University of Hradec Králové
Faculty of Informatics and Management

Welcome Presentation

Czech Republic, city and university

FIM UHK

Czech Republic

- **Founded:**
  - October 28, 1918 (Czechoslovakia)
  - January 1, 1993 (the Czech Republic)
- **Population:** 10 millions
- **Area:** 78,871 km²
- **Capital:** Prague (1,000,000 citizens)
- **Official language:** Czech
- **Currency:** Czech crown
- **Political system:** Unitary parliamentary republic
- **Well known companies:** Brewery Plzeňský Prazdroj; Škoda Auto a.s. – the largest car manufacturer in Czechia

FIM UHK

Faculty of Informatics and Management UHK

University of Hradec Králové

- = Institute of Education was founded in 1959
- = In 1992 established as a university
- = 6,000 students
- = Public institution
- = ECTS (European Credit Transfer System)
- = 4 faculties
- = Dormitory for students

Faculty of Informatics and Management

- → FIM founded in 1993
- → 1,600 students
- → Bachelor´s, Master´s and Doctoral degree
- → Exchange students from the whole world
- → Summer school „Czech It Out“

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Management of the Faculty of Informatics and Management

prof. Ing. Mgr. Petra Marešová, Ph.D., MBA
Dean

prof. RNDr. Petra Poulová, Ph.D.
Vice-Dean for Strategy and Development

prof. PhDr. Blanka Klímová, M.A., Ph.D.
Vice-Dean for International Relations

Ing. Jan Mačí, Ph.D.
Vice-Dean for Study Affairs

prof. Ing. Vladimír Bureš, Ph.D., MBA
Vice-Dean for Science and Research

Ing. Lenka Buchtová
executive secretary

FIM UHK

Faculty of Informatics and Management

Who we are

The Faculty of Informatics and Management (FIM) at the University of Hradec Králové is a **modern and dynamic educational and research** institution. We combine IT, data analytics, economics, and management, with a focus on practical skills, innovation, and **international cooperation**. Our graduates are well-prepared for successful careers and contribute to enhancing the **university's reputation** both nationally and internationally.

Vision

FIM aspires to be a **top choice for talented students** integrating computer science, management, and innovation. Through digital learning, interdisciplinary research, and industry partnerships, we shape the future—regionally and globally.

FIM UHK

Organizational structure of the faculty

Founded: 1993

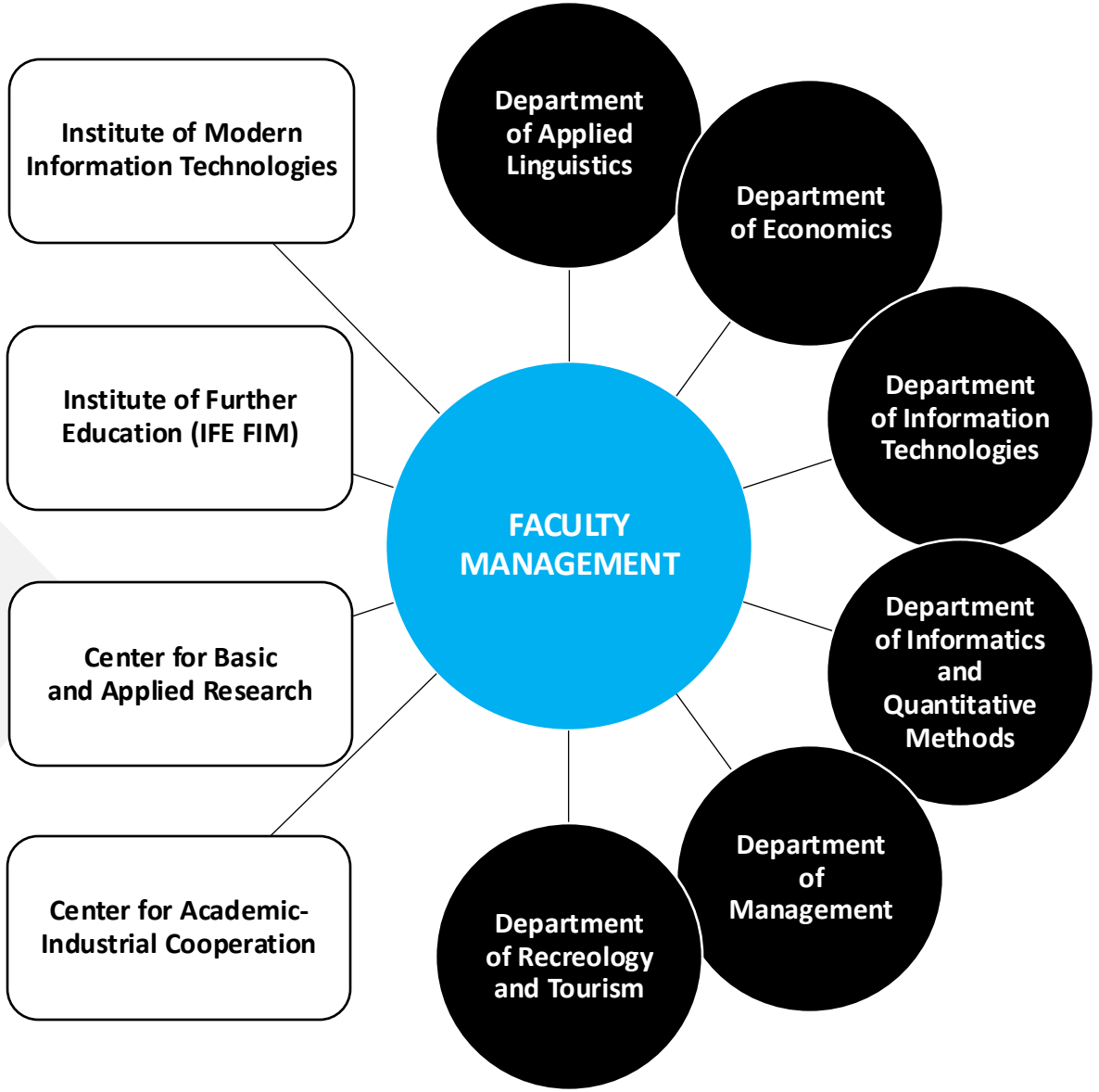
Number of study programs: 5 Bachelor‘s,

4 Master‘s,

3 PhD

Number of students: 1,589

Number of staff: 105



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Research

UHK | HR EXCELLENCE IN RESEARCH

UHK/FIM rankings

UHK proves its high standard by passing strict criteria of prestigious international rankings such as QS or THE, it has also successfully qualified in a ranking devoted to sustainability and ecology – the UI Green Metric.

