

SCHWEIZERISCHE HOCHSCHULKONFERENZ
CONFERENCE UNIVERSITAIRE SUISSE
CONFERENZA UNIVERSITARIA SVIZZERA
SWISS UNIVERSITY CONFERENCE



Bundesamt für Bildung und Wissenschaft
Office fédéral de l'éducation et de la science
Ufficio federale dell'educazione e della scienza
Uffizi federal da scolaziun e scienza

2nd Call for Proposals

Swiss Virtual Campus



2000 – 2003

A programme of the Swiss Confederation
entitled under the 1999 Swiss Federal Law on University Development
to support new information and communication technology
in higher education

July 2000

Imprint:

The **submission deadline for proposals** in hardcopy and electronic form is 16 October 2000. Proposals should be submitted to:

The Swiss University Conference
Sennweg 2
3012 Bern
Switzerland

An official application form can be downloaded at <http://www.virtualcampus.ch/>

Contact addresses

Schweizerische Hochschulkonferenz
Sennweg 2
3012 Bern
Dr. Hans-Martin Bürki
Fax: 031 302 17 92
E-mail: hans-martin.buerki@shk.ch
or shk@shk.ch
<http://www.shk.ch>

Bundesamt für Bildung und Wissenschaft
Hallwylstrasse 4
3003 Bern
Dr. Franziska B. Marti
Fax: 031 322 78 54
E-mail: franziska.marti@bbw.admin.ch
<http://www.admin.ch/bbw>

Bundesamt für Berufsbildung und Technologie
Effingerstrasse 27
3003 Bern
Prof. Dr. Beat Hotz-Hart
Fax: 031 371 82 89
E-mail: beat.hotz@bbt.admin.ch

ETH-Rat
Generalsekretariat
Haldeliweg 15
ETH-Zentrum
8092 Zürich
Dr. Christoph Grolimund
Fax: 01 632 11 90
E-mail: grolimund@ethrat.ch

Prof. Bernard Levrat
President of the
Swiss Virtual Campus Commission
Department of Computer Science
University of Geneva
Rue General Dufour, 24
1211 Genève 4
Fax: 022 705 77 80
E-mail: bernard.levrat@cui.unige.ch
<http://cuiwww.unige.ch/~levrat/>

Prof. Peter Stucki
President of the Steering Committee
Swiss Virtual Campus
Dean WWE
Universität Zürich
Rämistrasse 71
8006 Zürich
Fax: 01 634 49 63
E-mail: stucki@ifi.unizh.ch

<http://www.virtualcampus.ch>
<http://www.edutech.ch>

<i>Contents</i>	Page
1. Introduction and current situation.....	4
2. Programme contents.....	5
2.1 Goals.....	5
2.2 Programme structure.....	5
3. Organisation.....	6
4. Second call for proposals schedule.....	8
5. Finances.....	8
6. Information.....	9
7. Terms of participation and instructions for applicants.....	9
8. The selection process.....	10
9. Terms and criteria for project selection.....	10
List of abbreviations.....	11

1. Introduction and current situation

New information and communication technology has an increasing influence on our everyday lives. Higher education also needs to adapt to the modern world. Expressions such as ‘correspondence courses’, ‘multimedia’ and ‘virtual classrooms’, ‘just-in-time learning’ and ‘learning for life independent of space and time’ now have a new meaning or have been accepted as part of our current vocabulary. One of the key questions facing today’s information society is how we can enable students and university staff to transform information into knowledge and skills in any efficient way. Answers to other important questions are also needed. What are the likely general effects of virtual courses on teaching and learning methods? How can interaction and collaboration be encouraged in a virtual learning environment? How can people be motivated to learn on their own? Is an optimum level of didactics, pedagogic and ergonomics sufficient? What is the cost-effectiveness ratio? What can and should the population expect from a Swiss Virtual Campus in the medium and long term? Are all subjects suitable for a virtual learning environment? Are there any sectors of the population that will be disadvantaged by the teaching and learning methods involved in the Swiss Virtual Campus? We should not forget that the teaching staff and students should enjoy virtual courses – a sustainable virtual campus in Switzerland can only be set up if this is the case.

