

APOSTILLE

(Convention de La Haye du 5 octobre 1961)

1. Riik / Country Estonia
Selle avaliku dokumendi / This public document
2. on allkirjastanud / has been signed by
Arno Annus
3. ametikoht / acting in the capacity of
Head of Dean's Office of Faculty of Information Technology
4. kinnitatud pitsati- / templijäljendiga/
bears the seal / stamp of
Tallinn University of Technology

Kinnitatud / Certified

5. Kus / at Tallinn
6. Millal / the 06.04.2005
7. Kelle poolt / by Ene Ritso, Head of Tallinn Office
8. Nr / No 1366
9. Pitsatijäljend / Seal
10. Allkiri / Signature Ene



AA 022578

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programme in Register
ring, 7542310, 31.05.02

2.5. Language(s) of instruction: Tallinna Tehnikaülikool, public university
Estonian

3. INFORMATION ON THE LEVEL OF THE QUALIFICATION

- 3.1. Level of qualification: Second stage of higher education; ISCED (1997) 5A3
- 3.2. Official length of programme: 2 years
- 3.3. Access requirement(s): bakalaureusekraad
or education of an equivalent level

4. INFORMATION ON THE CONTENTS AND RESULTS GAINED

- 4.1. Mode of study: Full-time
- 4.2. Programme details: Completion of 80 AP/120 ECTS credit programme, general studies 2/3, basic studies 10/15, core studies 8/12, special studies 20/30, graduation thesis 40/60

4.3. Components of study programme:

DS 003267



REPUBLIC OF ESTONIA

DIPLOMA SUPPLEMENT

Annex to Diploma No CB001301

This Diploma Supplement follows the model developed by the European Commission, Council of Europe and UNESCO/CEPES. The purpose of the diploma supplement is to provide sufficient independent data to improve the international 'transparency' and fair academic and professional recognition of qualifications. 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. Information in all sections should be provided. Where information is not provided, an explanation should give the reason why.

1. INFORMATION IDENTIFYING THE HOLDER OF THE QUALIFICATION

- 1.1. Family name: Rodina
1.2. Given name: Anastassia
1.3. Date of birth (day/month/year): 23.06.1981
1.4. Personal identification code: 48106232221

2. INFORMATION IDENTIFYING THE QUALIFICATION

- 2.1. Name of qualification and title conferred (in original language):
tehnikateaduste magistri kraad
2.2. Main field(s) of study for the qualification (name, code and date of registration of programme in Register of programmes of Ministry of Education and Research):
Electronics and Biomedical Engineering, 7542310, 31.05.02
2.3. Minor field(s) of study:
No specialisation
2.4. Name and status of awarding institution: Tallinna Tehnikaülikool, public university
2.5. Language(s) of instruction:
Estonian

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Subject code	Subject	Credit points (AP/ECTS)	Date	Result	Teaching staff member
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The following subjects which have been taken outside Tallinn University of Technology in the capacity of 40,5 AP/60,75 ECTS credits, shall be counted as fulfillment of the study programme Electronics and Biomedical Engineering as follows: (The data missing in case not indicated in the original document)

Patrase Ülikool, Kreeka

VFQ8210	Applications of Physics in Medicine: mechanics, electricity	2/3	21.05.2004	3	
VFQ8200	Biomedical Instrumentation	5/7,5	31.05.2004	3	
VFQ8190	Health Care Technology Assessment	5/7,5	31.05.2004	5	
VFQ8180	Clinical Engineering	5/7,5	31.05.2004	5	
VFQ8171	Health Care Telematics & Neural Networks	3/4,5	31.05.2004	3	
VFQ8161	Biomedical Signal Processing and Pattern Recognition	3/4,5	31.05.2004	3	
VFQ8151	Dynamic Modeling of Biomechanical Systems	2/3	31.05.2004	4	
VFQ8140	Biomechanics and Biocompatible Materials	3/4,5	31.05.2004	3	
VFQ8130	Basics of Signal Processing	1,5/2,25	31.05.2004	5	
VFQ8120	Electronics in Medicine	1,5/2,25	31.05.2004	5	
VFQ8110	Quality Management/Research Methodology	3,5/5,25	31.05.2004	5	
VFQ8090	Biology and Biochemistry, Anatomy	3/4,5	31.05.2004	4	
VFQ3120	Physiology and Pathophysiology	3/4,5	31.05.2004	3	

Tallinn University of Technology

LBR5020	Bioelectromagnetism	4/6	14.06.2002	5	H.Hinrikus
LBR5030	Electromagnetic radiation in biological media	4/6	10.01.2003	4	H.Hinrikus
HLI8750	English for science	2/3	03.12.2004	4	G.Pesur

Title of thesis: Modulated electromagnetic field effects on human visual perception
40/60 06.12.2004 5 J.Lass

Total capacity of credits obtained 90,5 AP/ 135,75 ECTS

Weighted average grade 4,46

4.4. Grading scheme:

Grade	Description	Percentage of Knowledge	Estimated Grade Equivalent in ECTS*
5	excellent	91 - 100	A
4	very good	81 - 90	B
3	good	71 - 80	C
2	satisfactory	61 - 70	D
1	sufficient	51 - 60	E
0	insufficient	0 - 50	FX/F

* ECTS – European Credit Transfer System

Preliminary examination can be expressed as a grade or a positive result "A" - Passed or as a negative result "M" - Failed.