UHK Rankings	2024	2025
THE WUR	1201–1500	**1001–1200**
THE by subject: Education Studies	N/A	**601+**
THE by subject: Computer Science	601–800	**601–1000**
THE by subject: Physical Science	1001+	**801–1000**
THE by subject: Life Sciences	601–800	**501–600**
THE by subject: Arts & Humanities	N/A	**601+**
THE Young Universities	**351–400**	N/A
QS WUR	1001–1200	**1001–1200**
QS EECA/Europe	**403**	N/A
QS Eastern Europe	**41**	N/A
UI GREEN METRIC	**527**	N/A

Focus on Journals

Year	Web of Science		Scopus	
	Journals	Proceedings	Journals	Proceedings
2019	61	52	57	60
2020	83	31	71	36
2021	114	15	102	32
2022	109	9	88	16
2023	109	9	116	16
2024	103	3	119	21
2025*	95	1	101	10

* December 2025 not included

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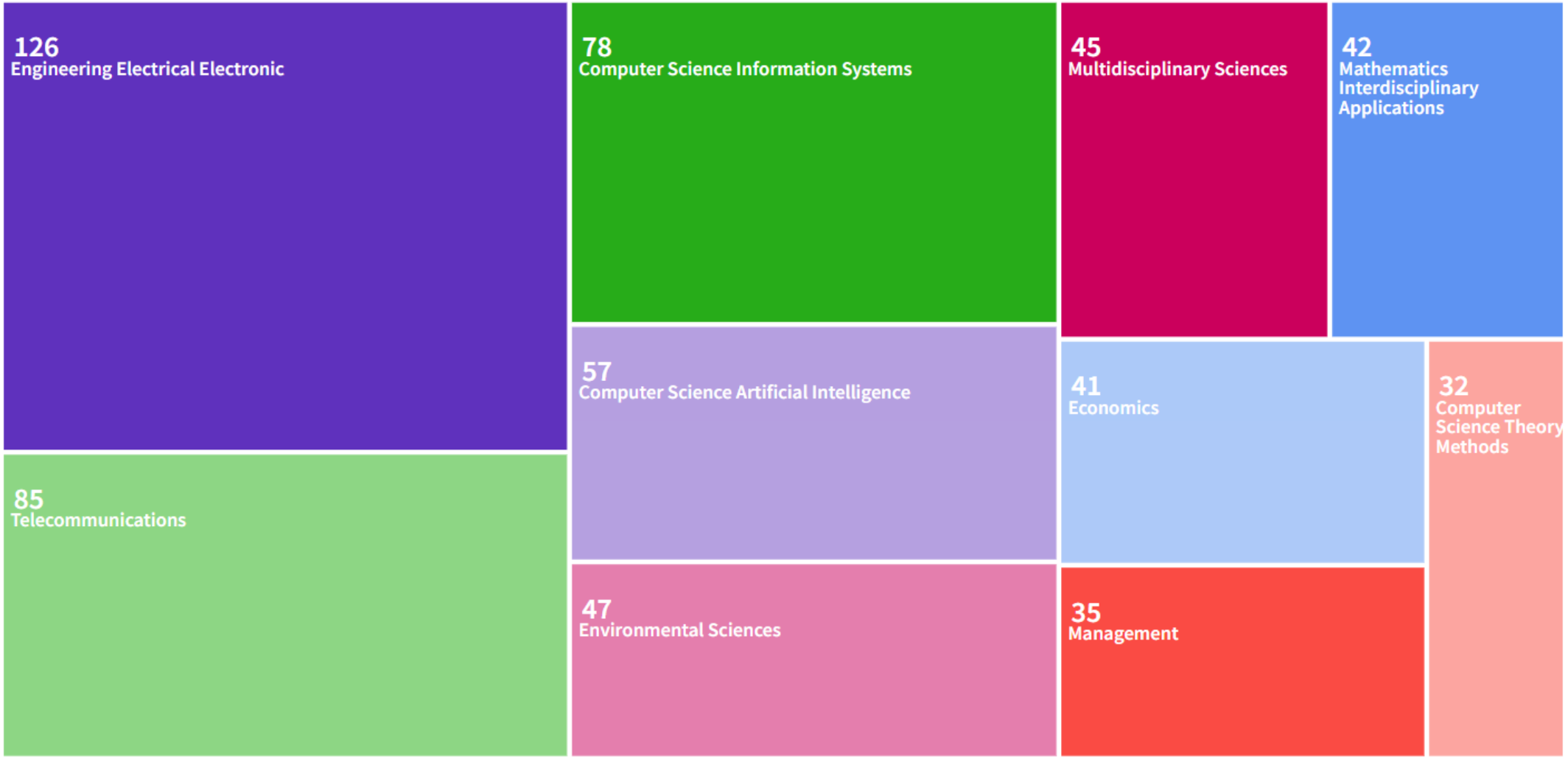
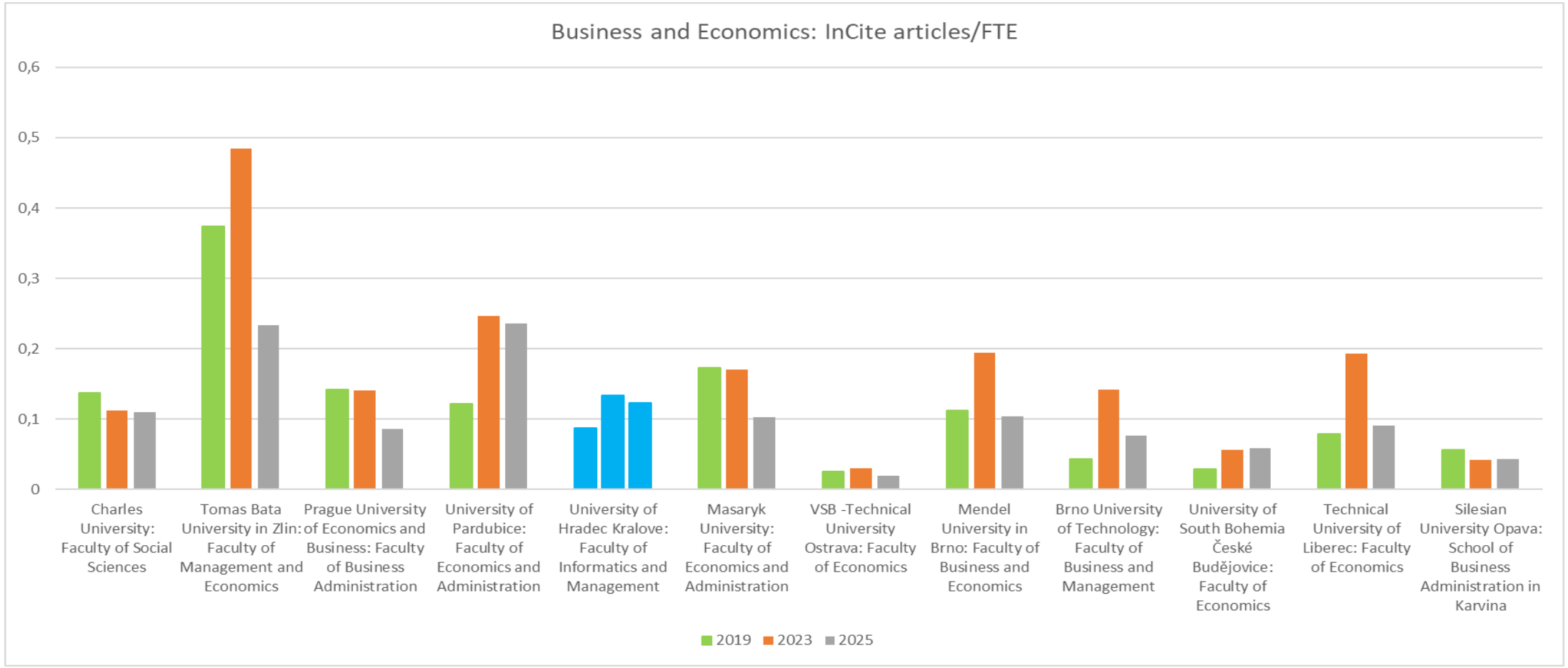
Research profile in Web of Science