The Swiss Virtual Campus programme encompasses the entire higher education sector¹ in Switzerland. The programme should provide answers to some of the questions listed above and thus promote the Information Society in Switzerland. In practical terms, it should offer students an aspect of virtual mobility that will enable them to play an active role in learning processes. In this conjunction, the programme supports projects that develop high-quality courses and learning modules on the Internet involving subjects that preferably attract large numbers of students. These modules must be part of the curriculum offered by the universities involved. Collaboration between participating universities and an international approach are of paramount importance. Each project should be based on an interdisciplinary team made up of qualified people in the fields of education, didactics and ergonomics, in addition to those specialised in the subject matter *per se*, in order to guarantee products of an internationally acceptable state-of-the-art quality. The ideal framework to guarantee the success of the Swiss Virtual Campus will result from ‘horizontal’ study projects that in particular have pedagogic, didactic, ergonomic, legal and economic aspects, develop communal tools on stable platforms, as well as the necessary regulations for a credits system.

The Swiss parliament approved the implementation of the Swiss Virtual Campus programme as part of its *project-linked contributions* under the terms of the federal law on aid to universities, based on the Federal Council’s message of 25 November 1998 relating to the promotion of education, research and technology for the period 2000 to 2003 (the full text is available at www.admin.ch/bbw/bbdt/bbdtindex.html). The programme is based primarily on a proposal made by the University Education and New Technology Working Group of the Swiss University Conference. The federal government has budgeted Sfr 30 million for the cantonal universities in connection with the Swiss Virtual Campus programme. The two Swiss federal institutes of technology and the universities of applied sciences will also contribute towards the Swiss Virtual Campus programme from their own funds.

¹ Universities, federal institutes of technology and universities of applied sciences

2. Programme contents

2.1 Goals

The Swiss Virtual Campus programme is part of a process aimed at promoting the Information Society in Switzerland as well as enabling education – in particular higher education – to take advantage of the opportunities now available through new information and communication technology. In this respect the programme hopes to provide students with a virtual mobility that will enable them to play an active role in learning processes and follow high-quality courses on their computer monitors. The principal concrete aim of the programme is to develop accessible teaching modules through the Internet for basic and specialised study programmes, particularly for subjects that attract large numbers of students. It is not intended to support courses that are *mise-à-niveau*, refresher or continuing education courses. However, to account the specific needs of the universities of applied sciences, projects in which they are involved may also involve continuing education, or develop a range of services in the field of didactics and virtual teaching methods, as well as help to set up educational, technical and ergonomic support centers.

Three main aims of the programme are:

- Improving the quality of student learning processes and strengthening interactive² teaching by broadening university teaching into a range of available courses for both on campus and corresponding students. The students should be encouraged to use all the information and resources available on the Internet as part of their real studies.
- The strengthening of collaboration between the universities. Several institutions should be involved in each project. A system of credits should be set up to support the virtual mobility offered by the Swiss Virtual Campus system as well as life-long learning over the long term.
- The development of high-quality teaching materials and methods. The steering committee's recommendation to create multilingual modules and use a common set of tools to set up modules and for management functions should ensure that the course programmes created by the Swiss Virtual Campus are of the highest quality. This high level of content, didactics and ergonomics should also guarantee a demand for these courses outside Switzerland.

2.2 Programme structure

Projects

The federal government intends to provide special support for a certain number of projects for a maximum period of three years so that the established targets can be achieved. The two Swiss federal institutes of technology, the universities of applied sciences and any interested private or foreign institutions are also invited to participate in the Swiss Virtual Campus but will fund their own involvement in the programme.

² In this context 'interactivity' can be defined as 'intellectual involvement in solving a problem with the help of a computer'. In the Swiss Virtual Campus programme interactivity should include not only dialogue between the person and the computer but also interactivity between students and teachers.

In general, each project should develop a course that can be followed via the Internet that includes teaching material, exercises, seminars or practical work as well as online or direct aids and assessment (self-assessment and examinations). Projects involving teaching modules for large numbers of students will be particularly welcome. The courses developed should be part of a curriculum of the participating universities.

