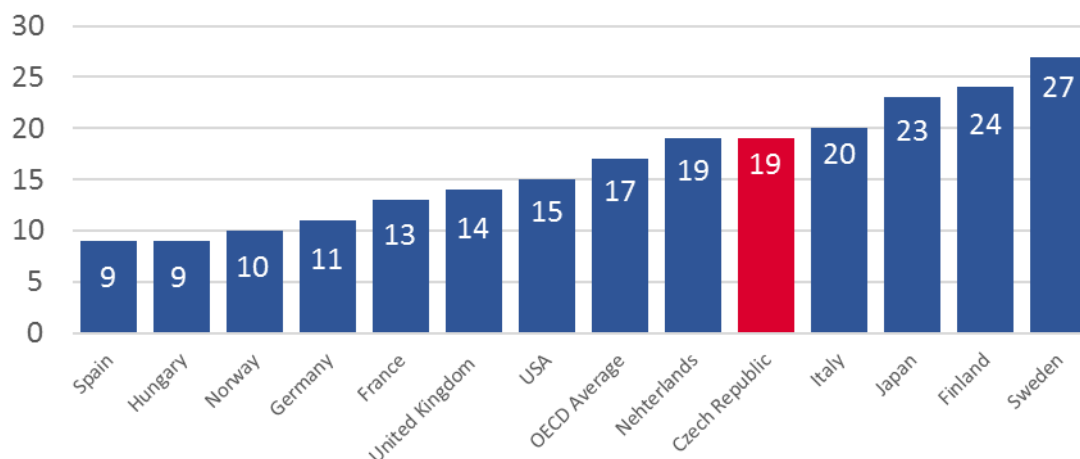


11. Technical Education

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)

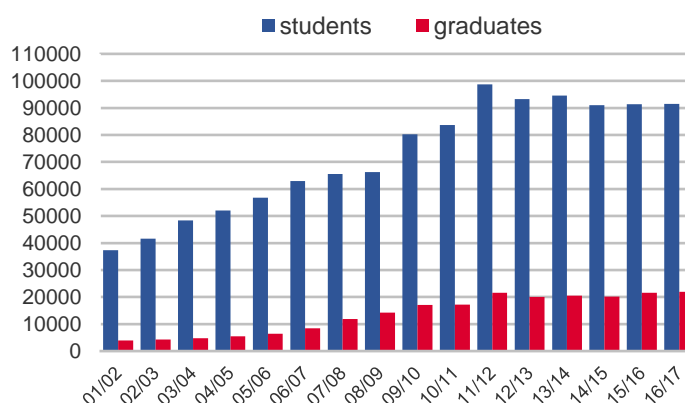
Equivalent to German *Fachhochschulen*, higher professional schools are usually located on the same campus and share resources with secondary technical schools. They usually provide a three-year technical education after completion of secondary education. Higher professional schools currently do not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

UNIVERSITIES

There are currently more than 91,000 technical university students and students who study technical subjects at other universities. More than 21,000 university graduates in technical and scientific subjects enter the workforce every year.

Source: Ministry of Education, Youth and Sport, 2017; CzechInvest, 2017

Students and graduates at technical faculties



Largest Technical Faculties at Czech Universities, 2016/2017

University	City	Students	Graduates	PhD Students
Czech Technical University, (ČVUT)	Prague			
Civil Engineering		4,278	1,290	445
Mechanical Engineering		2,720	573	264
Electrical Engineering		2,892	721	380
Faculty of Information Technologies (est. 2009)		2,171	397	70
Transportation Sciences		1,212	324	131
Nuclear Sciences and Physical Engineering		1,284	253	286
Architecture		1,652	408	172
University of Chemistry and Technology, (VŠCHT)	Prague			
Chemical Technology		1,223	264	242
Environmental Technology		484	75	138
Biochemical Technology		1,577	357	240
Chemical Technology Engineering		705	182	168
Charles University,	Prague			
Faculty of Mathematics and Physics		2,248	442	561
University of West Bohemia, (ZČU)	Plzen			
Mechanical Engineering		1,173	184	158
Electrical Engineering		1,017	291	112
Applied Sciences		1,093	264	186
Technical University of Liberec	Liberec			
Mechanical Engineering		834	184	99
Mechatronics		539	122	77
Textile Engineering		1,005	166	87
University of Pardubice	Pardubice			
Chemical Technology		1,512	390	198
Transport		1,591	331	90
Electrical Engineering and Informatics		770	154	42
Brno University of Technology	Brno			
Civil Engineering		4,907	1,377	364
Mechanical Engineering		4,207	1,084	327
Electrical Engineering and Communication		3,369	846	378
Information Technology		2,337	491	196
Chemistry		1,162	238	145
Architecture		541	136	39
VŠB - Technical University of Ostrava	Ostrava			
Civil Engineering		1,405	399	101
Safety Engineering		1,147	273	109
Mechanical Engineering		1,888	463	211
Electrical Engineering and Computer Science		2,580	587	253
Mining and Geology		2,281	653	253
Metallurgy and Materials Engineering		1,333	396	128
Tomáš Baťa University	Zlín			
Faculty of Technology		1,791	304	134
University of Life Sciences	Prague			
Faculty of Engineering		1,374	247	69
Faculty of Forestry, Wildlife and Wood Science		2,009	327	187
Škoda Auto University	Mlada Boleslav			
		1,036	200	0
Total		91,525	21,929	23,265

Source: Ministry of Education, Youth and Sport, 2017