Fachhochschule
Nordwestschweiz

Die Fachhochschule Nordwestschweiz FHNW, Hochschule für Technik erteilt

Manuel Georg Schneider

geboren am 11. Mai 1981
aus Deutschland

das Diplom als

Ingenieur FH

in Angewandter Informatik mit Vertiefung
in Internet Engineering

Brugg, 1. Februar 2008

Direktionspräsident
Fachhochschule Nordwestschweiz

Prof. Dr. Richard Bührer

Direktor
Hochschule für Technik

Prof. Jürg Christener

Die Fachhochschule Nordwestschweiz ist eine vom Bund nach Art. 14 des Fachhochschulgesetzes vom 6. Oktober 1995 genehmigte Fachhochschule. Der mit diesem Diplom verliehene Titel ist gesetzlich geschützt.

Fachhochschule Nordwestschweiz
Hochschule für Technik

Herbstsemester 2007/08

Diplomzeugnis (FH)

Herr **Manuel Georg Schneider**, geb. 11.05.1981, von Deutschland
Student im Studiengang Informatik, Vertiefungsrichtung: Internet-Engineering + E-Business

hat das Diplom mit folgendem Ergebnis absolviert:

Fächer	Gewichtung	EN	PN	Diplom-Note	ECTS-Punkte	ECTS-Bewertung
INTERDISZIPLINÄRE FÄCHER				**5.2**	**10**	**C**
Qualitätsmanagement	25%		5.6			
Didaktik	25%		5.3			
E-Business	25%		5.0			
Multimedia	25%		4.9			
INTERNET-PROGRAMMIERUNG				**5.3**	**12**	**B**
INTERNET-TECHNOLOGIEN						
Kryptologie und Netzsicherheit			6.0			
Middleware und Komponententechnologie			5.4	**5.7**	**9**	**B**
BUSINESS				**4.8**	**12**	**C**
Web-Verwaltung	33 1/3%		5.3			
Geschäftsprozess Management	33 1/3%		4.5			
Zukunftstechnologie	33 1/3%		4.5			
PROJEKTARBEITEN		4.8		**4.8**	**10**	**C**

Testatfächer	Testat	
Seminar	**erfüllt**	**3**
Bildverarbeitung in der Praxis	**erfüllt**	**3**
Wahlfächer	**erfüllt**	**7**

Durchschnittsnote	**5.2**		
Diplomarbeit	**5.8**	**20**	**A**

Das Diplom gilt als bestanden.

Fachhochschule Nordwestschweiz
Hochschule für Technik

Prof. Jürgen Spielberger
Studiengangleiter Informatik

Muttenz, 1. Februar 2008

Notenskala	5.8-6.0	5.3-5.7	4.6-5.2	4.0-4.5	3.5-3.9	Unter 3.5
ECTS-Gradings	A	B	C	D	E	F
In Worten	hervorragend	sehr gut	gut	befriedigend	ausreichend	ungenügend

Die für die Promotion massgebende FHBB-Promotionsordnung vom 7. Dezember 2000 taxiert Noten unter 4.0 als ungenügend; für das ECTS-System gelten die europäischen Massstäbe.

EN = Erfahrungsnote / PN = Prüfungsnote

University of Applied Sciences
Northwestern Switzerland

Diploma programme
APPLIED COMPUTER SCIENCE

DIPLOMA SUPPLEMENT

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.). The supplement 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. The supplement is free from any value judgements, equivalence statements or suggestions about recognition.

1. INFORMATION IDENTIFYING THE HOLDER OF THE QUALIFICATION

1.1	**Family name(s)**	**Schneider**
1.2	**Given name(s)**	Manuel Georg
1.3	**Date of birth**	11.05.1981
1.4	**Student matriculation number**	03-387-032

2. INFORMATION IDENTIFYING THE QUALIFICATION

2.1 Type of qualification

The person mentioned has a degree of a nationally recognised institution of higher education (in accordance with the Universities of Applied Sciences Act of 6-10-1995, article 2 and 7). These qualifications allow the holder to use the following title of the University of Applied Sciences.