FORD 5.2 - Business and Economics: a comparison among faculties

= InCite records, journals articles only

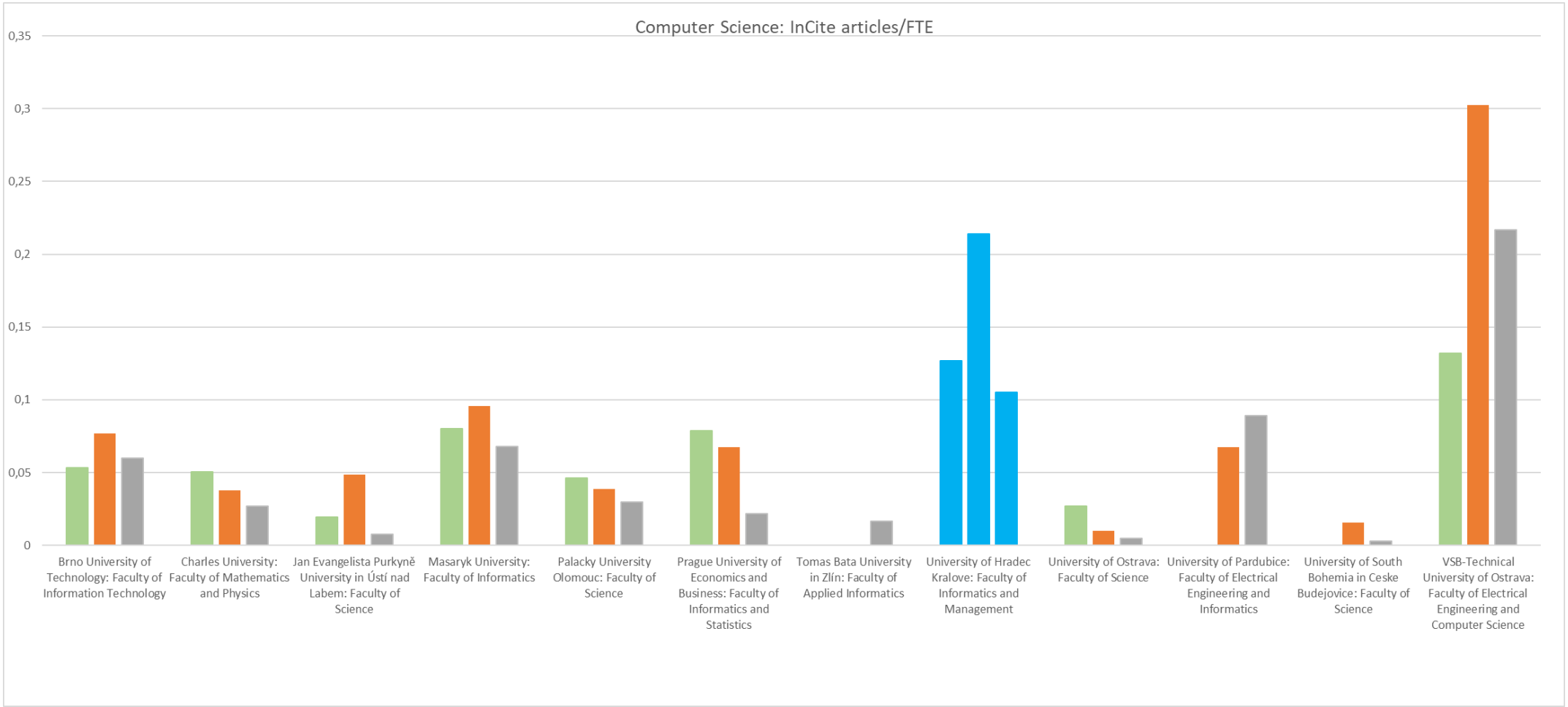
= Related to FTE according to the Ministry of Education, Youth and Sports