The projects receive support from an interdisciplinary team of teaching, education and technology specialists with the requisite knowledge in the course subject matter, as well as people with specific knowledge of the IT tools necessary for implementing the course. All the parties involved should draw up the aims and content of the course proposals, and the question of certification of qualifications or credits must be clarified within each university. The courses will be made available to the general public after the partners involved in the project have evaluated them. The modules that make up a course will be drawn up by one or several of the participating institutions, which will appoint a competent, motivated person as a project co-ordinator (part-time, at least 50%). At the same time, they will set up the appropriate infrastructure and ensure that the modules can be tested under controlled teaching conditions.

The Swiss Virtual Campus projects will differ from other efforts to enhance teaching through the introduction of new information and communication technology in that they involve complete courses that can be followed independently via the Internet. They will thus open the way to correspondence courses and life-long learning as an addition to the current range of courses available. Thanks to their autonomous character, the Swiss Virtual Campus projects will be well suited for use outside Switzerland.

Mandates

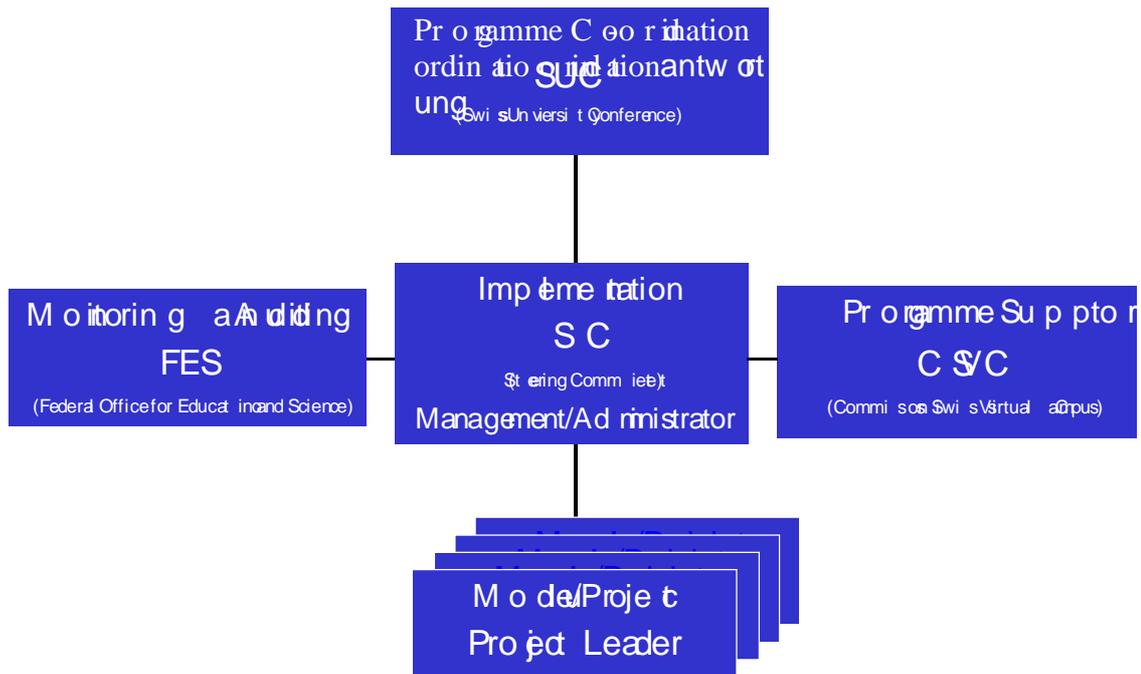
In order to ensure that the Swiss Virtual Campus can develop within an optimal environment, the programme also supports a number of mandates, which include more general studies or investigations that address the infrastructure necessary to support the programme as a whole. These could deal with legal (copyright, data protection, etc.), didactic and ergonomic topics, economic (cost effectiveness, product marketing, etc.) or technical (edutech, etc.) questions or projects connected with the necessary credits system and certification of qualifications.

3. Organisation

According to the Federal Council's message, the Swiss Virtual Campus will be run by the existing Swiss University Conference and taken over by the new SUC when that comes into operation.

Two bodies have been set up to prepare and implement the whole programme: the Swiss Virtual Campus Commission and the Swiss Virtual Campus Steering Committee. The creation of two supervisory bodies will ensure that there is close contact with universities, which is essential for the success of the programme, and that the proposals submitted will receive an impartial assessment by recognised specialists.

