

## Internet technologies EN

During this course students will get know the characteristics of internet technologies and gain insight to some basic applications. After the course, students will

- know the main areas of internet technology,
- have a glance into the current trends,
- know basic rules behind the various business models,
- understand some technical issues.

The history of internet together with recent trends, internet initiative, internet invariants etc. will be reviewed. Business model of the android and ios will be compared and freemium model will be discussed in details. The concept of IOT, industry 4.0 as well as models from B2B to M2M will be introduced. Electronic administration in Hungary will be considered. With the help of industrial examples of Fortune 500 as well as others general characteristics and basic hardware equipment of the internet industry will be examined. The topic of cloud is discussed based on NIST definition and its interpretation. Basic network science issues will be discussed. Smart glasses and some technical details, for example scalability will be considered as separate topics. Roles, processes user stories, task lists and their practical usage together with some collaborative techniques offered in virtual space will be discussed to support application developments. Agile development, scrum and waterfall models will be compared.

Attending is required according to the university's attendance code.

Students will work out and give presentations on preliminary discussed topics. Missed or unsatisfactory documentation and/ or presentations will be grounds for failing the class. There will be 1 or 2 Tests by the students, should the performance be below 50%, the test is said to be failed, the Student cannot enter the Exam Period, ie it is grounds for failing the course.

The exam has two main parts that will test the Students' knowledge and problem-solving skills on all preceding lectures of the Course as well as the presentations held by each and every student. The first written part is approximately 30 mins. It covers all or some of the main topics of the Course. In case the performance is below 50%, the exam is said to be failed. In case the achievement is above 50%, then the oral part of the exam is entered automatically.

Evaluation: 0-50%: 1 / 51-70%: 2 / 71-80%: 3 / 81-90%: 4 / above 91%: 5

Alexander Osterwalder, Yves Pigneur. Business Model Generation: A Handbook for Visionaries, Game Changers, and Challengers. ISBN-13: 978-0470876411. (In Hungarian: ISBN9789632782201)

Andrew Reichman. File Storage Costs Less In The Cloud Than In-House. August 2011. Forrester.

B. Furht, A. Escalante (eds.), Handbook of Cloud Computing. ISBN 978-1-4419-6523-3 Springer Science+Business Media, LLC 2010.

Dave Evans. The Internet of Things. White paper. Cisco Internet Business Solutions Group (IBSG). April 2011.

NIST. SP800-145. NIST. SP800-144.

Securing the Cloud for the Enterprise. A Joint White Paper from Symantec and VMware. May 2011.

Albert-László Barabási: Network Science. Cambridge University Press 2016. ISBN-13: 978-1107076266. (In Hungarian: Libri, 2016., ISBN 978-963-310-787-4.)