

1) Could the faculty/institute provide a self-reflection on where they currently position themselves in relation to similar faculties at other Czech Universities, as well as compared to several leading universities in Europe

FA BUT did thorough analysis of faculty of architecture in Prague (FA ČVUT), Liberec (FUA TUL) and Brno (FA VUT/FA BUT) at the beginning of year 2020. There were only data of the year 2018 available. FA ČVUT is the largest faculty of architecture with more than 3 times more students and education budgets. FUA TUL is the smallest of the three faculties:

Number of students (2018)	FA VUT	FA ČVUT	FUA TUL
Bc.	284	876	172
Mgr.	149	563	62
Ph.D.	48	66	16
total	481	1505	250

Revenues 2018 (selected types, EUR)			
2018	FA VUT	FA ČVUT	FUA TUL
Education aid	1 560 237	5 684 000	1 105 762
Research development aid	51 539	173 407	15 662
Specific research	37 023	152 185	7 935
Education and equipment subsidies	307 904	343 741	213 253
Science and research subsidies	48 148	605 259	134 048

Science projects and grants were identified as a weakness of FA BUT early after a new management began to act at December 2018. Since second half of the year 2019 FA BUT have established „Project support department“ and performs active support for scientist/researchers currently available at FA BUT. There were 16 research and science subsidies applications passed during last 13 months in total amount of 2 million EUR. (details in „Grants and subsidies FA BUT 2019-2020“).

Our first steps are leading towards our own human resources. Next steps are to increase attractiveness of FA BUT for high quality researches and scientists by increasing wages and providing modern hi-end equipment (currently ongoing).

As two other main faculties of architecture in the Czech Republic FA BUT falls in to the FORDE: 6. Humanities and the Arts which fits to its overall profile in terms of scientific output (mainly in the fields of history, theory, urbanism and design) as well as epistemological profile of the architecture understood as an art.

Similarly QS Ranking subsumes Architecture under the Arts and Humanities. FA VUT can compete with faculties that rank 151 – 200 and should aim at those positions as well. It is also worth mentioning that Academic Reputation makes 70% of the ranking assessment:

70% Academic Reputation

The highest (Oslo School of Architecture): 71,5

Average: 50,61

Faculty of architecture BUT: 42,8

The lowest (Università di Padova): 42.3

10% Employer Reputation

The highest (American University of Sharjah): 88,8

Faculty of architecture BUT: 67.7

Average: 64,68

The lowest (Dalian University of Technology): 29.6

10% Research citations per paper

The highest (Ryerson University): 100

Average: 75,18

Faculty of architecture BUT: 68.5

The lowest (Universitas Indonesia): 42.6

10% H-index

The highest (Ryerson University)

Average: 64,63

Faculty of architecture BUT: 60.0

The lowest (Oslo School of Architecture): 11.1

2) Please explain the evolution in staff members (professors and researchers) and how this relates to the evolution of research grants.

Academicians hired since 2019:

- 1) prof. Ing. arch. Ivan Koleček (teaching studios, contribution to Register of Artistic Output – RUV)
- 2) Ing. arch. Marek Štěpán (teaching studios, contribution to Register of Artistic Output – RUV)
- 3) MgA. Ing. arch. Vojtěch Jemelka (teaching studios, contribution to Register of Artistic Output – RUV)
- 4) mgr inž. arch Szymon Rozwalka (teaching studios, contribution to Register of Artistic Output – RUV)
- 5) doc. PhDr. Pavel Šopák, Ph.D. (lectures, involved in one project, contribution to SCOPUS)
- 6) prof. Ing. arch. Monika Mitášová, Ph.D. (lectures, involved in one project)
- 7) Ing. Jana Barnetová (seminars)

