FRANKFURT UNIVERSITY OF APPLIED SCIENCES

BACHELOR-URKUNDE

Die Frankfurt University of Applied Sciences verleiht

Herrn
Lam Nguyen Hong

geboren am
13. Dezember 1993

in
Vung Tau

auf Grund der am
28. Juni 2016

am Fachbereich 2
Informatik und Ingenieurwissenschaften – Computer Science and Engineering

im Studiengang
Electrical Engineering and Information Technology

bestandenen Bachelor-Prüfung den akademischen Grad

Bachelor of Engineering (B. Eng.)

Frankfurt am Main, den 28. Juni 2016

i.V.

Prof. Dr. Frank E.P. Dievernich
Der Präsident

Prof. Achim Morkramer
Der Dekan

FRANKFURT UNIVERSITY OF APPLIED SCIENCES 18

FRANKFURT UNIVERSITY OF APPLIED SCIENCES

BACHELOR-ZEUGNIS

Herr Lam Nguyen Hong
geboren am 13. Dezember 1993
in Vung Tau

hat am Fachbereich 2: Informatik und Ingenieurwissenschaften – Computer Science and Engineering
im Studiengang Electrical Engineering and Information Technology

die Bachelor-Prüfung abgelegt und dabei folgende Bewertungen erhalten

Gesamtnote[1] der Bachelor-Prüfung 3,1 befriedigend
Summe ECTS-Punkte (credits)[2] 180

Pflichtmodule	**ECTS-Punkte Credits**	**Note**	
Bachelor Thesis and Colloquium	12	3,8	ausreichend
Cover of Bachelor Thesis: „Image Segmentation of the Human Brain "			
Fundamentals of Engineering Mathematics 1	10	3,3	befriedigend
Experimental Physics and Laboratory	10	2,0	gut
Fundamentals of Electrical Engineering 1	10	3,3	befriedigend
Basics of Engineering Design	5	2,0	gut
Advanced Engineering Mathematics	5	3,3	befriedigend
Fundamentals of Electrical Engineering 2	5	2,0	gut
Electrical Engineering Materials	5	3,3	befriedigend
High-Level Programming Language	5	4,0	ausreichend
Digital Circuit Design and Laboratory	5	3,0	befriedigend
Electronics and Laboratory	10	4,0	ausreichend
Transients and Transforms in Electric Circuits and Systems	5	2,3	gut
Electrical Metrology and Instrumentation	5	2,7	befriedigend
Digital Signal Processing	5	4,0	ausreichend
Industrial Management	5	2,0	gut
Intermediate German	10	4,0	ausreichend
Fundamentals of Telecommunication	5	2,7	befriedigend
Control Engineering 1	5	4,0	ausreichend
Microcontroller and Laboratory	5	3,0	befriedigend
Fundamentals of Power Engineering and Laboratory	5	4,0	ausreichend
Communications Engineering and Laboratory	5	3,0	befriedigend

Lam Nguyen Hong
geboren am 13. Dezember 1993
in Vung Tau

Pflichtmodule	ECTS-Punkte Credits	Note	
Digital Routing and Laboratory	5	3,0	befriedigend
RF-Engineering and Laboratory	5	3,3	befriedigend
Embedded Intelligent Systems and Laboratory	5	1,7	gut
Information Processing with Project and Laboratory	5	1,7	gut
Control Engineering 2 and Laboratory	5	4,0	ausreichend
Signals and Systems	5	2,0	gut
Digital Systems and Laboratory	5	2,7	befriedigend
Elective Subjects Project and Laboratory	8	2,3	gut

Frankfurt am Main, den 28. Juni 2016

FRANKFURT UNIVERSITY OF APPLIED SCIENCES
FRANKFURT UNIVERSITY OF APPLIED SCIENCES
18

Prof. Dr.-Ing. Erich Flach
Der Vorsitzende des Prüfungsausschusses

[1] Die Gesamtnote der Bachelor-Prüfung errechnet sich aus dem entsprechend der ECTS-Punkte (Credits) gewichteten Mittelwert der Noten der Modulprüfungen.Die Note des Moduls Bachelor-Arbeit mit Kolloquium setzt sich aus den Noten der Bachelor-Arbeit und des Kolloquiums im Verhältnis 8:2 zusammen.

