

Code.....

Course item:

1. INFORMATION ABOUT THE COURSE**A. Basic information**

| | |
|---|---|
| Name of course | Database Systems |
| Study level | <i>first degree</i> |
| Unit running the study programme | <i>Faculty of Management</i> |
| Study programme | <i>Management</i> |
| Speciality | |
| Name of teacher (s) and his academic degree | <i>Cezary Graul, MSc, Marek Sikora, PhD, Grzegorz Dzieża, PhD</i> |
| Introductory courses | <i>Information Technologies</i> |
| Prerequisites | <i>no prerequisites</i> |

B. Semester/week schedule of classes

| Semester | Lectures | Classes | Laboratories | Project | Seminars | Field exercises | ECTS |
|--------------|----------|---------|--------------|---------|----------|-----------------|------|
| fall, spring | | | 30 | | | | 3 |

2. EFFECTS OF EDUCATION (acc. to National Qualifications Framework)

| | |
|-------------|---|
| Knowledge | <i>on successful completion of the course student will be acquainted with fundamental of database systems theory. The student will have the basic knowledge of Structural Query Language.</i> |
| Skills | <i>on successful completion of the course student is supposed to analyse and solve basic problems related to databases with the usage of MS Access and MySql. The participant of the studies will have the possibility of data manipulation and database development with the help of MS Access GUI or with the SQL queries on MySQL.</i> |
| Competences | <i>after the subject completion the student will have the ability to explain and solve fundamental matters connected with databases and can cooperate with database developers and analytics.</i> |

3. TEACHING METHODS

| |
|---------------------------------|
| <i>multimedia lecture, lab.</i> |
|---------------------------------|

4. METHODS OF EXAMINATION

| |
|--|
| <i>test of closed questions, project</i> |
|--|

5. SCOPE

| | |
|----------|---|
| Lectures | Database systems used in production and commercial companies and in civil service and services. Principles and terms connected with integrated systems. Selection of records and carrying out the operation on many records. Database service at the administrative level. Managing and selecting data from the user level. Designing and providing databases software for thematic areas. Elements of designing relational databases. Functional relations. Layouts of relation schemes. Normal characters of relation schemes. Terms: tables, preliminary research, relations, forms, reports, modules, websites of the access to data. SQL bases. Principles of saving the cohesion of the database. Principles of creating the user's intuitive |
|----------|---|

Comment

Do not exceed 2 pages (A4)

| | |
|--------------|--|
| | interface. |
| Laboratories | Developing software for the database application the Access in MS containing essential elements, such as data inputs and outputs. Implementation of the database for specific applications. Draft of the database – determining principles of the work on the project. Order of creating elements of databases. Designing and making tables. Creating the relation amongst tables. Designing and creating preliminary research. Developing the user's interface. |

6. LITERATURE

| | |
|--------------------------|---|
| Basic literature | <ol style="list-style-type: none"> 1. Roman S., 2002. <i>Access Database Design & Programming (3rd Edition)</i>, O'Reilly Media. 2. Jennings R. 2010. <i>Microsoft Access 2010 In Depth</i>. Que Corp, Que 3. Hennig T., Cooper R., Griffith G.L., Dennison J., 2010. <i>Access 2010 Programmer's Reference (Wrox Programmer to Programmer)</i>. |
| Supplementary literature | <ol style="list-style-type: none"> 1. Simpson A., 2004. <i>Access VBA Programming For Dummies</i>. Hungry Minds Trade Co, John Wiley&Sons. 2. Schmalz M., 2005. <i>Integrating Excel and Access</i>. O'Reilly Media. 3. Ken Getz K., Litwin P., Baron A., 2004. <i>Access Cookbook, Solutions to Common User Interface & Programming Problems</i>. O'Reilly Media. |

Comment

Do not exceed 2 pages (A4)