FORD 1.2 - Computer Science: a comparison among faculties

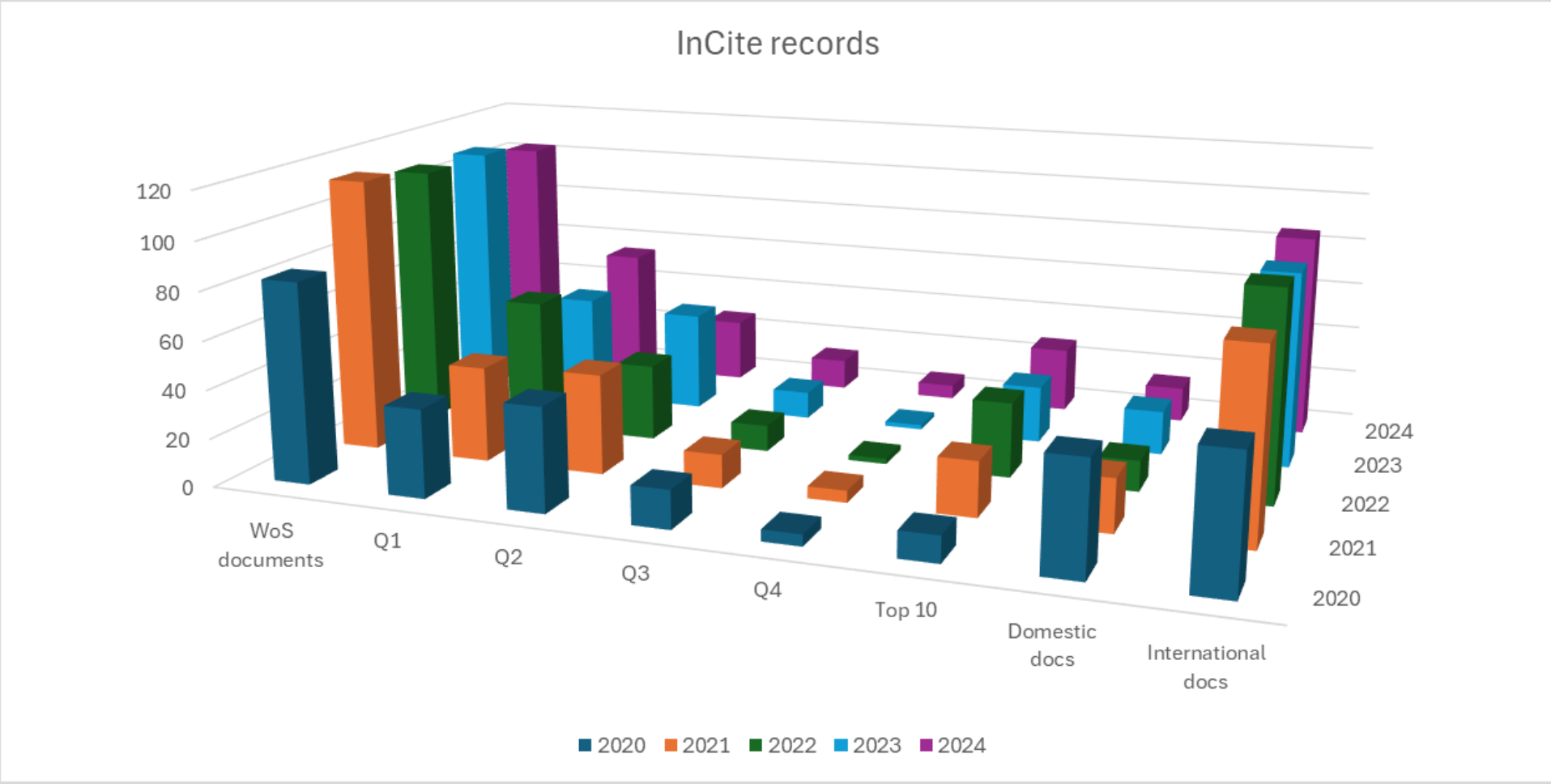
= InCite records, journals articles only