- The habilitation procedure (associate professor) assesses both the scientific qualifications (based on research activities) and artistic qualifications (based on professional performance) of the applicant. These qualifications can also be verified based on the defense of the habilitation thesis (especially in the case of academic staff who are lacking a professional portfolio) as well as other scientific, professional, or artistic works. The applicant's pedagogical competence is also evaluated on the basis of the habilitation lecture and previous pedagogical practice [§ 72 par. 1 of the Higher Education Act (Act No. 111/1998)]. The applicant proposes three topics for the public lecture to the Scientific Council of the faculty, of which the habilitation committee selects one.
- The appointment procedure (professor) can be initiated by the applicant and must be supported by at least two written statements from professors in the same or a related field. It can also be initiated by the dean or rector, with the proposal being submitted to the Scientific Council of the faculty. The applicant must document his/her pedagogical practice, provide an overview of scientific, professional or artistic works, as well as an overview of scientific, professional or artistic internships completed, both domestic and foreign, and other scientific or artistic activities. The applicant chooses the topic of the public lecture before the scientific council of the faculty and the scientific council of BUT.
- A successful research project of basic or applied research is an important prerequisite for initiating a habilitation or appointment procedure. It is usually preceded by publishing activities and the management of graduates or doctoral students.
- The applicant for the position of the associate professor submits five (for professor, ten) of his/her most important publications or engineering or artistic works. Significant engineering, architectural or artistic works are mainly those which have implemented solutions, been successful by international standards, are protected by patents or have won a significant international art competition. Complex technical works with a proven economic benefit are also accepted.

3) How can the system and rules for obtaining the title of professor and associate professor be adjusted so that achieving these levels of career growth is more accessible for younger generations? Do you think that this could bring new trends in innovation, or that it could lead to greater internationalization of the institution?

- The rules also currently allow for habilitation on the basis of a set of works with a commentary, which is particularly advantageous for new academics coming from architectural firms. However, they lack personal experience from doctorate-level studies. On the other hand, academics have experience in teaching, lecturing, research and publishing, but do not generally have a body of architectural realizations comparable to that of practicing colleagues. They are however very well prepared to lead doctoral students. Relaxing the criteria set by the university in the area of successful results according to international standards, especially for results that are more of a local or national significance in our field, could support applicants who apply for these positions. Other motivational tools that we have introduced at the faculty include:

- o Sabbaticals (creative leave), which allow candidates to prepare for the habilitation and appointment procedures (with the possibility of internships abroad).
- o A planned and university-supported introduction of the SHAP academic career system, evaluation of R&D and the creative performance of employees, as well as personal interviews.
- o Differentiation within personal evaluation (in terms of financial rewards for scientific research and creative results).
- o New rules of procedure that will enable the Scientific Council to vote at a distance during COVID (Up to now, the Scientific Council has only been able to discuss personnel matters in person).

4) What is the experience of PhD researcher with respect to the PhD program, support for internationalization and career opportunities?

- As a rule, we accept experienced PhD applicants who already have practical experience and have worked while studying. Our program boasts a newly accredited PhD program (from 2019) with an international dimension; academic English; a compulsory foreign internship [For the last 4 years, doctoral students have been required to go abroad for internships at universities / research institutes (in Denmark and Slovenia for example)]; mandatory publishing activities, including submitting publications to international conferences; and the involvement of doctoral students in full-time teaching and cooperation with the faculty (in their last year of study)

5) It is obvious that in an effort to increase the quality of study, there is a tendency to constantly increase theoretical knowledge and so it is more difficult to look for innovative forms of teaching in a limited time, such as e.g. solving several tasks in laboratories or solving specific tasks required from practice (eg diploma or dissertation thesis) or connecting teaching with industrial enterprises in the form of internships. What are the experiences of the faculty/institute? What percentage of final work can be attributed to those whose solution is directly required by practice?