5. INFORMATION ON THE FUNCTION OF THE QUALIFICATION

5.1. Access to further study:

5.2. Professional status:

doktoriõpe (doctor-level study)

No special information is indicated, provides access to positions in the labour market, where master-level education is required

6. ADDITIONAL INFORMATION

Cntd DS003267

6.1. Information on accreditation (date and institution):

The study programme has been accredited
by the Estonian Higher Education Quality Assessment Council on
14.06.1999

6.2. Additional information of awarding institution: www.ttu.ee

6.3. Further information sources:

Tallinn University of Technology
Faculty of Information Technology
Ehitajate tee 5, 19086 Tallinn
ESTONIA

Tel: + 372 6 203 528

Fax: +372 620 20 20

E-mail: lt@ttu.ee

Academic Recognition Information Centre

The Estonian ENIC/NARIC

Koidula 13 a, 10125 Tallinn

ESTONIA

+ 372 696 24 15

+ 372 696 24 19

gunnar@archimedes.ee

7. ESTONIAN HIGHER EDUCATION SYSTEM

1. GENERAL FRAMEWORK

Higher education is primarily regulated by the Universities Act, the Institutions of Professional Higher Education Act, and the Private Schools Act.

The Estonian higher education system is binary and consists of universities (*ülikool*) and professional higher education institutions (*rakenduskõrgkool*). Some vocational schools also have a right to offer professional higher education programmes. Based on the form of ownership, institutions of higher education can be divided into state, public and private institutions.

Since the academic year of 2002/2003, the general structure of the higher education system is based on two main cycles, following the undergraduate-graduate model. The first cycle is the bachelor level; the second cycle is the master level. For some specialities, the study programmes have been integrated into a single long cycle, leading to a master level qualification. The highest stage at universities is doctorate studies. Professional higher education programmes constitute the first stage of the higher education system and correspond to bachelor level programmes.

Universities are institutions that provide academic higher education and can also offer professional higher education programmes. Institutions of professional higher education provide professional higher education and may offer master level programmes in the field of theology and defence or in other fields in cooperation with universities.

2. ACCREDITATION AND RECOGNITION OF QUALIFICATIONS

Accreditation is a process in the course of which an institution of higher education or its study programme is evaluated. The Higher Education Quality Assessment Council, in cooperation with foreign experts, carries out accreditation. The term of validity of a positive accreditation decision is seven years. A conditional accreditation decision is also a positive decision the term of validity of which is three years.

Qualifications awarded to students who have completed a study programme that has been accredited positively as well as the qualifications that have been awarded up to two years before a positive accreditation decision are deemed to be recognised by the state. Diplomas of public universities awarded upon the completion of study programmes that were registered before 1 June 2002, as well as diplomas awarded upon the completion of professional higher education programmes that were registered before 30 June 2003 enjoy state recognition even without being accredited.

3. ADMISSION REQUIREMENTS

3.1. General requirements

The general admission requirement to an institute of higher education is secondary education evidenced by a respective certificate – secondary school leaving certificate, certificate on acquiring secondary vocational education, other respective certificates and diplomas from previous systems and foreign qualifications giving access to higher education.

The secondary school leaving certificate (*Gümnaasiumi lõputunnistus*) is awarded after 12 years of studies (9 years of basic education and 3 years of secondary education). Since 1997, secondary school students must pass state examinations (as of 1998 there are three examinations). The *Gümnaasiumi lõputunnistus* is valid with the state examination certificate – *Riigieksamitunnistus*.

3.2. Specific requirements

In addition to general requirements an institution of higher education may impose specific admission requirements such as entrance examinations, result of state examinations, speciality tests or interviews, etc.

4. ORGANISATION OF THE COURSE OF STUDIES

The Standard of Higher Education establishes general requirements for studies, curricula and academic staff. The nominal duration of studies is measured in academic years, the scope of the curriculum in credit points (*ainepunkt*, or AP). One credit point corresponds to forty hours (one study week) of studies performed by a student. One academic year consists of 40 credit points, which corresponds to 60 credits of the European Credit Transfer System (ECTS).

