# VISION FOR CTU FOR 2026-2030

PROF. DR. ING. MICHAL PĚCHOUČEK, M.SC.

I am prepared to build CTU's exceptional reputation and profound societal impact both within the Czech Republic and globally, thereby cementing our position as a truly respected academic institution. Through demonstrated excellence in international comparison, I will guide CTU toward achieving transformative influence across the Czech Republic and Central European region. My vision is to reshape CTU into a beacon that attracts the most brilliant minds—a destination where exceptional students receive the most advanced and relevant preparation for tomorrow's challenges. I am committed to securing substantial financial resources while establishing the foundation for lasting economic independence and sustained growth. Under my leadership, each successive generation of CTU graduates will surpass the achievements of those who came before, creating an upward trajectory of excellence that defines our institutional legacy.



The Czech Republic ranks among the most industrialized countries in the world. Per capita, it ranks 7th in terms of industrial production value added, 4th in software development expenditure, 15th in chemical production, and 14th in defense systems production (ahead of the US, UK, France, Germany, and Poland). However, manufacturing as such generates less added value (measured per employee) than development, research, and innovation. I am convinced that long-term strengthening of focus on development, research, and innovation is absolutely crucial for the economic development of the Czech Republic. CTU, as the leading Central European technical university, has the best prerequisites to become an engine of innovation, technical education, and cutting-edge science - and thus very concretely contribute to the economic stability and prosperity of both our country and the European Union.

Therefore, it is important to take care of our university and create the best possible conditions for its growth and development.

However, CTU is not in ideal condition and is not prepared to compete with successful growing universities in our region and worldwide. Among the main problems we must solve are low citation rates of our scientific work, low scientific output per academic person, and high academic inbreeding. We are not attractive to foreign candidates for academic positions, we have low international mobility, and few connections with top foreign universities. The university is closed in on itself. We have untapped potential for industry collaboration and really poor results in establishing startups and spinoffs. We cannot properly manage our real estate and use it effectively, student housing is in a state of disrepair. Decision-making and administrative processes are often inefficient, insufficiently flexible, and poorly digitized, university management decisions are not always transparent and comprehensible, and the academic community lacks trust in the rector.

If we want to restart CTU and restore the university's former glory, we must all do something for it.

# CTU as a renowned, high-quality, and sought-after university

CTU is the oldest technical university in Europe, which obligates us. CTU is the alma mater of notable personalities such as Christian Doppler, Otto Wichterle, Josef Koudelka, Vladimir Prelog, František Křižík, Emil Škoda, Ivan M. Havel, Vlado Milunić, Pavel Janák, Josef Pleskot, Jaroslav Fragner, Josef Vavroušek, Antonín Engel, Eva Jiřičná, Zdeněk Bažant, and Franz Gerstner. Our graduates are successful both in the Czech Republic and abroad, building bridges, designing engines, founding companies, managing large enterprises, and making Czech architecture famous.

We have an impressive history and excellent current achievements. At the same time, we see that according to some metrics, we are not even the best technical university in the Czech Republic (according to the latest internal quality assessment report for 2023). It is natural that opinions in the academic community on quality and ways of further improvement may differ. However, we will ultimately be evaluated by the outside world, and success in such comparison will ensure the university's appropriate position and conditions for further development.

Therefore, as rector, I will primarily develop the university as an institution - strengthening its renown, reputation, and quality in education, science, and creative activities so that we become part of the group of

best European technical universities and the best technical university in the Central and Eastern European region.

I will develop a strategy and lead CTU in such a way that within 10 years we will reach the top 100 best technical universities in the world according to the QS World University Ranking in the Engineering and Technology category, where we are currently ranked 189th.

I will use my personal reputation in social, business, and political circles to strengthen CTU's renown. I will ensure CTU's perfect image in the media and society and focus on defending the interests of the university, its faculties, and components.

# CTU as an open, innovative, and socially responsible university

Society has high expectations of CTU. It is expected that through scientific work and creative activities, we will not only be able to understand technological development but also positively influence and determine it. Thanks to this, we will be able to educate future generations of professional and innovative personalities.

The university should be a leader in innovation in the broad sense and should, besides science and research, be able to succeed in cooperation with local and international industry. It should be a place where technology startups are founded, and at the same time an effective partner to state administration and municipalities in digitalization, technological innovations, and urban development.

