Degree Course in Electrical Engineering

This Diploma Supplement follows the model developed by the European Commission, the Council of Europe and UNESCO/CEPES. The purpose of the supplement is to provide sufficient independent data to improve the international 'transparency' and fair academic and professional recognition of qualifications (diplomas, degrees, certificates, etc.). It is designed to provide a description of the nature, level, context, content and status of the studies that were pursued and successfully completed by the individual named on the original qualification to which this supplement is appended. It is free from any value judgments, equivalence statements or suggestions about recognition.

1. INFORMATION IDENTIFYING THE HOLDER OF THE QUALIFICATION

1.1 Family name(s): Märki
1.2 Given name(s): Peter

1.3 Date of birth: 24. Februar 1971

2. CONVERSION OF DEGREES FROM FEDERALLY RECOGNIZED COLLEGES

Universities of Applied Sciences (Fachhochschule FH / Haute école spécialisée HES / Scuola universitaria professionale SUP) were primarily established by adapting federally recognised colleges (Höhere Fachschule / Ecole supérieure / Scuola superiore) to modern demands, e.g. colleges of business administration (Höhere Wirtschafts- und Verwaltungsschule HWV / Ecole supérieure de cadres pour l'économie et l'administration ESCEA / Scuola superiore per i quadri dell'economia e dell'amministrazione SSQEA), engineering colleges (Höhere Technische Lehranstalt HTL / Ecole technique supérieure ETS / Scuola tecnica superiore STS), art and design colleges (Höhere Fachschule für Gestaltung HFG / Ecole supérieure d'arts appliqués ESAA / Scuola superiore d'arti applicate SSAA) as well as colleges of home economics (Höhere Hauswirtschaftliche Fachschule HHF / Ecole supérieure d'Economie familiale ESEF / Scuola specializzata superiore d'economia domestica SSED). Graduates of these former colleges have the opportunity to take up a federal offer of obtaining a degree awarded by the Universities of Applied Sciences after gaining certain additional qualifications. This opportunity is also open to graduates of the Ecole hôtelière de Lausanne who completed their studies in 1998, 1999 or 2000. Further details as to the status of the FH/HES/SUP can be found in par. 8 of this supplement.

3. INFORMATION ON THE DEGREE HOLDER'S QUALIFICATIONS

3.1 Nature of the qualification:

The degree holder earned a diploma of a federally recognized engineering college (HTL/ETS/STS) and shows evidence of a subsequent professional experience of at least five years or the successful completion of a post-diploma course at university level. These qualifications allow him to carry the following FH/HES/SUP title.

3.2 Legally protected title:

In German: Ingenieurin FH / Ingenieur FH in Elektrotechnik , in French: Ingénieur HES en électrotechnique , in Italian: Ingegnere SUP in elettrotechica.

3.3 Title in English:

Corresponds to a Bachelor of Engineering, degree course in Electrical Engineering.

3.4 Name of the awarding organisation:

Federal Office for Professional Education and Technology OPET

4. INFORMATION ON THE COLLEGE EDUCATION AND THE ADDITIONALLY ACQUIRED QUALIFICATIONS

4.1 Information on the prerequisite engineering college studies:

Studies at an engineering college (HTL/ETS/STS) provided students with solid subject-specific knowledge and led to an application-oriented degree at the tertiary level. The study programme consisted of humanities, mathematical and natural sciences as well as subject-specific scientific engineering basics and their fields of application. In addition, business administration basics (generally including accountancy) were dealt with.

4.1.1 Official length of study:

3 years of full-time study

4.1.2 Admission requirements:

The general prerequisite was the completion of a federally recognized professional education and training (which lasts a minimum of 3 years) in a field relevant to the degree in question. In addition, candidates generally had to pass an entrance examination. Holders of a general Baccalaureate (Gymnasiale Maturität / Maturité gymnasiale / Maturità liceale) were admitted if they had acquired regulated professional experience of at least one year in a relevant field.

4.1.3 Graduation:

Prerequisites for completion of studies were the passing of intermediate graduation examinations as well as the final graduation examination, including an application-oriented thesis project in a selected engineering field.

4.1.4 Electrical Engineering studies:

After electrical engineering basics, in recent times augmented by computer science, students as a rule embarked on a specific field of studies chosen from their school's syllabus. Generally this encompassed either electrical power engineering and electrical machines, or electronics, measurement, telecommunications, digital electronics, control and automation. In more recent years this range has also included computer science and computer communications as well as microelectronics. At any given time, subject-specific education reflected the prevailing state of the art.

4.1.5 Professional status:

On the basis of their broad and solid fundamental knowledge as well as their skills and competence, Electrical Engineers HTL/ETS/STS can be successfully employed in a wide spectrum of industrial activities (hardware and software design, project engineering, certification, initialisation of plants and installations, technical sales support, training, technical management). First-time employment was often in research and development or involved work unit or project responsibility. The generalistic background is a sound basis for continuing education and professional development as well as for taking on line management functions.

4.2 Acquired HTL/ETS/STS diploma:

4.2.1 Name of school: HTL/ETS/STS Rapperswil

4.2.2 Date of graduation: 24. Januar 1997

4.2.3 Title: Ingenieur HTL in Elektrotechnik (Electrical Engineering)

4.2.4 Details of the degree course, grades, assessments and credits obtained:

see degree certificate

4.2.5 Grading scheme:

Generally the following grading scale was used:

6 = very good, 5 = good, 4 = sufficient, 3 = insufficient, 2 = poor, 1 = of no value

4.2.6 Overall classification of the qualification:

No overall classifications were awarded.

