



FACULTY
OF INFORMATION
TECHNOLOGY
CTU IN PRAGUE

Faculty of Information Technology CTU in Prague

International evaluation panel 2025





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FIT

in numbers

- founded in 2009
- 10 bachelor specializations
- 10 master specializations
- 400+ courses
- 6 departments
- 21 laboratories
- 13 research groups
- 4700+ alumni

- 50 industry partners
- 60 university partners abroad

- 3rd largest in number of students
- 1st in number of applications





Main strategic goals

- be an **internationally recognized** faculty in educational, scientific, research, innovative and other creative activities
- provide **high-quality technical education** in the main fields of computer science at all three levels of tertiary education
- provide a **balanced ratio** of **theoretical foundations** and **engineering** and **technical disciplines** with a sufficient level of project teaching and elective courses enabling the necessary individual profiling of students
- implement **research and development** activities at a **top level**
- **cooperate with leading partners** in industry, business, r&d institutions and public and state administration, taking into account the optimization of graduate profiles in cooperation with partner organization



Outline

[Slide 5: Students](#)

[Slide 16: Human resources](#)

[Slide 22: Finances](#)

[Slide 25: R&D Outputs](#)

[Slide 31: External projects](#)

[Slide 34: Recognition](#)

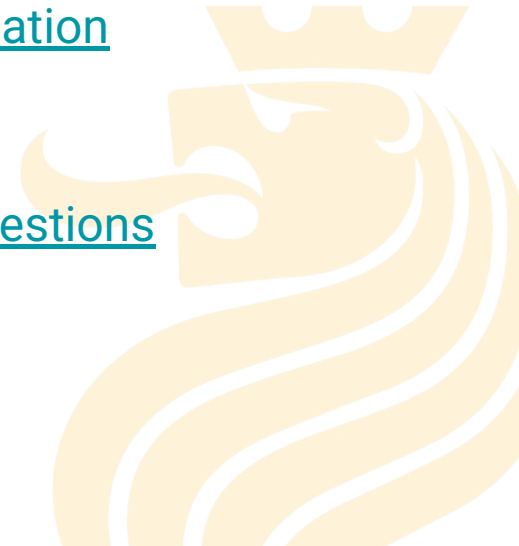
[Slide 37: Cooperation with industry](#)

[Slide 46: Public relations and popularization](#)

[Slide 57: SWOT](#)

[Slide 59: Annex](#)

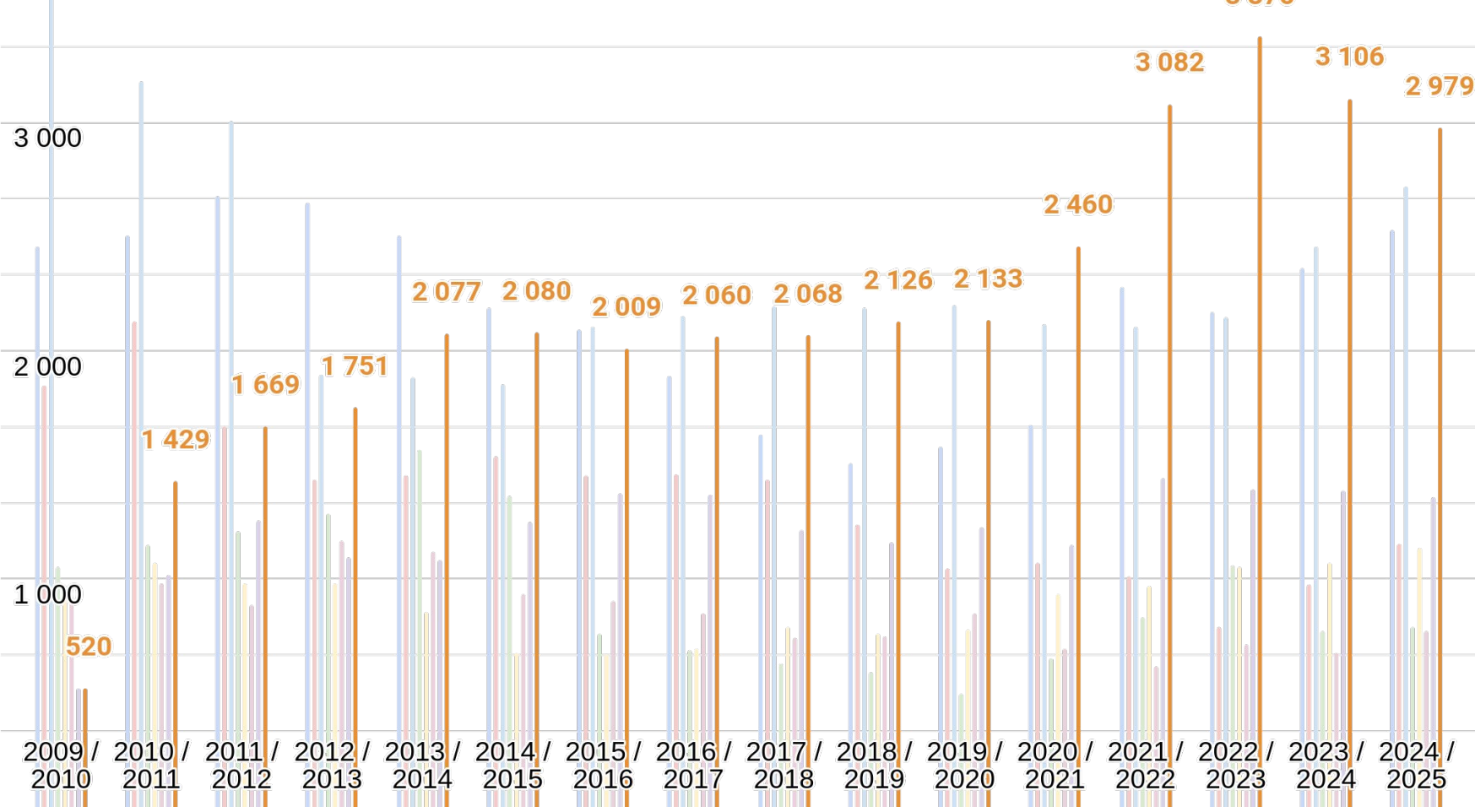
[Slide 61: Additional slides based on questions](#)

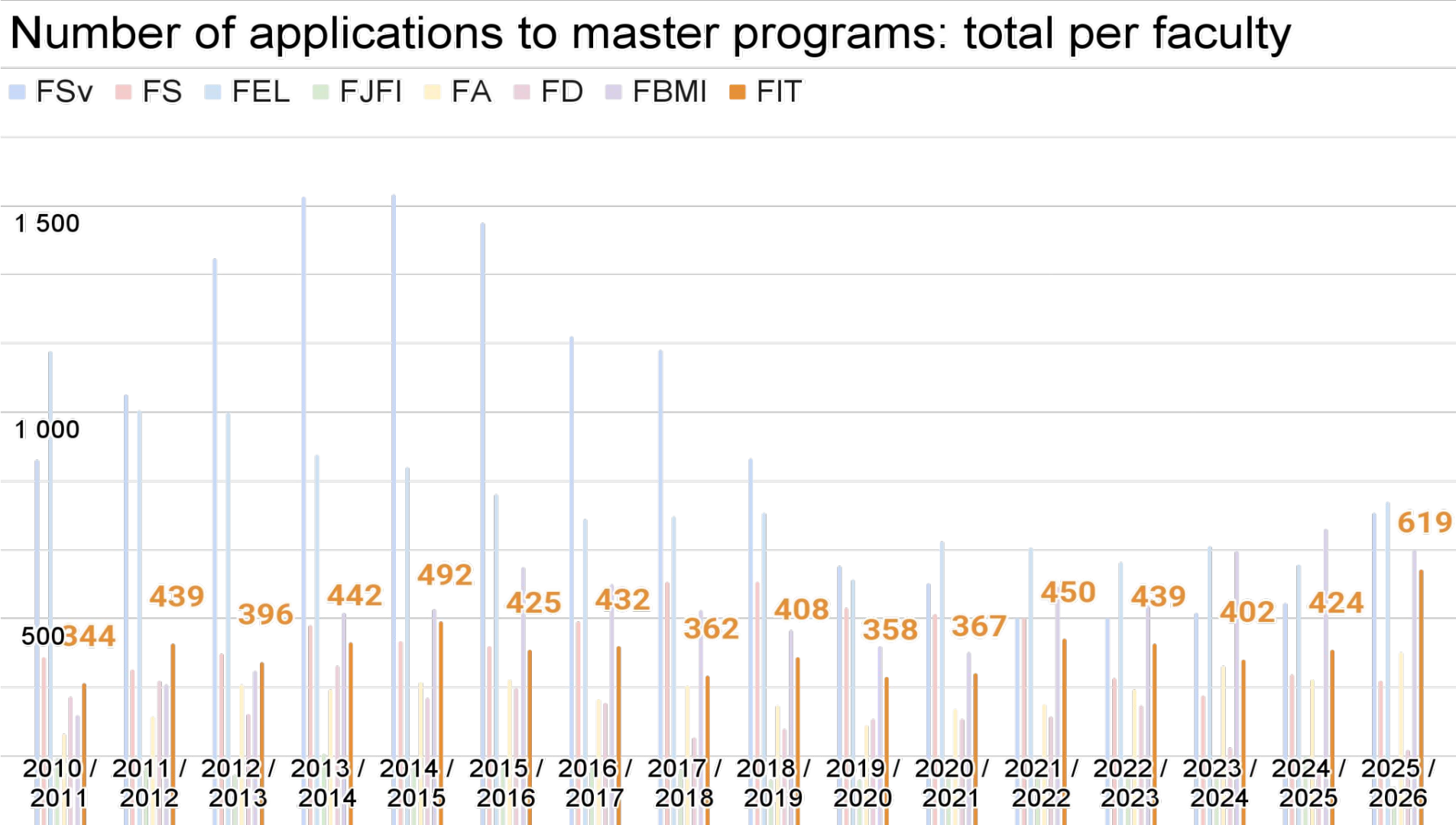


Students

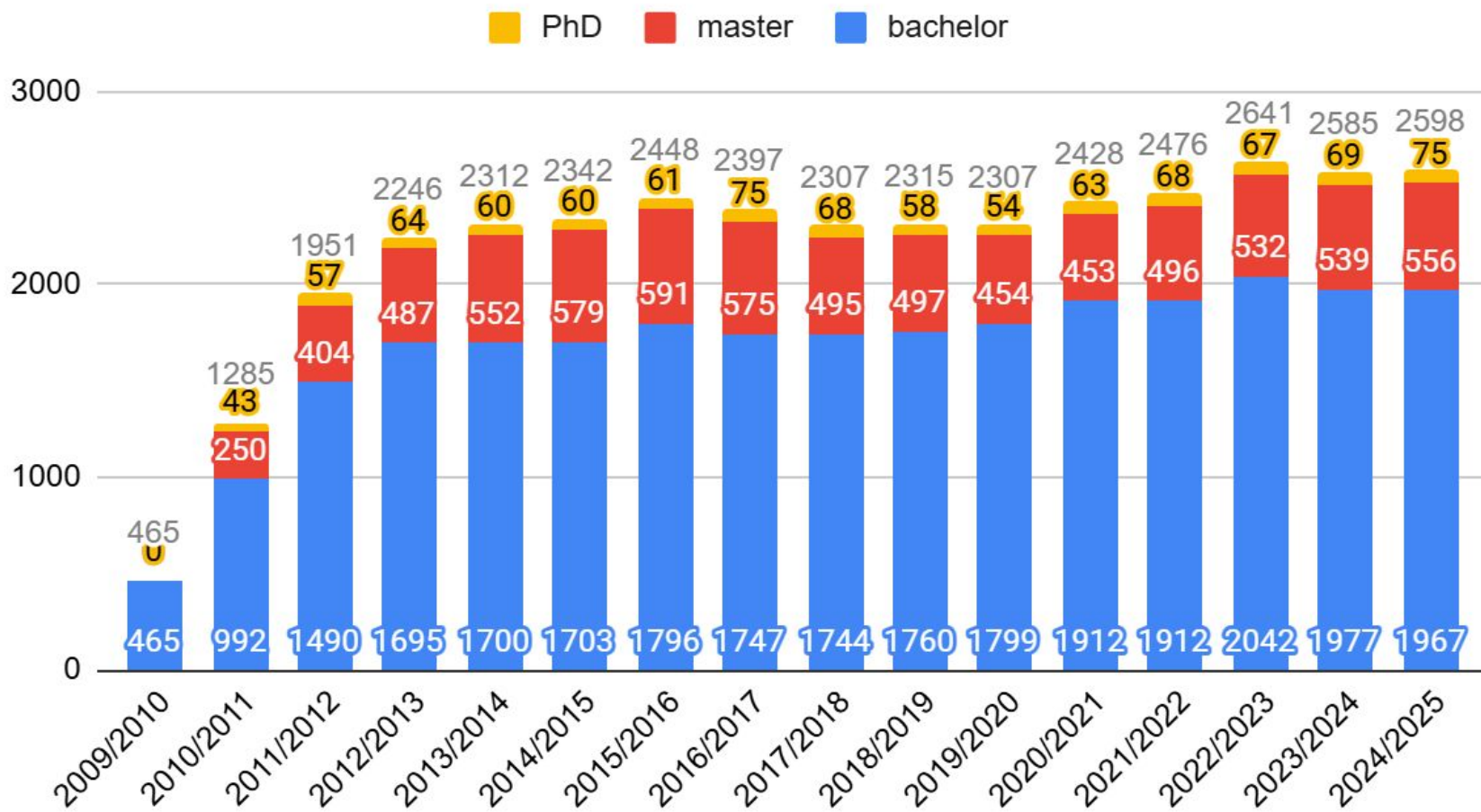
Number of applications to bachelor programs: total per faculty

