The canton of Vaud is proud to be a leading European hub in terms of technology and innovation. Vaud has the largest university campus in the country and research centers of global repute. Its research centers and technology parks attract large numbers of international specialists.
WORLD CLASS UNIVERSITIES AND INSTITUTES

Switzerland is very much an international hub for innovation and this reputation is richly deserved, with its levels of expenditure in research and development activities among the highest around the globe (some 3.5% of GDP). Switzerland has featured at or near the top of international rankings for innovation. It maintains peak levels of global competitiveness according to the WEF index, and has done so since 2009.

The secret of Switzerland’s success lies in the synergies of the industry and academia. Close ties between universities and institutes of higher education and industry promote the transfer of knowledge and technologies. Another strong indicator of the quality of a country’s research is recognition of its national publications by researchers in other countries, and Switzerland has the highest percentage of papers cited worldwide.

The country also has the highest proportion of PhDs within the working-age population, thanks notably to the presence of numerous foreign graduates; indeed, a good quarter of students and 40% of researchers in Swiss universities come from other countries. This percentage even reaches 50% in the case of the Federal Institute of Technology Lausanne (EPFL), which, with over 120 nationalities on campus, claims to be Europe’s most cosmopolitan technical university.

VAUD’S LEADING INNOVATION

The canton of Vaud is at the forefront of Swiss innovation. Over time it has specialized in five central fields: life sciences such as pharma, biotech, neuroscience, and medtech which holds an unrivaled position in oncology/immunotherapy. These are the flagships of the digital health sector and the heart of Health Valley.

Digital technologies and their multiple applications, in particular the fields of cybersecurity, data science, robotics and drones produced a concentration of promising companies that pleased the canton of Vaud.

The region benefits from a heritage of international sports, with a veritable cluster established between the IOC and other international sporting federations present in the canton of Vaud. Within this culture lies a strong interaction between research institutes and innovative small and medium-sized businesses and startups in the sports sector.

Precision industries have emerged from the canton’s expertise in watch manufacture in the fields of miniaturization, micro and nanotechnologies applied to measurement instrumentation and robotics. Nutrition has a specific connection with the canton of Vaud as home of Nestlé. The multinational creates some collaborations between the industry and academic sector in the region as proves the research chair at the EPFL.
A QUALIFIED WORKFORCE

Switzerland provides the best international managers on the planet, while their motivation at the workplace is only second to the Danes, according to the World Competitiveness Yearbook published by the IMD. 88% of young people carry on their education after their obligatory schooling has finished, putting Switzerland at the head of all OECD countries. Swiss productivity is also among the highest in the world, with employees stating furthermore that they are very attached to their companies.

At the end of the compulsory part of their schooling, two out of three young Swiss people become apprentices. Their training period lasts from two to four years and includes a practical section in a business as well as a theory aspect in a vocational school. After this training, they receive a federal attestation of professional training or a federal certificate of aptitude. If they so desire, they can then earn a diploma of professional maturity corresponding to their sector, which gives them access to specialized institutes of higher education. These schools provide more practical training to bachelor’s or master’s level, and invest in research and development in collaboration with the écoles polytechniques fédérales and the universities.

HIGHER EDUCATION EXCELLENCE

The excellence of the École polytechnique fédérale in Lausanne is regularly illustrated in international rankings, and even more so by what it actually produces. It oversees the Human Brain Project, whose research involves leading scientists from over 100 European universities and research centers, while one of its spin-offs, called MindMaze, became the country’s first ever “unicorn” (a startup that has gone on to be worth at least a billion US dollars) in 2016. The EPFL also houses the Swiss center of competency for fundamental and applied research in robotics, the brand-new Trust Center for cybersecurity, and the Swiss Data Science Center run jointly with the ETH Zurich.

The UNIL meanwhile has seen a number of its researchers win the Nobel Prize, the most recent being Jacques Dubochet in December 2017 for his cutting-edge and highly promising chemistry research. The Institute for Management Development (IMD) in Lausanne regularly has its MBA programs ranked among the best in the world.
A UNIQUE MODEL IN THE WORLD

The concentration and unique density of the academic and research institutions, as well as the cross-disciplinary way in which they interact, provide an unparalleled pool of talents. With a solid education system and professional training that is virtually unique the world over, the canton of Vaud has a qualified, motivated and multilingual workforce. At the end of their compulsory education, young people can choose among sectors as diverse as construction, medicine and health, mechanics, IT, electrical and electronics, law, biology, commerce, or hospitality and catering.

They can then move on to higher institutes of education such as the University of Lausanne (UNIL), the École polytechnique fédérale de Lausanne (EPFL), the School of Management and Engineering Vaud (HEIG-VD), the École hôtelière de Lausanne (EHL), or the Lausanne School of Art and Design (ECAL), providing them with skills that will take them far beyond cantonal borders. The education system, combining theory and practice, means that the Vaud economy has well-educated professionals who are also ready for the job market.

SYNERGIES IN THE ACADEMIC SECTOR

The specialized institutes of higher education spread across the canton also make a contribution to its excellence in education. They include the School of Management and Engineering Vaud and the Joux Valley School of Technology, which teaches the age-old skill of watch manufacture. The density of research institutes in the canton and the region provides access to a pool of talents that is unparalleled in terms of the cross-disciplinary nature of the institutes and the skills they are home to.

Lastly, there is the Institut du Rosey, which is one of the most prestigious private schools in the world and which has been educating royalty from around the globe for over a century. There is also the Ecole Survil Montreux and the Institut Monte Rosa in Montreux, Collège Alpin Beau Soleil in Villars, the International School of Lausanne, GEMS World Academy in Etoy and the Collège Champittet in Pully, with around 60 private schools in total which provide an excellent education and offer advanced programs not only in English and German but also in Mandarin and Russian.