2.2 Title in German

Diplomierte Ingenieurin FH, diplomierter Ingenieur FH in Angewandter Informatik (gesetzlich geschützter Titel).

2.3 Title in English

Corresponds to a Bachelor degree of Engineering, degree course in Applied Computer Science. This diploma certifies also that the holder has practical professional qualifications with at least one additional year of proven professional experience.

2.4 Main fields of study for the qualification

Computer Architecture, Fundamentals of Computer Science, Programming, Electronics for Computer Science, Algorithms and Data Structures, Operating Systems, Databases, Software Engineering, Communication, Computer Graphics, Language Society and Communication, English, Mathematics, Numerical Mathematics, General Management, Physics, Law, Leadership and Team-work.

Major in Image Processing and Multimedia: Introduction to Multimedia Technology, Introduction to E-business, Advanced Studies in Image Processing, Advanced Studies in Graphic Processing, Image Management, Image Processing Hardware, Design, Image Processing User Software, Virtual Reality Animation Visualisation, Image Processing Sciences.
Major in internet Engineering & E-Business: Introduction to Multimedia Technology, Introduction to E-business, Internet Programming I + II, Cryptology and Network Security, Middleware and Component Technology, Web Management, Technologies of the Future, Business Process Management.

2.5 Name and status of the organisation which has awarded the qualification

University of Applied Sciences Northwestern Switzerland.
Further details concerning the status of the Universities of Applied Sciences (UAS) can be found in section 7 of this diploma supplement.

2.6 Name and status of the organisation administering the degree course

University of Applied Sciences Northwestern Switzerland, School of Engineering, Course of studies Applied Computer Science.
Further details concerning the University of Applied Sciences Northwestern Switzerland can be found in section 6.2 of this diploma supplement.

2.7 Language of instruction / in the examination

Mainly German (except in foreign language modules).

3. Information on the Level of the Qualification

3.1 Information on the level of the qualification

University degree 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 professional experience.

3.2 Normal duration of the programme of studies

3 years of full time studies (200 ECTS credit points).

3.3 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) or a federally-recognised general baccalaureate certificate (Matura). An additional requirement is completed professional training or at least one year of proven professional experience in a field relevant to the degree course in question.

4. Information on the Contents and Results obtained

4.1 Programme requirements

The University of Applied Science degree course in Applied Computer Science provides the student with solid subject-specific knowledge, interpersonal skills, knowledge of methods and techniques, and of personal strengths and weaknesses. It leads to a professionally-oriented certificate of higher education.

Graduates

- possess a sound broadly-based specialised knowledge of general management and master fundamental knowledge of Computer Science. Their specialisation in one of the chosen majors, "Internet-Engineering & E-Business" or "Image Processing and Multimedia" in 5th and 6th semester enables them to operate at a high level in the relevant areas of trade and industry;
- think in an analytical and pluridisciplinary way, grasp complex relationships, elaborate relevant and innovative solutions, and can analyse and evaluate critically approaches to problem solving;
- communicate effectively to different target groups;
- know their own culture and understand other cultures; possess good general knowledge, act in a cooperative and consensus-oriented manner, are actively and passively critical and can resolve conflicts;
- know their own strengths and weaknesses and can handle change and procedures.

Award of a Diploma is subject to passing the First and Second Year and Diploma Examinations as well as a satisfactory thesis.

4.2 Details on the course of studies, grades, assessments and credits obtained

cf. attached degree certificate

4.3 Grading scheme

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

ECTS Credits: Performance in any subject or educational module is rewarded with a given number of ECTS credits; one full-time semester corresponds to 30 credits, the diploma thesis outside regular lessons 20 credits. No credits are awarded for inadequate achievement. Credits represent a quantitative student performance.