FSv FS FEL FJFI FA FD FBMI FIT





Number of students at FIT (as of 31th Oct. each year)





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Study programs: bachelor

Informatics

1. starting from 2021/2022 reaccredited with many optimizations
2. specializations:
 - 10 Czech full-time
 - 2 Czech part-time
 - 6 English



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Study programs: master

Informatics

1. optimizations underway to be ready for 2026/2027
2. specializations: 9 Czech, 1 double-degree with University of Antwerp (started for 2024/2025), 5 English, only full-time

Teacher Education in Informatics for secondary schools

1. started for 2025/2026
2. in cooperation with Masaryk Institute of Advanced Studies of CTU

Quantum Informatics

1. started for 2025/2026
2. in cooperation with 3 other faculties



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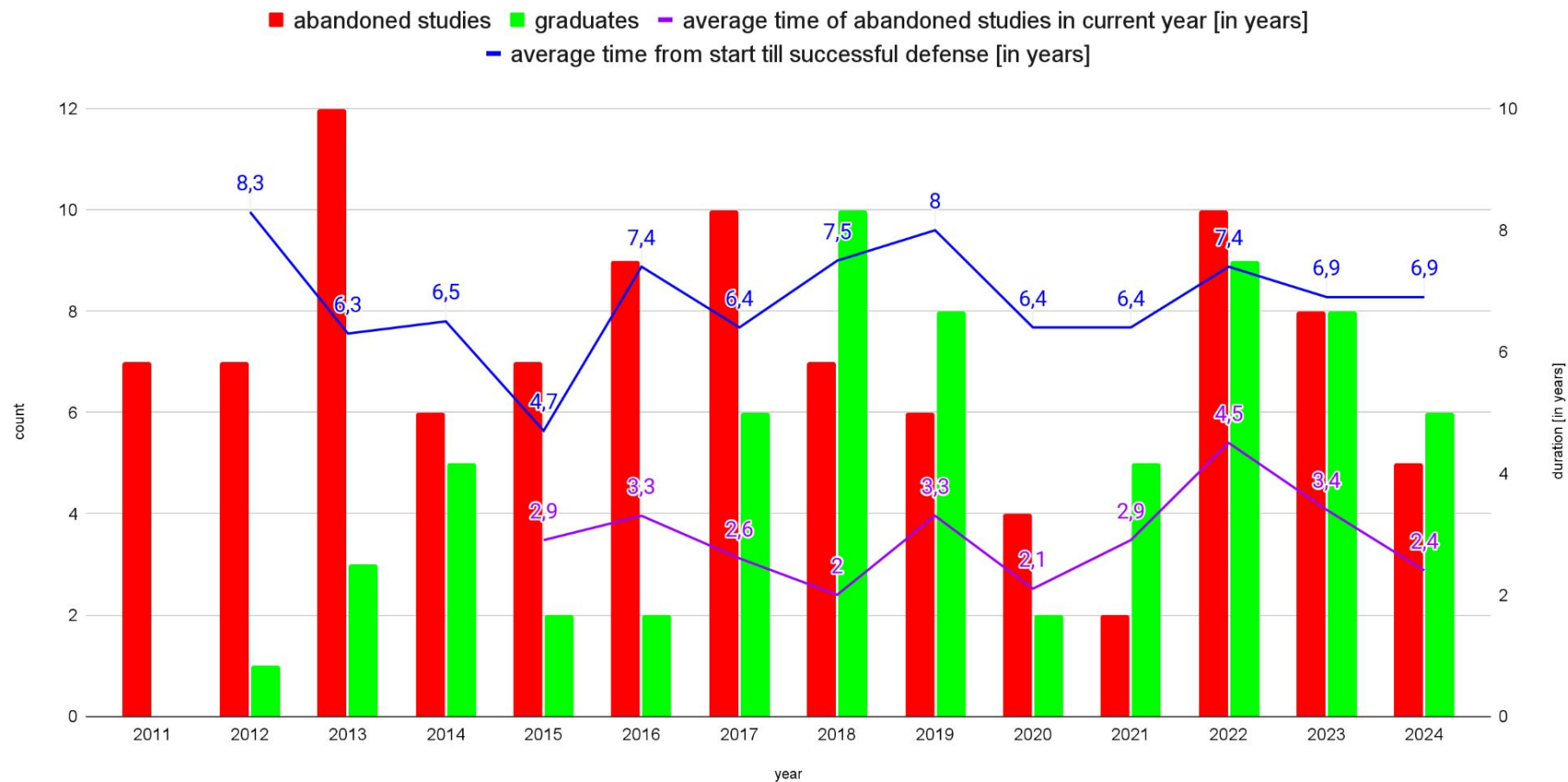
Study programs:

PhD

Informatics

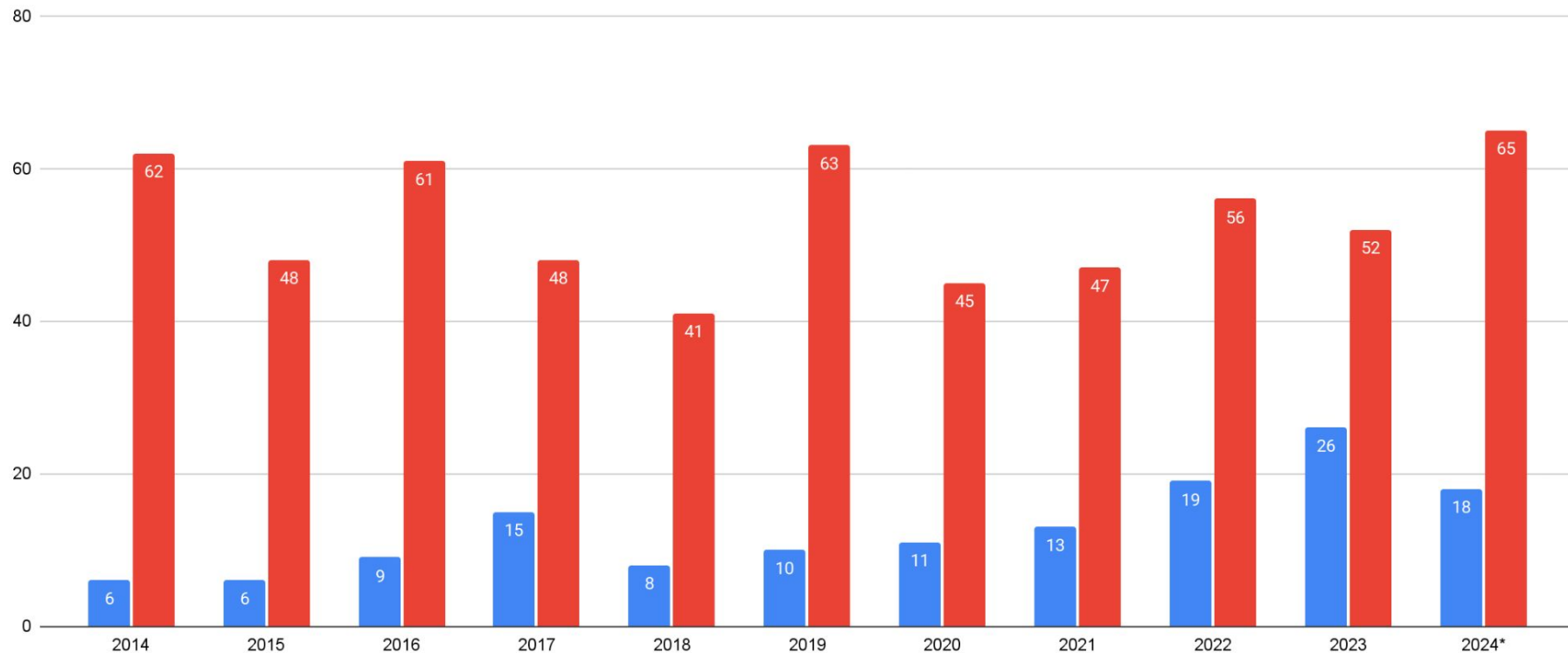
1. in Czech and English, full-time and part-time
2. since 2019, double-degree with University of Antwerp
3. about 70 students
4. 2 in full Industrial Ph.D. mode

PhD program - average times overview



journal articles and conference articles by PhD students (while still studying)

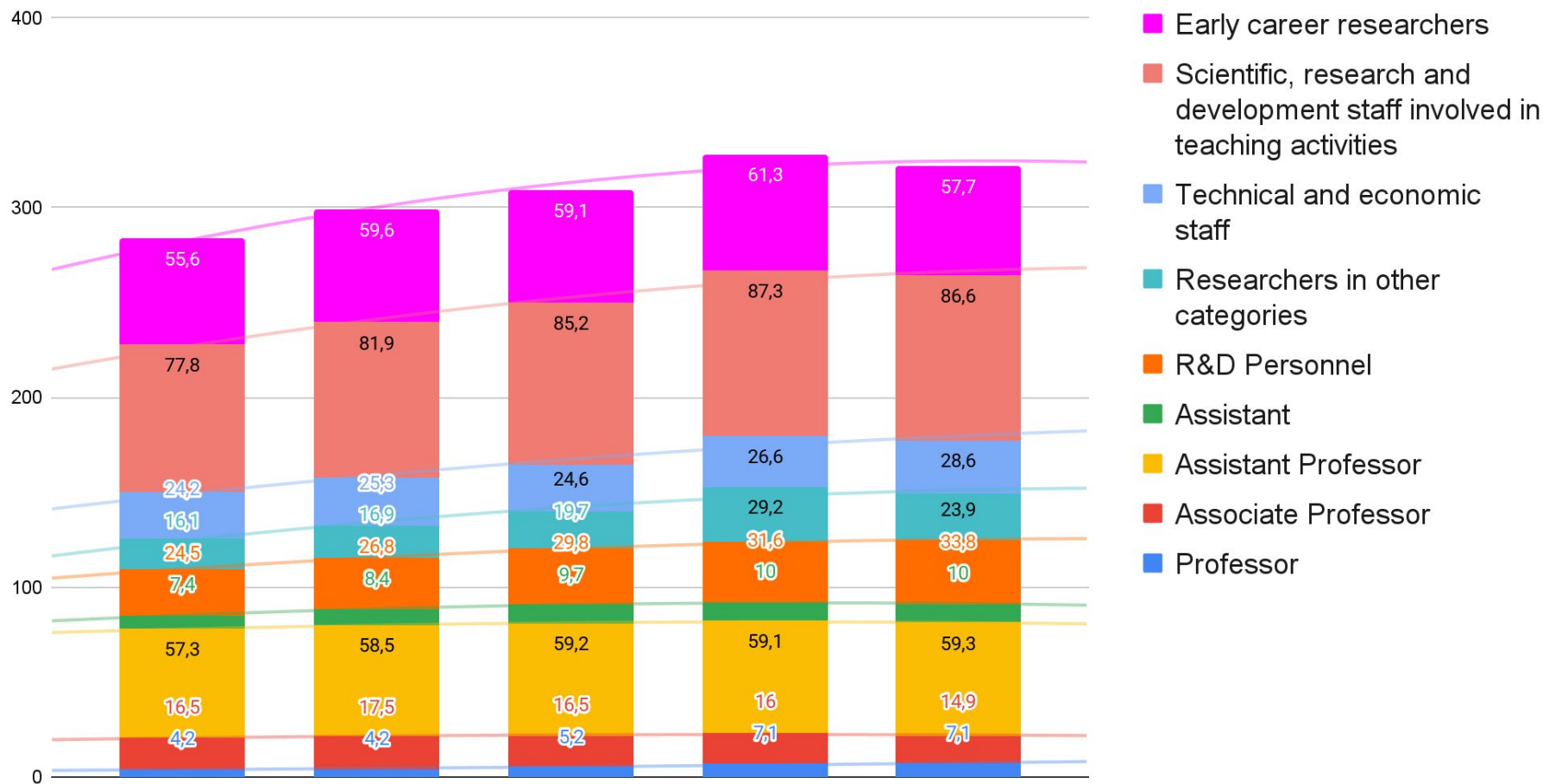
■ journal articles ■ conference articles



year (2024* - data are very probably incomplete)