The structure of the Swiss Virtual Campus is shown in the following diagram.



The main responsibilities of the institutions shown in the diagram are as follows:

The **Swiss University Conference (SUC)** is responsible for the programme. As determined by the federal resolution, the SUC makes the final decision on financing of projects and mandates recommended by the Steering Committee and approves the financial plan developed by the Steering Committee.

The **Steering Committee (SC)** is responsible for the implementation of the programme. It evaluates the incoming proposals, selects which will be supported and negotiates the financing of the individual projects and mandates.

Management is under control of the **secretariat of the SUC**. It is responsible for all organisational questions and monitors the progress of the programme in general as well as of each individual project and mandate. At the request of the Steering Committee, it prepares the programme progress and financial reports.

The **Commission** has prepared the call for proposals. It establishes contacts with interested parties from the university, cantonal, federal, and business communities.

The universities of applied sciences (UAS) and the Swiss federal institutes of technology (SFIT) are completely integrated within the programme, and are appropriately represented in the Steering Committee.

The **Federal Office for Education and Science (FES)** is responsible for controlling, progress and financial reporting, and auditing the Swiss Virtual Campus programme. It establishes appropriate guide and hands down decrees.

A progress report and a financial report must be submitted annually. The 2002 annual report will serve an important purpose not only as an interim report on the programme but also as part of the next message on promoting education, research and technology. The final report

serves as a basis for the third phase; it will include an evaluation in the form of an analysis of the impact of the programme and enable the Swiss University Conference to draw conclusions concerning the Swiss Virtual Campus programme and make recommendations to the decision-making bodies in the field of education. It is planned to organise a public event to mark the end of the project.

4. Second call for proposals schedule

Project outlines can be submitted again following an initial call for proposals. The Steering Committee will assess them and selected applicants will then be asked to submit a more detailed project outline. The Steering Committee will then arrange the detailed projects in order of priority. Proposals submitted by UAS or applications involving UAS must also be assessed and approved by the Federal Office for Professional Education and Technology (OPET). Similarly, the Board of the Swiss federal institutes of technology (FIT Board) will deal with applications submitted by their own institutions.

16 October 2000	Submission deadline for project outlines
15 November 2000	Selected applicants asked to submit detailed projects
20 December 2000	Submission deadline for detailed project proposals
22 February 2001	Decision of the Swiss University Conference about projects to be supported in the second phase

5. Finances

The funds allocated in the Federal Council's message (Sfr 30 million) to finance the programme, the projects and the mandates are reserved for the cantonal universities. The two SFIT, the UAS and other partners will provide their own funds for participation in the corresponding projects. Projects submitted by the UAS or involving them, will be subsidised by the OPET under analogous conditions. In the same way, projects submitted by the SFIT or involving them will be subsidised by the FIT Board. The programme will cover the general cost of projects in which the cantonal universities, the UAS and/or the two SFIT participate.

The cantonal universities will be expected to make an appropriate financial contribution (at least 50%) to the projects. The factors to be taken into account for the cantonal contributions are defined in the federal decree concerning aid to universities, which can be found at <http://www.admin.ch/ch/d/sr/4/414.201.de.pdf>. The enabling legislation can be found at <http://www.admin.ch/ch/d/sr/4/414.20.de.pdf>. The agreement of all other promotional organisations involved in the funding must be obtained before the Swiss University Conference can approve the projects that make up a programme.

As a result of the call for proposals in autumn 1999, an initial set of 27 projects was started in the summer of 2000. Of these, universities lead nineteen, federal institutes of technology one,

and universities of applied sciences the remaining seven. In the second phase, Sfr 10 million are specifically available to support a second series of university projects. The OPET and the FIT Board will make other funds available to support projects from SFIT and UAS.

Sfr 3.4 million will be made available for mandates.

An amount of Sfr 1.6 million has been budgeted for managing the programme (including fees for specialists and their staffs, assessments, expertise, reports, events, etc.).