[2] ECTS-Punkte (Credits) gemäß dem Europäischen System zur Anrechnung, Übertragung und Akkumulierung von Studienleistungen
Einzelbewertungen: (1) sehr gut, (2) gut, (3) befriedigend, (4) ausreichend

DIPLOMA SUPPLEMENT

This Diploma Supplement model was developed by the European Commission, 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 should be free of any value judgements, equivalence statements or suggestions about recognition. Information in all eight sections should be provided. Where information is not provided, an explanation should give the reason why.

1. HOLDER OF THE QUALIFICATION

1.1 Family Name / 1.2 First Name

Nguyen Hong, Lam

1.3 Date, Place, Country of Birth

13 December 1993, Vung Tau, Vietnam

1.4 Student ID Number or Code

106 8038

2 QUALIFICATION

2.1 Name of Qualification / Title conferred
(full, abbreviated; in original language)

Bachelor of Engineering (B.Eng.)

2.2 Main Field(s) of Study

Electrical Engineering and Information Technology

2.3 Institution Awarding the Qualification
(in original language)

Frankfurt University of Applied Sciences
Department of Computer Science and Engineering
Status (Type / Control)
University of Applied Sciences / State Institution

2.4 Institution Administering Studies (in original language)

(same)

Status (Type / Control)

(same)

2.5 Language(s) of Instruction/Examination

English

3. LEVEL OF QUALIFICATION

3.1 Level

First degree, including thesis

3.2 Official Length of Programme

3 years, 180 ECTS

3.3 Access Requirements

General or specialized Higher Education Entrance Qualification (HEEQ), cf. Sect. 8.7., or foreign equivalent. Foundation Year at the „Vietnamese German University" and IELTS 6.0

4. CONTENTS AND RESULTS GAINED

4.1 Mode of study

Full-time

4.2 Programme Requirements/ Qualification Profile of the Graduate

The programme includes 25 written exams, and three supervised teamwork projects, 12 weeks (12 CP) Bachelor Thesis (optionally in a company or state institution) and a concluding colloquium.

The graduate is competent and qualified to think in a multi- and interdisciplinary way when applying laws and principles of engineering sciences in order to solve challenging and complex technical problems, particularly in reference to the development of new technologies, products, and services. The graduate acquired a wide knowledge base both in mathematical, natural science disciplines (mathematics, experimental physics) and in engineering sciences (electrical engineering, electronics, computer engineering, digital technology, control systems, information technology, and automation technology).

The graduate student owns profound specialist knowledge in the fields of electrical engineering. He/she has specialized skills in the field of Information and Communication Technologies (see Transcript of Records).

The graduate is able to apply modern business administration methods and has at his/her disposal key competences in technical English,in intercultural communication, in social interaction (team work, practical placement) and in professional presentation and communication. The graduate is familiar with new technologies in the field of electrical engineering and their application. He/she is prepared for life long learning, and will be able to obtain higher academic degrees.

4.3 Programme Details

See "Transcript of records" for list of courses and grades, and "Prüfungszeugnis" (Final Examination Certificate) for subjects offered in final examinations (written and oral), and topic of thesis, including evaluations.

4.4 Grading Scheme

General grading scheme cf. Sec. 8.6 – In addition, institutions already use the ECTS grading scheme which operates with the levels A (best10%), B (next 25%), C (next 30%), D (next 25%), E (next 10%).

4.5 Overall Classification (in original language)

Gesamtnote: 3,1 - befriedigend

Based on the accumulation of grades received during the study programme and the final thesis.

cf. Prüfungszeugnis (Final Examination Certificate)

5. FUNCTION OF THE QUALIFICATION

5.1 Access to Further Study

Qualifies to apply for admission for Master studies

5.2 Professional Status

The degree entitles the holder to electrical engineering functions in companies and private and state institutions.

6. ADDITIONAL INFORMATION

6.1 Additional Information

The programme includes a compulsory work experience of 8 weeks in a company or state institution.