Human resources

Structure of Human Resources [in FTE]



Most important faculty level human resources related tools

1. Faculty research output evaluation using **methodology tailored for our domain** (more on the next slide)
2. Motivational **bonuses** for
 - a. submitted grant applications
 - b. qualification advancement (PhD, assoc. prof., full prof.)
 - c. successful PhD students (defended in time)
3. **Budgeting bonuses** to cover A or A* conferences
4. Faculty **support of postdoc** positions (mainly within [CTU Global Postdoc Fellowship](#))

Faculty **methodology of evaluation of research outputs** (in 41 categories) with **strong focus** on quality and domain specific needs (conferences)

The goal is to motivate academic employees and provide tools to quantify performance

Used for: **bonuses** for ac. employees, **reduction** of teaching duties, and department **budgeting**

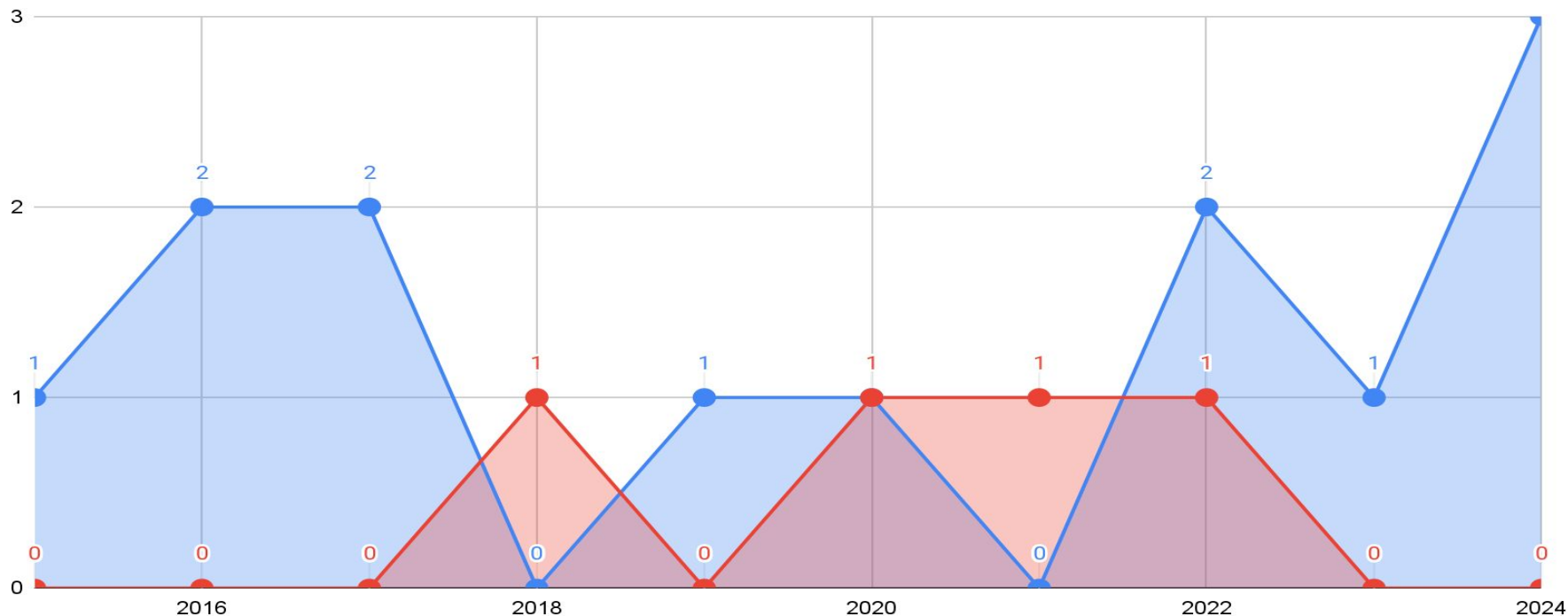
Last update 2022

označení	název	bodové hodnocení	upřesnění	vazba s V3S / EZOP	druh výsledku	poznámky a dodatečné pokyny k zadávání do systémů
B8	Odborný článek ve Scopus	$(30 + 270 * ((1 - (1 - x^{1,5})^{(1/1,5)}))) * Const8$	Const8 je nastavena tak, aby bylo dosaženo požadovaného poměru jednotlivých kategorií (více informací v detailech).		CLA	Scopus ID , Poslední verze seznamu CERGE je 2017 na https://idea.cerge-ei.cz/files/edatori/Mistni/ata/SeznamP dators2017.xl
B9	Odborný článek v recenzovaném mezinárodním časopise, který není ani ve Scopu	5*Const8	Const8 je nastavena tak, aby bylo dosaženo požadovaného poměru jednotlivých kategorií (více informací v detailech). Body jsou podle hodnot		CLA druh Jost (dříve Jneimp)	

374749	B8	CLA	doc. Ing. Štěpán ...	Department of A...	Faculty of Inform...	The number of p...	2024	36
350382	B12	STA	doc. Ing. Štěpán ...	Department of A...	Faculty of Inform...	Formalization of ...	2021	50.625
367017	B8	CLA	doc. Ing. Štěpán ...	Department of A...	Faculty of Inform...	Binary Codes th...	2023	92.88549
336580	B8	CLA	doc. Ing. Štěpán ...	Department of A...	Faculty of Inform...	Bounds on the p...	2020	113.7252
353259	B8	CLA	doc. Ing. Štěpán ...	Department of A...	Faculty of Inform...	On Sturmian sub...	2021	118.23316
349659	B8	CLA	doc. Ing. Štěpán ...	Department of A...	Faculty of Inform...	Binary intersecti...	2021	118.23316
349783	B8	CLA	doc. Ing. Štěpán ...	Department of A...	Faculty of Inform...	A characterizatio...	2021	132.79919
362526	B8	CLA	doc. Ing. Štěpán ...	Department of A...	Faculty of Inform...	On a faithful repr...	2023	140.99247

Qualification advancement of academic employees

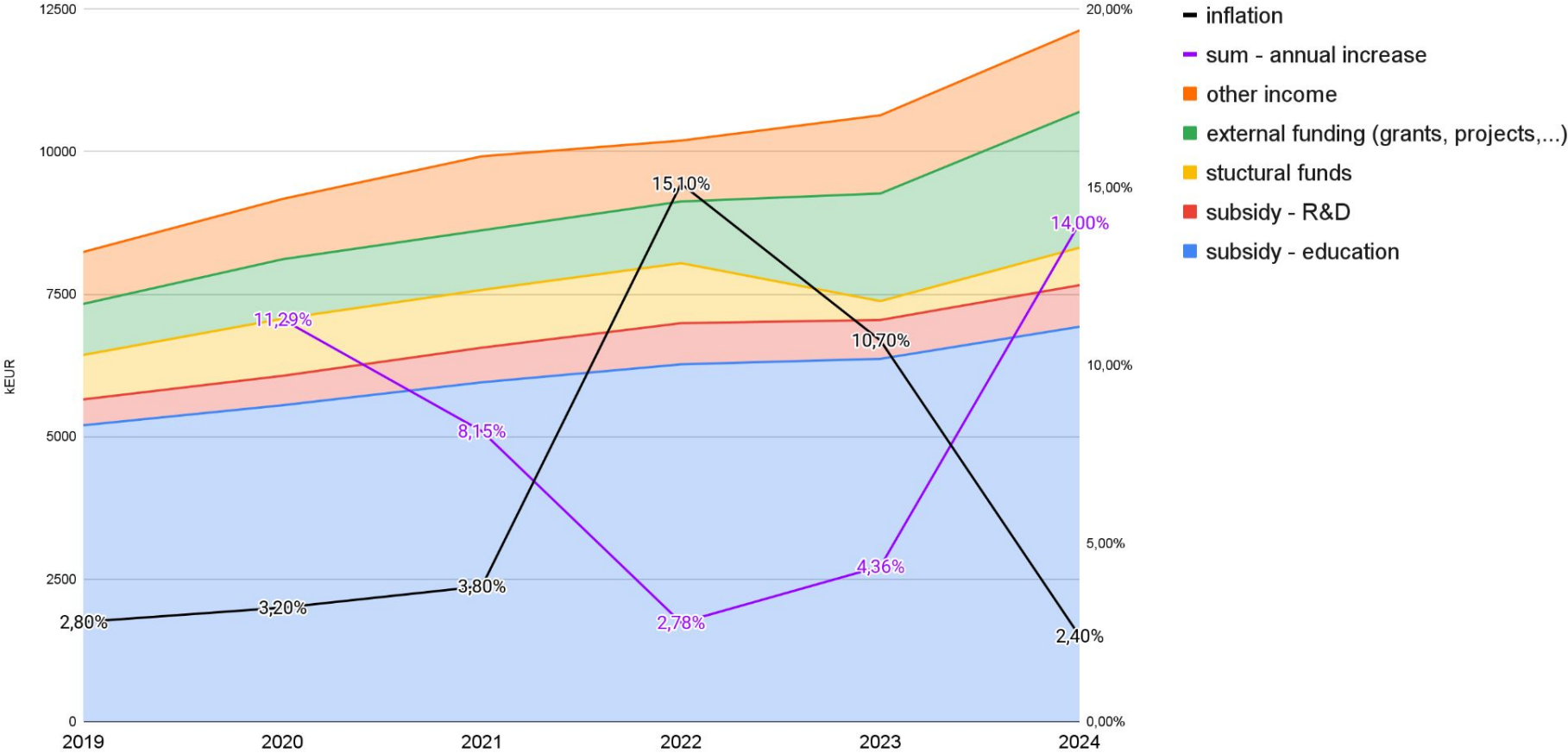
● "new" assoc. prof. ● "new" full prof.



To **incentivize qualification advancement** of ac. employees, in 2020, we introduced a methodology that allows an employee to gain time to prepare for his/her advancement

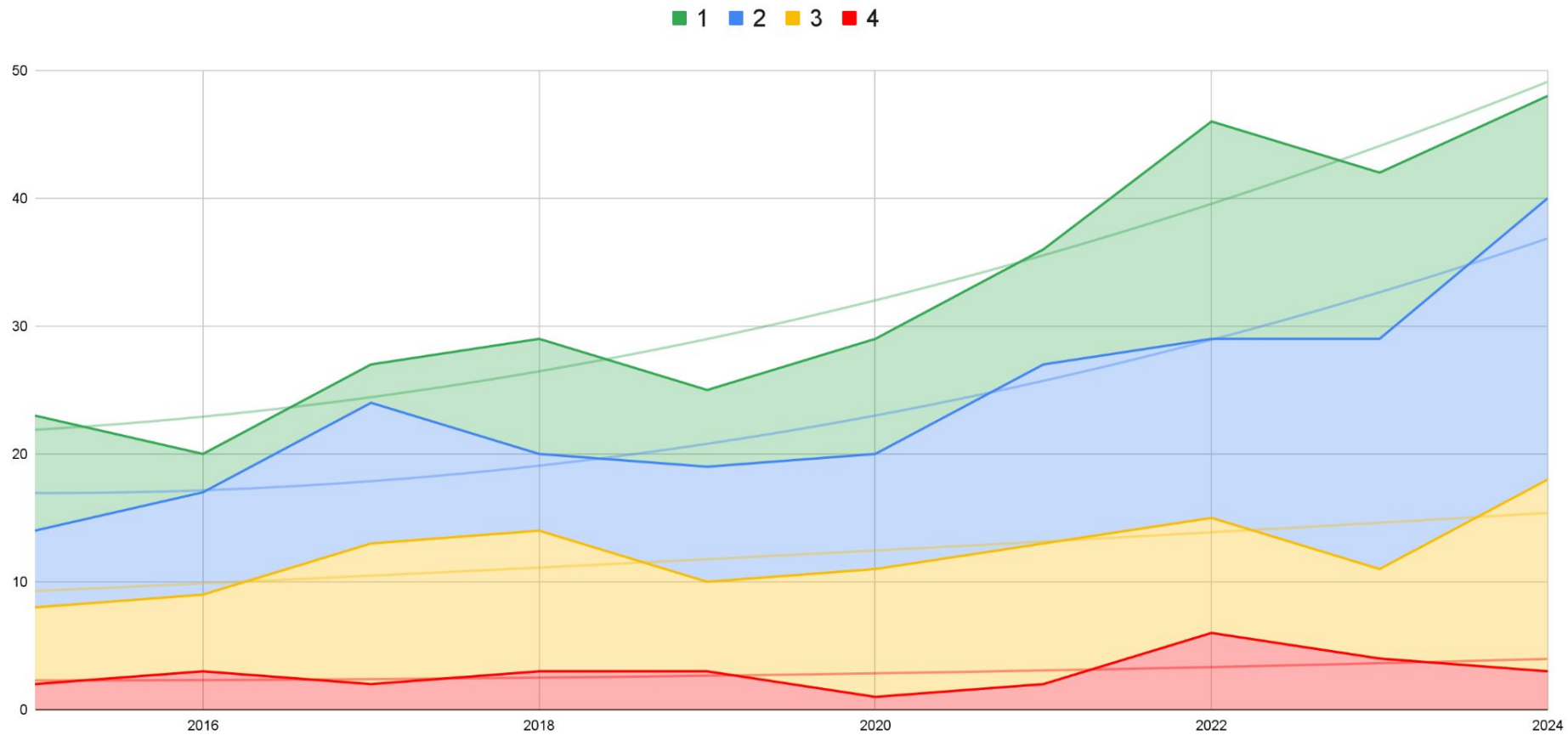
Finances

sources of income per type [in kEUR] with annual increase and average inflation [in %]