As rector, I will ensure the university's social responsibility and support cooperation with the non-governmental sector. I will build the university as a place for safe dialogue on topics such as sustainable development, environmental protection, security, and ethical issues related to scientific progress and technology development. I will strive to ensure that our university continues to be fair, diverse in opinions, and open to people from abroad and those with different cultural or professional experiences. I want it to continue not discriminating against anyone based on age, gender, or nationality and help those who decide to combine scientific careers with parenthood.

# Basic prerequisites for successful development of CTU

- 1. A people-based university: growing quality and good reputation of the university attract the best students, who are a joy to work with. Through their studies and contribution to research and creative activities, they further enhance the university's reputation and later become the calling card of their alma mater. The quality of teaching primarily rests on the academic staff, doctoral students. It is the rector's task to create conditions and lead the university so that successful and inspiring people are satisfied here and new ones want to work here.
- 2. **Innovative use of Al and new technologies:** CTU must be able to respond to technological progress not only in the subject of its creative and educational activities but also in how it supports the work of teachers, scientists, and administrative staff. Artificial intelligence is now transforming the nature of much intellectual work, and CTU should be a leader in responsible, effective, and human-role-oriented implementation of Al. Only this way will we maintain long-term relevance and competitiveness.
- 3. **CTU** as a trustworthy university: it is absolutely crucial that our university enjoys the highest possible level of trust and respect from society, the state, industrial partners, but especially future students and their parents. It is natural that the rector's role in building trust in CTU is irreplaceable, and trust in the rector conditions trust in the university. Given that a significant part of executive powers at the university is in the hands of deans, the rector has the opportunity to influence events at the university through properly set rules and through informal authority, which is given by the extent to which the academic community trusts them.
- 4. **Stable economic development in dynamic times:** CTU is a distinctive and independent university. Economic independence and long-term stability are absolutely crucial for knowledge creation, scientific and creative work, and innovative pedagogy. From the position of rector, I will bear responsibility for creating conditions and promoting strategies that ensure diverse and long-term stable funding of the university from state resources, European funds, industrial cooperation, self-paying students, and donors. I will facilitate productive relationships with the surrounding environment at the state, industry, and academic levels. CTU has proven in the past its good ability to adapt to changes in economic reality, which is a good prerequisite for success in both stable and uncertain economic environments.
- 5. **Responsible management and development of entrusted property:** CTU historically possesses significant property, which we must know how to maintain sustainably and develop strategically.

However, CTU's property is not a goal but a means for developing our educational, research, and creative activities and should not be a burden where caring for it prevents us from our primary activities.

# **Strategic Priorities**

### 1. Effective management, professional support, and reduction of bureaucracy

- I will build the rector's office as a team managed by academics and professionals. I will select vice-rectors through an informal competition announced immediately after being elected rector. The vice-rectors will divide the agendas: (i) teaching; (ii) science and research; (iii) industrial cooperation and innovation; (iv) campus development and management; (v) IT infrastructure and cybersecurity; (vi) international cooperation and PR; (vii) human resources; (viii) government and EU relations; and (ix) Al implementation and digitalization.
- I will lead discussions with deans about dividing responsibility for administrative support between faculties and the university to ensure necessary flexibility.
- I will emphasize automation of administrative work, simplification of regulations, and removal of bureaucratic burden I will implement a pilot regime at the rector's office and then offer the experience to faculties and components.
- University management will be data-based I will create the **office of chief analyst** for collecting and providing data for effective and accurate decision-making.
- I will rely on a newly appointed international council and establish an industrial council of CTU.
- I will propose and negotiate procedures for justifiable and controlled remuneration of the rector, component directors, deans, and vice-rectors, and according to § 15 paragraph 3 of the Higher Education Act, I will have them discussed by the university's board of trustees.
- I will annually publish complete information about the **rector's** and **bursar's** income.
- In cooperation with deans, I will strive for a shared vision of the university and will codify it into the Strategic Plan, approved by the Academic Senate. The shared vision will contain specific verifiable goals, and the rector together with deans will be responsible for its fulfillment.
- To restore trust, I consider it important to strengthen independent internal control mechanisms, especially the control function of the Academic Senate. In a confidential regime, I am ready to restore access for the AS chairman and the chairman of the relevant committee to the corresponding CTU financial information systems.