6.2 Further Information Sources

On the institution: www.frankfurt-university.de

On the programme:
www.frankfurt-university.de/fachbereiche/fb2.html

For national information sources see Sect. 8.8

7. CERTIFICATION

This Diploma Supplement refers to the following documents:

Urkunde über die Verleihung des Bachelor-Grades vom 28. Juni 2016

Prüfungszeugnis vom 28. Juni 2016

Transcript of records of 28 June 2016

(Official Stamp/ seal)

Certification Date: 28 June 2016

Prof. Dr.-Ing. Erich Flach

Chairman Examination Committee

8. NATIONAL HIGHER EDUCATION SYSTEM

The information on the national higher education system on the following pages provides a context for the qualification and the type of higher education that awarded it.

Fachbereich 2:
Informatik und Ingenieurwissenschaften

FRANKFURT UNIVERSITY OF APPLIED SCIENCES

Leistungsübersicht für

Herrn

Lam Nguyen Hong

Stand: 01.07.2016
Mtknr: 1068038
geboren am: 13.12.1993
geboren in: Vung Tau

Abschluss: 19 Bachelor
Studiengang: 77 Electrical Engineering and Information Technol VGU Bachelor

		Note	A	PO/Sem/Termin	Status	CP	V	Ver
10 MD	Fundamentals of Engineering Mathematics 1	3,3		7710 /20122 /01	BE	10	1	
20 MD	Experimental Physics and Laboratory	2,0		7710 /20122 /01	BE	10	1	
30 MD	Fundamentals of Electrical Engineering 1	3,3		7710 /20132 /01	BE	10	1	
40 MD	Basics of Engineering Design	2,0		7710 /20122 /01	BE	5	1	
50 MD	Advanced Engineering Mathematics	3,3		7710 /20131 /01	BE	5	1	
60 MD	Fundamentals of Electrical Engineering 2	2,0		7710 /20131 /01	BE	5	1	
70 MD	Electrical Engineering Materials	3,3		7710 /20131 /01	BE	5	1	
80 MD	High-Level Programming Language	4,0		7710 /20131 /01	BE	5	1	
90 MD	Digital Circuit Design and Laboratory	3,0		7710 /20141 /01	BE	5	1	
100 MD	Electronics and Laboratory	4,0		7710 /20141 /01	BE	10	1	
110 MD	Transients and Transforms in Electric Circuits and Systems	2,3		7710 /20152 /01	BE	5	1	
120 MD	Electrical Metrology and Instrumentation	2,7		7710 /20142 /01	BE	5	1	
130 MD	Digital Signal Processing	4,0		7710 /20152 /01	BE	5	1	
140 MD	Industrial Management	2,0		7710 /20132 /01	BE	5	1	
150 MD	Intermediate German	4,0		7710 /20142 /01	BE	10	1	
160 MD	Fundamentals of Telecommunication	2,7		7710 /20141 /01	BE	5	1	
170 MD	Control Engineering 1	4,0		7710 /20151 /01	BE	5	1	
180 MD	Microcontroller and Laboratory	3,0		7710 /20142 /01	BE	5	1	
190 MD	Fundamentals of Power Engineering and Laboratory	4,0		7710 /20141 /01	BE	5	1	
200 MD	Communications Engineering and Laboratory	3,0		7710 /20142 /01	BE	5	1	
210 MD	Digital Routing and Laboratory	3,0		7710 /20142 /01	BE	5	1	
220 MD	RF-Engineering and Laboratory	3,3		7710 /20142 /01	BE	5	1	

Hinweise zu den Spalten 1, 2, A, PO/Sem/Termin, Status, CP, V und Ver
Spalte1: Lehrveranstaltungsnummer
Spalte2: Prüfungsart, PL=Prüfungsleistung, SL=Studienleistung, K=Konto, TP=Teilprüfungsleistung, WP=Wahlpflicht, GE=Generiert
Spalte Status: BE=Bestanden, NB=Nicht bestanden, EN=Endgültig nicht bestanden, AN=Angemeldet, PV=Prüfung vorhanden.
Spalte CP = CreditPoints, Spalte V = Versuch
SpalteA: A=Übertragene Leistung von anderer Prüfungsordnung oder anerkannte Leistung aus anderem Studiengang oder anderer Hochschule, sonst leer
Spalte PO/Sem/Termin: Prüfungsordnungsversion, Semester und Termin des Leistungsnachweises
Spalte Ver=Vermerk: RT Rücktritt, AT Attest, RU Rücknahme, NE Nicht Erschienen, TA Täuschung

Die Bescheinigung wurde maschinell erstellt und ist ohne Unterschrift gültig.

