



REPUBLIC OF ESTONIA

TARTU ÜLIKOOL
University of Tartu

DIPLOMA SUPPLEMENT

Annex to Diploma No LA 001289

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: **UUSTAL**
1.2. Given name: **TIMO**
1.3. Date of birth (day/month/year): **29.03.1984**
1.4. Personal identification code: **38403292735**

2. INFORMATION IDENTIFYING THE QUALIFICATION

- 2.1. Name of qualification and (if applicable) title conferred (in original language):
loodusteaduse bakalaureuse kraad.
- 2.2. Main field(s) of study for the qualification: **Programme: Environmental Technology (code 2460)**
The study programme entered into the Estonian Education Information System on 22.08.2002
Main field of study: Environmental Technology
Minor field of study: Economics 48 ECTS
- 2.3. Name and status of awarding institution (in original language):
Tartu Ülikool, public university
- 2.4. Name and status of institution (if different from 2.3.) administering studies (in original language):
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- 2.5. Language(s) of instruction: **Estonian**

3. INFORMATION ON THE LEVEL OF THE QUALIFICATION

- 3.1. Level of qualification: **first cycle higher education,**
Estonian Qualifications Framework Level 6
European Qualifications Framework Level 6
- 3.2. Official length of programme: **3 years**
180 European Credit Transfer and Accumulation System (ECTS) credits
- 3.3. Access requirement(s): *gümnaasiumi lõputunnistus (Secondary School Leaving Certificate), lõputunnistus kutsekeskhariduse omandamise kohta (Certificate of Vocational Secondary Education) or a corresponding qualification giving access to higher education*

DS 073957

4. INFORMATION ON THE CONTENTS AND RESULTS GAINED

- 4.1. Mode of study: full-time
- 4.2. Programme requirements: The obligatory base programme (48 ECTS) consists of two base modules, 24 ECTS each, common for all the curricula of sciences. The narrow field programme comprises one obligatory narrow field module (24 ECTS) and one obligatory speciality module (24 ECTS); a student may select additional narrow field module (24 ECTS) and speciality module (24 ECTS) and from amongst the narrow field modules of sciences or the other curricula of the University of Tartu. Three elective modules (6 ECTS each) may be selected from amongst the elective modules of the curricula of sciences or the other curricula of the University of Tartu. The curriculum also contains optional subjects (12 ECTS) and a final thesis (6 ECTS).

Learning outcomes:

After passing the curriculum the student

- 1) has the basic knowledge in mathematics, physics, chemistry, biology and earth sciences for independent study;
- 2) is able to apply knowledge of physics, chemistry and biology to environmental processes and problems;
- 3) is familiar with different technologies and practices in the environmental field;
- 4) understands the general research principles and the scientific method in environmental technology;
- 5) can use specialized databases to collect information and is able to critically and creatively interpret the information;
- 6) is able to analyze orally and in writing problems related to the specialty and participate in relevant discussions;
- 7) can interpret the theoretical and practical value of acquired knowledge and skills to the individual as well as to society, taking into account scientific, social and ethical aspects.

4.3. Programme details (e.g. modules or units studied) and the individual grades/marks/credits obtained:

| Subject code | Subject | ECTS credits | Date | Result | Teaching staff member |
|---|--|--------------|------------|----------------|---|
| Universiteti i Prishtines (Republic of Kosovo) | | | | | |
| | Research Planning and Design for the Biological/Chemical and Environmental/Ecological Sciences | 4.50 | 29.07.2005 | A - Excellent | Potts |
| University of Tartu | | | | | |
| BGMR.07.023 | Biological Physics | 6.00 | 24.11.2003 | C - Good | A. Freiberg |
| MTAT.03.009 | Introduction to Computer Applications | 3.00 | 03.12.2003 | Pass | M. Treumuth |
| FKFE.01.090 | Seminar in General Chemistry | 3.00 | 11.12.2003 | Pass | L. Tamm |
| BGGL.03.026 | Fundamentals of Earth Sciences I (Part 1) | 3.00 | 18.12.2003 | Pass | I. Tuuling |
| MJJV.08.004 | Basics of Strategic Management | 3.00 | 19.12.2003 | Pass | A. Reiljan |
| MJRA.01.028 | Financial Accounting and Statement Analysis | 3.00 | 08.01.2004 | A - Excellent | S. Kalnin |
| MTPM.05.067 | Higher Mathematics | 6.00 | 09.01.2004 | A - Excellent | E. Abel |
| FKFE.01.085 | Chemical Principles | 6.00 | 16.01.2004 | A - Excellent | L. Tamm |
| MJRA.02.064 | Banking I (Financial Institutions and Markets) | 3.00 | 30.01.2004 | A - Excellent | A. Juhkam |
| BGGL.03.026 | Fundamentals of Earth Sciences I (Part 2) | 3.00 | 15.03.2004 | B - Very good | T. Pani |
| BGBG.00.001 | Diversity of Organisms | 6.00 | 17.03.2004 | C - Good | M. Martin, Ü. Reier, A. Sellin, H. Valdmann |
| BGMR.08.033 | Biochemistry I | 3.00 | 13.04.2004 | B - Very good | J. Sedman |
| BGBO.03.001 | Ecology | 1.50 | 06.05.2004 | E - Sufficient | K. Zobel |
| BGMR.06.023 | Cell Biology | 3.00 | 18.05.2004 | A - Excellent | E. Padu |
| MJJV.08.046 | Time Management - Theoretical and Infotechnological Aspects | 3.00 | 26.05.2004 | Pass | V. Leping, A. Siimon |
| MJRA.01.065 | Managerial Accounting | 3.00 | 27.05.2004 | Pass | P. Peets |
| BGGG.03.039 | Earth Science II | 3.00 | 31.05.2004 | B - Very good | Ü. Mander |
| MJJV.03.084 | Organizational Behaviour | 3.00 | 02.06.2004 | A - Excellent | M. Vadi |
| BGMR.02.024 | Mechanisms of Evolution | 1.50 | 04.06.2004 | B - Very good | R. Villems |
| BGMR.03.034 | Genetics I | 3.00 | 07.06.2004 | A - Excellent | M. Kivisaar |
| MJRI.08.040 | International Economics I | 3.00 | 10.06.2004 | Pass | E. Reiljan, T. Vissak |