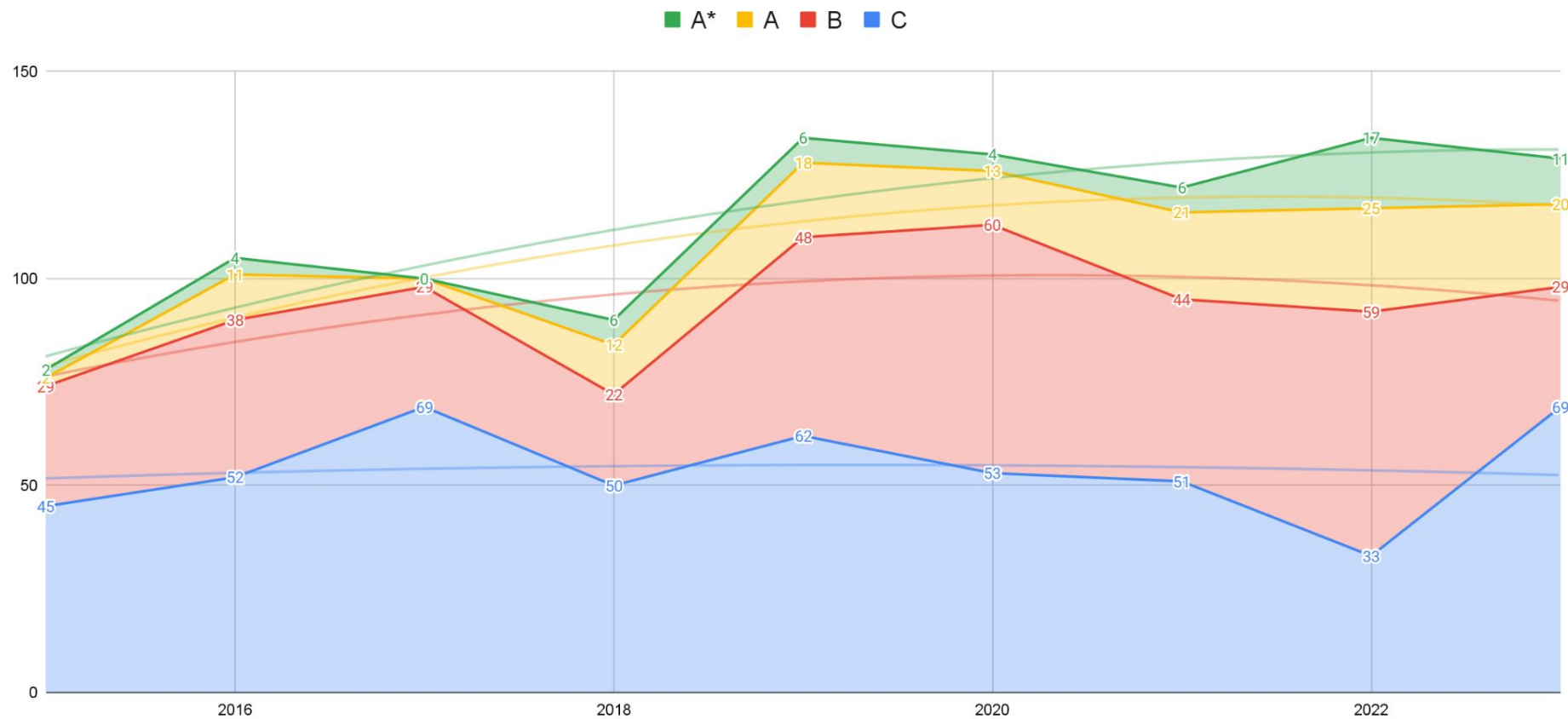


R&D Outputs

journal publications with a co-author from FIT - Web of Science AIS (Article Influence Score) best quartile



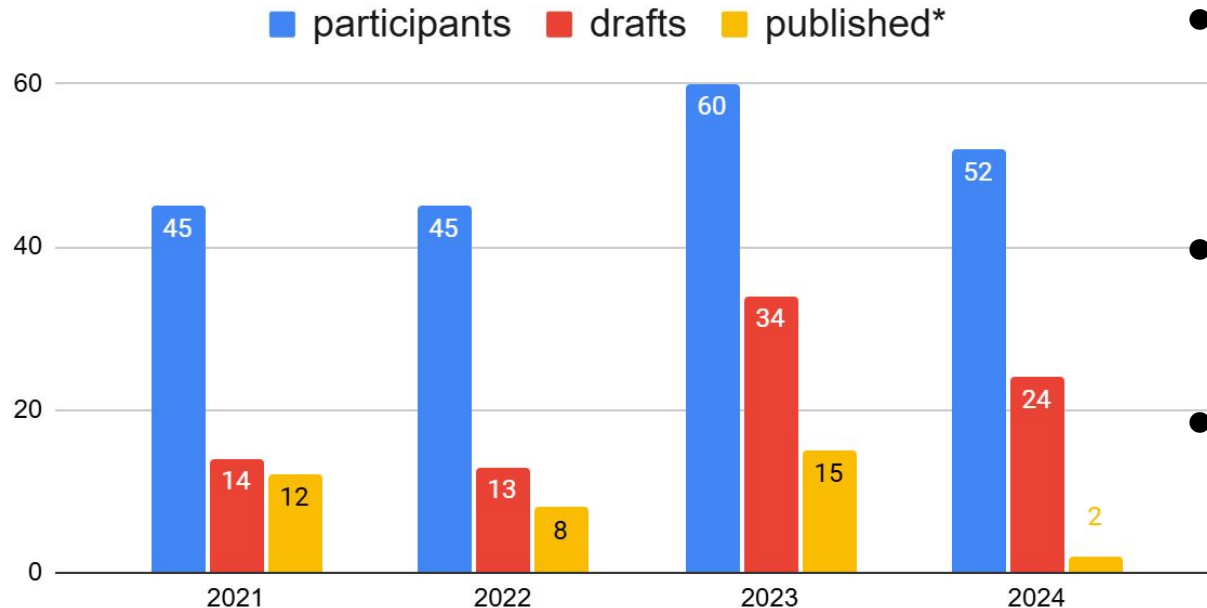
conference papers split by conference rank (CORE or faculty methodology)



Summer research at FIT: a successful programme to involve students in research

Summer research at FIT

published* = the process is still ongoing



- from 2020 in its current form
- students (bachelor, master) **work on a topic with a researcher** (incl. PhD students)
- **students get a reward** for completing 2 milestones, the last one is a finished draft of an an output
- many candidates for PhD students from FIT participated in this program
- outputs include **D1** journal articles and **A*** conference papers

Example of software R&D output: Data Stewardship Wizard

The **Data Stewardship Wizard** (DSW) software has been developed to streamline and enhance data stewardship practices.

DSW was started as part of the ELIXIR CZ infrastructure services provided by CTU. Over time, it has evolved into a widely recognized and adopted tool for data management. DSW has acquired a strong global user base within the three user groups: researchers, data stewards, and funders and evaluators. The cloud-based service operated by ELIXIR currently has approximately 6,500 registered users. Additional users rely on on-premises installations, as DSW is open-source.

The screenshot displays the 'Questionnaire' section of the Data Stewardship Wizard. The interface includes a top navigation bar with links for 'Questionnaire', 'Metrics', 'Preview', 'Documents', and 'Settings'. Below the navigation bar, there are tabs for 'View' and 'Import replies'. The main content area is divided into two columns. The left column, titled 'Current phase', shows a progress bar for 'Before Submitting the ...'. Below this, a 'Chapters' list is displayed, with 'V. Interpreting data' selected and highlighted in blue. The right column contains two sections, 'V.1 List the data formats you will be using for in' and 'V.2 Will you be doing integration or linking of d'. Each section includes instructions, a 'Desirable' checkbox, and external links. A '+ Add' button is visible between the two sections.

Questionnaire Metrics Preview Documents Settings

View Import replies

Current phase

Before Submitting the ...

Chapters

- I. Administrative inf... 1
- II. Re-using data 1
- III. Creating and coll... 5
- IV. Processing data 10
- V. Interpreting data 2**

V.1 List the data formats you will be using for in

Give each type of data a name that you recognise.

If you have data in many different structures, integrating the data n

☒ Desirable: *Before Submitting the Proposal*

☐ External links: [RDMkit on Machine Actionability](#), [RDMkit on Dat](#)

+ Add

V.2 Will you be doing integration or linking of d

If you are getting different types of data from different sources and together. This can be done with traditional table database technolo

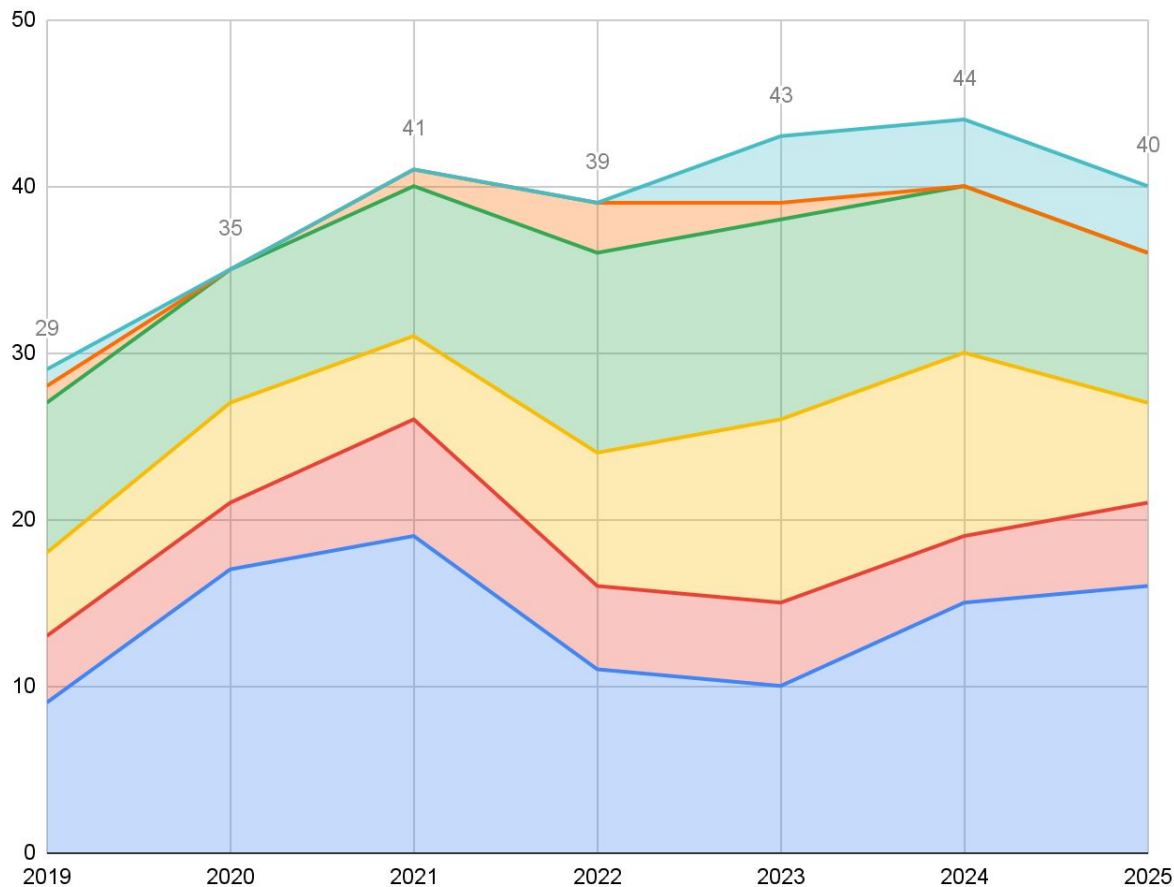
You may also need to use "mappings" to match data together.