= Related to FTE according to the Ministry of Education, Youth and Sports



Qs and the Internationalization of Publications

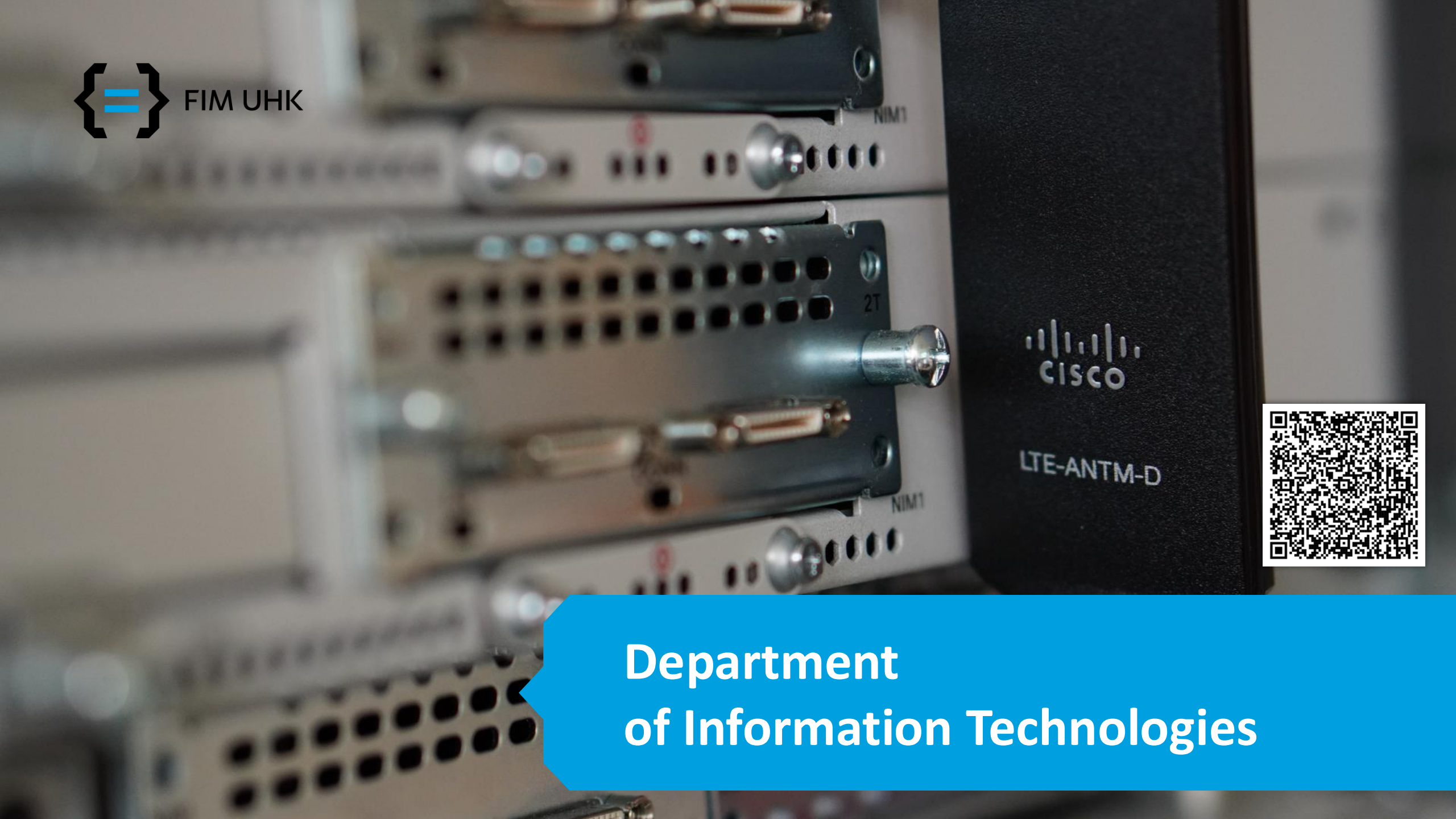
= **Comparison of publications with respect to international authoring teams and quartile** (source: Clarivate InCites)



University of Hradec Králové
Faculty of Informatics and Management

Research Activities and Projects

University of Hradec Kralove, Faculty of Informatics and Management



Department of Information Technologies

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Dept. of Information Technologies – Research Activities

CYBERSECURITY

- Use of AI for expert system of asset identification and risk management
- Artificial intelligence for Smart and Sustainable Urban Mobility
- Securing IoT and resilient systems
- The utilisation of social engineering as a means of enhancing resilience to cyber threats

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Dept. of Information Technologies – Project ARTISEC

- **Project Goal:**
  - The ARTISEC project focuses on the use of artificial intelligence to ensure cyber security
- **Funding:**
  - Technology Agency of the Czech Republic - The THÉTA 2 programme is aimed at supporting applied research and innovation in the energy sector
  - 1,25 mil. EUR
- **Project duration:** 2022 – 2025
- **Additional partners:**
  - The Faculty of Electrical Engineering and Communication, Brno University of Technology
  - Self-Governing Region Hradec Kralove

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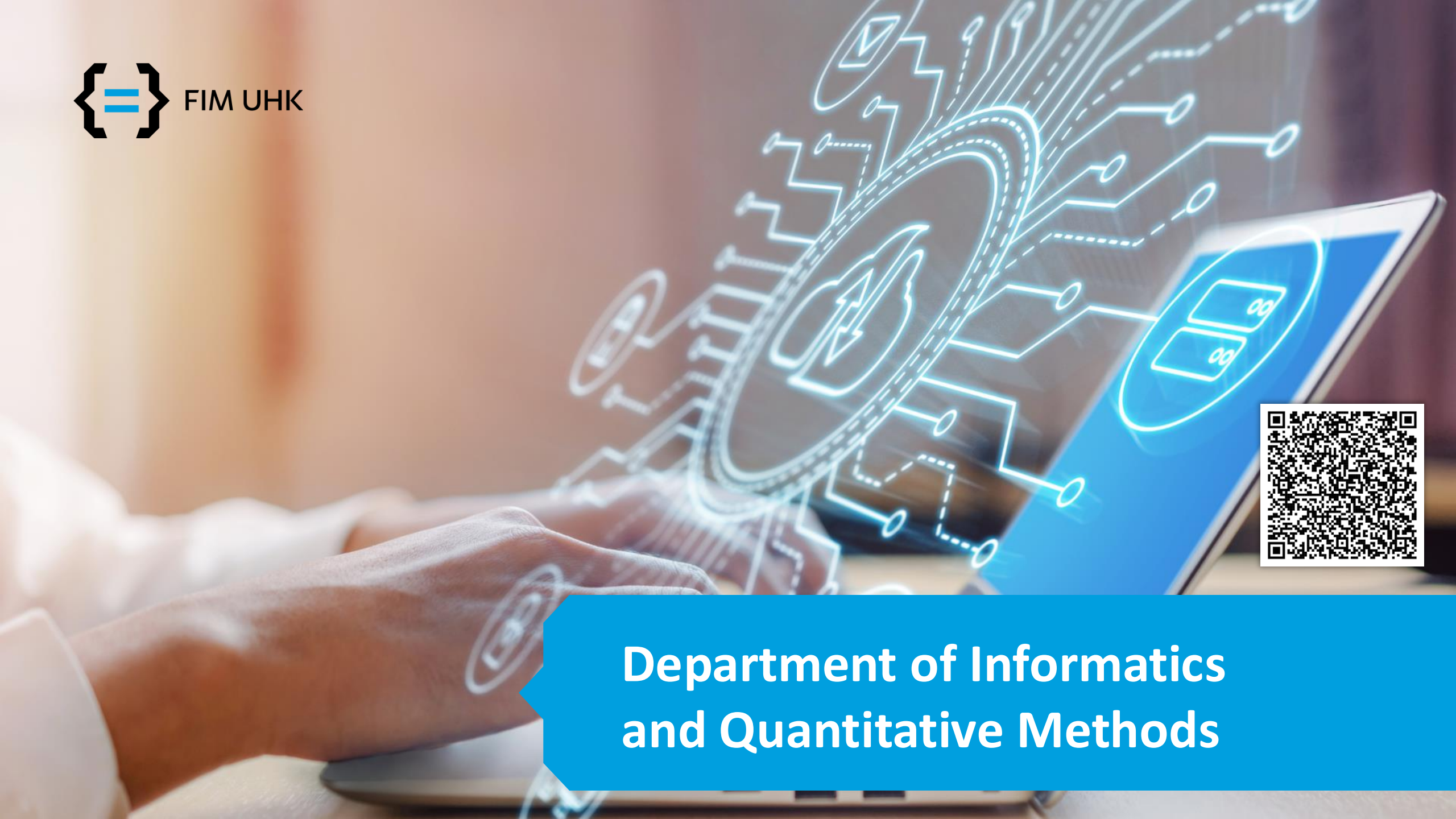

