

Operating Systems III (E765002)

Due to Covid 19, the education and evaluation methods may vary from the information displayed in the schedules and course details. Any changes will be communicated on Ufora.

Course size (nominal values; actual values may depend on programme)
Credits 6.0 Study time 170 h Contact hrs 60.0 h

Course offerings and teaching methods in academic year 2020-2021

A (semester 2)	Dutch	Gent	lecture	24.0 h
			seminar: practical PC room classes	36.0 h

B (semester 1)

Lecturers in academic year 2020-2021

Volckaert, Bruno	TW05	lecturer-in-charge
Denert, Marleen	TW05	co-lecturer

Offered in the following programmes in 2020-2021

Master of Science in Information Engineering Technology	crdts	offering
	6	A, B

Teaching languages

Dutch

Keywords

Windows Server, Active Directory, System Administration

Position of the course

In-depth knowledge of Windows Server system administration

Contents

- Identity Services (Active Directory)
- Network infrastructure services (DHCP, DNS)
- File servers and storage management (DFS)
- Hyper-V virtualisatie and containers
- High Availability in Windows Server
- Disaster recovery
- Windows Server security
- Virtual desktop
- Remote access and web services
- Azure
- Powershell

Initial competences

Initial competences:

- Knowing the basic principles of computer architecture and of the architecture of operating systems
- Being able to configure network interfaces. Being able to use and debug static and dynamic IP routing, in mixed IPv4/IPv6 environments.

Final competences

- 1 Provide, configure and secure file services.
- 2 Being able to configure user management in Windows Server
- 3 Virtualisation management in Windows Server
- 4 Managing high availability on Windows Server
- 5 Windows Server Security management
- 6 General system administration in Windows Server
- 7 Being able to use Powershell for system administration

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

Extra information on the teaching methods

Hoorcollege, werkcollege: PC-klas / laptop oefeningen

Learning materials and price

Slides on the electronic learning platform

References

Windows Server 2019 Inside Out, Orin Thomas, 5/26/2020, 1st Edition, ISBN 978-0-13-549227-7

Course content-related study coaching

Interactive support via the electronic learning environment; assistant-guided labs; contact with professor and assistants through mailing list and personally by means of an appointment.

Evaluation methods

end-of-term evaluation and continuous assessment

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

Written examination

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

Written examination

Examination methods in case of permanent evaluation

Assignment, report

Possibilities of retake in case of permanent evaluation

examination during the second examination period is possible

Extra information on the examination methods

First term:

- PE1: written exam with open questions
- NPE1: evaluation of result labs based on report / scripts

Second term:

- PE2: written exam with open questions
- NPE2: evaluation of result labs based on report / scripts

Calculation of the examination mark

- 50% of the final grade is determined by the answers to the written exam
 - 50% of the final grade is determined by evaluation of the result of the labs
- To pass, a student needs to receive at least 9/20 for both the PE and NPE. If this not the case and the calculated result is 10 or more, the final grade will be changed and the student receives 9/20.