



# Enrollment after the Compulsory Advanced Level Graduation

## New Challenges and New Opportunities

The expansion of Hungarian higher education in the last two decades can also be identified in the case of Óbuda University, whereas the 3-4 times increase in the number of students is inevitably accompanied by a decrease in standards and a differentiation in the level of entrants' knowledge. Due to the state level introduction of compulsory advanced graduation from 2020, the number of applicants has significantly decreased this academic year. A serious challenge is how technical higher education institutions, and especially Óbuda University can regain its former base, whether it will be able to develop a recruitment strategy that serves two purposes at the same time: (1) to increase the number of students to the historical level; and (2) to increase the incoming knowledge level of entrants.

A systemic cooperation between public and higher education should be an important development priority in increasing the prestige and innovation potential of the university. However, this obviously needs the university to be – physically or digitally – present in the partnering high schools.

Analyzing the enrollment data from previous years, the primary target group of technical universities and engineering colleges is students coming from vocational high schools and – mainly on a territorial basis – some grammar schools. Students at high-prestige high schools prefer to choose science universities with a long history (or foreign institutions), which are also of higher prestige, so this segment would be difficult to target for polytechnic institutions.

Two-thirds of students come from vocational high schools (for boys it is even higher, about 70-80%), who, despite administrative name changes in the secondary school system, perform systematically lower than traditional grammar school graduates in all national comparative research, and this is also true for comparative analyzes of basic skills. In other words, the natural recruitment base of technical higher education is provided by the middle (and partly the lower) segment of the middle class, and it is likely that the proportion of students who will be first-generation intellectuals is quite high. Their education requires, in many respects, different from that of students with high social status, socialized in elite high schools. These student needs should be considered in university education, which could mean more individual support, smaller groups, support for the socialization of students, but above all the setting of clear and achievable goals in learning to which students can relate.



The freedom inherent in the credit system and the large number of grades do not help the socialization of students, which could be one of the most important retaining forces in technical higher education. It would be worth considering the introduction of new incentive systems, the development of student support services that help students build relationships with each other, develop spontaneous learning circles, but also support the individualization of requirements, if necessary, for more talented students who need more learning support or move faster.

The disadvantage of the students from vocational high schools in the field of basic subjects can be explained by the fact that the subject of physics hardly appears in vocational training, and the compulsory advanced level graduation is completed primarily by students from vocational subjects. Thus, an apparent lack of knowledge does not necessarily mean a lack of thinking skills, technical sense, or interest. A way forward for a recruitment strategy could be for the university to launch high school programs in well-known basic institutions that encourage students to take advanced degrees in mathematics, physics, or computer science rather than professional subjects. Such programs can be organized based on the secondary school's own teachers with financial incentives, but also with the involvement of external preparers and university students. Preparatory courses supported for high school students can be linked to the university's recruitment program, offering benefits to the best if they choose Óbuda University in the first place or provide them with financial incentives during their later studies. It may also be important to monitor the introduction of the new vocational training system and the new type of technical training, which is certainly an important and new field for the university as well.

According to the performed analyzes, the dropout rate is the highest in the computer engineering department. The rationale behind this may be the fact that the content requirements of mid-level IT graduates have a strong focus on software use and only the advanced level requirements include practices that also require an actual IT mindset. Thus, the lack of advanced graduation in this field can also have a strong negative effect on the incoming students' knowledge level, which can also be found in the support of high school studies.

However, dropping out is also a natural part of university education, as high school students are not yet familiar with the training programs, and their interests may change, so career choice and career development is a priority to be supported during the entire university education. Well-timed personal counseling, redirection tailored to the student's abilities and interests can prevent permanent dropout from university. Personal counseling can even be started within high school programs.

An element of a marketing strategy tailored to secondary schools can also be to address girls, for which it is worth finding out why engineering education may be more attractive to them than other fields of study. In the last decade, very serious programs have been launched in the field of attracting girls to STEM careers all over the world and

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in Hungary, and active participation in them or starting their own programs can be an important recruitment goal for Óbuda University.

