| REPUBLIC OF BULGARIA<br>D.A. TSENOV ACADEMY OF ECONOMICS – SVISHTOV | |
|---|---|
| **FACULTY**<br>**„FACULTY OF MANAGEMENT AND MARKETING“** | **DEPARTMENT**<br>**„BUSINESS INFORMATICS“** |

**Approved by:**
**RECTOR:**
(Prof. Mariyana Bozhinova, PhD)

Approved by the AC, Resolution № 5/02.03.2022
Approved by the FC, Protocol № 4/16.02.2022
Approved by the DC, Protocol № 9/24.01.2022

# QUALIFICATION DESCRIPTION

# DOCTORAL PROGRAMME
## „APPLICATION OF COMPUTING IN ECONOMICS“

| Educational and scientific degree:<br>**Doctor** | | Area of study:<br>**3. Social, economic sciences and law** |
|---|---|---|
| Mode of study: | Length of study: | Field of study:<br>**3.8. Economics** |
| **Full-time/Unsupervised** | **3 years** | |
| **Part-time/Distance** | **4 years** | Code of the document:<br>**ED/QD-D-FT/PT/U/D-3/4-3.8-ACE-FMM-DBI-2022** |
| Language: **Bulgarian/English/Russian** | | |

**1. General description of the Doctoral programme**

The doctoral program aims to meet the growing need to raise the educational level in the area of information and communication technologies. It provides in-depth theoretical training; knowledge and skills to analyse, implement and maintain state-of-the-art high-tech IT solutions; developing research capabilities; as well as teaching activities oriented towards students and practitioners.

PhD students' training is aimed at acquiring lasting knowledge and skills related to conducting research on the organization, management and operation of IT in business, as a result of which they can perform analyses and identify problems and weaknesses, to offer concrete solutions for their overcoming, to professionally evaluate trends in the development of information and communication technologies and to implement and adapt these technologies in the corporate information infrastructure.

The doctoral program provides doctoral students with three years of full-time and four-year part-time studies to conduct qualitative research in various areas where they have interests such as e-business, information security and information protection, information infrastructure

management, business intelligent systems, knowledge management, and more. The serious research of lecturers from the Department of Business Informatics contributes to the training and development of PhD students who are supported and involved in various joint research, publications and research projects.

The final stage of the training is the defence of a doctoral dissertation and the acquisition of the Doctor's educational qualification degree.

Graduates of the doctoral program have opportunities for realization as lecturers and researchers in the field of education and science as well as highly qualified IT specialists in public and state administration and corporate business.

**2. Educational goals**

The main goal of the doctoral program is to prepare graduate masters for academic career in the field of higher education. To achieve this goal PhD students are trained to carry out scientific research and to train students. The other goal of the PhD program is to prepare PhD students for business research, as well as for the key management positions in IT.

**3. Organisation and length of study**

The training organization provides PhD students with in-depth, highly specialized knowledge in a particular IT field such as: business information systems; e-business; security and protection of information; business intelligent analysis, and more. In addition, the training of PhD students is also characterized by:

• use of project principle;
• close cooperation with business practice;
• solving real problems;
• open nature, with the possibility of flexible and dynamic updating of the content of the topic developed in accordance with new phenomena in business technology;
• Forming lifelong learning habits.

The duration of PhD students in the program "Application of computing in economy" is 3 years for regular and independent training and 4 years for part-time and distance training.

**4. Knowledge**

The knowledge that PhD students receive correspond with the requirements of business practice and the realities of the information society. They can be systematized in several main subject areas:

- building and maintaining corporate network architectures and technologies;
- design and implementation of modern business information systems;
- e-business solutions, e-commerce and e-learning;
- implementation and use of business information systems;
- organization and construction of modern information infrastructure;
- security and protection of information, etc.

In each of these directions, the research attitude is focused on the independent work of the doctoral student suggesting critical analysis and innovative ideas, a creative approach.