#### 2. Functional infrastructure and campus development

- I will guarantee efficient, secure and partially centralized IT. I will defend necessary measures in the academic community that will lead to higher cybersecurity. At the same time, I will strive to modernize university IT so that it maximally supports users, automates unnecessary human work, reduces administration and maintains flexibility and autonomy of components, departments and teams
- I will solve the dire situation of dormitories so that CTU has a **permanently sustainable strategy for affordable and dignified student housing**. I will have various options developed, which I will transparently discuss with the senate and deans. I will negotiate support for the option that will be most advantageous for CTU from the perspective of long-term development and property management.
- I will guarantee efficient use of real estate that is under the administration of the rectorate and components subordinate to the rector. I will mediate and lead discussions with deans about ways to ensure the most efficient and flexible use and development of real estate under faculty administration.
- I will initiate discussion about a new master plan of CTU with the goal of setting a generous vision for campus development into the second half of the 21st century and will establish the role of **chief** architect of CTU. I will prioritize developing existing buildings before building new ones. If possible, I will prioritize buildings that develop existing campuses before buildings dislocated outside the Dejvice, right-bank or Kladno campus. For each new building, I will require an open architectural competition. My priority will be to secure own premises for FIT.
- As part of responsible property management, I will build the rector's seat of CTU so that it connects the university, is sufficiently representative for the external world and establishes a long-term permanent tradition of the rector's office.

#### 3. Human resources development and new generation of CTU

- Human resources development is one of the basic building blocks for the CTU of the future. Therefore, I will establish a new position vice-rector for human resources and will transform the current employee department at the rectorate into a real human resources department. From the person in this position, I will expect that they will:
  - Build on the results of the **HR Award** project and eliminate shortcomings in meeting project goals
  - Lead discussion on improving CTU's career regulations, in such a way that it places reasonable and predictable demands on employees and at the same time guarantees long-term work perspectives, with the goal of creating an attractive career model for academic, administrative and managerial positions
  - Methodologically support top management of the university and components in human resources development
  - Methodologically and technically support faculties in hiring new academic staff with the goal of building long-term sustainable quality growth of the university
  - Help faculties in their efforts to get foreign scientists and doctoral students into their teams.
- I will build a development program for new academics (following the example of Charles University):
  - **CTU Starting:** for newly arriving, beginning academics with excellent results and foreign postdoctoral experience at a quality institution, which will help them for a precisely determined time to obtain their own financing (e.g., GAČR Junior Star and/or ERC grant).
  - **CTU Chair:** for a small number of excellent professors from abroad who have a great chance to raise the overall level and fame of the university.
- Following the example of similar programs in the world, I will build a Joint Doctoral Fellowship Programme to support joint training of doctoral students by specialists from top universities.
- I will appeal to deans to create conditions for taking creative leave (according to par. 76 of the Higher Education Act). I will find and promote ways to support academic staff during and after parental leave in discussion with deans.
- I will support CTU kindergartens and schools and will support the establishment of a nursery group.
- I will establish an **ombudsperson of CTU**. I will renew partnership with trade unions.
- I will promote an increase in tariff salaries of academic positions so that CTU is a competitive employer offering dignified wages.

## 4. Effective, relevant, innovative and interdisciplinary education

- I value the work of the Internal Evaluation Council (RVH) and will try to make maximum use of the results of its work. I will initiate innovations in the way of controlling the quality of the educational process and finding effective ways to increase and guarantee it. In response to very rapid development of technological changes, I will ask RVH for regular control of the **relevance of programs** and focus taught at the university.
- I will lead discussions with deans about possibilities of how to open the educational process more to society and industry and thus enable better response to new challenges and opportunities. I will discuss new possibilities of involving non-habilitated specialists in teaching, new ways to create industrial internships for students or variants of introducing industry-supported doctoral programs (following the example of MFF UK).
- I will remove barriers to study permeability and promote the possibility of selecting elective subjects between faculties. I will discuss possibilities of offering inter-faculty and inter-university minor specializations as a strong competitive advantage of CTU.
- I consider responsible introduction of innovation and automation into the teaching process a priority, especially digitization and **artificial intelligence**. I will seek opportunities to economically support innovation in the educational process and will advocate for sharing experiences between teachers across faculties.
- I am convinced that society expects the university to be able to predict the future and adapt education to changes in society and technology. The future of work is different from its past. The university must prepare students and society not only for the work of the future, but must be able to support them with knowledge many years after they graduate from the university. For this reason, I believe in the growing role of **lifelong learning** and will try to find a way to create and use a great opportunity from this trend for CTU.

