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|  | **Óbuda UniversityKeleti Faculty of Business and Management** |
| **Unit of study:** | Business IT Applications | **Subject code:** | GVXUI1ABNE |
| **Institute:**  | Department of Business Enterprise Management(1084 Budapest, Tavaszmező u. 15-17.)  | **Credits:**  | 3 |
| **Course type:**  | Full-time Course | **Language:**  | English | **Term:** | Fall |
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| **Major:**  | Technical Management BSc |
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| **Subject coordinator:**  | Dr. habil Velencei Jolán | **Lecturer(s):**  | Dr. Andrea Tick |
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| **Prerequisites:**  | - |
| **No. of sessions per week/term:** | weekly | **Lecture:**  | 0 | **Seminar:**  | 0 | **Lab:**  | 2 | **Consultation:**  | 0 |
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| **Exam/assignment:**  | written exam +home assignment |
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| **Course objectives:**  | The course is an introduction to Business IT Applications. During the course students get an insight into the role of management in designing, developing and using information systems at companies. Furthermore the students may be able to use a kind of MIS software. Students gen an insight in different Business IT Applications supporting decisions and data analytics and online appearance of the companyAt the end of the course students will be able to* define what a Management Information System is,
* characterize Information Systems,
* explain the role, functions and architecture of a Management Information System,
* list different kinds of Business IT Applications,
* build decision making tools for middle management applying dashboards and business intelligence.
* apply different Business IT Applications for business project processes
* compiling data analytics using statistical programme
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| **Course assessment:**  | Students are required to attend all classes. (Active participations are required during the lessons). Home work (essay) and written exam.*Practical course* is a form of tuition where the aim of a course unit is to consolidate the skills aspect of acquisition. As for some course units, lectures and practical courses have a complementary role to play in the process of tuition.Absence from course units whose attendance is compulsory is acceptable up to 20 per cent of contact hours in those course units. Absence from over fifty percent of contact hours shall lead to that unit having to be redone to fulfil course unit requirements. Absence from over 20 percent but less than 50 percent of contact hours in a course unit shall lead to an obligation to make up for contact hours missed, the conditions of which shall be specified in the departmental Course Requirements Guide. **STUDENTS CAN MISS 2 SEMINARS AT MOST!**The subsequent obtaining of an end-of-semester mark/mark for student participation and subsequent assessment following the receipt of a ’fail’ mark is confined to two assessment days during the examination period. An unsuccessful retake shall entail the student’s obligation to do that course unit again. |
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| **Module description** |
| **Week(consultation)** | **Course content** |
| **1.**  | Introduction to Management Information Systems, MIS structure, functions, economical aspects. Configuration, default, interfaces.  |
| **2.**  | Manager-friendly informatics, Expert systems, System and database administration, authentication, authorization (login)  |
| **3.**  | MIS – Expert System, Integrated Systems, tasks and tools |
| **4.**  | Introduction to Dashboard systems, Business reports and KPI  |
| **5.**  | MIS . Managing Knowledge, Manager friendly MIS - visualisation |
| **6.**  | Basic Database actions and operations, OLAP and OLTP Systems, multidimensional models, Data feeds (support and stages) |
| **7.**  | Deep and expert knowledge, data mining, advanced database operation |
| **8.**  | Dashboard and data visualization (basic and complex mashapps), data analytics |
| **9.**  | Big Data’s world, data-driven Analysis, |
| **10.**  | Interactive reports Data analysis, data filters, Reports sharing, communication in and out of the corporate |
| **11.**  | MIS – Emerging Technologies, the Cloud |
| **12.**  | **Midterm test 2** |
| **13.**  | **Students’ presentations: Reports made by the students. Written Exam.**  |
| **14. December 9** | **Students’ presentations: Reports made by the students. Written Exam (Make up test).** |
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| **Assessment:**  | **Preconditions of signature** are the attendance at the seminars, valid test and submitted home assignment.Students are required to have a valid test. No turn up on the scheduled test is considered an invalid test and the student is not entitled to have a re-sit. In the test students are entitled to use handwritten notes on one A4-sized paper. No photocopies, photos or notebooks can be used. No cellphones, smartphones or any other smart device capable of taking pictures can be brought into the room during test writing.Should the student use any unauthorized help during test writing, his/her mark is “NO SIGNATURE” regardless of his/her results achieved so far.Absence from test writing due to illness or other official occupancy can be certified once. Should this be the case, the student is entitled to have a make-up test.Students must submit the assignment announced during the course. Students will be assessed on the test written in the test week and the assignment submitted.Grade in this course is based on total points/percentages of the test, and student’s activity, creativity and preparation (i.e. the instructor also values the active/inactive participation in classes or the level of the homework).Each element will be assessed on a scale of 1 to 100% where the assessment bands are the following:

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| **Percentage (%)** | **Assessment** |
| **0** | **-** | **<50** | **fail** |
| **51** | **-** | **<62** | **pass** |
| **63** | **-** | **<74** | **fair/satisfactory** |
| **75** | **-** | **<85** | **good** |
| **86** | **-** | **100** | **excellent/distinction** |

