operations in the context of enterprise models and enterprise architecture
- 2 Knowledge of and being able to apply relevant concepts, models, methods and techniques of enterprise modeling and enterprise architecture
- 3 Being able to present a contemporary topic of (innovative) (disruptive) IT use in organisations, which was analysed using the concepts and instruments of the conceptual framework for IT management that was used for the course

Conditions for credit contract

Access to this course unit via a credit contract is determined after successful competences assessment

Conditions for exam contract

Access to this course unit via an exam contract is unrestricted

Teaching methods

Group work, lecture, lecture: plenary exercises

Extra information on the teaching methods

The pedagogic approach is a combination of:

- lectures
- guest speakers
- practice sessions
- Group assignment and student presentations

Learning materials and price

course with slides and notes + reader with articles, manuals, professional standards, reports, etc.

References

A reader with papers and references to relevant literature and research (including the research of the UGent Business Informatics research group) is made available via Minerva

Course content-related study coaching

Via Minerva:Forum, Student Publications, Dropbox
Individual guidance is possible

Evaluation methods

end-of-term evaluation and continuous assessment

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

Open book examination

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

Open book examination

Examination methods in case of permanent evaluation

Oral examination

Possibilities of retake in case of permanent evaluation

examination during the second examination period is possible in modified form

Extra information on the examination methods

Open book exam with multiple choice questions and open answer questions
Presentation of a group assignment related to the use of IT in organisations. Students should demonstrate their ability to apply the framework for IT management studied during the course to a self-selected theme.

Calculation of the examination mark

The score is the weighted sum of the exam score (80%) and the oral examination by means of the group presentation (20%).

Facilities for Working Students

None