Department of Informatics and Quantitative Methods

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Dept. of Informatics and Quantitative Methods – Research

- Algorithmization
- Indoor Localization
- Data Science, Data Processing and Analysis, Statistical and Mathematical Modelling
- Application of AI

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Dept. of Informatics and Quantitative Methods – Projects

- **Algorithmization**
  - Web service application for Quartz Scheduler (DERS, spol. s r.o.)
  - Design of a paperless laboratory concept (VUOS a.s., EffiChem, spol. s r.o.)
  - Design and analysis of a hotel process simulator (VŠH, spol. s r.o.)
  - Design of an application for processing medical data from Capsule Endoscopy (FN HK)
  - Mobile application for CO2 sensor readings including visualization and sensor management via NFC (Protronix, spol. s r.o.)
- **Data Science, Data Processing and Analysis, Statistical and Mathematical Modelling**
  - Analysis of data related to water management (institutional project with the company Povodí Labe)
  - Analysis of data from the transport system of the city Pardubice and data describing the use of parking spaces in the city of Hradec Kralove (MPO project Smart Parking & Charging)
  - Analysis of data describing the habits and behaviour of elderly people (project with the Medical Faculty of Hradec Kralove and others)

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Department of Economics

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Dept. of Economics – Research Activities

- Application of decision-making methods and methods of dynamic simulation in the field of healthcare
- Design of a dynamic model to evaluate the effectiveness of investment in the selected areas of research and development
- Econometry and related models and indicators
- Industry 4.0/Company 5.0

Devising a Personalized Risk Stratification and Holistic Management for Prevention of Cognitive Impairment in Patients with different Cardiovascular Phenotypes: The Dorian Gray Project

- **Horizon Europe, main coordinator**: Università degli Studi di Brescia (UNIBS)
- **Project duration:** 2025 – 2029

- **Objective:** Univeristy of Hradec Kralove in proposal: Generation of a Health Technology Assessment (HTA) report based on the results of an implementation clinical study in 4 clinical centres across Europe. HTA will explore legal, ethical, and social aspect as well and cost–effectiveness of the multidomain personalised intervention delivered through the ABCE (WP12). Outcome: implementation of the intervention in population with MCI.

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Department of Management

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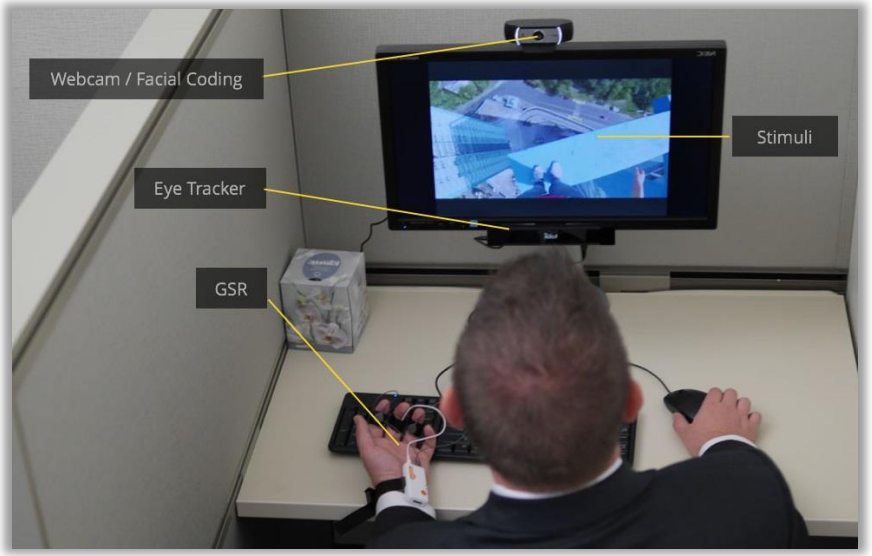
Dept. of Management – Research Activities

- Audio-visual interaction: exploring the relationship between music and visual stimuli
- Usability testing of websites and improving user experience (UX)
- Analysis of eye movements and emotional facial expressions
- Digital communication, innovative development , or digital communication on social networks or in the communication of multinational companies
- The issue of innovation, or open innovation strategies, specifically in the area of human resource management strategy, referred to as the 'human side of open innovation‘



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Department of Recreology and Tourism

FIM UHK

Dept. of Recreology and Tourism – Research Activities

- **Sustainable and Socially Responsible Tourism**
  - Geotourism with emphasis on geointerpretation and geo-education
  - Social responsibility in tourism
  - Use of ICT, modelling and systems approach in tourism sustainability

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Dept. of Recreology and Tourism – Research Activities

4GEON

- The IGCP-751 4GEON project supports geoscience knowledge transfer in geoparks
- **5 diverse geoparks** connected by approach to ABC interpretation and community involvement
- **Participating goeparks**
  - The Barrandian National Geopark
  - Rio Coco UNESCO UGGp
  - Colca y Volcanes de Andagua UGGp
  - Ngorongoro Lengai UGGp
  - Bohol Island UGGp

