



Switzerland – The place for education, research and innovation

Switzerland is one of the most competitive countries in the world. Its success is the result of generous investments aimed at creating an efficient system of education and research. Equally important are values and principles such as ensuring the autonomy of higher education institutions and researchers, fostering competition and quality when allocating public funds, and encouraging an open outlook. These values are shared by the agencies and institutions involved in education, research and innovation. Switzerland is an associated member of the EU's Framework Programmes for Research and Technological Development as well as its Education Programmes.

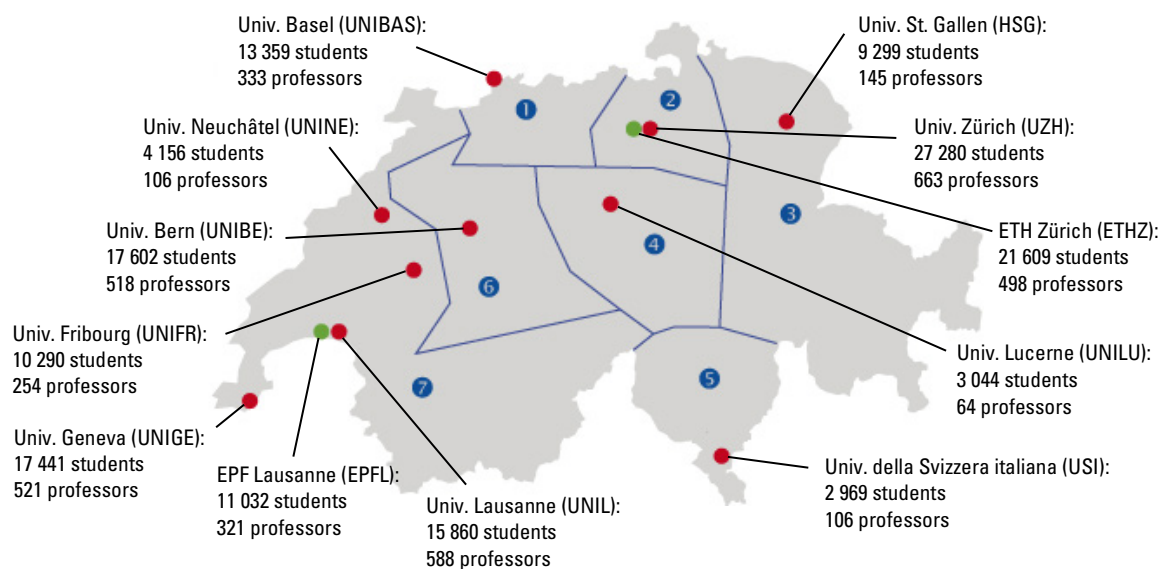
General Information

- Surface area: 41 290 km²
- Population: 8 513 200 (2018)
- Official languages: German, French, Italian and Romansh
- GDP: USD 609 billion (2019)
- GDP per capita: USD 70 954 (2019)
- GDP annual growth rate: 0.9% (2019)

Source: [OECD](#)

Education

- Switzerland's public spending on education corresponds to 5.1% of its GDP (2016).
- After finishing their compulsory education, around one third of young people opt for a general education school and two thirds follow the path of vocational education and training.
- Switzerland has 12 tier-one (T1) universities and 8 universities of applied sciences (UAS).
- Around 50% of T1 university professors and 28% of UAS teachers are from abroad.
- Around 31% of students of T1 universities and 19% of students of UAS are from abroad.



- ① University of Applied Sciences and Arts Northwestern Switzerland (FHNW): 13 809 students, 770 teachers
- ② Zürich University of Applied Sciences (ZFH): 22 836 students, 1 200 teachers
- ③ University of Applied Sciences of Eastern Switzerland (FHO): 6 334 students, 489 teachers
- ④ Lucerne University of Applied Sciences and Arts (HSLU): 7 742 students, 633 teachers
- ⑤ University of Applied Sciences and Arts of Southern Switzerland (SUPSI): 5 944 students, 359 teachers
- ⑥ Bern University of Applied Sciences (BFH): 7 212 students, 720 teachers
- ⑦ University of Applied Sciences Western Switzerland (HES-SO): 21 038 students, 1 851 teachers
- ⑧ Kalaidos University of Applied Sciences (private, located in several towns): 2 509 students, 48 teachers

Research and Development (R&D)

- R&D personnel makes up 81 751 full-time equivalents, including 46 088 researchers (2017).
- Switzerland spent CHF 22.6 billion on R&D in 2017, an increase of 2% since 2015.