☒ Desirable: *Before Submitting the Proposal*

☐ External links: [FAIRCookbook on Interlinking data using mapping](#)

External projects

Project providers



- Other foreign provider
- Other national provider
- Ministries
- Czech Science Foundation
- Technology Agency of the Czech Republic
- European Commission

Focus on (larger) projects

Experienced faculty project managers:

2019: about 1.5 FTE
now: over 4.5 FTE

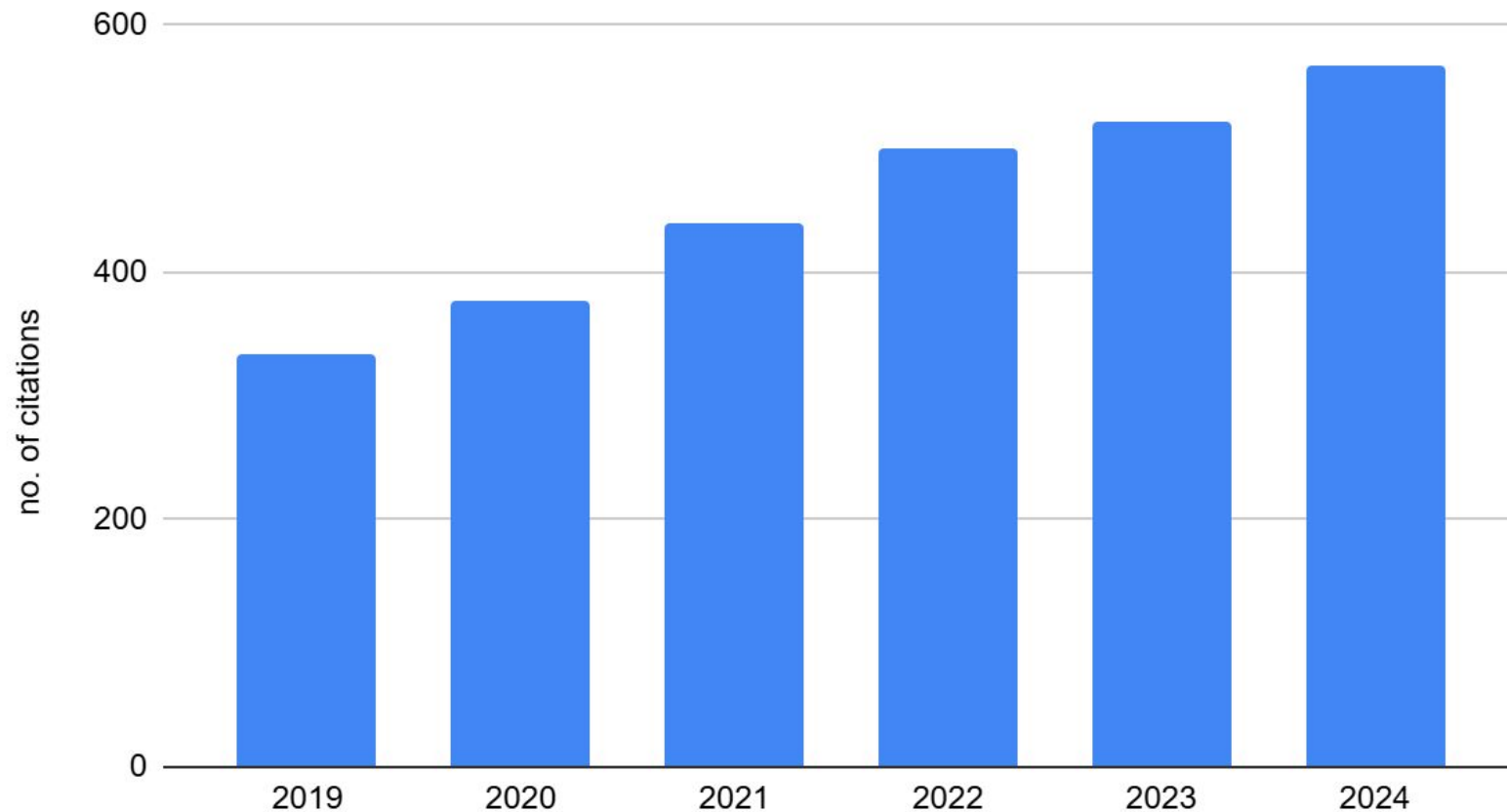
Notable large projects

- **Big Code: Scalable Analysis of Massive Code Bases** (2019 - 2022): provided by Ministry of education youth and sports, total budget 1475 kEUR
- **Rigorous Engineering of Data Analysis Pipelines** (2023 - 2027): provided by Czech Science Foundations, total budget 1972 kEUR
- **Fostering Sustainable, Balanced, Equitable, Place-based and Inclusive Development of Rural-Urban Communities' Using Specific Spatial Enhanced Attractiveness Mapping ToolBox** (2024 - 2026), provided by European Commission, coordinator of 20-member consortium, total budget 5500 kEUR, FIT budget 556 kEUR

Recognition

- we **grow in number of citations**
- a few of our academic employees manage to be in **program committees** of good conferences (A*/A) repeatedly
- we have some employees present in **editorial boards** of relevant journals
- we lack notable involvement in the **evaluation of national/European research project/programme calls**
- we manage to (co-)organize **relevant conferences**, the most important are:
 - 20th International Conference on Network and Service Management (CNSM) 2024 [Core B]
 - Conference on Cryptographic Hardware and Embedded Systems (CHES) 2023 [Core A]
 - 25th IEEE International Conference on Business Informatics (CBI) 2023 [Core B]
 - 33rd Annual Symposium on Combinatorial Pattern Matching (CPM) 2022 [Core B]
 - 25th International Symposium on Design and Diagnostics of Electronic Circuits and Systems (DDECS) 2022
 - [link to full archive on the web of FIT](#)

no. of citations using CTU methodology



citation in article in Web of Science (SCIE, SSCI a AHCI) nebo Scopus, without autocitation

Cooperation with industry



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Cooperation with industry

Partnership program

Enhancement of the Partnership program (Sep 2024)

- To distinguish two forms: **Sponsors & Partners**.
- To motivate Partners to increase potential cooperation in fields of **Commercialization, Teaching, Research** and **PR**.
- To not only provide services but to require **various valuable activities** such as:
 - joint funding for research or technology,
 - Industrial PhD framework,
 - “First-year-friendly” status during the fair,
 - support of events organized by our student associations,
 - transfer of school works and theses,
 - financial support for faculty’s startups.



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FREE UKRAINE!

PROFINIT
An Amdocs Company

SKODA



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Cooperation with industry

Partnership program

Result

- Increased pricing for services
- Rearrangement of Partners and Sponsors
- 9 Partners (3 strategic), 41 Sponsors
- More income, less work
 - 2023: 13 Partners, 163,300 (EUR)
 - 2025: 9 Partners, 161,290 (EUR)
- More **valuable activities** than just projects

Significant collaborations in R&D

- Device for automatic evaluation of defect indications using non-destructive methods (ATG)
- Strategic Partners' logos below



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Cooperation with industry

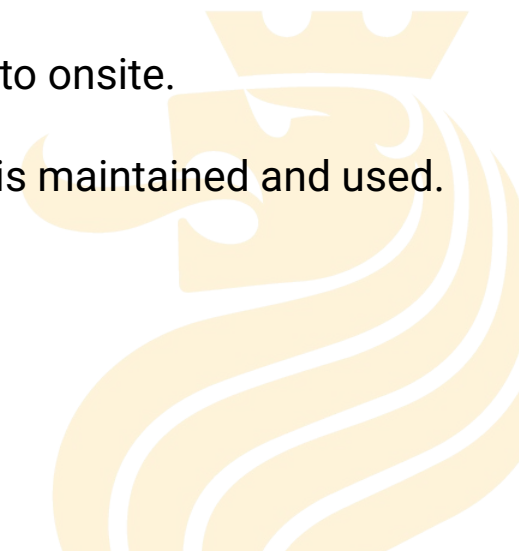
COFIT job fair

Maintaining our vision to connect students with industry professionals

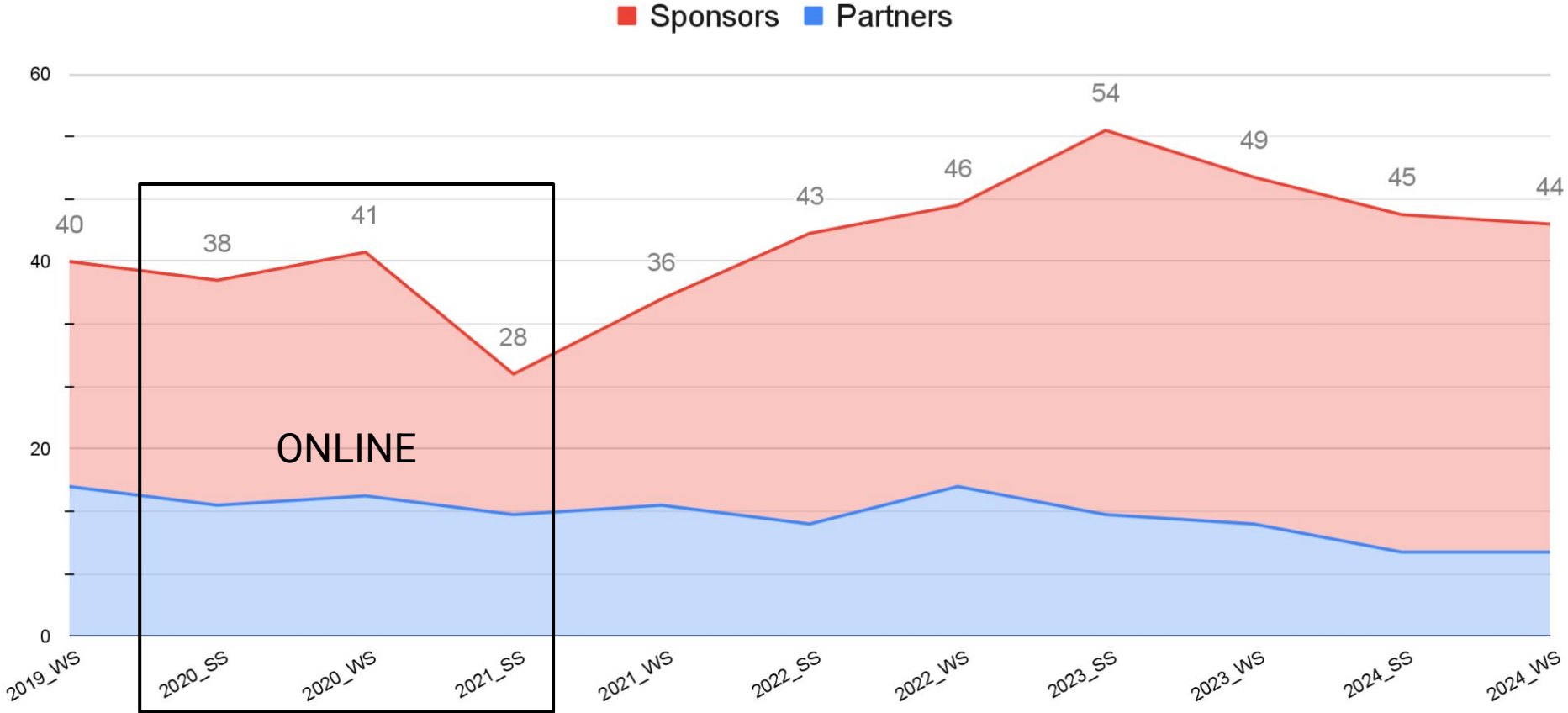
- Over **900 visitors** throughout the day – consistent interest across the schedule
- Strong student interest in exhibiting companies – most connected with **20+** students
- Average student **contacts per company: 51–100**

Successful transit from online (2020) back to onsite.

Since then the [online version](#) of the job fair is maintained and used.



Companies' participation (WS = winter semester, SS = summer semester)





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Cooperation
with
industry

Technology
transfer

Office for Technology Transfer on University level

- Finalized process to transfer intellectual property into business (Jan 2024).
- Currently **2 spin-offs** in process.
 - [Edumatch.ai](https://edumatch.ai)
 - platform for matchmaking the Academy and Partners
 - [Tempest Labs](https://tempestlabs.com)
 - now casting precipitation prediction
- Organizing activities to **share good practices** among faculties and to **motivate** inside teams **to transfer**.



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Cooperation
with
industry

Technology
transfer

Licensing of school work and theses (Jan 2025)

- **Redesigned the process** on faculty level to allow companies to pay for licences.
- Created full scale **enlightenment** (students, teachers, researches) and complex **monitoring** of all cooperative activities between students and companies.
- Introduced **active communication** with those companies to ensure the process and spare the students.
- Motivated the companies **to become official Partners** to be able to account the licencing as **valuable activity** for faculty and offer them even more.

