

Webdevelopment (C003779)

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

Credits	6.0	Study time	180 h	Contact hrs	60.0 h
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Course offerings and teaching methods in academic year 2016-2017

A (semester 2)	Dutch	lecture	30.0 h
		seminar: practical	30.0 h

Lecturers in academic year 2016-2017

Lambert, Peter	TW06	lecturer-in-charge
Verborgh, Ruben	TW06	co-lecturer

Offered in the following programmes in 2016-2017

Bachelor of Science in Computer Science	crdts	offering
	6	A

Teaching languages

Dutch

Keywords

Security, capacity planning, standarization, markup languages, metadata, web technology, semantic web

Position of the course

The main purpose of this course is to let the students familiarize with the principles of modern web and internet applications. Moreover, the students will gain some experience with setting up web and internet applications.

Contents

- 1 Architecture and infrastructure of web applications
- 2 Basic technology, hypermedia and markup languages
- 3 Interactivity - integration with back-office applications
- 4 Implementation - overview &
- 5 Concrete examples (Java and .net)
- 6 Performance and capacity planning of web applications
- 7 Security and legal aspects (cryptography, DRM & applications)
- 8 Technologies for the semantic web
- 9 Web applications - use cases

Initial competences

Programming in a high-level programming language; basic knowledge computer networks

Final competences

- 1 To know and being able to set up architectures and infrastructure for internet applications.
- 2 To know and being able to apply basic technology, hypermedia and markup languages.
- 3 To know and being able to apply principles of interactivity.
- 4 Performance and capacity planning - to know and being able to apply basic models.
- 5 To know some case studies.
- 6 Security and legal aspects: to know principles of cryptography + applications.
- 7 To know and being able to apply the basic technologies for the semantic web.
- 8 Some experience with setting up internet applications.

Conditions for credit contract

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

Conditions for exam contract

This course unit cannot be taken via an exam contract

Teaching methods

Lecture, seminar: practical PC room classes

Learning materials and price

Annotated PowerPoint presentations

References

Course content-related study coaching

Coaching during computer-assisted problem solving

Contact with lecturer and coaches of exercises/project work (via e-mail and personally)

Evaluation methods

end-of-term evaluation and continuous assessment

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

Oral examination

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

Oral examination

Examination methods in case of permanent evaluation

Assignment, skills test

Possibilities of retake in case of permanent evaluation

examination during the second examination period is not possible

Extra information on the examination methods

Non-periodical evaluation (during semester): graded lab sessions + project work

Calculation of the examination mark

Global score = 50% non-periodical evaluation (score obtained during semester) + 50% periodical evaluation (score obtained during examination period). Additional requirement for passing: obtain 7/20 for each part (i.e. permanent examination during semester & examination during examination period). For the second examination chance, the student should not retake the non-periodical evaluation. The score for the second examination chance is the maximum of the score for the periodical evaluation and the score obtained following the same calculation method as for the first examination chance.