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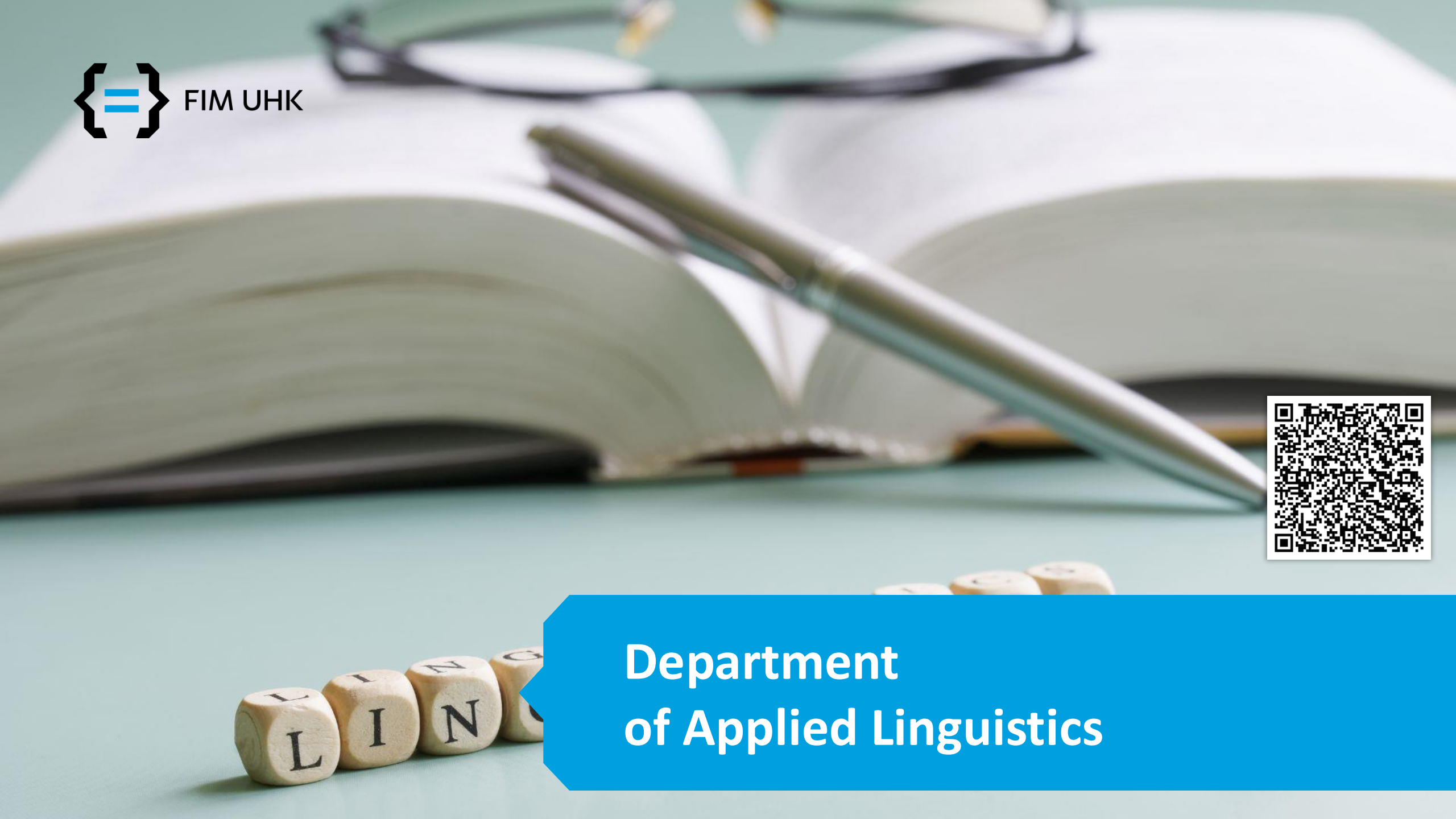

Department of Applied Linguistics

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Dept. of Applied Linguistics

- Approaches to foreign language teaching and learning
- AI in higher education
- Linguistic and ethical aspects of digital communication
- Efficiency of digital tools for foreign language learning
- Quality of Life of older generation in the context of digital education
- Business digital communication and intercultural business communication

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Dept. of Applied Linguistics - Projects

- 2023 – 24 Grant of the Fund for Bilateral Relations (reg, no. EHP-BFNU-OVNKM-4-257-01-2023)
  - **Artificial Intelligence in Formal Foreign Language Education** (UHK-NTNU)
- 2022 – 23 Grant of the Fund for Bilateral Relations (reg. no. EHP-BFNU-OVNKM-4-198-01-2022)
  - **Usefulness of Emerging Technologies in Formal Foreign Language Education** (UHK-NTNU) https://sites.google.com/view/web-bilateral-initiative
- 2020 - 24 - COST CA19102 - **Language in the Human-Machine Era**
- 2024 – 25 **Accelerating Digital Transformation for Higher Education Institutions in Southeast Asia** (DX.SEA) – (UHK, other European and Asian universities)

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Study Programs

Study Programs

Study programs taught in English

- Applied Informatics (B, M, D)
- Information Management (B, M, D)
- Economics and Management (B, M, D)

Other study programs taught in Czech

- Management of Tourism (B)
- Cybersecurity (B)
- Data Science (M)

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International Cooperation

Achievements in International Cooperation

A significant increase of the international pedagogical and research cooperation through:

= **memberships** in MC of COST **projects (9)**, KA2 projects, bilateral projects or Visegrad Funds

= memberships in the program and organizing committees of **international conferences**

= **invited lectures** at the international conferences

= **ERASMUS mobility** academic and student exchanges

= **summer schools** *Czech It Out* and *BIPs*

= COST *LITHME* 4th **Training School**

= **international conferences**

Other Internatioal Projects

Horizon Europe

- 2025 – 29 Dorian Gray „Digital twinning Of caRdiovascular and cognitIve heAlth: aN inteGrated pRevention strAtegy for healthier aGeing“