#### 5. High quality research work with emphasis on impact

- CTU is a research university. For long-term growth, it is absolutely crucial to **increase the number of quality publications and overall intensification of scientific work**, increasing the number of excellent scientists, increasing success in obtaining top grants (e.g., ERC, Horizon, Darpa) and active participation in consortia with top universities.
- I will guarantee and connect my personal responsibility with the growth of quality of research and creative activity at the university. Measurable growth in the quality of research, creative and artistic work should be one of the main criteria for **evaluating the success of the rector and deans.**
- I will ensure that quality control conclusions from RVH are always implemented in updating the university's Strategic Plan, and that deans take partial responsibility for increasing the quality and volume of scientific work at faculties. I will continue to strengthen the role of DKRVO as a tool for long-term quality improvement.
- I will create a platform for sharing experiences with the specificity of defining quality of scientific and creative activity and success in increasing quality and volume of outputs at individual faculties and components.
- I will strive to increase the quality of doctoral student training at faculties by negotiating and promoting the **standard of responsible supervisor**. I will support the creation of inter-faculty doctoral schools and interdisciplinary scientific cooperation so that supervisors from research-successful components are willing to become specialist supervisors for doctoral students from scientifically developing components.
- I will ensure ethical reporting of results of scientific work and creative activity.
- I will increase the number of people awarded by the rector for outstanding and inspiring results.
- I will establish the tradition of **CTU Benchmark** I will encourage every leading worker at the university to create a list of workplaces that inspire them to improve the quality of their workplace (faculty, department, center, group). For the rector, such a list will be workplaces in the EuroTeQ consortium. I will use inspiration from the EuroTeQ network and from other top universities to improve the university and will expect the same from all leading workers at CTU.

#### 6. Relevance, partnership and success in industrial cooperation

- I consider the ability to effectively cooperate with industry as one of the future competitive advantages of CTU. For this reason, I will establish a new position **vice-rector for cooperation with industry and innovation**, from which I will expect in the context of industrial cooperation:
  - Seeking new significant opportunities for industrial cooperation and supporting faculties in developing their industrial cooperation
  - Mapping existing and future capabilities of the university in the context of industrial cooperation, proposing growth areas for building new capabilities,
  - Providing methodological and legal support in negotiating with industry, support in valuing work and valuing licensed intellectual property and
  - Mediating shared experience in industrial cooperation between faculties.
- I will continue the work of the previous rector and will try to strengthen CTU's role in cooperation with the defense industry and security sector in the Czech Republic, EU and NATO. I will further support the increasing role of CTU in projects building a resilient society.
- I am prepared to devote myself to growing the university's reputation in the context of industrial cooperation and do everything so that I can, in cases where it will be possible and desired, guarantee the quality of work performed.
- I will look for sources for industry or donor-financed positions CTU Industrial Chairs.
- I will understand the growth of industrial cooperation volume as one of the evaluation criteria for rector's success.

### 7. CTU as a leader in innovation and founding startups/spinoffs

- CTU has the opportunity, thanks to its scientific-research potential, to determine technological trends. Besides successful industrial cooperation, it should be capable of its own innovation initiatives and become a place where incubation projects and technological startups will emerge. Therefore, I will expect from the vice-rector for cooperation with industry and innovation:
  - Establishing cooperation with existing incubation projects in Prague and the Czech Republic,
  - Creating an effective legal framework for founding and supporting startups and spinoffs,
  - Proposing a temporary mechanism for leap support of startup and spinoff incubation,
  - Obtaining grant resources for supporting startup and spinoff incubation,

- Establishing effective cooperation with regional venture capital funds for CTU,
- Sharing experiences and spreading interest of the academic community towards innovation and incubation.
- The number of new incubation projects, founded startups and spinoffs and their economic success should be another evaluation criterion for rector's success.

