







ISBN 978-9941-8-7135-1

მე-8 ქახთუდ-პოდონუხი საეხთაშოხისო სამეცნიეხო კონფეხენცია "სატჩანსპოჩტო ხიჹი ევჩოპა-აზია"

8th Georgian-Polish International **Scientific Conference** "Transport Bridge Europe-Asia"

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16-18 ოქგომბეჩი, 2024, თბივისი 16-18 October, 2024, Tbilisi









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შრომათა კრებული

8th Georgian-Polish International Scientific Conference
"Transport Bridge Europe-Asia"

Collection of works

ISBN 978-9941-8-7135-1

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EDUCATION OF STUDENTS OF TRANSPORT SPECIALTIES IN POLAND CONSIDERING THE POSSIBILITIES OF INTERNATIONAL COOPERATION

Aleksander Sładkowski, Silesian University of Technology, E-mail: <u>Aleksander.Sladkowski@polsl.pl</u>

Summary:

The article examines the possibilities of training foreign students in Polish higher education institutions in the discipline of Transport. The offers of a number of higher education schools are shown, financial and organizational aspects are considered. The possibilities of cooperation with foreign partner universities for joint training of students are discussed. Particular attention is given to the possibility of implementing double degree programs.

Key words:

81

13

discipline Transport, Polish higher education institutions, financial and organizational aspects, English-language courses, cooperation, double degree programs.

INTRODUCTION

Poland is one of the most important countries in Europe in terms of transport communications. This is not surprising, since the most important transcontinental corridors from East to West and from South to North pass through Poland. It is obvious that the current political situation in the world is not conducive to the exchange of goods. This is especially true for the military situation in eastern Ukraine, where traditional transport communications have been disrupted as a result of Russian aggression. Nevertheless, according to statistics on transportation in Europe for 2022 in tonne-kilometers, Poland ranks second after Germany for rail transport and first for road transport [1].

The above trends determine the needs of the labour market in Poland. It is therefore not surprising that in the article [2] among the most popular specialties, truck drivers currently occupy the first place. This is the most widespread profession. Obviously, it does not require higher education, but at the same time, most transport companies require managers, logisticians, and transport process organisers. Specialists are needed for the traffic police and inspection. Here, a specialised higher education already required. Accordingly, education institutions are expanding recruitment of young people every year for studies in specialties that are somehow related to the transport industry.

TRAINING OF HIGHER-QUALIFIED SPECIALISTS IN POLISH HIGHER SCHOOLS

Currently, education in Polish universities is primarily classified by disciplines, which in turn are divided into separate specialties. Since the author of the article works at the Silesian University of Technology, we will base our analysis on the offer of this university for applicants for the 2024/25 academic year. In particular, several faculties offer a choice of the following disciplines: Transport; Aeronautics and aerospace engineering; Logistics; Railway transport. As an example, let's consider the discipline Transport, within which at the Faculty of Transport and Aviation Engineering, a student can choose one of the following specialties at the first (engineering) level of study:

- o Operation of motor vehicles;
- o Operation of rail vehicles;
- o Rail infrastructure and traffic;
- o Traffic engineering;
- o Transport logistics;
- o Aviation mechanics and operations;
- Air navigation;
- Technology and management in road transport;
- Industrial transport.

It should be noted that not only within the above disciplines can there be specialties related or close to the transport industry. For example, at the Faculty of Civil Engineering, within the discipline Civil engineering, a student will be able to study the following specialties:

- o Road construction;
- o Roads, streets and highways;
- o Railroads;
- o Bridges.

If we consider the situation in Poland as a whole, many higher education institutions offer applicants to study subjects related to transport, which meets the needs of the industry. As an example, let's consider the main discipline Transport. In the 2024/25 academic year, 17 state and 6 private higher schools offer training in this discipline [3]. State education is more prestigious and, in addition, free of charge for full-time education. Table 1 presents the offers of the specified state higher schools (arranged in alphabetical order).

Table 1
Propositions of Polish public higher education institutions
for training students in the discipline Transport

		1st engineering level		2nd master level	
No.	Higher school	Study time (years)	Form of classes	Study time (years)	Form of classes
1	Cracow University of Technology	3,5 4,5	full-time, part-time	1,5 2,0	full-time, part-time
2	Gdańsk University of Technology	3,5	full-time	1,5	full-time
3	Gdynia Maritime University	3,5	full-time, part-time	1,5	full-time, part-time
4	Kielce University of Technology	3,5 4,0	full-time, part-time		
5	Koszalin University of Technology	4,0	full-time, part-time		
6	Lodz University of Technology	3,5	full-time		
7	Lublin University of Technology	3,5	full-time	1,5	full-time
8	Maritime University of Szczecin	3,5	full-time, part-time	1,5	full-time, part-time
9	Poznan University of Technology	3,5	full-time, part-time	1,5	full-time, part-time
10	Rzeszow University of Technology	3,5	full-time	1,5	full-time
11	Silesian University of Technology	3,5	full-time, part-time	1,5	full-time, part-time
12	State University of Applied Sciences in Piła	3,5	full-time, part-time		
13	State Vocational School in Suwałki	3,5	full-time		
14	University of Bielsko-Biala	3,5 4,0	full-time, part-time	1,5	part-time
15	Warsaw University of Technology	3,5	full-time, part-time	1,5 2,0	full-time, part-time
16	West Pomeranian University of Technology in Szczecin	3,5	full-time	1,5	full-time
17	Wrocław University of Science and Technology	3,5	full-time	1,5	full-time

As can be seen from the table, the first level of study, upon completion of which the student receives the title of engineer, is 3.5-4.5 years (mostly 3.5 years, i.e. 7 semesters). All higher schools teach this discipline full-time, while most also have a part-time course, which is paid.