**5. Skills**

As a result of the serious theoretical knowledge and acquired practical skills, the graduates of the Doctoral Program "Application of computing in economy" will be able to formulate and implement ideas in the field of information technologies and will gain competencies and skills to:

- analyse a wide range of knowledge and understand the essential facts, concepts and principles related to the modern information technologies and the opportunities for their application in the business;
- identify and offer solutions to specific issues related to information security;
- apply theoretical knowledge, practical skills and tools to design, implement and evaluate the effect of different information technologies.

**6. Competences**

After completing the training in the Doctoral Program "Application of computing in economy", PhD students will acquire competencies in several fields.

***6.1. Autonomy and responsibility***

- Business process management capabilities for business IT management and IT teams management;
- Take responsibility for decision-making concerning the management of ICTs under the influence of difficult predictable factors;
- Demonstrate creativity, innovation and leadership in IT adoption, deployment and management;
- Assess the knowledge and skills of IT specialists and decide on the need for training to increase their team efficiency.

***6.2. Learning competences***

- Assess the need to improve their personal qualifications by judging their knowledge and skills by comparing them with the current trends in IT development and planning the need to expand and update their professional qualifications.

***6.3. Communication and social competences***

- Formulate and expose clear, understandable ideas, problems and solutions from the IT field to specialists in this field as well as to non-specialists;
- Evaluate and understand different topics based on methods for qualitative and quantitative descriptions and assessments;
- They have a broad personal view and show understanding and solidarity with others;
- Communicate freely and fully with colleagues and clients in English.

***6.4. Professional competences***

- Explore, collect, classify, assess and interpret IT data to solve specific tasks;
- Apply the acquired knowledge and skills in new or unknown conditions;
- They have the ability to analyze, not only in the field of IT but also in an interdisciplinary context;
- Use new strategic approaches; form and express an opinion on issues of public and ethical nature arising in the course of the work.

***7. Brief profile of the academic staff***

The lecturers engaged as PhD students' supervisors in the Doctoral Program "Application of computing in economy" are highly qualified and highly professional. There is a serious presence of professors among them, who have many years of experience and achievements in scientific leadership. The PhD students' tutors are academics with solid research in various fields, represented by numerous publications in the relevant field. They are actively involved in research projects, such as managers, coordinators or participants.

**8. Professional realisation**

The professional realization of the graduates can be accomplished in the following directions:

*a) In the field of science and education, such as:*

• lecturers at a university in disciplines related to informatics and information technologies;

• secondary school teachers in the disciplines "Informatics" and "Information technologies";

• in research institutes.

*b) In the public and corporate sectors, such as:*

• analytical software specialists;

• specialists and experts in the design and implementation of information systems;

• consultants in the field of information technology;

• database administrators and LANs;

• specialists in the management and servicing of computer tools and technologies;

• heads of information services units, etc.

**9. Educational and scientific degree and professional qualification**

PhD students who have completed their individual curriculum and successfully defended their dissertation receive PhD degree in the field of higher education 3. Social, economic and legal sciences, professional filed 3.8. Economy.

Dean: ……..….....….... Head of Department: …….….....……

(Prof. Margarita Bogdanova, PhD) (Prof. Krasimir Shishmanov, PhD)

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# CURRICULUM

## Doctoral programme
## „ APPLICATION OF COMPUTING IN ECONOMICS“

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| Language: **Bulgarian/English/Russian** | | Effective as from: **2022/2023 academic year** |

## I. EDUCATIONAL ACTIVITY

| № | Type | *Code* | Subject/Activity | ECTS credits | Form of assessment |
|---|---|---|---|---|---|
| 1 | R | *Fundamental Courses (doctoral minimum I)* | | 25 | exam |
| | | FMM-DBI-D-101 | Business informatics | | |
| 2 | E | *Specialized Courses (doctoral minimum II)* | | 25 | exam |
| | | | Subject related to the topic of the doctoral degree dissertation | | |
| 3 | R | FIC-DSSL-D-901 | Methodology of science and research | 10 | c.g. |
| 4 | R | FIC-DSSL-D-902 | Academic writing and presentation methods | 10 | c.g. |
| 5 | R | FEA- DSAM-D-901 | Methodology and methods of empirical research | 10 | c.g. |
| 6 | R | | Attendance and participation in courses (seminars, doctoral degree tutorials), conferences and other training activities | 5 | IS report |
| | | | **Total:** | **85** | |
| 1 | F | FMM-DBI-D-901 | Information technology | 10 | c.g. |

