

# Talent for today and tomorrow



Micro-diagnostics laboratory  
CSEM Landquart

## Facts and figures

A **highly qualified workforce** and **continuous innovation** are Switzerland's most important capital. The quality of the state school system is internationally renowned. Universities, universities of applied science, advanced technical colleges and international private schools and boarding schools enjoy worldwide recognition.

The federalistic structure ensures a **high-quality education system and proximity to practical economics and research**. The **dual education system** is characteristic: Along with a conventional education with high school diploma and university studies, in many handcraft and industrial trades as well as service professions, apprenticeships provide practical training "on the job".

# The education system

## Personnel with top training

Companies which relocate to the Canton Grisons gain sustainable advantages from the high-quality Swiss education system. This makes well-trained, multilingual, motivated and loyal personnel available for investors. No wonder that several sector leaders such as Hamilton, Trumpf, Würth, EMS-CHEMIE, Cedes, Georg Fischer, Bizerba Busch and Wittenstein are based in the Grisons. Together, these companies provide jobs for more than 3300 employees.



## Private and state schools of global acclaim

Foreigners who relocate to Switzerland greatly value the high educational level in state and private schools. This high quality characterises the whole education system from the primary school to higher education. Thanks to the myriad of opportunities available to them, children at all school levels can integrate well and according to their level of learning.

## Vocational training with further education possibilities – dual training system

Apprenticeships last three or four years and involve practical work in a company and theory work attending trade-specific lessons at a vocational college. Training is available in a range of around 250 professions. Along with the regular school qualifications, equivalent high-school diploma / 'A level' exams can be taken which allow entrance to an advanced technical college.

Having completed initial training professionals may attend advanced colleges of further education in order to gain career-specific qualifications recognised throughout Switzerland.

Successful qualification of professional and advanced exams leads to a Swiss Federal Certificate or a diploma which guarantees internationally comparable qualifications.

## Key figures

# 6

Universities\*

# 14

Universities of applied sciences and advanced technical colleges\*

# 60,000

students\*

Potential future employees

# 1<sup>st</sup> place

Switzerland takes first place for qualified employees

Source: Global Talent Competitiveness Index (GTCI) 2014  
\* within a 75 min. drive

## Academic career

A high-school education lasts four years and allows academic further education. Switzerland has a total of twelve recognised university facilities which are regularly ranked among the leading positions in international comparisons.

## Internationally compatible

Internationally oriented families have a choice of tailor-made school offers. Their children are taught in a large number of international schools or internationally aligned boarding schools in their mother tongue or in internationally accepted study courses. They are prepared perfectly for school leaving diplomas which are valid in their home countries – for example for A-levels, a baccalaureate or qualifications for entry to an American university.



# Educational opportunities in the Grisons area

Educational institutes in the Grisons area offer Bachelor, Master and engineering qualifications in the most important MINT fields (mathematics, informatics, natural sciences and technology). In this way, they train highly-qualified, sought-after experts in a variety of fields. These include electro, system and machine technology, engineering informatics, photonics, life sciences, chemistry/physics and biology as well as economic engineering, micro-technology etc.

## Universities

Swiss Federal Institute of Technology Zurich ETH  
[www.ethz.ch](http://www.ethz.ch)

University of St. Gallen, St. Gallen  
[www.unisg.ch](http://www.unisg.ch)

University of Zurich  
[www.uzh.ch](http://www.uzh.ch)

