



INNOVATION AND TECHNOLOGY

Three of Switzerland's strengths are especially prominent: high degree of innovation, supremely educated workforce and first-class scientific research organizations. Cutting-edge technologies and a business-friendly climate also contribute to our country's productivity.

Image
Swiss Federal Laboratories for Materials
Science and Technology (EMPA),
Dübendorf



Research and Development Hub

Image
UCB Farchim, Bulle

WORLD-CLASS UNIVERSITIES AND RESEARCH

Switzerland invests almost 3.4% of its GDP in research and development, one of the highest percentages in the world. More than 60 universities help to ensure the highest level of professional work. They work closely with the international research community and take part in scientific partnerships. They connect with industry through the exchange of knowledge and technology, support innovative start-ups, and establish strong spin-offs. Organizations and companies from Switzerland and abroad value the country's excellent research platform and its role as an international innovation hub. No wonder so many companies are based here, from biopharmaceutical giants Bristol-Myers Squibb and Roivant Sciences to the research centers of Disney and Google.

Almost half of Swiss workers are employed in knowledge-intensive industries. High-tech products form an important pillar of the country's economic success and excellent reputation. Around one quarter of all high-tech products are exported. This underlines the innovation potential of the Swiss economy, which holds a leading position in international rankings. Intellectual property is effectively protected through patent, trademark, design, and copyright law. In 2019, more than 8,000 patent applications were filed in Switzerland. This is the seventh highest figure in the world and it is the highest figure worldwide per capita. Switzerland's international leadership in research is also apparent in the number of Nobel Prize laureates per capita: Switzerland has the highest figure worldwide in this area as well.

CROSS-BORDER COOPERATION

As an important center of research, Switzerland attracts highly qualified foreign researchers. Several internationally important institutions are based here. For example, the European Organization for Nuclear Research CERN, the Swiss Center for Electronics and Microtechnology CSEM and the Paul Scherrer Institute (PSI). CERN is considered to be one of the most important centers in the world for basic research in physics. It was here, in the late 1980s, that the World Wide Web was developed.

The Swiss research community actively participates in the cross-border exchange of knowledge. It is well integrated in the cooperation networks of major European nations and covers a wide spectrum of research fields. Albert Einstein once studied and taught at the Swiss Federal Institute of Technology in Zurich (ETHZ). And he's far from being the only one: ETHZ has always welcomed foreign researchers and lecturers; indeed half of its professors are non-Swiss.



Leading Industries and Technologies

Image
Smart Factory, digital manufacturing,
stock image

- Artificial Intelligence (AI)
- Robotics
- Advanced Manufacturing
- Personalized Health
- Blockchain

A STRONG LOCATION FOR STRONG BUSINESSES

Significant international companies choose to locate their headquarters in Switzerland, a highly industrialized technology location with leading research institutions. The excellent collaboration between academia and industry in Switzerland ensures the rapid transfer of technology in the field of research and development. Three Swiss groups, Roche, Nestle, and Novartis, are among the 40 most valuable companies in the world. More than 850 multinational companies have their regional or global headquarters here, including giants like Johnson & Johnson, Google, Japan Tobacco, Medtronic, and Adidas.

A UNIQUE COMBINATION OF INDUSTRY CLUSTERS

Switzerland has world-renowned universities and research institutes in the field of artificial intelligence (AI). Thanks to legislation favorable to data protection and the proximity to top research, prestigious major tech corporations like Google, IBM, and Microsoft conduct their AI research from Switzerland. Thanks to outstandingly educated ICT specialists, Switzerland has an excellent base for further growth and innovation in the field of digitization technologies.

Based on a long tradition in the machine, electrical engineering, metalworking, and watchmaking industries, a highly industrialized precision cluster has developed in Switzerland and is taking up a leading position in the area of robotics and advanced manufacturing in the digital shift era. Various international companies such as ABB, Oerlikon, Schindler, and Hamilton are optimizing their existing production processes in Switzerland with digital solutions.

Switzerland has one of the most well-established life sciences clusters in the world. As a leading neutral location for global company headquarters, it is extremely attractive for global chemical and pharmaceutical companies such as BeiGene, Takeda, and Biogen, which have located their headquarters and production here. Thanks to this traditional strength in life sciences as well as considerable know-how in ICT, Switzerland is optimally equipped for the new era of personalized health, in which data is integrated into the healthcare system.

Switzerland has also developed into an innovation hub for blockchain. Crypto Valley, originating in Zug, has now become a global hub for international development in blockchain technology. Blockchain technology is used in the fields of supply chain management, the insurance industry, energy provision, and logistics. Legislation globally recognized as favorable to data protection as well as the proactive attitude of the national government and the cantons has created positive general conditions and legal certainty for international companies throughout Switzerland.



Strong Education System

Image
Swiss Federal Institute of Technology
Lausanne (ETHL)

HIGHLY SKILLED WORKFORCE

Excellent, practice-oriented basic education, renowned private and boarding schools, and world-class universities and technical colleges – these are the ingredients for the success of Switzerland’s top-level educational landscape. These factors provide businesses in Switzerland with substantial, lasting benefits. In Switzerland, investors find well-educated, multilingual, motivated, and loyal employees. It is hardly surprising that Google and Oracle, two of the world’s most attractive employers, have chosen to be located in Switzerland. Major international companies work in close partnership with regional universities and recruit large numbers of highly educated employees from this high-quality pool.

The Swiss education system combines practice-oriented vocational training with outstanding university education. This dual system fuels the economy’s capacity for innovation and creativity. Low unemployment rates, even among young people, testify to the strength of the Swiss education system.

WORLD-CLASS STATE AND PRIVATE SCHOOLS

Public schools in Switzerland enjoy an excellent reputation – and with good reason. Students regularly achieve very good results in international PISA assessments. In mathematics, Switzerland’s mean is statistically significantly above the OECD average. Swiss universities regularly occupy top places in international university rankings. Four Swiss universities rank among the world’s top 100: the Zurich and Lausanne Federal Institutes of Technology and the Universities of Basel and Zurich. In fact, the first two are classed among the 40 best universities in the world.

The state school system is complemented by around 260 private and boarding schools. Internationally oriented families will find a tailor-made education system for them. Some staff members of foreign companies often stay in Switzerland only temporarily. Their children receive education in their native language or take part in international education at numerous international schools. They are well prepared for school-leaving exams in their home country, be it the Abitur, the Baccalaureate, or the admission requirements for a U.S.-American university.