Aspects of the final grade are the following:* business dashboard, making and presentation of business report
* written exam
* participation and attendance during the course (regarding the TVSZ (Study Rules and Regulations))
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| **Course completion (written or oral exam, test, etc.):**  | Substitution (make up test) during the first 10 weekdays of the exam period.  |
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| **Compulsory literature:**  | 1. KC Laudon, JP Laudon, Management Information Systems, Managing the Digital Firm, Global Edition, 13/E, Pearson, 2014
2. http://www.bi-dw.info/excel/tutorials.htm
3. http://www.microsoftvirtualacademy.com/training-courses/excel-2013-power-bi-fundamentals
4. https://support.office.microsoft.com/en-us/article/Tutorial-Import-Data-into-Excel-2013-and-Create-a-Data-Model-4b4e5ab4-60ee-465e-8195-09ebba060bf0?CorrelationId=cb85a656-b5ee-4c0b-aa24-fb938b068038&ui=en-US&rs=en-US&ad=US
5. <https://support.office.microsoft.com/en-us/article/Power-View-Explore-visualize-and-present-your-data-98268d31-97e2-42aa-a52b-a68cf460472e?CorrelationId=16aa8731-343f-4426-8358-9dd17c6e68f5&ui=en-US&rs=en-US&ad=US>
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| **Recommended literature:**  | 1. Contoso project: <https://goo.gl/5eponX>,
	1. https://www.microsoft.com/en-us/download/confirmation.aspx?id=18279
	2. [https://msdn.microsoft.com/en-us/library/gg413497(v=sql.110).aspx](https://msdn.microsoft.com/en-us/library/gg413497%28v%3Dsql.110%29.aspx)
	3. <https://goo.gl/RkyWWn>
	4. [https://msdn.microsoft.com/en-us/library/gg399129(v=sql.110).aspx](https://msdn.microsoft.com/en-us/library/gg399129%28v%3Dsql.110%29.aspx)
	5. [https://msdn.microsoft.com/en-us/library/gg399135(v=sql.110).aspx](https://msdn.microsoft.com/en-us/library/gg399135%28v%3Dsql.110%29.aspx)
	6. [https://msdn.microsoft.com/en-us/library/gg399133(v=sql.110).aspx](https://msdn.microsoft.com/en-us/library/gg399133%28v%3Dsql.110%29.aspx)
	7. [https://msdn.microsoft.com/en-us/library/hh272060(v=sql.110).aspx](https://msdn.microsoft.com/en-us/library/hh272060%28v%3Dsql.110%29.aspx)
2. OEP:
	1. <http://www.oep.hu>
	2. http://www.neak.gov.hu/felso\_menu/szakmai\_oldalak/publikus\_forgalmi\_adatok/gyogyfurdo\_forgalmi\_adatok/forgalmi\_adatok\_2017gyogyf.html
	3. http://www.neak.gov.hu/felso\_menu/szakmai\_oldalak/publikus\_forgalmi\_adatok/gyogyszer\_forgalmi\_adatok
	4. https://support.office.com/hu-hu/article/els%C5%91-l%C3%A9p%C3%A9sek-a-power-pivot-in-microsoft-excel-fdfcf944-7876-424a-8437-1a6c1043a80b
	5. https://msdn.microsoft.com/en-us/library/gg413497(v=sql.110).aspx
	6. <https://powerpivotpro.com/what-is-power-pivot/>
3. [https://en.wikipedia.org/wiki/Dashboard\_(business)](https://en.wikipedia.org/wiki/Dashboard_%28business%29);
4. <http://excel-bazis.hu/tutorial/dashboard-alapvetes>;
5. <http://officeguru.blog.hu/tags/DASHBOARD>;
6. <https://www.youtube.com/watch?v=odmZm9JF2aw>;
7. <https://chandoo.org/wp/2010/01/04/sales-dashboards/>
8. <https://goo.gl/hBU8t9>
9. <https://goo.gl/rYXiKY>
10. <https://goo.gl/oVunVK>
11. <https://goo.gl/Zdn4f1>
12. <https://goo.gl/c6gH1C>
13. <https://goo.gl/FbWE9f>
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| **Supplementary material:**  | Further readings and supplementary material will be given out during the course in the Moodle LMS system1. https://support.office.com/en-us/article/power-pivot-powerful-data-analysis-and-data-modeling-in-excel-a9c2c6e2-cc49-4976-a7d7-40896795d045
2. https://support.office.com/en-us/article/start-the-power-pivot-add-in-for-excel-a891a66d-36e3-43fc-81e8-fc4798f39ea8
3. https://support.office.com/en-us/article/Get-started-with-Power-Map-88a28df6-8258-40aa-b5cc-577873fb0f4a
4. https://support.office.com/en-us/article/power-view-explore-visualize-and-present-your-data-98268d31-97e2-42aa-a52b-a68cf460472e
5. https://www.data.gov/
6. https://data.worldbank.org/
7. http://www.fao.org/faostat/en/#home
8. https://www.gapminder.org/data/
9. https://data.europa.eu/
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| **Quality management aspects:**  |  |

 Dr. Andrea Tick

 lecturer