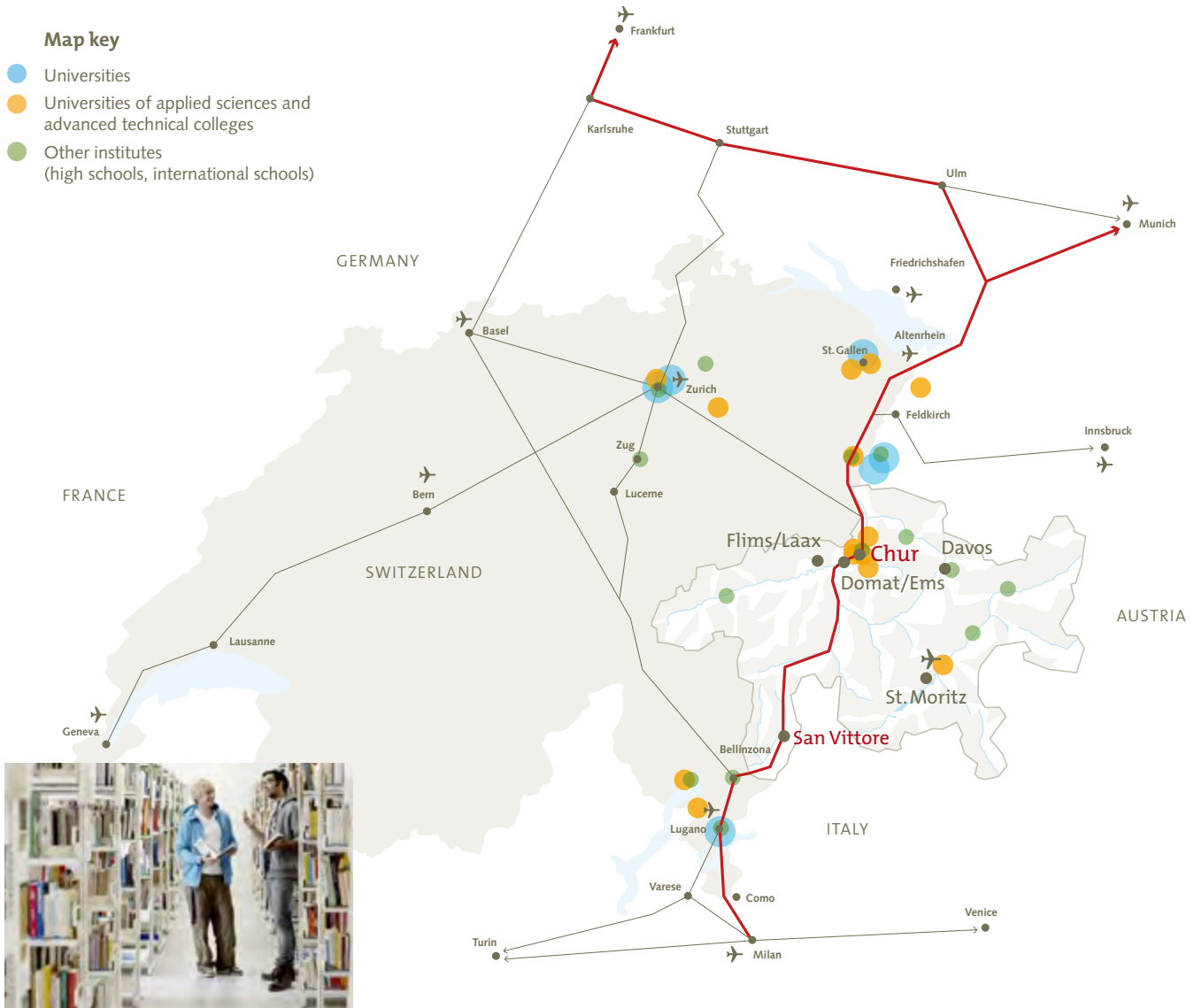
University of Liechtenstein, Vaduz  
[www.uni.li](http://www.uni.li)

Private University in the Principality of Liechtenstein, Triesen  
[www.ufl.li](http://www.ufl.li)

Università della Svizzera Italiana – USI  
[www.usi.ch](http://www.usi.ch)

## Map key

- Universities
- Universities of applied sciences and advanced technical colleges
- Other institutes (high schools, international schools)



### Universities of applied sciences

University of Applied Sciences (HTW), Chur  
[www.htwchur.ch](http://www.htwchur.ch)

University of Applied Sciences and Technology (NTB), Buchs  
[www.ntb.ch](http://www.ntb.ch)

University of Applied Sciences (HSR), Rapperswil  
[www.hsr.ch](http://www.hsr.ch)

University of Applied Sciences, St. Gallen  
[www.fhsg.ch](http://www.fhsg.ch)

University of Applied Sciences of Eastern  
 Switzerland, St. Gallen  
[www.fho.ch](http://www.fho.ch)

Zürcher Fachhochschule (ZFH), Zurich  
[www.zfh.ch](http://www.zfh.ch)

Vorarlberg University of Applied Sciences,  
 Dornbirn, Austria  
[www.fhv.at](http://www.fhv.at)

University of Applied Sciences and Arts of  
 Southern Switzerland, SUPSI, Locarno/Manno  
[www.supsi.ch](http://www.supsi.ch)

### Advanced technical colleges

ibW Institute for vocational training south-eastern  
 Switzerland, Chur  
[www.ibw.ch](http://www.ibw.ch)

