



## INDIVIDUAL STUDY PLAN OF PhD STUDENT

### PhD student

Name and surname, academic degree:	Zeru Kifle Kebede
STAG ID:	E23989
Study programme:	System Engineering and Informatics
Form of study:	Full-time
Commencement date:	3. 10. 2023
Supervisor:	prof. Ing. Petr Hájek, Ph.D.
Faculty institute (workplace):	Institute of System Engineering and Informatics
Dissertation title:	Deep Learning Model for IoT Cyber-attack Detection in Smart Cities

### Study plan

Compulsory courses		Number of ECTS	Planned year of fulfilment			
			1.	2.	3.	4.
1	Selected Issues of Economic Theory	20		X		
2	Methodology of Science	20	x			
3	Statistical and Mathematical Methods in Management	20		X		
4	General Systems Theory	20	X			
<b>Compulsory options / Optional courses</b>						
5	Theory of Information and Data Security	10	X			
6	Artificial and Computational Intelligence	10	x			
7						
8						
9						
10						
State Doctoral Exam					x	
Defense of Dissertation Thesis						x

### Scientific-research activities of PhD student

The PhD student will get involved in scientific-research activities under guidance of the supervisor at the assigned workplace.

A student also participates in scientific-research tasks, in compliance with a dissertation topic, at his/her workplace (at the assigned institute) and is obliged to present his/her results in front of co-workers or other researchers (for example in terms of student grant's competitions).

Scientific and Research Activities	ECTS credits*
Publication in a journal with IF factor in WoK - Q1 and Q2	40
Book monographic publication (outside the Czech and Slovak Rep.)	30
Publication in a journal with IF factor in WoK - Q3 and Q4	30
Publication in a Scopus journal with SRJ - Q1 and Q2	25
Publication in a journal registered in the database ESCI WoK	25
Publication in a Scopus journal with SRJ - Q3 and Q4	20
Book monographic publication (inside the Czech and Slovak Rep.)	20
Publication in an indexed conference proceeding (WoK, Scopus)	15
Textbook, script	10
Publication in a reviewed non-index journal	8
Other scientific publications, presentations, performances (non-indexed conferences in the database Scopus or WoK, scientific journals etc.)	5

\*) In case of co-authors, the number of credits is stipulated in compliance with the share of each author. If the share is not defined, the number of credits is divided by the number of authors. If a co-author is represented by a supervisor, the supervisor is excluded from sharing.

1 conference paper on cyber-attack detection using deep learning, 1 journal paper on cyber-attack detection methods – a systematic review

### Pedagogical activities of PhD student

A full-time student is required to perform pedagogical activities between 2 and 4 hours per week in a semester during two semesters, usually within the first two years of study. The appropriate number of hours will be stipulated by a supervisor upon agreement of a head of the institute (workplace), considering his/her needs.

As regards a part-time student, teaching is done on a voluntary basis.

A student can gain 5 ECTS for 2 taught hours per week in a semester.

Knowledge-based management - 2 hours

Artificial and computational intelligence I - 2 hours

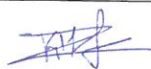

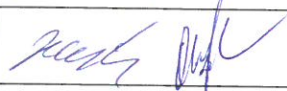


**Plan of study stays in the Czech Rep. and abroad / Internships, international cooperation etc.**

Internship in the academic year 2024/2025

This individual study plan of the PhD student will be specified in compliance with the internal rules and regulations of the Faculty of Economics and Administration, University of Pardubice, and by the Annual plan of student's activities. Assessment of the annual plan will be submitted to the particular advisory board for discussion.

**Individual study plan of PhD student**

Arranged on:	09/10/2024
Student's signature:	
Supervisor's signature:	
Head of the institute's signature:	
Approved by advisory board:	
Chairman of advisory board:	
Dean's signature:	