Continues on pages S 281156, S 281157, S 281158

| | | | | | |
|-------------|---|------|------------|------------------|-------------------------|
| MJIV.03.076 | Personnel Management | 3.00 | 28.10.2004 | Pass | K. Türk |
| BGBO.03.008 | Ecology | 3.00 | 10.11.2004 | C - Good | K. Zobel |
| BGGL.03.060 | Hydrogeology | 3.00 | 18.11.2004 | A - Excellent | E. Karro |
| FKMF.01.064 | Practical Works on Environmental Physics - I | 3.00 | 02.12.2004 | Pass | H. Siimon |
| MJRI.08.042 | Budgets and Taxation | 3.00 | 13.12.2004 | Pass | E. Ulst |
| FKFE.05.058 | Practical Works in Environmental Chemistry II | 3.00 | 17.12.2004 | Pass | A. Pruks |
| BGMR.03.025 | General Microbiology | 4.50 | 20.12.2004 | B - Very good | T. Alamäe |
| FKKF.03.044 | Fundamentals of the Environmental Physics I | 3.00 | 04.01.2005 | C - Good | H. Ohvril |
| FKKF.01.008 | Natural Energy Resources | 3.00 | 07.01.2005 | A - Excellent | Ü. Kikas |
| FKFE.05.136 | Processes in Microheterogeneous Systems | 3.00 | 10.01.2005 | B - Very good | K. Tammeveski |
| BGGG.01.079 | Geographic Information Systems I | 3.00 | 24.01.2005 | A - Excellent | T. Oja |
| FLKE.02.121 | French. Level I (Part I) | 3.00 | 25.01.2005 | Pass | E. Roon |
| MJJV.07.009 | International Economics II | 3.00 | 27.01.2005 | B - Very good | T. Roolah |
| FKFE.05.056 | General Course of Basic Environmental Chemistry I | 3.00 | 27.01.2005 | A - Excellent | K. Orupõld |
| FKFE.05.057 | General Course of Basic Environmental Chemistry II | 4.50 | 01.04.2005 | A - Excellent | K. Orupõld |
| MJRA.03.068 | Financial Management I | 3.00 | 26.04.2005 | C - Good | K. Kask, P. Sander |
| FKFE.05.059 | Practical Works in Environmental Chemistry II | 1.50 | 04.05.2005 | Pass | A. Pruks |
| FKFE.05.090 | Water Technology II | 3.00 | 11.05.2005 | B - Very good | T. Tenno |
| BGBO.04.030 | Ecological Applications | 3.00 | 13.05.2005 | B - Very good | E. Merilo |
| FKFE.05.052 | Ecotoxicology | 3.00 | 16.05.2005 | A - Excellent | K. Orupõld |
| BGGL.03.039 | Mineral Resources of Estonia and Mining Technologies | 3.00 | 19.05.2005 | C - Good | M. Rattas |
| MJJV.02.026 | Marketing I | 3.00 | 06.06.2005 | C - Good | E. Reiljan |
| MJRA.02.065 | Banking II | 3.00 | 07.06.2005 | A - Excellent | N. Ivanova |
| FKFE.05.088 | Environmental Technology, Introduction I | 3.00 | 13.06.2005 | A - Excellent | K. Hellat |
| FKFE.05.138 | Processes in Chemical Industry and Environment | 3.00 | 14.06.2005 | B - Very good | K. Hellat |
| BGGL.03.055 | Engineering Geology | 3.00 | 04.11.2005 | C - Good | P. Talviste |
| MJJV.02.077 | Marketing II | 3.00 | 09.11.2005 | D - Satisfactory | E. Reiljan, K. Timpmann |
| MJRA.03.069 | Financial Management II | 3.00 | 24.11.2005 | A - Excellent | V. Raudsepp |
| FKFE.05.060 | Solid Waste Management and Treatment | 3.00 | 01.12.2005 | Pass | K. Hellat |
| MJJV.08.031 | Management and Organization | 3.00 | 05.01.2006 | C - Good | A. Siimon |
| FKFE.05.011 | Environmental Analysis | 3.00 | 05.01.2006 | A - Excellent | K. Orupõld |
| FKEF.02.064 | Technical Graphics | 3.00 | 09.01.2006 | A - Excellent | P. Kukk |
| FKKF.03.073 | Dosimetry in the Environment and Radiation Protection I | 3.00 | 10.01.2006 | B - Very good | E. Realo |
| MJRI.09.017 | Microeconomics | 3.00 | 12.01.2006 | C - Good | A. Kaasa |
| FKFE.05.089 | Environmental Analysis (Practical Works) | 3.00 | 27.01.2006 | Pass | A. Pruks |
| BGGL.02.037 | Estonian Geology | 3.00 | 03.04.2006 | A - Excellent | T. Meidla |
| FKKF.01.007 | Environmental Remote Sensing I | 3.00 | 11.04.2006 | A - Excellent | T. Nilson |
| BGGG.03.064 | Ecological Engineering | 3.00 | 04.05.2006 | B - Very good | T. Mäuring |
| BGGG.03.023 | Nature and Environmental Protection | 3.00 | 09.05.2006 | D - Satisfactory | A. Lääneld |
| BGGL.03.051 | Environmental Geology | 3.00 | 15.05.2006 | A - Excellent | E. Puura |
| BGGG.03.077 | Basic Soil Science I | 3.00 | 15.05.2006 | E - Sufficient | A. Kanal |
| FKFE.05.094 | Hazardous Waste Treatment | 3.00 | 18.05.2006 | Pass(A) | K. Hellat |
| FKFE.05.087 | Water Technology I | 3.00 | 25.05.2006 | A - Excellent | K. Hellat |
| MJRI.10.010 | Macroeconomics | 3.00 | 29.05.2006 | C - Good | R. Eamets |
| MJRI.03.064 | Economic Policy | 3.00 | 01.06.2006 | Pass | D. Eerma |