Swiss School of Tourism and Hospitality, Passugg  
[www.ssth.ch](http://www.ssth.ch)

Pedagogic Training College Grisons (PHGR), Chur  
[www.phgr.ch](http://www.phgr.ch)

Advanced Training College for Tourism, Grisons,  
 Academia Engiadina, Samedan  
[www.hftgr.ch](http://www.hftgr.ch)

College of Professional Education and Training  
 in Social Pedagogy HFS, Zizers  
[www.hfs-zizers.ch](http://www.hfs-zizers.ch)

Scuola specializzata superiore di tecnica di  
 Bellinzona (SSST), Bellinzona  
[www.ssst.ti.ch](http://www.ssst.ti.ch)

Scuola Specializzata Superiore di Economia (SSSE),  
 Bellinzona  
[www.ssseco.ch](http://www.ssseco.ch)

### Internationally oriented high schools

Along with the Grisons canton high school at Chur, there are many renowned private high schools in and near the Grisons. These include the Lyceum Alpinum Zuoz, the Hochalpine Institut Ftan, the Academia Engiadina in Samedan and the Sport Gymnasium in Davos. They provide teaching and courses in different languages such as English or French as well as promoting achievement by talented students in a selected range of topics.

[www.mittelschulen.gr.ch](http://www.mittelschulen.gr.ch)

### Internationally oriented basic schooling

#### Bilingual private school Formatio, Triesen

Classes from kindergarten to secondary high school. Bilingual teaching in German and English.

[www.formatio.li](http://www.formatio.li)

#### Swiss International School, various locations

Kindergarten to secondary high-school levels, bilingual teaching in German and English at various locations such as Pfäffikon, Männedorf, Winterthur, Zurich and others.

[www.swissinternationalschool.ch](http://www.swissinternationalschool.ch)

#### International School Rheintal, Buchs

Classes from kindergarten to secondary high school. All teaching in English.

[www.isr.ch](http://www.isr.ch)

#### TASIS The American School In Switzerland, Montagnola

From kindergarten to secondary high school, bilingual teaching in Italian and English.

[www.tasis.com](http://www.tasis.com)

#### International School Ticino, Lamone

Also from kindergarten to secondary high school, bilingual teaching in Italian and English.

[www.isticino.com](http://www.isticino.com)

## 1<sup>st</sup> place: for qualified expert personnel

Switzerland is the most attractive country in the world for qualified expert personnel and offers the best opportunities for personal development. One important reason for this, along with the high quality of life and the stable economic situation, is the dual education system providing a choice between an apprenticeship or an academic career.

Source: Global Talent Competitiveness Index (GTCI) 2014

# Research in the Grisons

As a rule, internationally oriented companies in the Grisons are active in know-how and skill-intensive fields such as medical technology, chemistry/plastics, electronics/sensory systems and mechanical engineering. Research and development plays a central role in the manufacture of high-quality products and provision of services by these companies. Along with company in-house research and development departments, these companies also cooperate for specific projects with external research institutes in the canton. These institutes employ highly qualified foreign scientists from throughout the world and are optimally linked through international cooperation agreements and networks.

## General

### Academia Raetica

The Academia Raetica is an umbrella organisation and contact for university-level research and teaching in the Grisons region which includes institutes active in the fields of medicine, technology, natural and social sciences and the humanities. It strengthens the development of the Grisons as a research location and provides information to experts and the public. Members are independent institutes of national or international renown. [www.academiaaetica.ch](http://www.academiaaetica.ch)

### Graduate School Graubünden

The Graduate School Graubünden (GSGR) supports young scientific academics in the Canton Grisons. [www.gsgr.ch](http://www.gsgr.ch)

## The most important research institutes

### CSEM

The research and development center CSEM (Centre Suisse d'Electronique et de Microtechnique) in Landquart specialises in micro and nano-technology, micro-electronics, systems engineering and life sciences. It provides partners in industry with innovative and tailor-made solutions which are derived from the results of its applied research activities. [www.csem.ch](http://www.csem.ch)

### AO Foundation

The AO Foundation (Association for Osteosynthesis) in Davos is a medically-oriented, independent non-profit organisation headed by internationally renowned medical specialists for traumatology and illnesses of the musculo-skeletal system. With more than 16,000 doctors, OP personnel and scientists in more than 100 countries, the AO is today considered to be one of the most significant medical networks in the world. [www.aofoundation.org](http://www.aofoundation.org)