Only the most prestigious universities offer education at the second (master's) level, as they have higher requirements for the teaching staff. In general, training at this level lasts for 1.5 years (3 semesters). The exception is some universities where part-time courses last for 2 years.

TUITION FEES AT POLISH UNIVERSITIES AND OTHER EXPENSES

A small number of leading universities conduct training not only in Polish, but also in English,

and only for full-time classes. Training in English is paid. The amount of payment is set by each university individually. Table 2 shows a comparison of payment for some universities.

Table 2
Tuition fees for English-language courses in Transport for some leading universities

Higher school	1st engineering level	2nd master level		
Poznan University of Technology		10500 PLN - first semester, 9200 PLN - each following semester		
Silesian University of Technology	900 EUR - first semester, 3700 PLN - each following semester	900 EUR - first semester, 3700 PLN - each following semester		
Warsaw University of Technology	-	non-EU students: 2600 EUR per semester EU students: 3500 PLN per semester		

It should be noted here that the provided data on fees was obtained from the websites of the universities mentioned. In order for the reader to navigate this information, we will indicate that the average exchange rate of EUR → PLN on 12.09.2024 was 4.287. It should also be noted that the lack of an offer of classes in English for the first level of study at universities other than the Silesian University of Technology does not mean that these universities do not have similar offers for other disciplines. Organizing such classes at the second level of study, which lasts not 7 semesters, but only 3 semesters, is much simpler.

It was stated above that at the Silesian University of Technology, within the Transport discipline, there are several specializations that a student can choose. This does not mean that a student will necessarily study in the specialization he/she has chosen. This largely depends on the choice of other students, i.e. depending on the students' wishes, academic groups will be organized in one or another specialization. These preferences change from year to year, and the university management tries to organize the studies depending on the wishes of most students. This applies to an even greater extent to the choice of specializations with instruction

in English. Usually, at the first level of study, students study in English in one or two groups. In this regard, foreign students often prefer studying in Polish. Firstly, there is a larger choice of specialties. Secondly, tuition fees for foreign students in Polish groups are significantly lower. For comparison, tuition fees for Transport in Polish at the Silesian University of Technology are:

- o for level 1 education: 500 EUR first semester, 1900 PLN - each following semester;
- o for level 2 education: 600 EUR first semester, 2250 PLN each following semester.

One of the mandatory requirements for the admission of foreign students is their knowledge of English or Polish at level B2, which must be confirmed by a relevant certificate. In the case of Polish, this is not always possible, so in order to prepare students for further studies in Polish, the Silesian University of Technology organizes paid intensive courses in Polish, which are conducted online. In the future, after admission, the student will be given the opportunity to study Polish in parallel with his main studies.

Another necessary expense for a foreign student who will study in Poland is renting an apartment. Rental prices in Poland vary significantly

between cities. Obviously, housing in popular tourist centers such as Krakow, Gdansk or Warsaw will be significantly higher than the average. But even in Katowice, which is not so popular among tourists, the average price of renting an apartment is 2663 PLN according to data [4]. It is therefore not surprising that foreign students prefer to stay in comfortable rooms in university dormitories. In particular, for accommodation in a double room in the Babilon

dormitory of Silesian University of Technology with an area of 20 m², a student must pay 510 PLN per month.

Obviously, another item of expenditure for a foreign student is food. In this case, this is usually not a significant problem, since according to [5] Poland is one of the cheapest countries in Europe (Fig. 1).

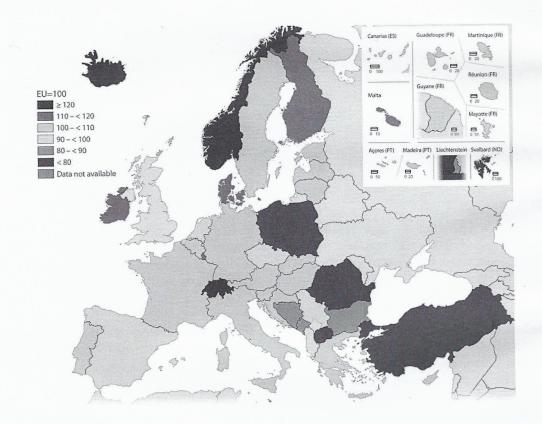


Fig. 1. Price level index for food and non-alcoholic beverages 2023 [5]

OPPORTUNITIES FOR COOPERATION IN THE FIELD OF EDUCATION WITH FOREIGN UNIVERSITIES

The Silesian University of Technology has developed and offers 3 possible schemes of cooperation in the educational field for the possibility of cooperation with foreign higher education institutions. These diagrams are shown in Fig. 2-4.