Increase in income

from averaged **4k / year** to **6.35k / half a year** (EUR).



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Cooperation with industry

CapTTict, Interreg Danube

Capabilities for Technology Transfer in ICT sector (CapTTict)

- In 2022, formed **international consortium** of **16 partners** from **9 countries** and became a **lead partner**.
- **Acquired funding** from Interreg Danube Region programme for **2.5 years** (Jan 2024 - Jun 2026).

Danube Digital Accelerator

- Together created an **accelerator programme** to speed up the startup process.
- Introduced **4 months mentoring** programme with board of **international experts**.
- Organized **3 cohorts** for inviting startups with min **TRL 3-4**.
- Total **29 startups** advanced from **89 applicants** (from all partners' countries).



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Cooperation with industry

Startups

Startups

- Currently **2 successful students' startups** on global level.
 - [Dronetag](#) (remote ID devices and app) est. 2019
 - sales 2.02M EUR in 2024
 - [Fitify](#) (digital fitness plan in an app) est. 2020
 - 20M users from 180 countries
- **2 more** are coming
- Introduced process (DDAccelerator) to ensure support for more future students' projects.



Public relations and popularization



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Popularization of R&D&I

Steps to active support of science popularisation (2019-2024)

- **new processes in internal communication** - setting up individual **cooperation with departments “PR guru”** to get more inputs for popularisation - since 2023
- setting target groups and communication channels
- focus on **individual and flexible communication with media and journalists** - since 2022

Positive effects

- more **information about the results and achievements** of individuals and groups, which is then used by the PR department to promote the faculty
- more often **involvement of faculty experts in popularization events**
- more **press releases**



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Target groups for communication

We have specified the individual target groups in order to be able to focus the communication more effectively

EXTERNAL

- High school students
- Secondary schools
- Public
- Media
- Companies
- Alumni

INTERNAL

- Students
- Staff



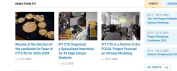
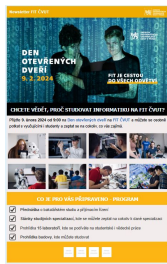


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We select key communication channels for effective popularization of science outputs.

Communication channels

Popularization of R&D&I





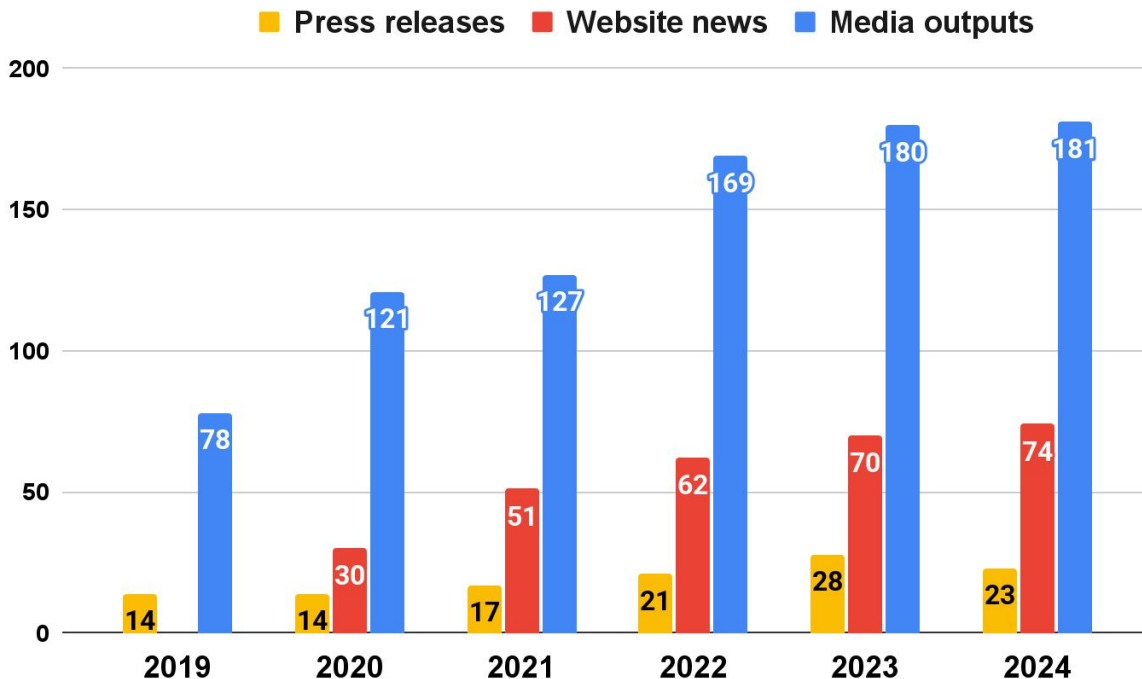
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Published releases, news and media outputs

Thanks to long-term efforts to work with the media and science department, we are getting more media coverage.

64% increase in press releases
2019-2024

132% increase in media output
2019-2024





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- Online
- Newspapers
- Magazines
- TV
- Radio

ITBIZ

Fakulta informačních technologií ČVUT v Praze se věnuje vývoji jednotného portálu

... (text continues) ...

euro.cz

BYZNYS • EKONOMIKA • TECH • DOPRAVA • VĚDA • ARCHIT.

ČESKÝ STARTUP DRONETAG PŘEVZAL V HELSINKKÁCH VESMÍRNÉHO OSCARA. JAK SE MLADÝM PODNIKATELŮM DAŘÍ PRORAZIT?

ŘEDAVCE EURO.CZ 18. 12. 2019



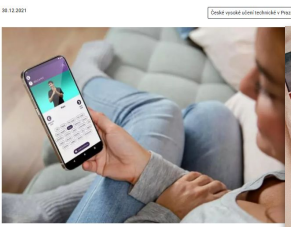
VĚDAVÝZKUM.CZ

Národní informace o vědě a výzkumu

VĚDA POLITIKA INOVACE A TRANSFERY ROZVOJOVÝ ANALÝZY NÁZORY GRANTY A DOTACE AKCE

Pražská technika se podílela na aplikaci usnadňující výuku znakového jazyka

18. 12. 2021



Nová aplikace Těhý jazyk pomůže sociálním pracovníkům, pedagogům a dalším účastníkům kurzu znakového jazyka odbornějším způsobem. Aplikace vznikla ve spolupráci fakulty informačních technologií ČVUT v Praze a společnosti ČVUT v Praze.



Největší světová konference o kryptografii

Karolína Wozniaková | Fakulta informačních technologií ČVUT v Praze

12-13. 12. 2023



Pavel Surynek

Profesor a vedoucí Laboratorie robotických agentů (Robotology), Fakulta informačních technologií ČVUT v Praze



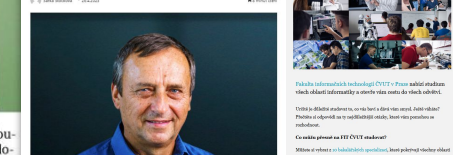
Lobkowiczové s ČVUT digitalizují své sbírky

Praha - Na začátku týdne podepsali zástupci House of Lobkowicz a Fakulty informačních technologií České vysoké učení technické v Praze memorandum o spolupráci. Hlavním cílem budou zejména projekty zaměřené na digitalizaci Lobkowiczových sbírek a jejich zpřístupnění široké veřejnosti. Dlouhodobě zveřejňací aktivitu kurátorského týmu House of Lobkowicz se tak budou moci rozšířit formou digitální edukace a stanou se dostupnější pro všechny zájemce - bez nutnosti fyzické přítomnosti v Čechách. (cír) Foto: Deník/R. Čihla



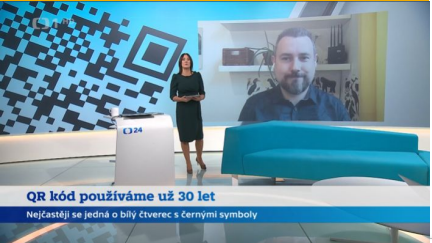
Studium na Fakultě informačních technologií ČVUT není jen o programování

Na nejbližší fakultě ČVUT, Fakultě informačních technologií, se v posledních letech hlásí ročně přes 3000 studentů a jejich počet rok od roku roste. Vyučovačů IT jsou nyní čtyři, včetně učitelů učebnice. Jejich perspektiva jistě budešho uplatnění v oboru, o jejichž dovednostech se píše v každé firmě. Jak vypadá studium na fakultě, kde se programují naše budoucnosti, jsme si povídali s jejím prodejkem pro studijní a pedagogickou činnost Zdeňkem Muzikalem.



Robotičtí agenti i předpověď počasí

Milota robotických agentů FIT v Praze přichází s novými robotickými agenty





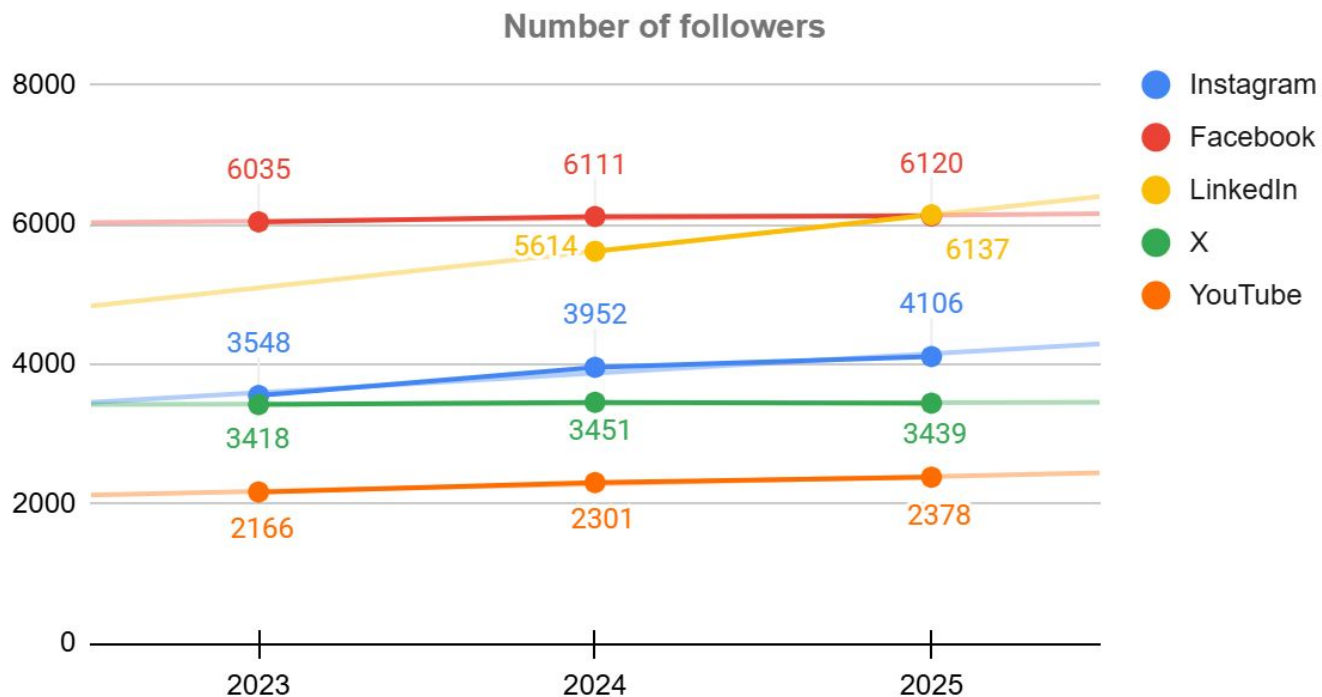
● List of media with outputs 2019–2024

- ČTK – Czech News Agency
- CZECH TV
- CZECH TV 24
- CZECH RADIO Radiožurnál
- CZECH RADIO DAB Praha
- CZECH RADIO Plus
- RESPEKT
- EURO
- Forbes
- Forbes NEXT
- Technický týdeník
- Hospodářské noviny
- COMPUTER
- COMUTERWORLD
- Epocha Plus
- News
- INNOVATION
- PrahaIN.cz
- MEDICAL TRIBUNE
- eGovernment
- layerws&business
- Zemědělec
- Harmonie
- europe-cities
- Zemědělec
- Průmyslová ekologie
- iRozhlas
- CNN Prima News
- MF DNES
- Impuls rádio
- Deník N
- Lidové noviny
- CZECHCRUNCH
- 21. století
- SCIENCEmag.cz
- Česká věda do světa
- PrahaTV
- DV TV
- TECHFOCUS
- ITBIZ
- Digitalní Česko
- classic praha
- smartmania.cz
- mobilenet.cz
- ROKLEN24
- AUTOMA
- epravo.cz
- iForum
- Prahadnes.info
- Life4you
- CZECH INVEST NEWS
- e-Všudybyl
- Aktuálně.cz
- CHIP
- Nová Večerní Praha
- ROOT.CZ
- LUPA.CZ
- Věda a výzkum
- E15
- PRÁVO
- iDnes.cz
- deník.cz
- NOVA TV
- Vesmír
- Seznam zprávy
- NOVINKY
- BusinessInfo.cz
- iRegiony
- T+T Technika a trh
- TECHFOCUS
- Praha Press
- Mcomputers
- Hanácký večerník
- Pozitivní zprávy
- czzpravy.cz
- Haló noviny
- NEWSGATE
- elogistika.info
- Metro
- Universitas
- Radio Prague International
- Lidovky.cz
- Ekonom
- HROT
- HROT24
- ScienceWeek
- cz.nic
- NETWORKNEWS
- Marianne
- Marie Claire
- ELLE
- JOY
- EuroZprávy.cz
- FEEDIT.CZ
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- Zdravotnictví a medicína
- Medicina.cz
- týždeň
- czechstartups.org
- EkonTech.cz
- CZECH&SLOVAK LEADERS
- ICT NETWORK NEWS
- MM PRŮMYSLOVÉ
SPEKTRUM
- BusinessInfo.cz
- Echo24.cz
- allnews.cz
- zive.cz
- ABC
- SystemOnline.cz
- TECHMAGAZIN
- Nejbusiness.cz
- zakazka.cz
- Pražský patriot
- Speciál MF DNES
- DENÍK PRAVDA
- Regio TV1
- blesk.cz
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- ABC LINUXU
- INVESTIGACE.CZ
- informuji.cz
- ITmix.cz
- Škola profi
- inspirante
- FMZINE
- MoneyMAG.cz
- enwiweb.cz
- ekolist.cz
- Qubits.cz



