

## **TRAINING PROGRAM IN DISCIPLINE: Information and Communication Technology**

### 1. Basic information

*Domain: Engineering and Technology*

*Discipline: Information and Communication Technology*

*Degree awarded: PhD in Information and Communication Technology*

### 2. Training demand

Development of a knowledge-based economy in new technologies in the discipline of information and communication technology raises the demand for high-class specialists, including degree of doctor of technical sciences, employed in scientific institutions, research and development units, consulting and advisory boards, as well as in the small and medium sector companies. Doctoral studies prepare the most talented candidates to write and defend dissertations.

### 3. Detailed entry requirements

Completing the Master's Degree in technical sciences or exact sciences, in particular in the following fields of study: electrical engineering, electronics and telecommunications, automation and robotics, computer science or applied mathematics. Candidate should show the ability to self-education, organization of his or her own work, presentation, discussion and communication skills.

### 4. Teaching methods

Lectures, individual and group projects, laboratory sessions, seminars.

### 5. Graduate's profile

Person who obtained the degree of doctor in discipline Information and communication technology.

### 6. Training plan

| <b>First year (Semester 1 and 2)</b>  |             |  |
|---------------------------------------|-------------|--|
| No.                                   | Subcategory | Subject  |
| 1                                     | E           | Entrepreneurship                                       |
| 2                                     | CC1         | Research methodology                                   |
| 3                                     | CC2         | Statistics   |
| 4                                     | CC3         | Advanced data processing algorithms and structures     |
| 5                                     | CC4         | Advanced human-computer interaction methods            |
| <b>Second year (Semester 3 and 4)</b> |             |  |
| No.                                   | Subcategory | Subject  |
| 1                                     | CC5         | Computational intelligence 1                           |
| 2                                     | CC6         | General-purpose computing on graphics processing units |
| 3                                     | CC7         | Computational intelligence 2                           |