

Cloud computing - course description

General information	
Course name	Cloud computing
Course ID	11.3-WE-BizEIP-PrzetwChmurach-Er
Faculty	Faculty of Computer Science, Electrical Engineering and Automatics
Field of study	E-business
Education profile	practical
Level of studies	First-cycle Erasmus programme
Beginning semester	winter term 2019/2020

Course information	
Semester	5
ECTS credits to win	3
Course type	obligatory
Teaching language	english
Author of syllabus	

Classes forms					
The class form	Hours per semester (full-time)	Hours per week (full-time)	Hours per semester (part-time)	Hours per week (part-time)	Form of assignment
Lecture	15	1	-	-	Credit with grade
Laboratory	30	2	-	-	Credit with grade

Aim of the course

Raising awareness for the benefits of using cloud computing in electronic business. Familiarize students with the selected cloud services available with Google Cloud Platform, Microsoft Azure Cloud Platform, and other vendor and cloud service providers.

Prerequisites

None.

Scope

Introduction to cloud computing. Review of commercial services of cloud computing.

Cloud computing principles and service models: Infrastructure as a Service, Platform as a Service, Software as a Service, Service, Software + Services and Integration Platform as a Service.

Criteria for making decisions when ordering services for business needs. Selecting the appropriate cloud services and cloud providers according to the cloud users. The commercial applications and services of Microsoft, Google, Amazon, Dropbox and Box. The major vendor and service providers that offer cloud platforms for development, management, and deployment of applications to commercial customers.

Teaching methods

Conventional lectures

Laboratory: practical classes, laboratory classes

Learning outcomes and methods of theirs verification

Outcome description	Outcome symbols	Methods of verification	The class form
Knowledge of virtualization systems and services in cloud computing		• a test with score scale	• Lecture
Knowledge of the possibilities of using cloud computing in e-business		• a test with score scale	• Lecture
Knowledge of the construction and principles of cloud computing models		• a test with score scale	• Lecture
Can secure e-business applications in the cloud		• programming projects	• Laboratory
Can transfer the application to a cloud-computing environment		• programming projects	• Laboratory
Can properly evaluate requirements of cloud e-business applications		• programming project	• Laboratory

Assignment conditions

The following guidelines will be used to establish the final grade for the course: the passing condition is to obtain positive marks from all exercises and tests conducted during the semester.

Calculation of the final grade: lecture 50% + laboratory 50%

Grades will be administered using the standard 90% = 5, 80% = 4.5, 70% = 4, 60% = 3.5, 50% = 3.

Specifically, 100 - 90 = 5, 89 - 80 = 4.5, 79 - 70 = 4, 69 - 60 = 3.5, and 59 - 50 = 3.

Recommended reading

1. Shroff, G., *Enterprise Cloud Computing*, Cambridge University Press, 2010.
2. Garrison, G., Kim, S., Wakefield, R.L., Success Factors for Deploying Cloud Computing. Commun, ACM, 55, 62–68 (2012)
3. Naylor computing, Series: The MIT Press Essential Knowledge Series. Cambridge, Massachusetts : The MIT Press. 2016
4. Cusumano, MA., Technology Strategy and Management: The Cloud as an Innovation Platform for Software Development: How cloud computing became a platform, *Communications of the ACM*, (10), 20–22 (2019)
5. Marković, DS., Branović, I, Popović, R., Review of Cloud Computing in Business', *Singidunum Journal of Applied Sciences*, pp. 673–677 (2014)
6. Chang, V., Walters, R.J., Wills G., 1.4 Cloud Computing for Business Use, in *Delivery and Adoption of Cloud Computing Services in Contemporary Organizations*, IGI Global (2015)

Further reading

1. Microsoft Azure documentation - <https://azure.microsoft.com>
2. Amazon Web Services (AWS) documentation - <https://docs.aws.amazon.com/>
3. Google Cloud documentation - <https://cloud.google.com/docs>

Notes

None.

Modified by dr inż. Anna Pławiak-Mowna, prof. UZ (last modification: 10-12-2019 22:49)

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