

## Our student will run a nuclear power plant

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Unlike Homer Simpson, who got into a nuclear power plant by mistake, sitting at the control desk with a doughnut in his hand and hoping that nothing explodes, the path to the "core" of Faculty of Mechanical Engineering of TUL graduate Filip Klikar is completely different – professional. Filip will become a nuclear power plant operator thanks to his skills and persistent pursuit of his dream.

After graduating from high school, Filip considered whether to start working or to study at the Faculty of Mechanical Engineering of TUL (FME TUL). He chose the second option and has no regrets. Today he is finishing his Master's degree in Applied Mechanics and has a promising and well-paid job as an operator at the Temelín nuclear power plant.

*"My journey to nuclear started while writing my bachelor's thesis. At that time, I was working on calculating the thermal efficiency of the secondary circuit of the Temelín nuclear power plant and creating a program for analysing the influence of the main equipment of this circuit. The topic combined two areas that were close to my studies – thermodynamics and programming," says Filip Klikar.*

At that time, he did not think that he could one day control the nuclear power plant circuit, which he was trying to calculate for his bachelor's thesis, from the unit control room. He only started to think seriously about the "control room" of the power plant later. It was the first year of a five-day ČEZ internship focusing on small modular reactors (SMR).

*„A year after the SMR camp, I attended the Temelín Summer University. It takes place on the premises of the nuclear power plant and during the intensive fortnight-long programme the participant gets a detailed insight into its operation. They will visit places that are normally inaccessible to the public. I have been thinking more and more about a career in a nuclear power plant," says Filip.*

Each internship, whether SMR camp or ČEZ Summer University, is preceded by a thorough psychodiagnostic testing. Based on these tests, thirty students are selected to participate in the program. The testing takes approximately six hours. In the performance part of the test, the candidate performs various tasks on attention span, logical thinking, memory or spatial orientation. The personality part concludes with an interview with a psychologist or psychologist.

After successfully completing the Summer University, Filip received a scholarship from ČEZ and an offer to work as a secondary circuit operator.

Filip also focuses on nuclear energy in his completed master thesis "Calculation of residual heat output and surface temperature in a spent nuclear fuel storage facility". The supervisor of the thesis is Jan Kracík and he cooperates on the topic with ÚJV Řež a.s.

When he receives his FS graduation diploma in the summer, he will have a two-year training at the CEZ training centre in Brno starting in September. Then he will move to Temelín in South

Bohemia, where he will spend the next six months training (not only) on the unit guard simulator. The simulator is a faithful copy of the centre where Filip will work in live operation. Operators learn to deal with abnormal operating conditions and manage stressful situations on the simulator. "I have a calm nature and I don't think I get easily distracted. I am confident that I will complete the training process successfully. I am confident because my studies at the Faculty of Engineering have prepared me well for this career," says Filip Klikar.

Filip pursued his dream as a nuclear power plant operator with determination. During his studies he had excellent results and received a scholarship. But other FME TUL graduates can also succeed, even if they still doubt their abilities. They will find out if they are suitable for the job during their internships at ČEZ. The offer is varied and students of humanities will also find something to their liking – for example, as part of the Nuclear Investment Camp internship.

FME TUL cooperates closely with ČEZ. Not only during summer schools, SMR camps or lectures. The faculty also encourages students to find a career in this field in other activities.

*"It is clear from Filip's example that other students and graduates can also apply for this highly prestigious, extremely responsible and promising position,"* says Luboš Běhálek, Vice Dean of the FME TUL.

Photos

<https://tuni.tul.cz/a/nas-student-bude-ridit-jadernou-elektrarnu-160701.html>