4.3 Additional requirements for being awarded the FH/HES/SUP title:

4.3.1 Professional experience:

Recognized experience of at least 5 years in a related engineering field

or

4.3.2 Post-diploma course:

Post-diploma course at university level with at least 200 lecture hours (100 lecture hours for the HTL/ETS/STS class of 1999/2000). Admittance, teaching staff and syllabus according to the Post-diploma Studies (NDS/EPG/SPD) recognized by the Federal Department of Economic Affairs.

5. INFORMATION ON THE LEVEL OF THE ACQUIRED FH/HES/SUP TITLE

5.1 Level of the qualification:

University level qualification for generalists with a marked concentration on practical applicability. The degree course builds upon a completed high school level education as well as practical experience.

5.2 Official length of the programme:

3 years of full-time study plus subsequent thesis project. (Corresponds to 200 ECTS credit points).

5.3 Admission requirements:

The prerequisite for study is the achievement of the standard required for matriculation at a University of Applied Sciences. This usually takes the form of a federally recognised Professional Baccalaureate certificate (Berufsmatura / Maturité professionelle / Maturità professionale) or a federally recognised general Baccalaureate certificate (Gymnasiale Maturitàt / Maturité gymnasiale / Maturità liceale). An additional requirement is completed professional training or at least one year of proven work experience in a field relevant to the degree course in question.

5.4 Programme requirements:

The University of Applied Sciences (FH/HES/SUP) degree course in Electrical Engineering provides the student with solid subject-specific knowledge, interpersonal skills, knowledge of methods and techniques, and awareness of personal strengths and weaknesses. It leads to a professionally oriented certificate of higher education. Graduates

- have at their disposal a broad and profound professional knowledge in electrical engineering as well as computer engineering and are able to successfully use it in all relevant fields of application;
- are capable of interacting with respective specialists;
- possess a sound understanding of business administration (including accountancy) and of economical aspects as well as of ecological challenges;
- are able to acquire or deepen specific knowledge when necessary, and to keep it up to date;
- think analytically and interdisciplined, grasp complex contexts and are able to extract the essentials;
- have command over efficient problem-solving methods and are capable of utilising them appropriately and innovatively;
- are in a position to critically question and assess possible solutions;
- understand industrial procedures and processes used in the design and manufacturing of technical products;
- possess a sound general background and know about cultural relations;

- act as partners, are consensus-oriented and are able to work under stress;
- can cope with changing and unusual situations.

Prerequisites for completion of studies are the passing of intermediate graduation examinations as well as the final graduation examination, including an application-oriented thesis project in a selected engineering field.

5.5 Access to further studies:

A University of Applied Sciences degree in Engineering can serve as an entry qualification to further studies (e.g. Masters degree courses) at Universities of Applied Sciences and other universities as well as to other special tertiary-level courses.

6. Sources of Further Information

Federal Office for Professional Education and Technology OPET, Leistungsbereich Fachhochschulen, Effingerstrasse 27, CH-3003 Bern

Tel. + 41 31 322 21 29, Fax: + 41 31 324 92 47, E-Mail: fachhochschulen@bbt.admin.ch

Homepage of OPET: www.admin.ch/bbt

STV/Swiss Engineering

Tel. + 41 1 268 37 11, Fax: + 41 1 268 37 00, E-Mail: info@SwissEngineering.ch

7. CERTIFICATION OF THE SUPPLEMENT

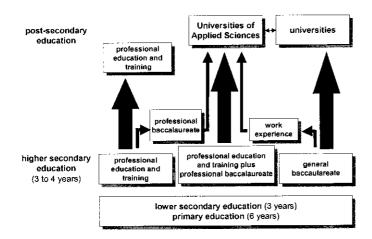
Federal Office for Professional Education and Technology

Berne. August 2003

Eric Fumeaux, Director

8. THE NATIONAL HIGHER EDUCATION SYSTEM

Switzerland has a dual university system. Both universities and Universities of Applied Sciences have different characteristics but are of equal status and economical importance. The general prerequisite for entry to university-level education is a 12 to 13-year education and a recognised Baccalaureate. The graphic below shows the organisation of the post-primary school education system in Switzerland.



Universities: The Swiss universities are either cantonal institutions, which are partly financed by the federal government, or federal institutions. Entry to the universities is usually by means of the general Baccalaureate (Gymnasiale Maturitàt / Maturité gymnasiale / Maturità liceale). With their academically oriented courses, these institutions have responsibility for the maintenance of the academic and scientific community.

Universities of Applied Sciences: The Universities of Applied Sciences are mainly cantonal or regional institutions but are subject to federal regulation (mission, function and accreditation) and are partly supported with federal funds. The mission and function of the Universities of Applied Sciences oblige them, apart from offering degree course programs, to be nationally and internationally active in applied research and development, technology and knowledge transfer, as well as in graduate level education. Students hold a Professional Baccalaureate (Berufsmatura / Maturité professionelle / Maturità professionale) or a general Baccalaureate (Gymnasiale Maturitàt / Maturité gymnasiale / Maturità liceale) at entry. By providing an applied, scientifically based education, the Universities of Applied Sciences prepare qualified young professionals for entry into the job market and particularly for the executive staff of small and medium-sized enterprises (SME), which are predominant in Switzerland. The courses of study and also the degrees are federally recognised and the titles they award are legally protected.