



# Information Systems

## General data

Course code:	B19GMK03E
ECTS credits:	7
Type of the course:	Core Course
Semester:	Fall semester, 1
Course restrictions:	
Course leader (with availabilities):	Sándor Danka, Dr. <a href="mailto:danka.sandor@ktk.pte.hu">danka.sandor@ktk.pte.hu</a> +36 72 501 599/ 23142
Further lecturer(s) (with availabilities):	

## 1. Description and aims

The course intends to present basic knowledge on modern information technology in general and an overview on business applications to establish the necessary level of understanding, the roles and potential of these technologies and methods in everyday business life.

The course covers the uses of data, information, technology, software, networking, manpower, organization, and will conclude by discussing information management, IT business planning, competitiveness and the problems of the Information Society.

## 2. Intended Learning Outcomes (ILOs)

Upon the successful completion of this course, students should be able to:

1. Elaborate the role and characteristics of IT tools and methods in business life. (PILO1)
2. Compare up-to-date technology development (hardware and software) and trends. (PILO2)
3. Assess IS and modern info-communication technologies in the context of the business organization. (PILO1)
4. Demonstrate the IS development process, different approaches, advantages and risks in business (PILO1, PILO3)
5. Ability to compare the role and types of stand-alone and networked IT devices (PILO6)
6. Plan to use information technology to develop competitive organizations (PILO1, PILO8)
7. Ability to examine dilemmas and controversies in IT and Information Management
8. The usage of PC-based managerial support tools in their individual work (PILO3, PILO4, PILO6)

*(The remarks in brackets express each CILO's connection to the Program Intended Learning Outcomes (PILOs).)*



### 3. Content, schedule

The discussion of topics is divided into the following block:

1. Introduction to Information systems, the history of informatics
2. Competitive strategy in technology based on hardware, computers and mobile devices,
3. Competitive strategy in technology based on hardware, innovation, reasons for failure
4. Competitive strategy in technology based on software, Open Source community
5. Competitive strategy in technology based on software, change management, migration through platforms, organizational change based on software's
6. Software: Applications, Aspects of software purchases
7. Effective use of IT investments, how CRM can be beneficial
8. Smart technology, lot devices
9. E-commerce, how technology enables new business models
10. Protection/ security of information systems, attacks, abuses
11. Launching and IT business, how start-up's work
12. Guest lecturer, Wop Week

### 4. Learning and teaching strategy, methodology

*Principal teaching methodologies:*

Lectures (about 50% of classroom activities), practices and case studies (with individual preparatory work) will present the key steps required to gain a competitive advantage in the marketplace through the use of information techniques and IT related methods.

Students are expected to engage in self-managed learning activities. Lab work meetings start with Q&A session to make all terms of the week clear

### 5. Assessment

*Formative assessment elements:* Formative feedback will be provided throughout this module through the discussion of problems given as topics for presentations and as homework.

*Summative assessment elements:*

Individual Assessment		100 %	Group Assessment		0 %	
Name of the element	Weight	Type	Details	Retake opportunity	Req.*	Related CILOs
Excel Test	20%	written exam, individual	Assessment on MS Excel methods learnt in practice sessions during weeks 1-6.	one retake opportunity	no	PILO3,4,6
Access Test	20%	written exam, individual	Assessment on MS Access methods learnt in practice sessions during weeks 7-12.	one retake opportunity	no	PILO3,4,6
Final Exam	60%	written exam, individual	A written exam based on all theoretical material learnt during lectures.	one retake opportunity	yes	PILO1,2,3,4,6,8



\* Req.: Completion of the element is required to pass the course, irrespective of the performance in other elements.

## 6. Learning materials

### Essential

- Jane P. Laudon, Kenneth C: Management Information Systems: Managing the Digital Firm, 13th Edition, Pearson, ISBN-13: 978-0133050691
- Beekman, G: Digital Planet, Tomorrow's Technology and You, 10th edition, Pearson, ISBN13: 9780132737524; ISBN10: 0132737523
- Gardner, C.-Rathswohl, E.: MIS Cases using application software Wiley, 2011; ISBN: 978-0-470-10122-

### Recommended

- Excel 2010 Introduction: Part I,
- Excel 2010 Introduction: Part II,
- Excel 2010 Advanced
- Download: <http://www.bookboon.com>

### Course Cases:

- The Rise and Fall of Nokia, <https://hbsp.harvard.edu/product/714428-PDF-ENG?Ntt=rise+and+fall+of+nokia&itemFindingMethod=Search>
- Novell: Open Source Software Strategy, <https://hbsp.harvard.edu/product/605009-PDF-ENG?Ntt=novell+open+source&itemFindingMethod=Search>
- Siebel Systems: Anatomy of a Sale, <https://hbsp.harvard.edu/product/503021-PDF-ENG?Ntt=siebel+systems&itemFindingMethod=Search>
- Hilton Hotels: Brand Differentiation through Customer Relationship Management, <https://hbsp.harvard.edu/product/809029-PDF-ENG?Ntt=hilton+hoet+crm&itemFindingMethod=Search>
- The Internet of Things (IoT): Shaping the Future of e-Commerce, <https://hbsp.harvard.edu/product/HK1063-PDF-ENG?Ntt=iot+ecommerce&itemFindingMethod=Search>
- Cyber Breach at Target <https://hbsp.harvard.edu/product/117027-PDF-ENG?Ntt=cyber+breach+at+target+&itemFindingMethod=Search>
- Drinks-Up! The Pitfalls of Digital Innovation, <https://hbsp.harvard.edu/product/W19293-PDF-ENG?Ntt=drinks+up&itemFindingMethod=Search>

## 7. Further information

<b>International</b> aspects embedded with the course
<ul style="list-style-type: none"> <li>- Global Edition book</li> <li>- international case studies</li> <li>- guest lecture by professionals with international experience (the companies are local but are operating in international environment)</li> </ul>
<b>Ethics, Responsibility &amp; Sustainability (ERS)</b> aspects embedded with the course
<p>Many parts and topics include ERS-related discussion:</p> <ul style="list-style-type: none"> <li>- Using information technology to reduce waste and improve productivity</li> </ul>



- Potential of Smart technologies in reducing consumption
- The use of technology to create equal standards for all
- The use of technology to empower communities

**Connections to the world of practice** of the course

- One (or two guest lecturers) per semester is invited from major companies in IT, such as SAP for e.g.
- Case studies are all related to real business problems
- Use of own work experience