#### 8. Internationalization, international success and inter-university cooperation

- CTU should be a university that will have, thanks to success in international comparison, strong regional impact on Czech and European competitiveness. I consider internationalization of most university activities, including those that have local impact, as a basic prerequisite for CTU's success.
- I will create conditions so that the largest possible number of **student exchanges** arise, so that students are motivated to travel abroad during their studies (for example by increasing flexibility in recognizing credits from foreign schools), and so that they demonstrate at least partially in their studies the ability to work in English. The percentage of students who go abroad for at least one semester I will consider an important indicator of new leadership success. Compared to other Czech universities, CTU little uses resources from Marie Curie and Erasmus+ programs. I will support submitting similar projects at all levels.
- I will advocate for **English** to gradually be used as a **second working language** at CTU and for the university to become an attractive place for study and work even for people who don't speak Czech. I will try to create enough opportunities for those who chose, for example, German as their first foreign language, to learn English to the extent that they will be able to cooperate with English-speaking foreigners and support them. I will gradually build an environment where not knowing Czech will not be discriminating in any of the professions and roles at the university.
- English is the language of science and research and for this reason I will promote that doctoral studies at CTU be conducted primarily in English. I will motivate deans to increase the offer of English-taught subjects and master's programs within their capacity possibilities. CTU should be a protector of Czech technical terminology in the expertise we teach, and therefore I consider subjects taught in Czech important. Although I will support the creation of new bachelor's programs in English, I consider it correct when Czech continues to dominate in bachelor's studies.
- I will lobby in communication with other rectors and the government **for such a change in the legislative framework** after which the possibility to study at CTU for free would not be decided by whether the study takes place in Czech, but whether the student is an EU citizen.
- Based on experience from the EuroTeQ network and existing international relations, I will develop a CTU i for international partnership and cooperation with universities in the European region and in the world. I will actively cooperate with research universities on the groundplan of the Association of Research Universities in the Czech Republic and institutions within Campus Dejvice. I consider close cooperation with VŠCHT strategically important. I will actively defend the interests of the Czech academic community as a member of the Czech Rectors' Conference.

## 9. CTU as an open university

- Only as an open university can we have truly transformative impact not only on the new generation of technical intelligence in the Czech Republic, but also on society as a whole. Let's find out what happens behind the school gates, and let's try to make our experience, knowledge and our vision work for the benefit of others.
- I will try to make CTU a place for **interdisciplinary dialogue** in areas of our expertise and communication with the lay public. I will create space for dialogue over ethical issues and human protection from negative consequences of technological development.
- I will build the university's ability to communicate results of scientific work so that the whole society can benefit from them (supporting applicability, increasing interest in innovation and science, developing critical thinking and scientific literacy).
- I will try to make the university a **model for self-government based on participatory, transparent, justifiable decision-making**.
- I will continue to support diversity and inclusion in education, scientific work and university management. Despite a certain departure in society, I will advocate for principles of sustainable development and environmental protection.
- CTU should strategically build relationships with secondary and elementary education and inspire upcoming generations in interest in STEM fields, creativity and entrepreneurship in technology. I will support all existing activities in this spirit (such as children's university or Stretech)

 As rector, I will defend academic freedoms, I will advocate for functionality and independence of academic self-governments. I will respect student organizations and will conduct open dialogue with them.

### 10. Care for good image of CTU in society

- The success of the university is to some extent given by how it is perceived by society. It is necessary to care for the university's image in a professional way.
- I will want to systematically invest in building the university brand so that interest in CTU increases both among applicants for study and among people who will want to work at CTU. A good image of CTU is also important for the volume of industrial cooperation and sponsorship donations to the university
- I will cooperate with faculties and institutes on building the brand and good image of CTU so that the university strategy complements the strategies of components.
- I consider it expedient to initially cooperate in this area with a professional agency that has experience in the field of supporting academic institutions, and at the same time I will want to build our own ability to communicate and create an image about CTU.
- I consider opening the university to graduates and creating a qualitatively new relationship with the alumni community a strategic priority. It is a great opportunity that traditional universities know how to use well. I will want to build a new strategy of private sector donations on these relationships.

I will evaluate these priorities within the annual Report on Achieving Strategic Plan Goals.

## Conclusion

Our university is a mighty organism. Its strength lies in long-term work and correct direction. At the same time, it must adapt to the technological development of the world and co-determine it in the area of its competence. I want to draw energy precisely from continuous discussion within the academic community about finding compromises between tradition and innovation. Improving CTU is a team matter that stems from the competence and will of all of us who shape CTU. As rector, I want to mediate effective and inclusive discussion about how, with what priorities and at what speed we are able to improve the university so that we help the weakest and at the same time enable multiplying what CTU excels in. Throughout the entire functional period, I will be the guaranter of negotiated consensus and will guarantee the implementation of this vision.

Beyond the rector's promise, I commit that if elected, I will devote myself fully only to work at CTU. I will not have any other employment obligations and will not act as an executive or as a paid member of an executive body in any other company.