ERASMUS+ Cooperation Partnerships Projects

- 2024 – 27 **AI4UNI**
- 2023 – 26 **MISS4Health - Micro-credentials in Soft Skills for Healthcare Professionals and Students**
- 2023 – 25 **Accelerating Digital Transformation for Higher Education Institutions in Southeast Asia** (DX.SEA101083265)
- 2021 – 23 **EducAGE - Improving Competences of Older People Caregivers towards Healthy Ageing through Digital Transformation**

Bilateral Projects - Norwegian Funds

- 2023 – 24 **Artificial Intelligence in Formal Foreign Language Education**
- 2022 – 23 **Usefulness of Emerging Technologies in Formal Foreign Language Education**

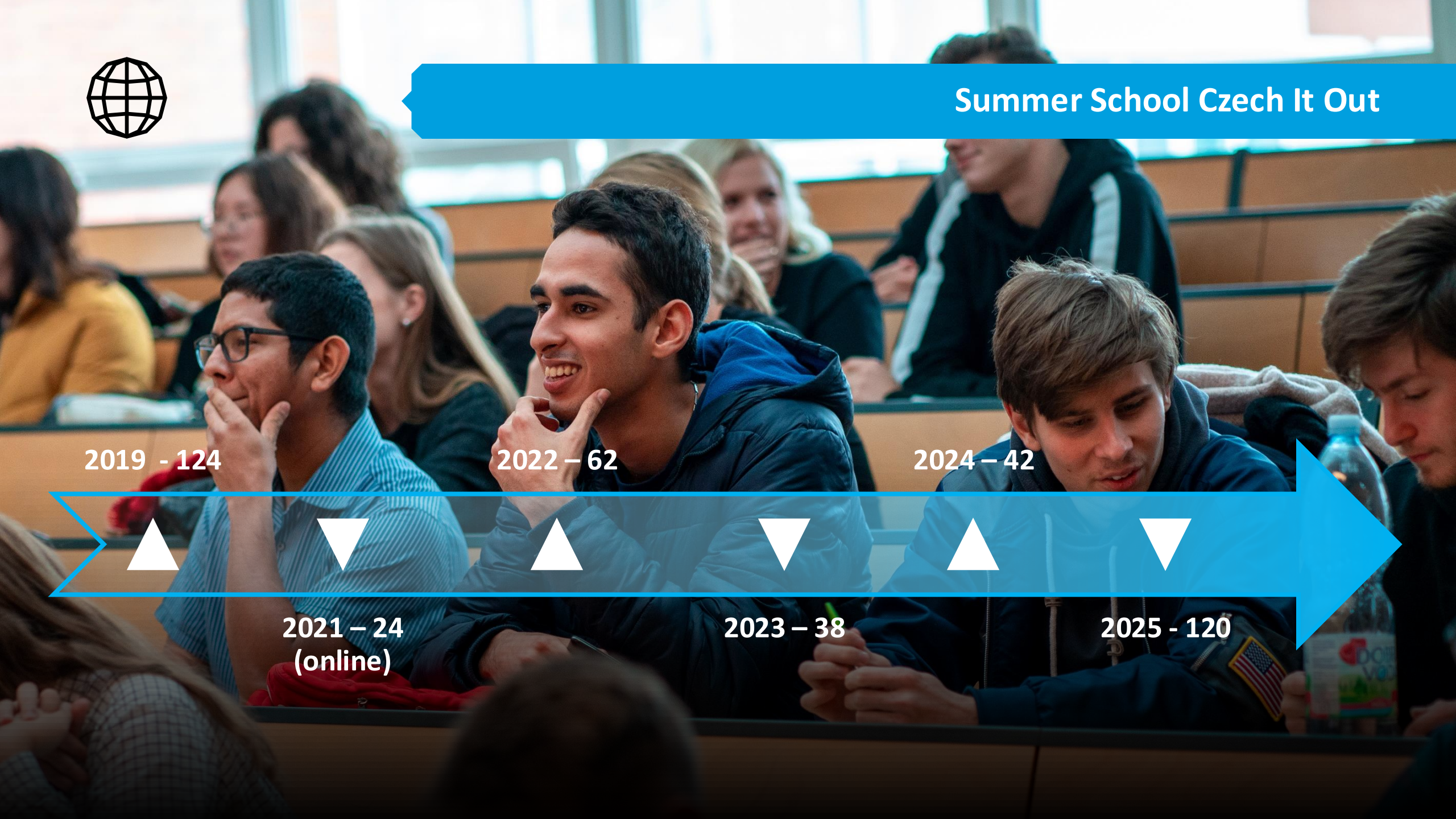
Visegrad Funds

- 2023 – 24 **Central European Urban Resilience Handbook for Best Practices**

Internationalisation

	2019/20	2020/21	2021/22	2022/23	2023/24	2024/25
Number of incoming students	186	141	189	235	219	272
Number of outgoing students	81	29	80	66	67	108

Summer School Czech It Out



Mobilities

= **Erasmus+ programs**

- Erasmus+ program for study, teaching, training or internships
- Erasmus+ International Credit Mobility
- Exchanges based on agreements about cooperation

= **Course Catalogue**

- On average 40 subjects available in English per semester
- Students can take courses from other faculties (up to 25 % of credits only)

= **ISCED codes**

- 0413 Management and Administration (includes Tourism, Languages)
- 0613 Software and applications development and analysis
- 0688 ICT (Information and Communication Technologies)

= **University Halls of Residence**

- 25-30 minutes walk or take the city bus
- Apartment has 2 bedrooms for 2 or 3 people
- Kitchen & bathroom are shared by 4 or 6 students
- Laundry, gym
- EUR 170 EUR per month

Achievements in Regional Cooperation

- **Collaboration with over 200 partner companies**
  - R&D projects
  - invited lectures (more than 40 per year)
  - practical projects (approx. 60 per year)
  - supervision of final theses
- **20 partner schools**
  - lectures, excursions, competitions

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www.uhk.cz/en/fim