ECTS evaluation: An adequate performance in any subject or module is judged on the basis of a relative evaluation scale. Pass grades are attributed according to one of five quality benchmarks within a reference group (the students who have reached the required level): The best 10% in the group are awarded an A pass, the next 25% a B, a further 30% a C, the next 25% a D and the last 10% receive an E pass. Fail grades are awarded the letter F.
In the UASNS courses of studies the statistical base is not usually sufficient for a meaningful application of the standard regulation, that's why for the time being the ECTS assessments will be assigned on the basis of the local grading system divergently from the above standard regulation:

UASNS-grading system	*ECTS assessments*	*in words*
5.8-6.0	A	excellent
5.3-5.7	B	very good
4.6-5.2	C	good
4.0-4.5	D	satisfactory
3.5-3.9	E	sufficient
grades under 3.5	F	insufficient

4.4 Overall classification of the qualification

No overall classifications are awarded.

5. INFORMATION ON THE PURPOSE OF THE DEGREE

5.1 Access to further studies

A University of Applied Sciences degree in Applied Computer Science 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.

5.2 Professional status

On the strength of their solid theoretical knowledge and their practical, interpersonal skills, University of Applied Sciences graduates in Applied Computer Science can be employed within the whole spectrum of fundamental computer-based activities (computer architecture, database, communication, software development). Although graduates have majored in the specialised fields of image processing or network engineering, which gives them an advantage in those appropriate areas, the education remains in general non-specialist and thereby creates the potential for further development and a rise through the ranks to management positions.

6. ADDITIONAL INFORMATION

6.1 Further details of the programme

In addition to the specialist course contents, methodological, social and communicative skills of the students are specially fostered. As part of its mission, the University of Applied Sciences (cf. section 7) arranges for students to work on problem-solving for and with partners from trade and industry and administration in relationship to projects within the specialised fields studied.

6.2 Further details about the educational institution

The new University of Applied Sciences Northwestern is a regionally embodied institution for education with national and international radiant emittance. It wants to be established as one of the prominent and innovation-strongest professional University of Applied Sciences of Switzerland. The UASNS developed from the fusion of the three UAS Aargau, Basel City and Basel-Country, Solothurn, School of Teacher Education Solothurn and Basel, the School of Social Work of Basel-City and Basel-Country. On 1 January 2008 also the music academy will push to the UASNS. 6000 men and women are enrolled at the UASNS. The UASNS consists of the following areas:

- School of Applied Psychology
- School of Architecture, Civil Engineering and Geomatics
- Academy of Art and Design
- School of Life Sciences
- School of Teacher Education
- School of Social Work
- School of Engineering
- School of Business
- Services

The UASNS and its eight Schools are distributed on four cantons with seats in Aarau, Basel, Brugg, Liestal, Muttenz, Olten, Solothurn, Windisch and Zofingen. The strategic management of the UASNS is the responsibility of the University Board, which consists of leading representatives from sciences, trade and industry, culture and politics, not otherwise connected with the school. The management is responsible for the operational guidance and consists of the management president as well as the nine directors of the schools and ranges mentioned above.

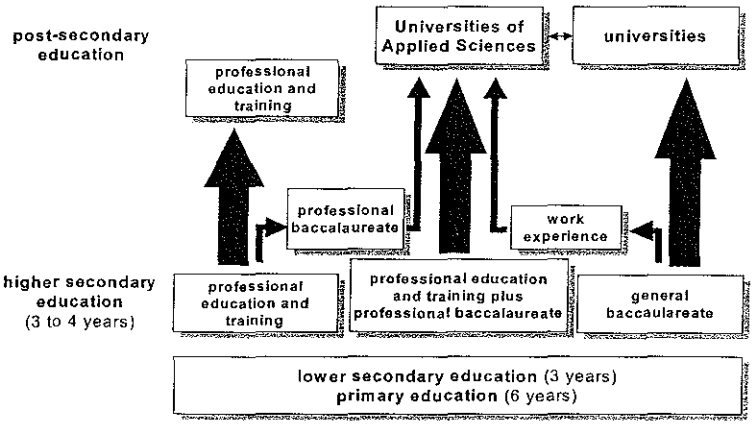
6.3 Sources of further information

University of Applied Sciences
Northwestern Switzerland
School of Engineering
Steinackerstrasse 5
CH-5210 Windisch
Telephone: +41 56 462 44 11
Telefax: +41 56 462 44 15
E-mail: information@fhnw.ch

Homepage of UASNS: www.fhnw.ch

7. 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 economic importance. The general prerequisite for entry to university-level education is a 12 to 13-year education and a recognised baccalaureate. The diagram below shows the organisation of the post-primary school education system in Switzerland.

