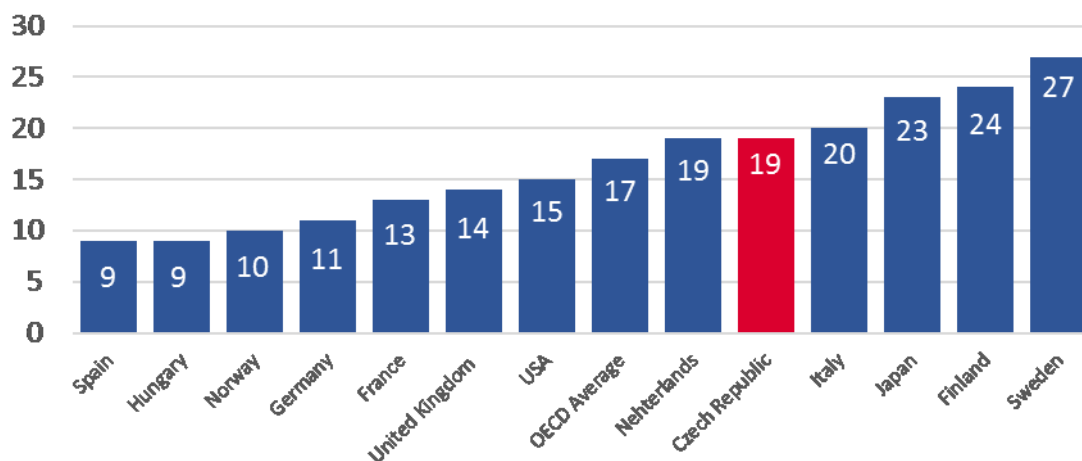


9. Technical Education

For many years the former Czechoslovakia produced the highest percentage of science and technical graduates in the world. This tradition continues in the Czech Republic: in 2008 the proportion of university degrees awarded in science-related fields (engineering, manufacturing and construction) was among the highest in Europe. The government is committed to sustaining this by maintaining or increasing funding in these areas.

Percentage of PhD students who graduate from engineering, manufacturing and construction, %, (2013)



Source: Education at a Glance 2015, OECD

SECONDARY TECHNICAL SCHOOLS AND VOCATIONAL TRAINING CENTRES

Secondary technical schools (Střední průmyslová škola) and **Integrated secondary schools** (Integrovaná střední škola) take students to a relatively high professional level through a mixture of general education courses, theoretical classes and practical training in particular fields such as general machinery, textile machinery, agricultural machinery, chemical engineering and electrical engineering, among others. Students finish their secondary education by sitting for the *maturita* (graduation) exam, which entitles them to apply for technical colleges and universities.

Vocational training centres (Střední odborné učiliště) provide more work-based training over three to four years in specialised fields (e.g. high-voltage electricity, textile machinery or automotive electronics). Extensive practical training at companies is a major part of the curriculum. Three-year programmes are concluded with an apprenticeship exam. In certain cases, students may opt for a higher course of study (four years instead of three) which, alongside practical training, also provides extensive general education. In this case students also sit for the *maturita* exam.

HIGHER PROFESSIONAL SCHOOLS (TECHNICKÉ VYŠŠÍ ODBORNÉ ŠKOLY)

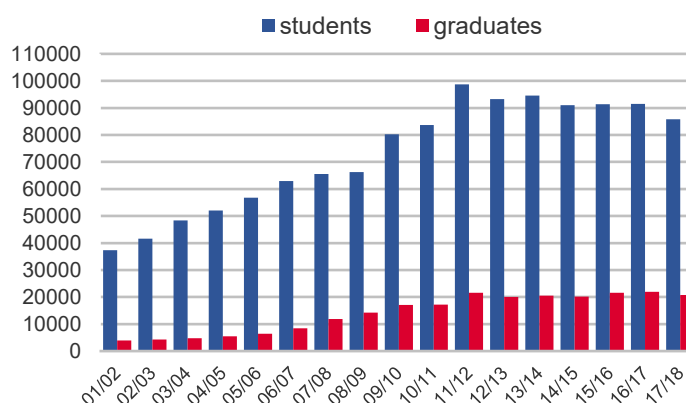
Equivalent to German *Fachhochschulen*, higher professional schools are usually located on the same campus and share resources with secondary technical schools. They usually provide a three-year technical education after completion of secondary education. Higher professional schools currently do not have the status of universities.

UNIVERSITIES

There are currently more than 85,000 technical university students and students who study technical subjects at other universities. More than 20,000 university graduates in technical and scientific subjects enter the workforce every year.

Source: Ministry of Education, Youth and Sport, 2018;
CzechInvest, 2018

Students and graduates at technical faculties



Largest Technical Faculties at Czech Universities, 2017/2018

University	City	Students	Graduates	PhD Students
Czech Technical University, (ČVUT)	Prague			
Civil Engineering		3,894	1,269	404
Mechanical Engineering		2,779	615	265
Electrical Engineering		2,780	666	331
Faculty of Information Technologies (est. 2009)		2,120	373	63
Transportation Sciences		1,259	243	119
Nuclear Sciences and Physical Engineering		1,176	263	276
Architecture		1,591	434	153
University of Chemistry and Technology, (VŠCHT)	Prague			
Chemical Technology		1,211	271	227
Environmental Technology		402	117	136
Biochemical Technology		1,582	394	226
Chemical Technology Engineering		727	172	170
Charles University,	Prague			
Faculty of Mathematics and Physics		2,232	427	545
University of West Bohemia, (ZČU)	Plzen			
Mechanical Engineering		1,101	198	150
Electrical Engineering		944	273	104
Applied Sciences		1,065	216	163
Technical University of Liberec	Liberec			
Mechanical Engineering		770	147	84
Mechatronics		502	106	65
Textile Engineering		810	144	70
University of Pardubice	Pardubice			
Chemical Technology		1,405	356	180
Transport		1,411	328	91
Electrical Engineering and Informatics		662	129	37
Brno University of Technology	Brno			
Civil Engineering		4,466	1,275	352
Mechanical Engineering		4,023	1,121	306
Electrical Engineering and Communication		3,122	786	322
Information Technology		2,269	488	167
Chemistry		1,113	283	151
Architecture		502	174	46
VŠB - Technical University of Ostrava	Ostrava			
Civil Engineering		1,263	344	76
Safety Engineering		1,056	246	102
Mechanical Engineering		1,808	443	188
Electrical Engineering and Computer Science		2,317	504	241
Mining and Geology		1,970	585	257
Metallurgy and Materials Engineering		1,163	355	128
Tomáš Baťa University	Zlín			
Faculty of Technology		1,580	295	130
University of Life Sciences	Prague			
Faculty of Engineering		1,302	232	65
Faculty of Forestry, Wildlife and Wood Science		1,949	301	164
Škoda Auto University	Mlada Boleslav			
		1,068	198	0
Total		85,757	20,794	22,228

Source: Ministry of Education, Youth and Sport, 2018