*Recommended template: “Course Description, Syllabus, Course Requirements”*

# course syllabus and course requirements academic year 2025/2026 First semester

|  |  |
| --- | --- |
| Course title | ERP Systems |
| **Course Code** | **IVB187ANMI** |
| **Hours/Week: le/pr/lab** | **2/0/1** |
| **Credits** | **5** |
| **Degree Programme** | **Computer Science Engineering Bachelor Programme (BSc)** |
| **Study Mode** | **Full Time** |
| **Requirements** | **Semester mark** |
| **Teaching Period** | **Fall** |
| **Prerequisites** | **Database 1** |
| **Department(s)**  **Course Director** | **Department of Cybersecurity and Networks Dr. Zsolt Ercsey** |
| **Teaching Staff** | **Dr. Zsolt Ercsey** |
|  |  |

# course description

*A short description of the course (max. 10 sentences).*

*Neptun: Instruction/Subjects/Subject Details/Basic data/Subject description*

During this course students will get familiar with the characteristics of ERP systems, understand the problems of system integration, and gain insight to some basic applications. They will get to know the IT expectations related to the everyday life of a corporation, i.e. business operation and processes.

# syllabus

*Neptun: Instruction/Subjects/Subject Details/Syllabus*

## **goals and objectives**

*Goals, student learning outcome.*

*Neptun: Instruction/Subjects/Subject Details/Syllabus/Goal of Instruction*

Students study their subjects focusing on IT relevant issues both from theoretical as well as from practical viewpoints. After graduation, students will become integral parts of a company as employees and they will have to understand the general business cases and to solve them after they reformulated these problems into IT problems. Integrated business management systems, ERP systems consider corporations globally and they model and handle most of the business processes specifically and in detail. This will be illustrated via examples and case studies. Students will get know how of the BizAgi Process Modeler, a process mapping software to create and optimize business workflows, Kulcs-Soft’s invoicing and inventory solutions and modules and services.

## **course content**

*Neptun: Instruction/Subjects/Subject Details/Syllabus/Subject content*

|  |  |
| --- | --- |
|  | TOPICS |
| LECTURE | 1. *Corporate knowledge what IT students should know.* 2. *Classification of IT systems.* 3. *The path of ERP development. ERP market.* 4. *Business processes. BPMN, BPD.* 5. *BizAgi Process Modeler.* 6. *BPD case studies.* 7. *Kulcs-Soft.* 8. *ERP selection and implementation.* 9. *Some IT related issues of environmental product charge and supply chain management.* |
| PRACTICE | 1. *topic* |
| laboratory practice | 1. *Corporate knowledge what IT students should know.* 2. *Bizagi process modeler.* 3. *Kulcs-Soft.* |

### **DETAILED SYLLABUS AND COURSE SCHEDULE**

### *academic holidays included*

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| LECTURE / LABORATORY PRACTICE | | | | |
| week | **Topic** | **Compulsory reading; page number**  **(from … to …)** | **Required tasks (assignments, tests, etc.)** | **Completion date, due date** |
| 1. | Course introduction, orientation. | … | … | … |
| 2. | Corporate knowledge fundamentals |  |  |  |
| 3. | Classification of IT Systems. |  |  |  |
| 4. | The path of ERP development. ERP market. |  |  |  |
| 5. | Business processes. BPMN, BPD. |  |  |  |
| 6. | BPMN, BPD. |  |  |  |
| 7. | Bizagi Process Modeler. |  | Bizagi homework | Friday 24:00 |
| 8. | Kulcs-Soft ERP. |  |  |  |
| 9. | ERP selection and implementation |  | Kulcs-Soft homework | Friday 24:00 |
| 10. | Business intelligence. |  |  |  |
| 11. | Some IT related issues of environmental product charge. |  |  |  |
| 12. | Supply chain management. |  |  |  |
| 13. | Test. Presentations. |  | Presentations by students. |  |

Mondays, 7:45-9:15 A117 and 9:30-11:00 A117

|  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- |
| Week 1 | Week 2 | Week 3 | Week 4 | Week 5 | Week 6 | Week 7 |
| 2025.09.08. | 2025.09.15. | 2025.09.22. | 2025.09.29. | 2025.10.06. | 2025.10.13. | 2025.10.20. |
| Week 8 | Week 9 | Week 10 | Week 11 | Week 12 | Week 13 | Week 14 |
| szünet | 2025.11.03. | 2025.11.10. | 2025.11.17. | 2025.11.24. | 2025.12.01. | 2025.12.08. |

## **assessment and evaluation**

*(Neptun: Instruction/Subjects/Subject Details/Syllabus/Examination and Evaluation System)*

##### **Attendance**

*In accordance with the Code of Studies and Examinations of the University of Pécs, Article 45 (2) and Annex 9. (Article 3) a student may be refused a grade or qualification in the given full-time course if the number of class absences exceeds 30% of the contact hours stipulated in the course description.*

***Method for monitoring attendance*** *(e.g.: attendance sheet / online test/ register, etc.)*

attendance sheet

##### **assessment**

*Cells of the appropriate type of requirement is to be filled out (course-units resulting in mid-term grade or examination). Cells of the other type can be deleted.*

Course resulting in mid-term grade (PTE TVSz 40§(3))

**Mid-term assessments, performance evaluation and their ratio in the final grade** (The samples in the table to be deleted.)

|  |  |  |
| --- | --- | --- |
| **Type** | **Assessment** | **Ratio in the final grade** |
| *Bizagi homework* | *Accepted / not accepted* |  |
| *Kulcs-Soft homework* | *Accepted / not accepted* |  |
| *Test* | *100 points* | *100%* |

To pass all homeworks have to be accepted plus the test result should be above 40%.

**Opportunity and procedure for re-takes** (PTE TVSz 47§(4))

*The specific regulations for improving grades and resitting tests must be read and applied according to the general Code of Studies and Examinations. E.g.: all tests and assessment tasks can be repeated/improved at least once every semester, and the tests and home assignments can be repeated/improved at least once in the first two weeks of the examination period.*

Retake is scheduled to the 13th or 14th week.

**Grade calculation as a percentage**

based on the aggregate performance according to the following table

|  |  |
| --- | --- |
| **Course grade** | **Performance in %** |
| excellent (5) | 85 % … |
| good (4) | 70 % ... 85 % |
| satisfactory (3) | 55 % ... 70 % |
| pass (2) | 40 % ... 55 % |
| fail (1) | below 40 % |

The lower limit given at each grade belongs to that grade.

## **Specified literature**

*In order of relevance. (In Neptun ES: Instruction/Subject/Subject details/Syllabus/Literature)*

##### **compulsory reading and availability**

[1.] The material of the course will be published via neptun and/or Teams.

[2.] Business Process Model and Notation (BPMN), 2011. OMG Document Number: formal/2011-01-03. Standard document URL: http://www.omg.org/spec/BPMN/2.0

[3.] Bizagi Modeler. User guide. Bizagi, 2018. http://download.bizagi.com/docs/modeler/3300/en/Modeler\_user\_Guide.pdf

##### **recommended literature and availability**

[4.] A. Drogin. Microsoft Dynamics NAV Development Quick Start Guide: Get up and running with Microsoft Dynamics NAV, December 27, 2018. ISBN-13: 978-1789612769

[5.] R. Lestina. Navision & dynamics nav user guide: volume 2: general guide for all users. ISBN-13: 978-0615944913