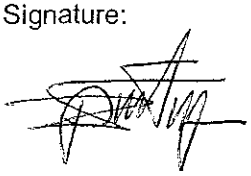


Universities: The Swiss Universities are either cantonal institutions, which are partly financed by the federal government, or federal institutions. Entry to the universities is usually by means of the general baccalaureate (Gymnasiale Maturität / Maturité gymnasiale / Maturità liceale). With their academically 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 programmes, 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 Maturität / 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.

8. CERTIFICATION OF THE SUPPLEMENT

Date: 01st February 2008

Signature:



Prof. Jürgen Spielberger
Head of course of studies Applied Computer Science

IHK Industrie- und Handelskammer Hochrhein-Bodensee

Zeugnis

Nach § 34 Berufsbildungsgesetz hat

Manuel Georg Schneider

geboren am 1981-05-11 in Lörrach

die Abschlussprüfung im Ausbildungsberuf

Fachinformatiker
Systemintegration

vor dem Prüfungsausschuss der IHK Hochrhein-Bodensee mit folgendem Prüfungsergebnis bestanden:

Prüfungsteil A	sehr gut 100 Punkte
Betriebliche Projektarbeit/Dokumentation	sehr gut 100 Punkte
Präsentation/Fachgespräch	sehr gut 100 Punkte
Prüfungsteil B	gut 91 Punkte
Ganzheitliche Aufgabe I berufsspezifische Fachqualifikationen	gut 88 Punkte
Ganzheitliche Aufgabe II Kernqualifikationen	sehr gut 96 Punkte
Wirtschafts- und Sozialkunde	gut 85 Punkte

Erhält ein Lob!

Schopfheim, 2003-07-10

Industrie- und Handelskammer
Hochrhein-Bodensee
i. V.

Hauptgeschäftsführer

INDUSTRIE- UND HANDELSKAMMER HOCHRHEIN-BODENSEE

IHK Industrie- und Handelskammer
Hochrhein-Bodensee

Urkunde

Manuel Georg Schneider

geboren am 11. Mai 1981 in Lörrach

hat vor dem Prüfungsausschuss der Industrie- und Handelskammer Hochrhein-Bodensee

die Prüfung nach der

Ausbilder-Eignungsverordnung

vom 21. Januar 2009 (BGBl. I S. 88) bestanden.

Damit wurden die berufs- und arbeitspädagogischen Fertigkeiten, Kenntnisse und Fähigkeiten im Sinne des § 30 des Berufsbildungsgesetzes nachgewiesen.

Konstanz, 7. Mai 2013

Der Hauptgeschäftsführer

Marx

Prof. Dr. Claudius Marx

INDUSTRIE- UND HANDELSKAMMER HOCHRHEIN-BODENSEE

IHK Industrie- und Handelskammer
Hochrhein-Bodensee

Zeugnis

Manuel Georg Schneider

geboren am 11. Mai 1981 in Lörrach

hat die Prüfung zum anerkannten Abschluss

Ausbilder-Eignungsverordnung

vom 21. Januar 2009 (Bundesgesetzblatt I S. 88) mit folgenden Ergebnissen bestanden:

Ergebnisse der Prüfung:	**Note**	**Punkte**
Schriftlicher Prüfungsteil	gut	83
Praktischer Prüfungsteil	sehr gut	94

Konstanz, 7. Mai 2013

Industrie- und Handelskammer
Hochrhein-Bodensee

Hauptgeschäftsführer

INDUSTRIE- UND HANDELSKAMMER × HOCHRHEIN-BODENSEE ×