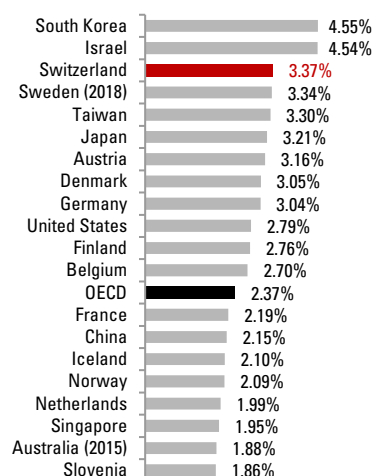
R&D financed by:	CHF m	%
Government	5 839	25.9%
Confederation	3 491	15.5%
Cantons	2 348	10.4%
Industry	15 117	67.0%
Other national sources	416	1.8%
Abroad	1 178	5.2%
Total	22 550	100%

R&D performed by:	CHF m	%
Industry	15 649	69.6%
Government	184	0.8%
Higher education	6 217	27.6%
Private non-profit sector	499	2.2%
Total	22 550	100%

Source: [Federal Statistical Office](#), reference year 2017

- Switzerland's total R&D expenditure corresponds to 3.4% of its GDP. This value is significantly above the OECD average.

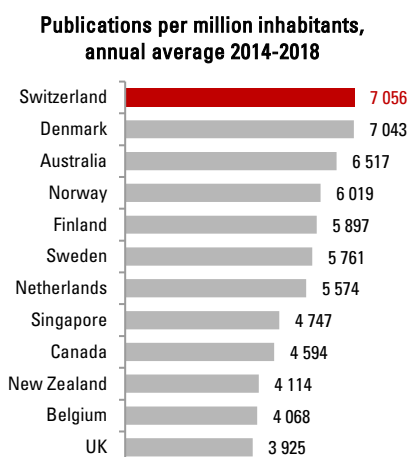
R&D expenditure as a % of GDP, 2017



Source: OECD, [Main Science and Technology Indicators Database](#)

Publications

- With an impact (citation index) of 125 Switzerland occupies a prominent position (3rd slot, behind the Netherlands and the UK).
- Swiss researchers produce roughly 1.1% of all scientific papers published worldwide (20th slot). If we relate the number of scientific papers to the country's total population, Switzerland is at the top of the list.

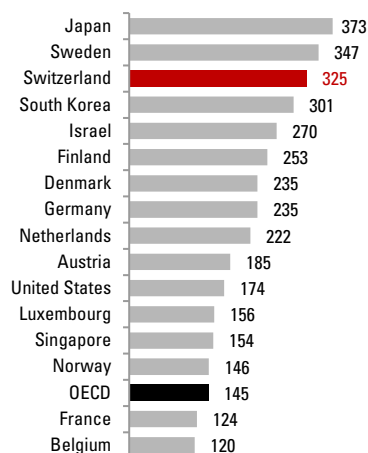


Source: SERI, [Scientific publications in Switzerland, 2008-2018](#)

Innovation performance

- Switzerland ranks 1st in the *European Innovation Scoreboard 2020* and the *Global Innovation Index 2020*, and 5th in the *Global Competitiveness Report 2019*.
- Switzerland ranks 3rd with regard to the number of patents expressed relative to the total population.

PCT patent applications per million inhabitants, 2017



Source: OECD, [Main Science and Technology Indicators Database](#)

Position of Swiss Universities in International Rankings

	EPFL	ETHZ	UNIBAS	UNIBE	UNIFR	UNIGE	UNIL	UNINE	HSG	USI	UZH
Shanghai Ranking 2020	83	20	88	101-150	401-500	59	101-150			701-800	56
QS Ranking 2021	14	6	149	114	601-650	106	169		428	273	69
Times Ranking 2020	38	13	94	113	301-350	144	198	501-600	401-500	301-350	90

Source: <http://www.universityrankings.ch/en/>