Greenfield Campus

Swiss Federal Institute of Technology Zurich (CH)

Eidgenössische Technische Hochschule (ETH Zurich)
Motto: Welcome tomorrow
Founded: 1855
Number of employees: 8,191
Number of students: 12,705
Percentage of foreign students: 22%
Ratio male / female students: 71% / 29%
Number of faculties: 15
Largest faculty: Architecture
Number of Nobel Prizes: 21
Annual budget: 717 m EUR [2005]

ETH Hönggerberg, Science City
Motto: Stadtquartier für Denkkultur
Founded: 1969, 2003 redevelopment
Campus area: 320,662 sqm
Floor space: 200,000 sqm + <145,000 sqm planned
Number of employees: 3,500 + 1,400 planned
Number of students: 5,300 + 1,200 planned
Number of residents: 1,000 planned
Number of companies: 10 planned
Number of institutions: 5 ETH
Investments: 75 m EUR [2003–06] + 400 m EUR planned

Location: With Science City, the ETH Zurich aims to establish itself as a leading university of technology. Science City is not only a physical concept for the reorganization of the ETH complexes – ETH Zentrum and ETH Hönggerberg – but even more a concept of how the University’s activities integrate, interact and communicate with the city of Zurich and related institutions elsewhere. Essentially Science City is a networking concept between the ETH, other universities and society at large. In light of this concept, ETH Hönggerberg, a 1960s campus on the outskirts of Zurich, is to be transformed from a monofunctional university compound into an urban quarter that acts as an interface between academia, industry and the general public. The public and on-campus transport network ensures good access to the city and nearby international airport as well as to the European high-speed rail and highway network.

Development: As an enclave located on top of Käferberg and Hönggerberg, thereby separated from and looking out over the city, the satellite campus will develop within its given contours by enhancing the existing landscape and by condensing teaching, research, spin-off activities, living and amenities into a complementary environment. The development strategy for Science City is more a transformational project rather than a building project. Hence, the master plan by KCAP is based on a flexible framework, which can develop a relevant set of rules. In this way it can adapt to the constantly changing demands of science, economy and society without destroying the coherence of the overall concept for the campus. In this regard the master plan is an instrument that controls the process of transformation. It contains minimal design principles in order to allow for a certain degree of freedom and planning flexibility.
ETH Hönggerberg looking towards the city centre and lake of Zurich.

Programme: Science City’s programme is constantly changing. The existing faculty clusters (Physics, Life Sciences, Architecture, and Civil Engineering) will be retained and complemented by a mixed-use housing district. Additionally, residential accommodation, business start-ups, retail outlets, sports and child-care facilities and other services will be organised around the various quarters. The project also envisions a new conference centre, a library and multifunctional spaces for meetings and exhibitions. All these uses are also open to a wider public and together create an attractive on campus environment for studying, working and living. In order to stimulate the exchange of knowledge and ideas, the master plan allows for a radical mix of uses: publicly accessible zones are located next to highly secure laboratories, offices next to apartment blocks, and conference facilities next to sports centres.

Morphology: The urban design strategy of ETH Hönggerberg is all about integration and densification. At the same time, a clear structure will be retained, recalling the original plan by Albert Heinrich Steiner. This plan divided the campus into four quarters with the major thoroughfare, Wolfgang Pauli Street, and the new communication axis of the ‘Congress and Meeting Boulevard’ running perpendicular to it. The basic principle is a spatially interlocking fabric of built volumes and open spaces, internal courtyards and patios, whereby the architecture should be largely flexible, so that it can react to new requirements and different circumstances in the future. The master plan defines building fields whose borders are determined by the most important public spaces and sight lines, in order to allow for a legible and permeable ensemble of buildings. The spaces are not separated from each other but merge into each other to create a connective tissue. Within these fluid transitions, spaces of encounter emerge with their own specific character and potential. This intermixing of different spaces and uses is intended to help turn the existing science hub into a thriving, future-oriented global urban district.

The City of Zurich: With about 370,000 inhabitants, Zurich is the largest city in Switzerland, occupying an important position in Swiss life. Regarded by many as Switzerland’s undercover capital, it leads the way in education and research, medical science and cultural activities. Zurich is known internationally as a financial hub and a large number of banks are based in the city. With its many scientific institutions, Zurich also aims to position itself as a city of science, with Science City being a major part of this ongoing goal.