- Folgeseite -

Fachbereich 2:
Informatik und Ingenieurwissenschaften

FRANKFURT UNIVERSITY OF APPLIED SCIENCES

Leistungsübersicht für

Herrn

Lam Nguyen Hong

Mtknr. 1068038

230 MD	Embedded Intelligent Systems and Laboratory	1,7	7710 /20142 /01	BE	5	1
240 MD	Information Processing with Project and Laboratory	1,7	7710 /20151 /01	BE	5	1
250 MD	Control Engineering 2 and Laboratory	4,0	7710 /20152 /01	BE	5	1
260 MD	Signals and Systems	2,0	7710 /20151 /02	BE	5	1
270 MD	Digital Systems and Laboratory	2,7	7710 /20142 /01	BE	5	1
280 MD	Elective Subjects Project and Laboratory	2,3	7710 /20151 /01	BE	8	1
290 MD	Bachelor Thesis and Colloquium	3,8	7710 /20161 /01	BE	12	1
9000 AB	Bachelor (Abschluss)	3,1	7710 /20161 /01	BE	180	1

Frankfurt University of Applied Sciences
Fb 2: Informatik und Ingenieurwissenschaften
Computer Science and Engineering
Dekanat / Dean's Office
Prüfungsamt
Nibelungenplatz 1 - 60318 Frankfurt am Main

Hinweise zu den Spalten 1, 2, A, PO/Sem/Termin, Status, CP, V und Ver
Spalte1: Lehrveranstaltungsnummer
Spalte2: Prüfungsart, PL=Prüfungsleistung, SL=Studienleistung, K=Konto, TP=Teilprüfungsleistung, WP=Wahlpflicht, GE=Generiert
Spalte Status: BE=Bestanden, NB=Nicht bestanden, EN=Endgültig nicht bestanden, AN=Angemeldet, PV=Prüfung vorhanden.
Spalte CP = CreditPoints, Spalte V = Versuch
SpalteA: A=Übertragene Leistung von anderer Prüfungsordnung oder anerkannte Leistung aus anderem Studiengang oder anderer Hochschule, sonst leer
Spalte PO/Sem/Termin: Prüfungsordnungsversion, Semester und Termin des Leistungsnachweises
Spalte Ver=Vermerk: RT Rücktritt, AT Attest, RU Rücknahme, NE Nicht Erschienen, TA Täuschung

Die Bescheinigung wurde maschinell erstellt und ist ohne Unterschrift gültig.

Faculty 2:
Computer Science and Engineering

FRANKFURT UNIVERSITY OF APPLIED SCIENCES

Exams Extract for

Mr.

Lam Nguyen Hong

Date: 01.07.2016
Reg.-No.: 1068038
Date of Birth: 13.12.1993
Place of Birth: Vung Tau

Degree: 19 **Bachelor**
Field of study: 77 **Electrical Engineering and Information Technol VGU Bachelor**

		Grade	A	PO/Sem/Date	Status	CP	V	Ver
10 MD	Fundamentals of Engineering Mathematics 1	3,3		7710 /20122 /01	BE	10	1	
20 MD	Experimental Physics and Laboratory	2,0		7710 /20122 /01	BE	10	1	
30 MD	Fundamentals of Electrical Engineering 1	3,3		7710 /20132 /01	BE	10	1	
40 MD	Basics of Engineering Design	2,0		7710 /20122 /01	BE	5	1	
50 MD	Advanced Engineering Mathematics	3,3		7710 /20131 /01	BE	5	1	
60 MD	Fundamentals of Electrical Engineering 2	2,0		7710 /20131 /01	BE	5	1	
70 MD	Electrical Engineering Materials	3,3		7710 /20131 /01	BE	5	1	
80 MD	High-Level Programming Language	4,0		7710 /20131 /01	BE	5	1	
90 MD	Digital Circuit Design and Laboratory	3,0		7710 /20141 /01	BE	5	1	
100 MD	Electronics and Laboratory	4,0		7710 /20141 /01	BE	10	1	
110 MD	Transients and Transforms in Electric Circuits and Systems	2,3		7710 /20152 /01	BE	5	1	
120 MD	Electrical Metrology and Instrumentation	2,7		7710 /20142 /01	BE	5	1	
130 MD	Digital Signal Processing	4,0		7710 /20152 /01	BE	5	1	
140 MD	Industrial Management	2,0		7710 /20132 /01	BE	5	1	
150 MD	Intermediate German	4,0		7710 /20142 /01	BE	10	1	
160 MD	Fundamentals of Telecommunication	2,7		7710 /20141 /01	BE	5	1	
170 MD	Control Engineering 1	4,0		7710 /20151 /01	BE	5	1	
180 MD	Microcontroller and Laboratory	3,0		7710 /20142 /01	BE	5	1	
190 MD	Fundamentals of Power Engineering and Laboratory	4,0		7710 /20141 /01	BE	5	1	
200 MD	Communications Engineering and Laboratory	3,0		7710 /20142 /01	BE	5	1	
210 MD	Digital Routing and Laboratory	3,0		7710 /20142 /01	BE	5	1	

