



## INTERNATIONAL MASTER IN BUSINESS INFORMATICS

International Master in Business Informatics (IMBI) is a programme that combines learning and application of knowledge and skills and IT. This programme is designed for students aimed to acquire broad understanding of information systems and their role in business environment and want to develop an interdisciplinary approach to management of IT projects that will prepare them for a successful career.

### KEY FACTS

|                  |   |
|------------------|---|
| <b>DURATION:</b> | <b>Route A:</b> 2 semesters (60 ECTS)<br>for candidates with bachelor degree of 240 ECTS<br><b>Route B:</b> 4 semesters (120 ECTS)<br>for candidates with bachelor degree of 180 ECTS           |
| <b>START:</b>    | <b>Applications:</b> September; <b>Start of semester:</b> October   |
| <b>LANGUAGE:</b> | English   |
| <b>DEGREE:</b>   | Master of Science (MSc) in Economics  |
| <b>FEES:</b>     | Eur 4,000 per year<br>For distinguished candidates scholarships (up to 25%) are available   |
| <b>CONTACT:</b>  | <a href="http://www.ekof.bg.ac.rs/imbi">www.ekof.bg.ac.rs/imbi</a><br>Email: <a href="mailto:international.master@ekof.bg.ac.rs">international.master@ekof.bg.ac.rs</a><br>Tel: +381 69 8066386 |

### LEARNING OUTCOMES

After successful completion of the programme, students will be able to:

- Create and administer databases for business information systems;
- Actively use quantitative and informatics knowledge and skills in all areas of business;
- Actively connect the concepts of classical statistical data analysis and modern data science;
- Use advanced techniques and models in the field of data science;
- Manage IT projects in accordance with PMBOK standards, develop the project management and capital budgeting skills to enable activity, programme and project costing, control and evaluation;
- Administer organizational change caused by the introduction of information systems.

### GRADUATE DESTINATIONS

In accordance with the competences and knowledge they will acquire upon completion of this study programme, graduates will be able to pursue career in a wide range of professions such as

- Information Systems Analyst;
- Heads of companies in the IT industry;
- Business System Analyst;
- Software development and testing experts;
- Application Support Specialist;
- Project manager for business transformation and digitization;
- Business IT consultant;
- Expert in the development and implementation of information systems, solutions and services;
- Expert in implementation of cloud-based software solutions;
- Business system analyst using big data analytics tool;
- Consultant in the field of development of business system solutions.

## CURRICULUM

| ROUTE A: 1 YEAR (60 ECTS) |                      |   |           |   |
|---------------------------|----------------------|---|-----------|---|
|                           | Course               | Terms   | ECTS      |   |
| FALL TERM                 | Mandatory courses    |   |           |   |
|                           | 1                    | Developing Software Solutions                     | 1         | 7 |
|                           | 2-3                  | Electives (at least 13 ECTS)                      |           |   |
|                           |                      | Information System Management                     | 1         | 7 |
|                           |                      | Machine Learning and Data Mining                  | 1         | 6 |
|                           |                      | Big Data Management                               | 1         | 7 |
|                           |                      | Business Process Management                       | 1         | 7 |
|                           |                      | Methodology of Scientific Research                | 1         | 7 |
|                           | 4                    | Electives (1 out of 3)                            |           |   |
|                           |                      | Organization and Management                       | 1         | 7 |
|                           |                      | Corporate Financial Reporting                     | 1         | 7 |
|                           |                      | Accounting Information for Decision Making        | 1         | 7 |
| SPRING TERM               | Mandatory courses    |   |           |   |
|                           | 5                    | Business Analytics and Decision Making Using Data | 2         | 7 |
|                           | 6                    | Electives (at least 5 ECTS)                       |           |   |
|                           |                      | IT Project Management                             | 2         | 7 |
|                           |                      | Intermediate Strategic Marketing                  | 2         | 7 |
|                           |                      | Digital Marketing                                 | 2         | 7 |
|                           |                      | E-Commerce  | 2         | 7 |
|                           |                      | Elective Courses                                  | 2         | 5 |
|                           | Other (mandatory)    |   |           |   |
|                           |                      | Research Seminar (Autumn)                         | 1         | 2 |
|                           |                      | Seminar Paper                                     | 1         | 1 |
|                           |                      | Internship  | 2         | 3 |
|                           | <b>Master Thesis</b> | <b>2</b>  | <b>15</b> |   |

| ROUTE B: 2 YEARS (120 ECTS) |                  |                               |   |           |   |  |
|-----------------------------|------------------|-------------------------------|---|-----------|---|--|
|                             |                  | Course                        | Terms   | ECTS      |   |  |
| YEAR 1                      | FALL TERM        | Mandatory courses             |   |           |   |  |
|                             |                  | 1                             | Organization and Management                       | 1         | 7 |  |
|                             |                  | 2                             | Methodology of Scientific Research                | 1         | 7 |  |
|                             |                  | 3                             | Business Process Management                       | 1         | 7 |  |
|                             |                  | 4                             | Research Seminar (Autumn)                         | 1         | 2 |  |
|                             |                  | 5                             | Electives (7 ECTS)                                |           |   |  |
|                             |                  |                               | Accounting Information for Decision Making        | 1         | 7 |  |
|                             |                  | Corporate Financial Reporting | 1   | 7         |   |  |
|                             | SPRING TERM      | 6                             | Intermediate Strategic Management                 | 2         | 7 |  |
|                             |                  | 7                             | Business Analytics and Decision Making Using Data | 2         | 7 |  |
|                             |                  | 8                             | Advanced Digital Tools                            | 2         | 4 |  |
|                             |                  | 9                             | Electives (7 ECTS)                                |           |   |  |
|                             |                  |                               | Digital Marketing                                 | 2         | 7 |  |
|                             |                  |                               | E-Commerce  | 2         | 7 |  |
| 10                          |                  | Electives (at least 5 ECTS)   |   |           |   |  |
|                             | Elective Courses | 2                             | 5   |           |   |  |
| YEAR 2                      | SPRING TERM      | Mandatory courses             |   |           |   |  |
|                             |                  | 11                            | Information System Management                     | 3         | 7 |  |
|                             |                  | 12                            | Big Data Management                               | 3         | 7 |  |
|                             |                  | 13                            | Electives (chose at least 6 ECTS)                 |           |   |  |
|                             |                  |                               | Information System Analysis and Design            | 3         | 7 |  |
|                             |                  |                               | Machine Learning and Data Mining                  | 3         | 6 |  |
|                             |                  | 14                            | Electives (1 out of 2)                            |           |   |  |
|                             |                  |                               | IT Project Management                             | 3         | 7 |  |
|                             |                  |                               | Developing Software Solutions                     | 3         | 7 |  |
|                             |                  | 15                            | Electives (choose at least 5 ECTS)                |           |   |  |
|                             |                  |                               | Elective Courses                                  | 3         | 5 |  |
|                             |                  | Other (mandatory)             |   |           |   |  |
|                             | FALL TERM        |                               | Research Seminar (Spring)                         | 4         | 2 |  |
|                             |                  | Internship                    | 4   | 3         |   |  |
|                             |                  | <b>Master Thesis</b>          | <b>4</b>  | <b>23</b> |   |  |