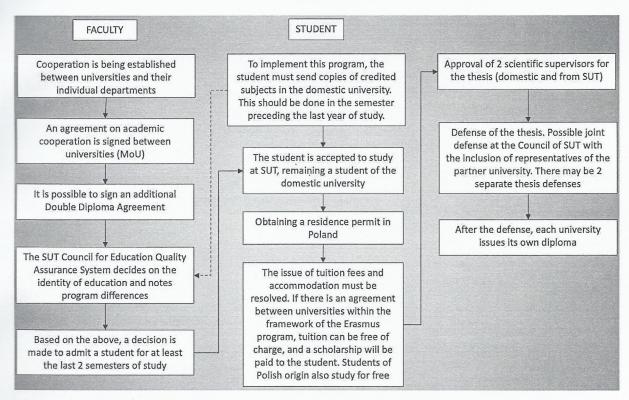


Fig. 2. The first scheme for the training of students of 1 and 2 levels of study

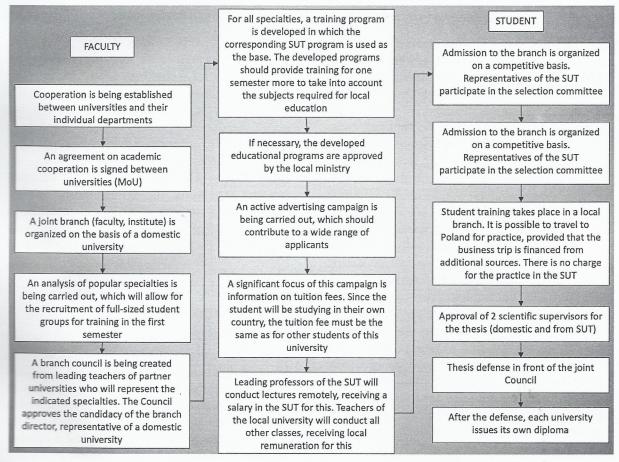


Fig. 3. The second scheme for the training of students of 1 and 2 levels of study

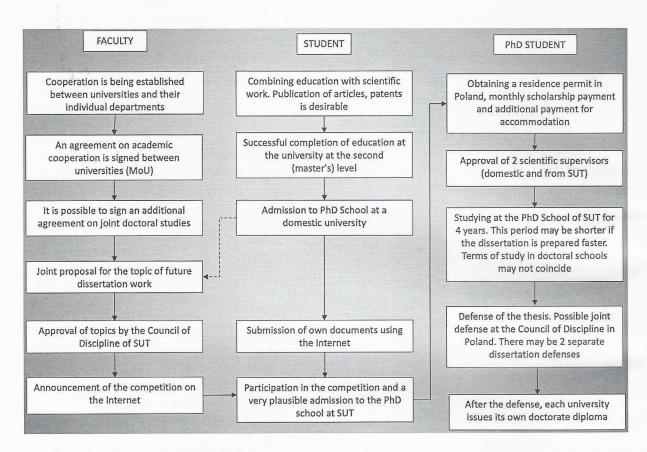


Fig. 4. The scheme for the training of students of 3 (PhD) level of study

The first scheme of training students is the easiest to implement. It has already been used for the dual diploma process. Several students from Satbayev University (Almaty, Kazakhstan) and University Tashkent State Transport successfully completed (Uzbekistan) educational process at the Silesian Technical University in the Faculty of Transport and Aviation Engineering, defending their master's theses and receiving the title of master-engineer in Poland.

The second scheme may be more attractive for students, as it involves significantly lower fees and the opportunity to continue their education in their own country without going to Poland or with separate internships. This scheme was enthusiastically accepted by a number of Ukrainian universities and was already at the implementation stage. Unfortunately, the beginning of the active phase of the war suspended the implementation of this project.

The third scheme, designed for training foreign doctoral students in Poland, is currently being implemented. Several foreign doctoral students have been accepted to the doctoral school at the Silesian University of Technology, who are

currently actively engaged in conducting scientific research with the aim of further preparing their dissertations.

All of the above schemes can be successfully applied not only to countries outside the EU, but also to European countries. In this case, there is the possibility of using student funding from European educational programs such as ERASMUS+, CEEPUS and others. The only requirement from the Polish side is the completion of at least the last two semesters in Poland, acceptance of the student's previous educational process based on the submitted transcript and successful defense of the thesis.

CONCLUSIONS

In conclusion, it should be noted that education in Polish universities is at a very high level. Many universities are among the top thousand prestigious rankings of the best universities in the world. A student receiving a diploma from a Polish university gives him the opportunity to find employment in all European and a number of other countries.

It should also be emphasized that cooperation with foreign universities is very useful for increasing the ranking of Polish universities. At the same time, the Silesian University of Technology adheres to the basic principle that a student's participation in the educational process in Poland should not harm the parent university. That is, if a given student goes to study in Poland, this should contribute to the prestige of his main university.

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