Remarks for columns 1, 2, Grade, A, PO/Sem/Date, Status, CP, V and Ver
Column 1: Module number
Column 2: Type of examination, PL=Major examination, SL=Minor examination, K=Account, MD=Modul, TP=Part of examination, WP=Elective subject, GE=Generated
Column Status: BE=Passed, NB=Not passed, EN=Finally not passed, AN=Enrolled, PV=examination existing
Column Grade: unbenotet: not graded, Column CP = CreditPoints, Column V = Attempt
Column A: A=Transferred results from other examination regulations or accepted results from other study program or other university, otherwise empty
Column PO/Sem/Date: Version of Examination Regulations, semester and date of examination results
Column Ver=Remarks: RT Withdrawal, AT Medical certificate, RU Revocation, NE Not appeared, TA Forgey, TGN=Participated

These certificate is done automatically and is valid without signature

- Next page -

Faculty 2:
Computer Science and Engineering

FRANKFURT UNIVERSITY OF APPLIED SCIENCES

Exams Extract for

Mr.

Lam Nguyen Hong

Registration Number 1068038

220 MD	RF-Engineering and Laboratory	3,3	7710 /20142 /01	BE	5	1
230 MD	Embedded Intelligent Systems and Laboratory	1,7	7710 /20142 /01	BE	5	1
240 MD	Information Processing with Project and Laboratory	1,7	7710 /20151 /01	BE	5	1
250 MD	Control Engineering 2 and Laboratory	4,0	7710 /20152 /01	BE	5	1
260 MD	Signals and Systems	2,0	7710 /20151 /02	BE	5	1
270 MD	Digital Systems and Laboratory	2,7	7710 /20142 /01	BE	5	1
280 MD	Elective Subjects Project and Laboratory	2,3	7710 /20151 /01	BE	8	1
290 MD	Bachelor Thesis and Colloquium	3,8	7710 /20161 /01	BE	12	1
9000 AB	Bachelor's Degree	3,1	7710 /20161 /01	BE	180	1

Frankfurt University of Applied Sciences
Fb 2: Informatik und Ingenieurwissenschaften
Computer Science and Engineering
Dekanat / Dean's Office
Prüfungsamt
Nibelungenplatz 1 - 60318 Frankfurt am Main

Remarks for columns 1, 2, Grade, A, PO/Sem/Date, Status, CP, V and Ver
Column 1: Module number
Column 2: Type of examination, PL=Major examination, SL=Minor examination, K=Account, MD=Modul, TP=Part of examination, WP=Elective subject, GE=Generated
Column Status: BE=Passed, NB=Not passed, EN=Finally not passed, AN=Enrolled, PV=examination existing
Column Grade: unbenotet: not graded, Column CP = CreditPoints, Column V = Attempt
Column A: A=Transferred results from other examination regulations or accepted results from other study program or other university, otherwise empty
Column PO/Sem/Date: Version of Examination Regulations, semester and date of examination results
Column Ver=Remarks: RT Withdrawal, AT Medical certificate, RU Revocation, NE Not appeared, TA Forgey, TGN=Participated

These certificate is done automatically and is valid without signature