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# Engineering and IT Foundation Program at ÚJOP

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International students from 21 countries came to ÚJOP in 2023 to prepare for admission to the best technical universities in the Czech Republic. Intensive training in the Czech language will allow you to reach the B1/B2 level in a year, which will allow you to study at a bachelor's or master's degree for free. Specialized subjects will not only help you prepare for entrance exams, but will also become a support in the first year of study at the university.

In November, we talked about how the [Engineering and IT COMPLEX](#) foundation course works, and in this article, we will cover the main points.

## Study at the best engineering & IT universities in Europe and the world

Any Czech university that has accreditation is a high-quality educational institution. However, several **Czech universities** can boast of being **included in the ranking of the best universities in the world**. There are about 25,000 universities in the world, but international rankings usually include the first thousand or even 500 universities.

### QS Ranking

In the QS Computer Science Rankings 2022, four Czech universities are included in the ranking:

- 251-300 Charles University
- 201-250 Czech Technical University in Prague (ČVUT)
- 351-400 Brno University of Technology
- 451-500 Masaryk University

### U.S. News college rankings

U.S. News college rankings are widely seen as America's most [influential](#) \*. **Charles University** is [ranked](#) globally by technical subjects:

- 101 in Mathematics
- 111 in Physics
- 151 in Space Science
- 373 in Computer Science

And if we talk about the world's oldest technical university, **ČVUT**, then its programs [are included](#) in the list of the best in the world:

- 166 in Physics
- 247 in Optics
- 252 in Computer Science
- 358 in Engineering
- 359 in Electrical and Electronic Engineering
- 378 in Mathematics
- 523 in Materials Science
- 756 in Chemistry

## Preparation for university entrance exams

Mrs. Vesecká, math teacher at ÚJOP: Students who come to study are often unfamiliar with crucial topics. Therefore, we aim to bridge the gaps in their education. Additionally, we strive to familiarize them with what they already know, but using the terminology, signage, and symbols commonly used in Czech universities. Do you really want to graduate from a technical university? In our foundation courses, we will teach you math and physics. You just need to show some initiative, go to school, and complete the homework and assignments given by your teacher. If you prepare regularly and attend classes consistently, you will definitely master mathematics and physics.

## You can choose from the following programmes

# Preparing for the first year

Our task is to ensure that students not only pass the entrance exams, but also that they pass the most important first year at the university.

Mrs. Vesecká, math teacher at ÚJOP: As I mentioned, our goal is not solely to help students pass school entrance exams, as the mathematics assessments are relatively straightforward. If they master the curriculum we teach here, it will provide a solid foundation, even for their first year at university. Students at a university don't have many new things to study in the first year; it's just a bit more math. To comprehend it, they only need to grasp what we teach them here. In physics, when they enter technical faculties, it often happens that they return and say, "What we learned here during the year was sufficient for my first year." **Sometimes, they even mention, "I was the best in my year among the Czech students."** That is, indeed, our goal.

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The engineering foundation program contains special subjects. One of these subjects is Computer Science. It is necessary not so much for the entrance exams, but rather for students to feel confident during the first year of their bachelor's degree. Mr. Jílek talks about the content of the subject, what it takes to succeed in programming, and what competencies you need to have.

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## Feedback from international students

The words of the teachers confirm the words of both our graduates and students.

Alexandrcurrently studying at Faculty of Information Technology, ČVUT in Prague:

"ÚJOP helped me a lot. Even though I didn't have a solid high school foundation in mathematics and programming, I don't feel that I know less than the local students, precisely because in Poděbrady I had not only language training, but also professional subjects, without which my studies in the first semester would have been significantly more demanding. I didn't have much experience with programming. Before I started at ÚJOP, I only had the basics, but then we had homework from Mr. Jílek, and that really helped. The university course Language C is difficult, but if you already know something, it is a huge advantage. So everything that is covered in the ÚJOP course – everything will be useful to future students. In general, I would really recommend keeping an eye on professional subjects.

I notice that students of other language schools often have problems with Czech concepts in mathematics, which is not a good thing – you will not have time for Czech at university, every student should be able to understand at least in exercises and lectures. You won't have time to revise what a trigonometric function is and how its typical values are calculated, or to study the basics of complex numbers that every Czech high school student must understand. I don't know any other school that devotes so much time to specialized subjects and has good teachers. It is a pity that in recent years the number of hours for vocational subjects in Poděbrady has been decreasing."

And these are **the reviews of current students** from anonymous questionnaires, which are collected regularly by the methodological department to analyze the educational process:

- "I am loving my IT class. It makes me think hard and solve problems using logic!"
- "Study advisors are very cooperative and helpful"
- "I really enjoyed hearing from two alumni of UJOP... They inspired me to stay and work harder here. I really look up to them"
- "Mathematics and computer science are the most interesting, thanks to professional teachers and interesting tasks"
- I want to say a big thank you to all my teachers"
- "It is a wonderful experience to study in Podedbrady"

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UJOP-506.html" target="\_blank" rel="noopener">&gt;&gt;</a></p> <br /><em>Min Phone Pyae, Myanmar</em>  
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