- At this time, the use of distance communication technologies in the program has allowed more students to be active in their studies than before, when attendance was lower due to the involvement of students in design activities or studio teaching (some of whom are educators improving their academic qualifications).
- PhD students coming from practice also bring practical research topics and development in the form of doctoral research and practical involvement in teaching students in bachelor's and master's degree helps to constantly innovate teaching, involve external entities (municipalities and state organizations), which is also reflected in dissertations.
- With their focus, all doctoral theses strive for practical applicability, whether it concerns the search for solutions to the problems of contemporary cities or challenges in the field of architectural realizations. However, for the development of the field, some research topics dealing only with theoretical issues or the study of history, without direct application in practice, are also needed.

6) What opportunities does the faculty see to increase research grants and budgets?

This question is closely linked to our answer to question number 1. Our currently taken and next steps are:

- Identify and use current resources (ongoing)
- Increase acrativeness (ongoing)
- Hire quality researchers (planned in 2021)

In the last year we have increased number of grant applications almost three times due to the establishment of Project Department.

Research grants and subsidies 2019 – 2020:

2019 TAČR "Jihlava's historical buildings"	ongoing	194,444 Euro
2020 Memov II OPVVV/EU	ongoing	103,439 Euro
2020 KInG BUT Ministry of Education	ongoing	80,230 Euro
2019 GAČR "Adaptive jointing ... "	request submitted	183,518 Euro
2019 GAČR "Planning after ... "	request submitted	148,630 Euro
2019 Interreg A-V "Areas ... "	request submitted	148,421 Euro
2019 Erasmus Strategic partnership "BIM"	request submitted	56,000 Euro
2020 AKTION "Scharoun - Šlapeta, ... "	request submitted	4,963 Euro
2020 AKTION "Central Europe ... "	request submitted	3,370 Euro
2020 TAČR "Libraries recovery strategy"	request submitted	203,704 Euro
2020 TAČR "Manual of restoration ..."	under development	74,074 Euro
2021 TAČR "Primary schools cooperation"	under development	111,000 Euro
2021 TAČR "Light intensity ..."	under development	111,000 Euro
2019 TAČR "Modular contruction ... "	not accepted	125,852 Euro
2019 TAČR "Small cities sustainable ... "	not accepted	86,944 Euro
2019 NAKI II "Unique clay structures"	not accepted	397,222 Euro

7) Where within the broad portfolio of the faculty would it be possible to search for and gradually expand the space for R & D & I?

- Here we could mention establishment of new infrastructure such as the robotics laboratory. Another area of possible development is Building Information Modeling (BIM). We also expect further opportunities to arise when the faculty moves to its new premises (in 10 years' time). Faculty management made following steps in the past year to expand space for R & D & I in the future:

Building Infrastructure:	2020	2021
Robotic Lab (2 robotic arms + access.)	46,617 Euro	217,212 Euro
Digital Studio (hi-end camera + access.)	109,348 Euro	2,109 Euro
Technical measurement lab	45,488 Euro	34,287 Euro
Joinery workshop (joinery machines)	24,612 Euro	9,341 Euro

E-library (e-databases)	0 Euro	62,704 Euro
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Modernisation of Infrastructure:

Model center (engraving lasers, 3D printers)	46,418 Euro	29,838 Euro
Computing center (HW, SW, server, etc.)	57,005 Euro	16,134 Euro
Library (book scanner, hi-end printers, books)	30,577 Euro	17,198 Euro
Studios and classrooms (AVT modernisation)	60,582 Euro	9,979 Euro

Total:	420,646 Euro	398,802 Euro
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Foundation of Faculty Development Funds:

Art and Creative activities Fund:	7,407 Euro	25,817 Euro
Science and Research Fund:	3,704 Euro	3,690 Euro
Science and Art publications Fund:	5,556 Euro	22,562 Euro
Excellent Students Fund:	2,778 Euro	9,259 Euro
Students Activities Fund:	2,778 Euro	3,704 Euro

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Foundation of Project Department:

Science and Research subsidies comparism	2015 - 2018	2019 - 2020
Applications submitted - total	12	17
Applications submitted - per year	3	8.5
Difference (%)	100%	283.33%