5. HIGHER EDUCATION QUALIFICATIONS

5.1. Professional higher education qualifications

Professional higher education is the first stage of higher education, established from the admission of the academic year of 2002/2003, which aims at acquiring the competencies necessary for work in a certain profession or further study in the master level. The nominal length of study is 3 to 4.5 years, 120 to 180 AP (180 to 240 ECTS credits). Graduates who have completed their studies are awarded a diploma (on a bluish-gray form, marked with E) certifying the completion of the professional higher education programme – *rakenduskõrgharidusõppe diplom*.

Professional higher education studies have developed from higher vocational education studies and diploma studies that applied until the academic year of 2002/2003. The aim of **higher vocational education studies** was to acquire general education as well as professional and occupational knowledge and skills. **Diploma studies** were of applied content, the purpose of which was to acquire practical knowledge and skills. The nominal length of both studies was 3 to 4 years. Higher vocational education and diploma studies differ in their requirements for teaching staff and the scope of practical training. Graduates who have completed their study are awarded a diploma on completing the respective study programme. The qualifications are called *kutsekõrgharidusõppe diplom* (higher vocational education diploma, on yellow form, marked with K) and *diplomõppe diplom* (diploma study diploma, on green form, marked with A), respectively.

5.2. *Bakalaureusekraad*

Bakalaureus -study is the first stage of bachelor level higher education study with the aim of increasing students' level of general education, acquiring basic knowledge and skills in the speciality necessary to pursue further studies at the master level and for commencing work. The nominal length of studies is generally 3 years, 120 AP (180 ECTS credits), and in few disciplines up to 4 years, 160 AP (240 ECTS credits).

The main aim of the *bakalaureus*-study programmes registered before 1 June 2002 was to develop theoretical knowledge and skills in the selected work area and the completion of the programme granted the right to work in a position requiring high-level specialist qualifications. The nominal length of studies was predominantly 4 years, along with teacher training that could be extended up to 5 years. Under the conditions and in the manner established by the university the completion of a programme registered before 1 June 2002 can be regarded as a part of studies at master level.

Graduates who have completed their studies are awarded a degree – *bakalaureusekraad* – which is certified by a diploma (on a greenish yellow form, marked with L; programmes registered before 1 June 2002 are on a blue form, marked with B).

5.3. *Magistrikraad*

Cntd S017907

Magister -study constitutes the second stage of master level higher education during which speciality knowledge and skills are developed further and knowledge and skills necessary for independent work and pursuing studies at a doctorate level are acquired. The main purpose of the *magister* -studies is to train a specialist with deep theoretical knowledge. The admission requirement is the *bakalaureusekraad* or an equivalent level of qualification. The nominal length of the studies is 1 to 2 years, 40 to 80 AP (60 to 120 ECTS credits), but along with the first stage at least 5 years, 200 AP (300 ECTS credits).

Upon completing *magister* -study programmes registered before 1 June 2002, *magistrikraad* is awarded as a research or professional degree. Research constitutes at least 50 percent of the studies in a research *magister* programme and a novel scientific treatment of a speciality problem is presented in the final thesis. Research, development or creative work constitutes at least 25 percent of the scope of studies in the professional *magister* programme and the studies are aimed at finding a novel solution to a professional, creative problem. Under the conditions and in the manner established by the university the completion of a *magister* -study programme registered before 1 June 2002 can be regarded as a part of doctorate studies.

Graduates who have completed their studies are awarded a degree – *magistrikraad* – which is certified by a diploma (on a silver form, marked with M; programmes registered before 1 June 2002, on a brown form, marked with C).

5.4. Qualification of integrated long-cycle programmes

The integrated long-cycle studies contain both bachelor and master level studies. Completion of the study programme provides a qualification corresponding to the *magistrikraad*. The studies are characteristic of medicine, veterinary medicine, pharmacy, dentistry, architecture, civil engineering and class teacher training. The nominal length of medical studies, and since the admission of the 2002/2003 academic year also veterinarian studies, is 6 years, 240 AP (360 ECTS credits); and in other fields 5 years, 200 AP (300 ECTS credits).

Graduates who have completed their studies are awarded a diploma (on a silver form, marked with M; programmes registered before 1 June 2002, on a brown form, marked with C) certifying the completion of the respective integrated programme. By a decision of the university the *magistrikraad* may be awarded.

5.5. Doktorikraad

Doktor -studies constitute the highest stage of higher education aimed at acquiring knowledge and skills necessary for independent research, development or professional creative work. The general admission requirement for *doktor* -studies is a *magistrikraad* or a corresponding qualification. The nominal length of studies is 3 to 4 years, 120 to 160 AP (180 to 240 ECTS credits).

Graduates who have completed their studies are awarded a degree – *doktorikraad*, which is certified by a diploma (on a golden form, marked with D; programmes registered before 1 June 2002, on a white form, marked with D). The degree is a research degree for which the candidate has to compose and defend a doctorate thesis – independent scientific research or creative work.

07.12.2004

Registration number 1-3907

Arno Annus

Head of Dean's Office of Faculty of Information Technology

Merike Siidoja
Secretary



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