Piotr DUDZIK, Monika SROKA-BIZOŃ, Krzysztof TYTKOWSKI Silesian University of Technology Geometry and Engineering Graphics Centre Krzywoustego 7 Street, 44-100 Gliwice, Poland

phone/fax: + 48 32 237 26 58 e-mail: piotr.dudzik@polsl.pl, monika.sroka-bizon@polsl.pl, krzysztof.tytkowski@polsl.pl

WHAT DO WE KNOW ABOUT STUDENTS?

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The change of the political system which took place in Poland in 1989 gave rise to revolutionary changes in social and economic life. After 1989, higher education system also experienced rapid changes, which was particularly visible in the number of students, growing annually since 1990, and in the dynamic increase of the net enrolment ratio. [1]

			Table 1							
Number of university students in Poland in 1990-2011										
Academic year	Total number of students	Academic year	Total number of students							
1990/1991	390,409	2001/2002	1,718,747							
1991/1992	414,609	2002/2003	1,800,548							
1992/1993	481,273	2003/2004	1,858,680							
1993/1994	568,702	2004/2005	1,930,917							
1994/1995	666,712	2005/2006	1,953,832							
1995/1996	779,907	2006/2007	1,941,445							
1996/1997	917,939	2007/2008	1,937,404							
1997/1998	1,082,657	2008/2009	1,927,762							
1998/1999	1,265,347	2009/2010	1,900,014							
1999/2000	1,421,277	2010/2011	1,841,251							
2000/2001	1,584,804	2011/2012	1,764,060							

Table 2

Net enrolment ratio in higher education system in Poland in 1990-2011											
Year	1990	1995	2000	2005	2006	2007	2008	2009	2010	2011	
Net enrolment ratio in higher education system	9.8	17.2	30.6	38.0	38.8	39.7	40.6	40.9	40.8	40.6	

The reform of the Polish system of education, which was initiated in 1990, along with the signing of the Bologna declaration, brought about structural and organisational changes in higher education system. One of the milestones was the entry in the Act of 27 July 2005 Law on Higher Education (Article 169, Point 3) definitely stating that the admission to first cycle programmes and long cycle programmes shall be subject to the results of the secondary education examination

(*matura* exam). The law gave the universities the possibility to run additional entrance examinations only when it is necessary to verify the knowledge and skills which are not tested by the secondary school examination. [2] [3] [4]

According to the Silesian University of Technology admission conditions and procedures for the candidates in the academic year 2014/2015, the basis for the admission to first cycle programmes at technical, mathematical, and management faculties was the number of points acquired in the *matura* exam in Mathematics (basic level) and the number of points for additional subjects (extended level): Mathematics, Physics and Astronomy, Chemistry, Biology, Computer Science

 $P = 0.6 \times W_{main} + 0.4 \ x \ W_{additional}$

P-total number of points in the application process

W_{main} – number of points (%) in the Mathematics matura exam (basic level)

 $W_{additional}$ – number of points (%) for the additional subject in the *matura* exam (extended level) elected by the candidate (Mathematics, Physics and Astronomy, Chemistry, Biology, Computer Science)

Thanks to such requirements, is possible to assume that at least 60% of the points acquired by the candidate refer to his or her mathematical knowledge.

In the article, the authors present comparative analyses of the results of the first-cycle students in the Civil Engineering programme during the Descriptive Geometry and Technical Drawing course and of the MCT results in relation to the number of points acquired in the university application process. The analyses are a basis for the formulation of an answer to the question whether the number of points acquired by the students in the application process correlates with their results during the course and with MCT results and whether it is reliable for the assessment of the students' geometric and spatial skills, under the assumption that such skills are particularly important for future civil engineers.

References:

- [1] Ministry of Science and Higher Education Report, Higher Education in Poland, 2013.
- [2] The Act of 7 September 1991on the Education System.
- [3] The Act of 8 January 1999 on the Implementation of the Education System Reform.
- [4] The Act of 27 July 2005 Law on Higher Education.