Załącznik nr 4

do Programu Kształcenia w ISD PŁ – ścieżka kształcenia w dyscyplinie Informatyka techniczna i telekomunikacja

**TRAINING PROGRAM IN DISCIPLINE:**

**Telecommunication and Computer Science**

1. Basic information

*Domain: Engineering and Technology*

*Discipline: Telecommunication and computer science*

*Degree awarded: PhD in Telecommunication and computer science*

*Program Coordinator:*

*Name: DSc. Eng. Piotr M. Szczypiński*

*Email:* *piotr.szczypinski@p.lodz.pl*

1. Lecturers

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
| No | Name and surname | Title/degree | Website/ORCID |  |  |
| 1 | Andrzej Materka | prof. dr hab. inż. | 0000-0003-0864-1518 |  |  |
| 2 | Wojciech Tylman | dr hab. inż. | 0000-0002-3896-4230 |  |  |
| 3 | Piotr Lipiński | dr hab. inż. | 0000-0002-8269-3802 |  |  |
| 4 | Adam Wojciechowski | dr hab. inż. | 0000-0003-3786-7225 |  |  |
| 5 | Artur Klepaczko | dr hab. inż. | 0000-0003-4045-5870 |  |  |
| 6 | Piotr Szczypiński | dr hab. inż. prof. PŁ | 0000-0002-9956-0862 |  |  |
| 7 | Piotr Napieralski | dr hab. inż. | 0000-0003-1427-7791 |  |  |
| 8 | Krzysztof Ślot | prof. dr hab. inż. | 0000-0003-1228-0970 |  |  |
| 9 | Adam Pelikant | dr hab. inż. prof. PŁ | https://pl.wikipedia.org/wiki/Adam\_Pelikant |  |  |
| 10 | Dorota Kamińska | dr inż. | 0000-0002-3416-5554 |  |  |
| 11 | Adam Niewiadomski | dr hab. inż. prof. PŁ | 0000-0001-7346-5472 |  |  |
| 12 | Agnieszka Wosiak | dr hab. inż. | 0000-0001-6124-1236 |  |  |
| 13 | Michał Morawski | dr inż. | 0000-0002-8902-1259 |  |  |

1. Training demand

Development of a knowledge-based economy in new technologies in the discipline of Telecommunication and computer science 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.

1. 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.

1. Teaching methods

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

1. Graduate’s profile

Person who obtained the degree of doctor in discipline Telecommunication and computer science.

1. Training plan

|  |  |  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| **Semester 1** | | | | | | | | | | |
| No. | Abbreviation | Course name |  | | | | | | | ECTS |
| L | T | L | P | S | Σ |  | |
| 1 | E | Entrepreneurship | 15 |  |  |  |  | 15 | 1 | |
| 2 | CC1 | Research methodology | 3 |  |  |  | 12 | 15 | 1 | |
| 3 | CC2 | Statistics | 4 |  |  | 26 |  | 30 | 2 | |
| Total | | |  |  |  |  |  | 30 | 4 | |
| **Semester 2** | | | | | | | | | | |
| No. | Abbreviation | Course name |  | | | | | | | ECTS |
| L | T | L | P | S | Σ |  | |
| 1 | CC3 | Advanced data processing algorithms and structures |  |  |  | 15 |  | 15 | 1 | |
| 2 | CC4 | Advanced human-computer interaction methods |  |  |  | 15 |  | 15 | 1 | |
| Total | | |  |  |  |  |  | 15 | 2 | |
| **Semester 3** | | | | | | | | | | |
| No. | Abbreviation | Course name |  | | | | | | | ECTS |
| L | T | L | P | S | Σ |  | |
| 1 | CC5 | Computational intelligence 1 |  |  | 15 |  |  | 15 | 1 | |
| 2 | CC6 | General-purpose computing on graphics processing units |  |  |  | 15 |  | 15 | 1 | |
| Total | | |  |  |  |  |  | 30 | 2 | |
| **Semester 4** | | | | | | | | | | |
| No. | Abbreviation | Course name |  | | | | | | | ECTS |
| L | T | L | P | S | Σ |  | |
| 1 | CC7 | Computational intelligence 2 |  |  |  | 15 |  | 15 | 1 | |
| Total | | |  |  |  |  |  | 15 | 1 | |
| **TOTAL** | | |  |  |  |  |  | **135** | **9** | |