According to the provisional financial plan the Sfr 30 million will be allocated as follows:

Year	2000	2001	2002	2003	Total
Projects, first series	2	5.5	4.5	3	15
Projects, second series	-	1.5	4	4.5	10
Mandates	0.6	0.65	1.1	1.05	3.4
Administration	0.4	0.35	0.4	0.45	1.6
Total	3	8	10	9	30

6. Information

Information concerning the programme can be obtained over the Internet, from the participating institutions, the chairmen of the Commission and from the Steering Committee of the Swiss Virtual Campus (see page 2 for addresses).

7. Terms of participation and instructions for applicants

Designated project managers must submit all project outlines to the secretariat of the Swiss University Conference (Sennweg 2, 3012 Berne, Switzerland) no later than **16 October 2000**. Each project should involve at least three university partners, (including the project manager), who will both develop the course and integrate it into their respective curricula. Additional partners from industry and from other countries who are likely to contribute to the success of the project are welcome. The Swiss Virtual Campus funds are for the exclusive use of participants from cantonal universities and for general costs incurred by participants from the SFIT and UAS. The FIT Board and the OPET will provide funding for participating SFIT and UAS. **Again, please note that all project partners must provide at least 50% of the project funding themselves if they are to obtain federal support.** Project outlines must indicate the support that will be provided by all participating institutions.

Project outlines should not exceed 6 pages in length and should be submitted in English in both hardcopy and electronic form (PC or Mac) and should address the following points:

- Applicant (= project manager): name, institution or organisation, address, telephone and fax numbers, e-mail address;
- Project partner(s) (name and institution(s) or organisation(s));
- Project title;
- Summary (in English **and** in one of Switzerland's national languages);
- Information concerning support from the universities or institutes for both the implementation and recognition of the course (generally within a course of studies), allocation of credits;
- Description of the project including general and detailed aims (in particular pedagogical and didactic aims and technical aids);
- Information concerning the expected number of course participants (students);
- Expected income and expected costs;
- Duration of project (maximum 3 years);
- Budget (roughly broken down into salaries, installations and equipment, running costs, rentals for special facilities, travel expenses);
- Expected financial support from all partners (including project manager).

The official application form is available for download at www.virtualcampus.ch.

8. The selection process

All the outline projects are assessed by the Steering Committee on the basis of the terms and criteria indicated below and the general regulations. If necessary, outside expertise is called in. The authors of the selected outline projects are then asked to submit a detailed proposal by mid-November 2000. The FIT Board and the OPET assess projects from or involving the SFIT and the UAS respectively. Details concerning this second stage are provided when the authors of the selected outline projects are asked to submit a detailed proposal.

9. Terms and criteria for project selection

The projects submitted should contribute towards achieving the aims set out in section 2.1 and must fulfil the following *criteria*:

- Collaboration between several Universities/SFIT/UAS (at least three);
- Realisation of a clear pedagogical aim;
- Use of common IT tools on a stable platform³;
- Support (including own funds) from the institutions to which those involved in the project belong (in order to ensure the continuation of the project);
- Integration of the course in an existing national curriculum and an international credit-point system.

The Steering Committee will also take into account the following *aspects* in its evaluation of the outline projects submitted:

³ Information and support for choosing a platform can be obtained from:
http://www.edutech.ch/edutech/tools/default_e.asp

- Projects for teaching modules which will attract large numbers of students are particularly welcome;
- The modules proposed should be interactive;
- Potential innovativeness of the planned courses;
- Multi-language support;
- Participation of the private sector.

To ensure that the **specific needs of the universities of applied sciences** are met the following applies to internal UAS projects. On the basis of the triple mandate laid down by the law and the corresponding detailed orientation, projects involving the UAS should focus on:

- The use of virtual teaching for continuing education and the transfer of technology;
- Media didactics in the sense of combining innovative technical potential with new pedagogical approaches;
- The establishment and operation of a service center, including exchanges for learning modules and advice on setting up a corresponding learning environment;
- Transfer of know-how to special areas of application such as further training;
- Quality management in virtual teaching.

List of abbreviations

CSVC	Commission Swiss Virtual Campus
FES	Federal Office for Education and Science
FIT Board	Board of the Swiss Federal Institutes of Technology
OPET	Federal Office for Professional Education and Technology
SFIT	Swiss Federal Institutes of Technology
SC	Steering Committee
SUC	Swiss University Conference
UAS	Universities of Applied Sciences