| | | | | | |
|---|---|---|---|---|---|
| 2 | F | FF-DFLT-D-901 | English for doctoral degree students (B2) | 10 | c.g. |
| 3 | F | FF-DFLT-D-902 | English for doctoral degree students (C1) | 10 | c.g. |
| 4 | F | A master or bachelor degree subject | | According to the curriculum of the subject | exam |
| 5 | F | Participation in trainings related to the doctoral degree studies | | 5 for each training | certificate |
| 6 | F | Participation in mobility for training or practice purposes | | 30 for each mobility | Mobility protocol |

## II. SCIENTIFIC AND EDUCATIONAL ACTIVITY

| № | Type | Subject/Activity | ECTS credits | Form of assessment |
|---|---|---|---|---|
| 1 | R | Publications regulated in group D, indicators 4 – 10 from RIDASRBA | 30 | IS report |
| | | **Total:** | **30** | |
| 2 | F | Participation in science and research projects | 10 per project | contract |
| 3 | F | Participation in mobility for research purposes | 10 per mobility | Mobility protocol |
| 4 | F | Participation with science reports in scientific forums (national or international) | 1 for each report | Participation certificate publication |
| 5 | F | Publications exceeding the standard of minimum required points regulated in RIDASRBA outside ch. II.1 and II.4 | 1 for each subchapter | publication |

## III. PREPARATION OF A DISSEERTATION PAPER AND AN ABSTRACT

| № | Type | Activity | ECTS credits | Form of assessment |
|---|---|---|---|---|
| 1 | R | Dissertation paper, including: | 50 | Science advisor and a DC protocol |
| 1.1. | | Theoretic and research work | 10 | science advisor |
| 1.2. | | Empirical and research work | 10 | science advisor |
| 1.3. | | Preparation of a chapter from the dissertation paper | 20 | science advisor |
| 1.4. | | Submission of a final version to the approval of the DC | 10 | a DC protocol |
| 2 | R | Preparation of an abstract and an original contribution declaration | 10 | a DC protocol |
| | | **Total:** | **60** | |

## IV. TEACHING AND EXPERT ACTIVITY

| № | Type | Subject/activity | ECTS credits | Form of assessment |
|---|---|---|---|---|
| 1 | E | Delivering a series of lectures and/or seminars according to the syllabus | 5 | Report from the SA visit |
| | | Participation in expert and consultancy activity | | Report by the SA; contract/reference |
| | | **Total:** | **5** | |
| 1 | F | Delivering a series of lectures and/or seminars according to the syllabus | 5 ECTS credits for 28 provisional classes | Remuneration form |

| | | | | |
|---|---|---|---|---|
| 2 | F | Participation in expert and consultancy activity | 2 ECTS credits per participation | report by the SA; contract/reference |
| 3 | F | Participation in mobility for teaching purposes | 10 ECTS credits per mobility | certificate |

## BASIC COMPONENTS OF THE SYLLABUS

| Activity | ECRS credits |
|---|---|
| **COMPULSORY ACTIVITIES** | |
| Educational activity | 85 |
| Scientific and educational activity | 30 |
| Preparation of a dissertation paper and an abstract | 60 |
| Teaching and expert activity | 5 |
| **Total:** | 180 |
| **FACULTATIVE ACTIVITIES** | |
| Educational activity | According to the IS of the doctoral student |
| Scientific and education activity | |
| Teaching and expert activity | |

**DEAN:** (Prof. Margarita Bogdanova, PhD)

**HEAD OF DEPARTMENT:** (Prof. Krasimir Shishmanov, PhD)