### SIAF

The SIAF (Swiss Institute of Allergy and Asthma Research) in Davos carries out research into the immunological principles of allergy and asthma illnesses in cooperation with the University of Zurich. The SIAF is world leader in its specific field and maintains close contact with regard to exchange of knowledge with the CK-CARE and other clinics in Davos. [www.siaf.uzh.ch](http://www.siaf.uzh.ch)

### PMOD/WRC

The Physikalisch-Meteorologische Observatorium in Davos researches the influence of the sun's radiation on the earth's climate. To do this, it develops instruments for use in space and on the ground. The World Meteorological Organisation has also designated the PMOD as a World Radiation Center (WRC) where reference instruments provide information which serves as a basis for all meteorological radiation measurements in the world. [www.pmodwrc.ch](http://www.pmodwrc.ch)

### CK CARE

The CK-CARE (Christine Kühne Center for Allergy Research and Education) in Davos specialises in research and development work in the field of allergies. [www.ck-care.ch](http://www.ck-care.ch)

### SLF

The Institute for Snow and Avalanche Research (SLF) in Davos is part of the WSL – the Swiss Federal Institute for Forest, Snow and Landscape Research, a federal research center within the domain of the Swiss Federal Institute for Technology (ETH). The SLF carries out research into snow, avalanches and other natural alpine hazards such as rock fall, mudflow or flooding or the relationship between nature, environment and life in the mountains. [www.slf.ch](http://www.slf.ch)

“In Davos we employ scientists from throughout the world. They enjoy ideal conditions for their research activities and appreciate being able to live in this wonderful region.”

Prof. R. Geoff Richards, Director AO Research and Development, Davos



# Crosslinking of research, development and industry as well as promotion of innovation

Locally based research institutes such as the CSEM in Landquart or the AO Foundation in Davos collaborate in scientific partnerships and network through knowledge and technology transfer with industry. They promote innovative start-ups and found high-performance spin-offs.

## CSEM and Kenzen – a cooperation example

Kenzen is a start-up company in the field of bioinformatics, founded in San Francisco, California (USA), which focusses on the development of medical devices and analysis for the health market. Its vision is to monitor the functions of the human body in connection with daily life, environment and activities and to accurately record data which was previously not available. Kenzen is developing the first Bluetooth devices to continually monitor personal health by recording vital signs and analysing beads of sweat. There is a significant market potential for these devices, as shown by the market reaction: Kenzen has already established contact with companies such as Kii, Coca-Cola, Powerade and Hyundai to form strategic partnerships.

In order to penetrate the European markets, Kenzen was looking for a strategic partner to provide specific technology for development of this new product. This partner was found in the Grisons in the form of CSEM at Landquart. The resulting partnership includes licensing of existing technology, product development (hardware, algorithms and software), rapid prototyping and initial support in production. The product introduction is planned for 2016.

In the long term, further development projects for medical and monitoring applications are planned in collaboration with CSEM. Kenzen has decided on the Grisons as a long-term location where it will establish its research and development, production, validation, market and sales business areas for Europe.

[www.kenzenwear.com](http://www.kenzenwear.com) and [www.csem.ch](http://www.csem.ch)

## Facts and Info

Research in the Grisons

[www.bildung-graubuenden.ch](http://www.bildung-graubuenden.ch)

International research cooperation

[www.snf.ch](http://www.snf.ch)

International cooperation education,  
research, science

[www.sbf.admin.ch](http://www.sbf.admin.ch)

## Promotion opportunities for innovative companies

### The Grisons Innovation Foundation

The Foundation for Innovation, Research and Development in the Grisons can provide subsidies, loans or a possible participation in start-up companies to support innovative projects. This support is often provided to SME and young entrepreneurs for implementation of outstanding, innovative projects for the development of novel, competitive products and services. [www.innovationsstiftung.gr.ch](http://www.innovationsstiftung.gr.ch)

### Possibilities of support from the canton

Based on the revised economic development laws, the canton can provide subsidies or loans. A central point is that the funding is used to support innovative companies and ideas which will strengthen the Grisons business location by creating added value, know-how and additional jobs. Detailed information can be found on the homepage:

[www.awt.gr.ch](http://www.awt.gr.ch)

“We had decided to become active in the European market and were looking for a technology partner to develop our products. We were successful in finding the CSEM in Landquart.”

Dr. Sonia Sousa, CEO and Co-Founder  
Kenzen, Landquart