Social media

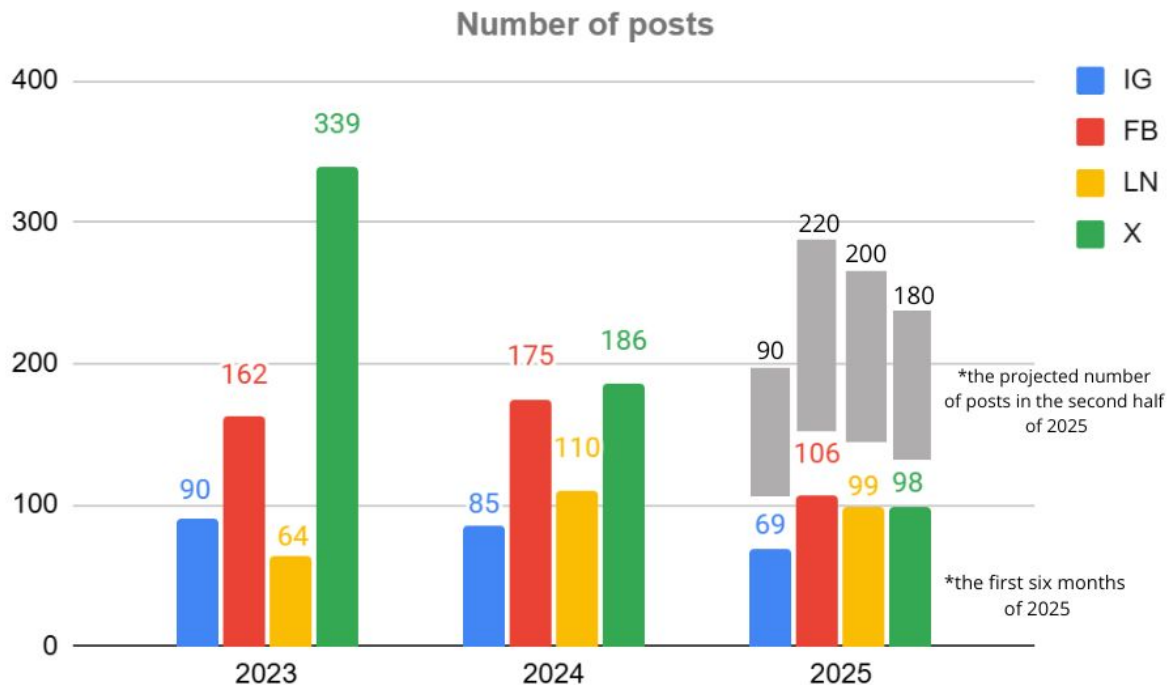
Number of followers





Social media

Number of posts





FACULTY
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CTU IN PRAGUE

Popularization of R&D&I

Events

- **For highschool students and secondary schools**

- **Open house** - 2 times a year (2000 visitors)
- **Summer schools** - One per year - topics - AI, Design sprint, Children Univerzity
- **Excursions** to laboratories or to lectures
 - one day – since 2023 (app. 10 schools/year)
 - two weeks for selected secondary schools (5-6 schools)
- **Gaudeamus fairs** - 3 times a year
- **FIKS - FIT Computer Science Correspondence Seminar**



- **For the public, high and elementary school students**

- **Science Fair** - since 2024
- **Make Fair** - since 2023
- **Science Fest**
- **Researcher's Night**
- **AI days**



- **For the public, FIT students and staff**

- **Informatics evenings** - IT topics
- **Seminars** organized by faculty research groups
- **LawFIT conference** - law in IT





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Popularization of R&D&I

Podcast

- **Faculty Technology Podcast Ones and Zeros** - since 2021
 - to present interesting IT topics and faculty projects to the public audience - Robotics, Security, Graphics, AI, Drones, Data, Mathematics in IT, etc.
 - **39** episodes since 2021
 - **46 182** streams



SWOT

SWOT

Strong points

1. FIT is steadily growing (except in number of students)
2. FIT actively supports researchers and students in doing R&D activities
3. FIT actively supports finding of external funding
4. FIT actively supports cooperation with industry
5. FIT is in constant interest of prospective students

Weak points

1. Research groups and labs often depend on 1 sole leader and thus are unstable
2. The age repartition of employees misses researchers in middle age
3. Academic employees are often overloaded with teaching duties
4. FIT is at its spatial limits to accommodate more students and employees (and labs...)
5. Some recognition metrics are weak (ed. boards,...)

Opportunities

1. Find more partners in the industry and abroad
2. Enforce cooperation between departments, groups, and laboratories
3. Continue with participations in excellent research projects

Threats

1. Unable to compete with salaries in the IT industry (a starting salary of PhD student in machine learning may be multiple times the starting salary of an assist. prof.)
2. R&D evaluation methods based on IF journals (as in many fields of FIT, conferences are main publication venues)
3. Growing expenses for administration

Annex

Structure of human resources

- FIT grows steadily in its human resources
- While in 2019 we lacked both associate and full professors (with a substantial FTE), we now have better number of associate professors with more to come
- In the past years, the administrative staff was strengthened with secretaries of departments, and with professional projects managers

Students

- Bachelor study program was optimized; Master study program will be optimized
- We opened and plan to open new Master study programs/specialization in accordance with current trends
- We are focusing on quality in PhD study program and on the improvement of statistics such as length of studies

Finances

- Overall income grows with a rather nice growth of external funding
- Some external conditions, e.g, inflation, are not favorable
- We focus on the opportunity to increase our incomes in domain of cooperation with industry following the idea “work less, gain more”:
 - Licensing of school work and theses was refurbished
 - Partnership program was revised and enhanced
 - We focus on profits coming from technology transfer in cooperation with Office for Technology Transfer
 - We announced a programme to support the growth of student startups

Academic and Research Careers

- FIT has methodology to ease career advancement to associate professor - the head of the department can get extra finances to 1) look for a substitute, 2) motivate the employee work on his/her habilitation thesis
- FIT actively supports postdoc positions, who help researchers with their research, establish new contacts, etc.
- FIT pays motivational bonuses for career advancement
- FIT pays motivational bonuses for submitted external funding applications
- FIT follows Career Guide of CTU

System of support for a quality R&D&I environment and incentive measures for quality science

- FIT has its own methodology of evaluation of R&D outputs
 - 41 types of outputs including conferences, editorial board memberships, popularization activities...
 - journal conference and conference articles are evaluated based on quality
 - Scopus SJR for journals
 - CORE or internal evaluation for conferences
 - similarly for derived output: editorial board and program committee memberships
 - used for
 - bonuses, reduction of teaching duties, budgeting
- FIT supports participation on prestigious (A/A*) conferences, which is important for the research domain

Significant collaborations in R&D

University of Antwerp - double degree programs, research collaboration

Škoda Auto a.s. - <https://www.skoda-auto.cz/>

Datamole - <https://www.datamole.ai/>

Profinit - <https://profinit.eu/en/>

Public relations & Popularization of R&D&I

- **The PR department actively supports science popularisation, mainly through processes** in internal communication including setting target groups and communication channels.
- **Daily cooperation with departments** (via a selected communication “officer”) allows for collection more inputs for possible popularisation from researchers.
- Focus on **individual long-term communication with media and journalists.**
- The long-term experience and professionalization of PR department has positive effects both in the form of greater involvement of faculty experts in popularization events and in obtaining more information about the results and achievements of individuals and groups, which, in turn, is then used by the PR department to promote the faculty and to increase media outputs.

Additional slides based on questions

Main research topics

- Computer Networks, Network Traffic Monitoring
- Information Security, Cybersecurity
- Information Systems
- Intelligent Embedded Systems, Reliability and Security
- Machine Learning, Data Processing, Data Science
- Intelligent agents, Social choice
- Programming Languages
- Theoretical Computer Science
- Normalized Systems, Conceptual Modelling
- Parallel and Distributed Computing

Specializations

Bachelor - Informatics

- Informatics for managers (Cz)
- Computer Graphics (Cz)
- Computer Engineering (Cz, En)
- Computer Networks and Internet (Cz, Cz part-time, En)
- Computer Science (Cz, En)
- Computer Systems and Virtualization (Cz, En)
- Information Security (Cz, En)
- Software Engineering (Cz, Cz part-time En)
- Artificial Intelligence (Cz)
- Web Engineering (Cz)

Master - Informatics

- Computer Science (Cz, En)
- Computer Security (Cz, En)
- Computer Systems and Networks (Cz, En)
- Design and Programming of Embedded Systems (Cz, En)
- Software Engineering (Cz, En)
- Informatics for managers (Cz)
- System Programming (Cz)
- Web Engineering (Cz)
- Knowledge Engineering (Cz)
- Digital Business Engineering (En - double degree)

without specializations:

Master - Teacher Education in Informatics for secondary schools

Master - Quantum Informatics

Opening new assoc./full prof positions

- 1) The head of the department responsible for a study specialization opens a position in order to enlarge the scope covered by the department - example "virtual reality"
- 2) There is a wider agreement (dean, vice-deans, heads of departments) to follow a new direction - example "quantum informatics"
 - a) for now, we started with a master study program
 - b) once established, the rest will follow - research, new positions

Teaching load

1 FTE of assistant professor (= academic employee with PhD) with no reductions means teaching **8** tutorials (90 minutes) in Czech per week and usual involvement in grading and exams.

Reductions:

- good research record -> time for research
- lectures, course guaranteeing
- final theses supervision
- PhD student supervision
- etc

Number of courses (approximative numbers)

Each program has 1-5 **mandatory** courses per semester

Each specialization has 2-4 **mandatory** courses

Sums of mandatory courses per semester:

- full-time bachelor in Czech: 60
- part-time bachelor in Czech: 15
- full-time bachelor in English: 35
- full-time master in Czech: 45
- full-time master in English: 25

Approx. 50 full-time Czech courses, 10 part-time Czech, full-time 30 English, per semester, are **elective**.

English and Czech courses are equivalent (=> not all courses are in both languages).

Abandoned PhD studies vs. publications

The event that a student abandons his/her PhD studies and has a publication is very exceptional: the 74 such abandoning students in last 10 years (co-)authored 8 publications.