Graduation thesis: Fosfor Läänemere
nõhjasetetes
Phosphorus in Sediments of Baltic Coast

6.00

07.06.2006 B - Very good

A. Pruks, K.
Pettersson

Total workload 219.00

Weighted average grade 4.10

4.4. Grading scheme(s):

Grading scheme since August 30, 1999

| Grade | Description |
|-------|--------------|
| A | Excellent |
| B | Very good |
| C | Good |
| D | Satisfactory |
| E | Sufficient |
| F | Insufficient |

The examination or preliminary examination is considered passed upon its grading in the range from "E" to "A". In calculating the average grade the following correspondences are applied: A = 5, B = 4, C = 3, D = 2, E = 1, F = 0.

Non-differentiated assessment of academic results is conducted using a system whereby the positive result is defined as "Pass" and the negative result as "Fail".

5. INFORMATION OF THE FUNCTION OF THE QUALIFICATION

5.1. Access to further study:

Master's studies

5.2. Professional status:

Gives access to positions on labour market, where higher education is required

6. ADDITIONAL INFORMATION

6.1. Additional information:

This study programme is included in the study programme group of "Environmental protection" and the studies are conducted according to the rights given by Government of the Republic Regulation No. 178 of 18.12.2008 "Standard of Higher Education"

6.2. Further information sources:

Institution: University of Tartu
Faculty of Science and Technology

Estonian ENIC/NARIC
Academic Recognition Information Centre
Archimedes Foundation

Address: Vanemuise 46-202, 51014, Tartu

L. Koidula 13A, 10125, Tallinn, ESTONIA

www-page: www.ut.ee

www.archimedes.ee/enic

Tel: (+372) 737 5820

(+ 372) 697 9215

Fax: (+372) 737 5822

(+ 372) 697 9226

E-mail: lote@ut.ee

enic-naric@archimedes.ee

7. CERTIFICATION OF THE SUPPLEMENT

7.1. Date: 02.01.2014

7.2. Signatures:

7.3. Names: Peeter Burk

7.4. Capacity: Dean

Kairi Hõlpus

Specialist for Academic Affairs

7.5. Official stamp or seal



Registration No 64

8. ESTONIAN HIGHER EDUCATION SYSTEM

8.1. GENERAL FRAMEWORK

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

The Estonian higher education system is binary and consists of universities (*ülikool*) and applied 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. Applied 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 applied 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.

8.2. 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.

8.3. ADMISSION REQUIREMENTS

8.3.1. 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*.

8.3.2. 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.

8.4. 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).

8.5. HIGHER EDUCATION QUALIFICATIONS

8.5.1. 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 *diplomiõppe diplom* (diploma study diploma, on green form, marked with A), respectively.

8.5.2. 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).

8.5.3. Magistrikraad

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, a *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).

8.5.4. 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.

8.5.5. 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 O; 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.