Involvement of young people in R&D&I

- many events for prospective students, correspondence seminar, summer schools
- many events for students
- summer research programme
- job fair, matchmaking
- possibility to teach tutorials
- possibility to be involved in a project, research group, laboratory

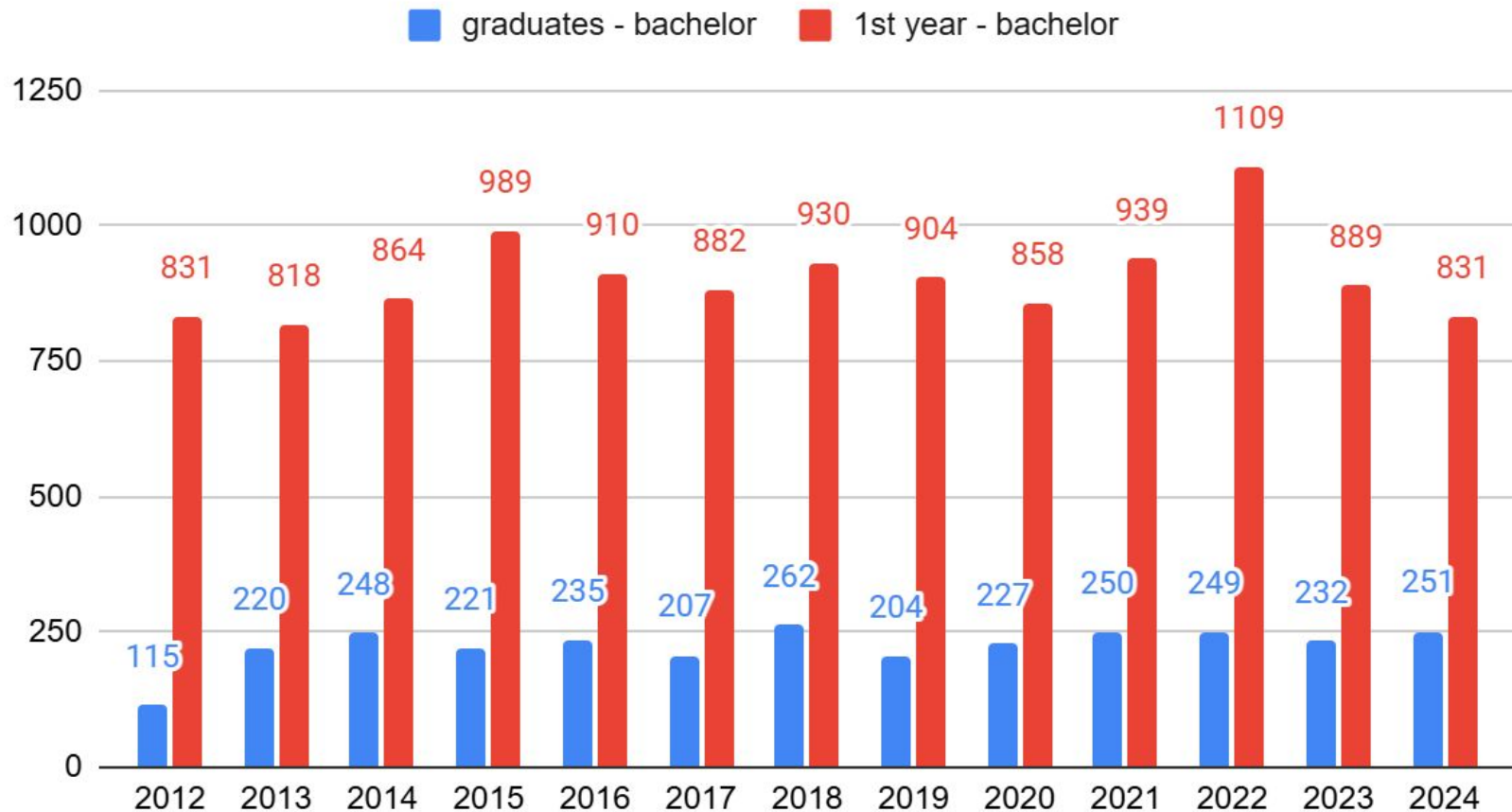
Quantum Informatics master programme

The target profile of a graduate: The graduate of the program will be a highly specialized expert in the field of quantum informatics, who, in addition to general knowledge of quantum computations and quantum communication, will design algorithms for quantum computers and other specialized devices working on the principle of quantum technologies, and who can operate and program these devices. In addition to this highly specific knowledge, he/she will also be well-versed in the areas of advanced mathematics, statistics, information theory, optimization methods, parallel systems, cryptology, and security.

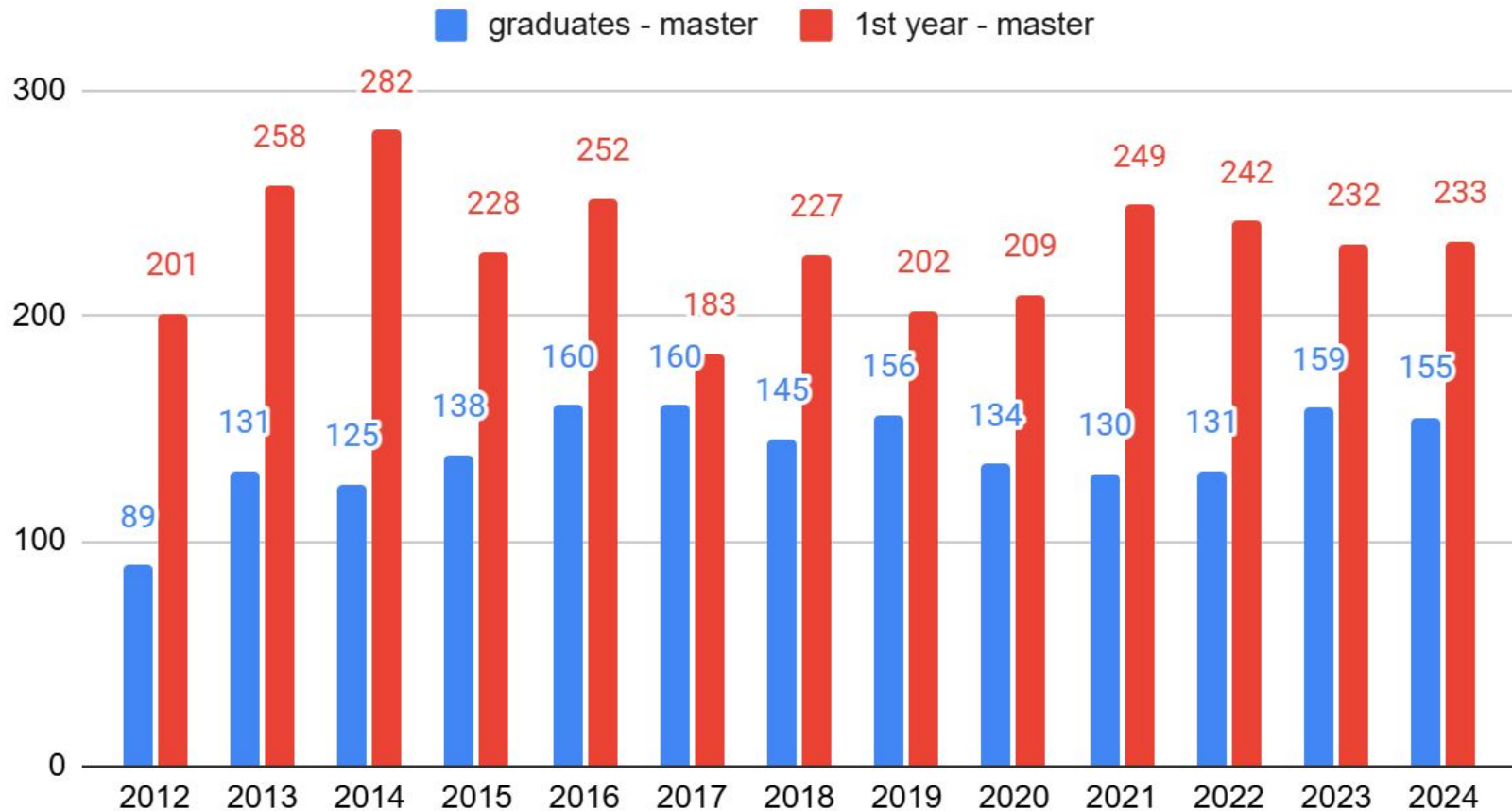
Mandatory Courses: Mathematics for Quantum Informatics, Quantum Computing, Linear Optimization and Methods, Introduction to Quantum Theory, Quantum Optic Communications and Networks, Parallel Systems Programming, Information Theory, Cryptology and Quantum Computing, Complexity Theory

- + **12 other courses** (a student should pass at least 4 of them)
- + **elective** courses

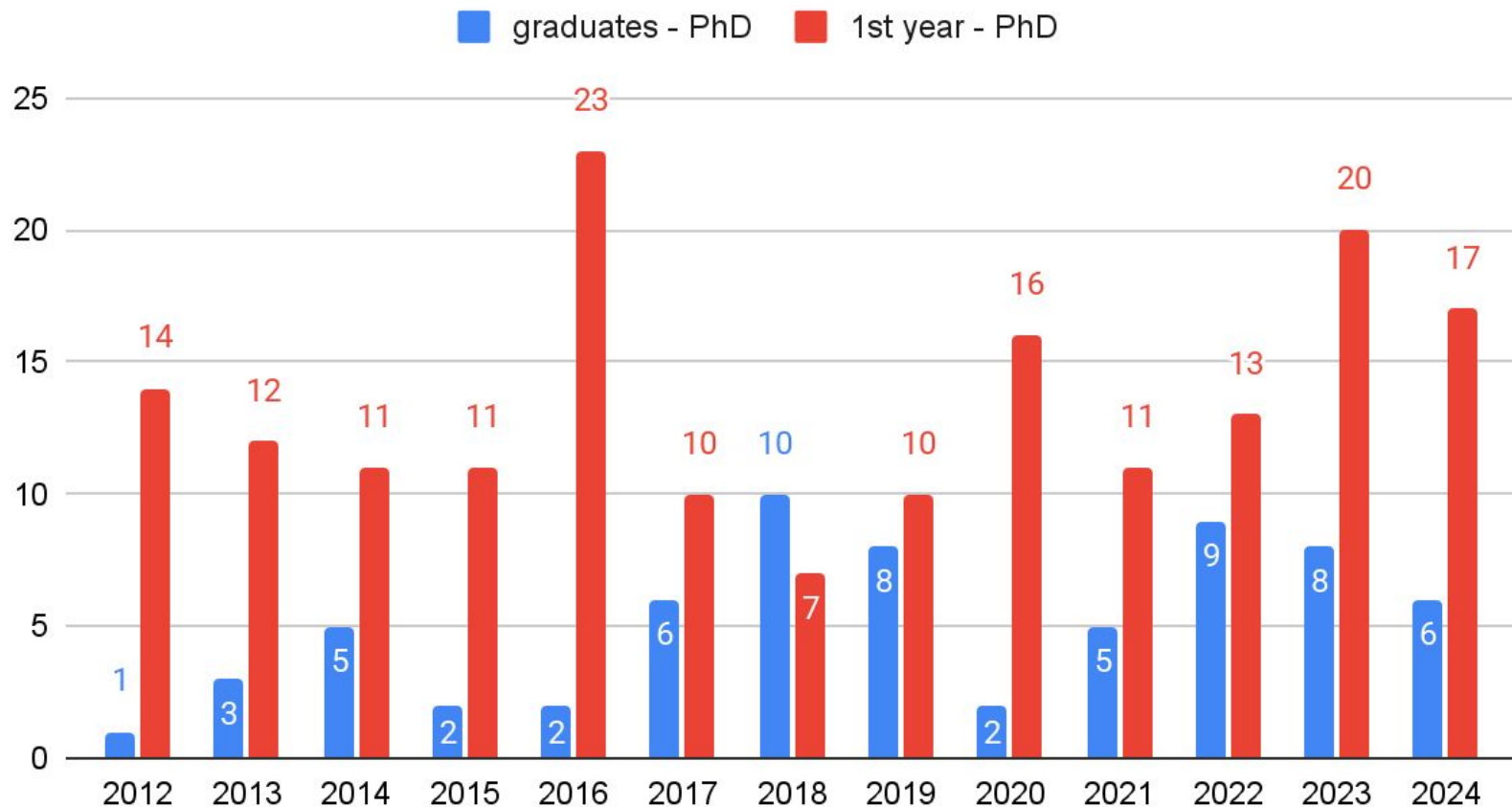
bachelor - 1st year vs. graduates



master - 1st year vs. graduates



PhD - 1st year vs. graduates



Short-terms goals / vision - "Wishlist"

- have more efficient administrative processes, ideally governed at the university level, possibly using efficient information systems
- have and generate more opportunities for cooperation within CTU (instead of competing)
- increase research performance, ideally to be comparable to the teaching performance (= shift from large teaching focus)
- breach our spatial limits
- minimize administrative tasks for academic and research staff
- keep with up-to-date trends in terms of research topic, courses taught, equipment
- continue to strengthen startup and spinoff creation process, possibly focus on venture funds and business angels
- keep getting involved in international projects and large consortiums
- "work less, gain more" - keep optimising our cooperation with industry programs, open new programs, increase total gains
- increase the number of bachelor and master students involved in research activities
- succeed in the newly opened field of Quantum Informatics: increase research outputs, open positions, start partnerships, start projects, educate the general public
- have more full and associate professors fully dedicated to the faculty
- create a suitable environment for academic and research staff with a high focus on quality of R&D&I outputs, enhance our support for young and foreign researchers
- be able to support (more) postdoc positions
- be able to support the development of existing research groups and laboratories
- find new important partners among universities abroad
- improve efficiency in terms of own data collection and performance measuring
- keep the quality of study programs, optimize PhD program
- enhance our cooperation with alumni, ideally governed at the university level

ordered by priority