



UNIVERSITY OF ICELAND

School of Engineering and Natural Sciences

Faculty of Industrial Engineering, Mechanical Engineering
and Computer Science

hereby makes known that:

Hallgrímur Þáði Egilsson

having completed all academic requirements and examinations in

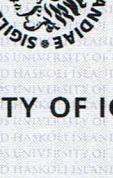
Computer Science

is awarded the degree of

baccalaureus scientiarum BS

Reykjavík, June 24, 2017

Certified translation of the original Icelandic degree certificate



Graduation Transcript

Hallgrímur Þórhallgrímur Egilsson

Born September 12, 1993

Id.no. 120993-2329

UNIVERSITY OF ICELAND

Graduation date: June 24, 2017

Faculty of Industrial Engineering, Mechanical Engineering and Computer Science

Computer Science – BS

Specialization: Computational Science

Number	Courses	Credits	Grade	Finished
IDN101G	Operation Management	6.0	Transf*	Autumn 2013
TÖL105G	Computer Science 1a	6.0	10.0*	Autumn 2013
STÆ104G	Mathematical Analysis IB	6.0	8.0*	Autumn 2013
STÆ107G	Linear Algebra B	6.0	7.5*	Autumn 2013
EDL102G	Physics 1 V	6.0	8.5*	Autumn 2013
STÆ205G	Mathematical Analysis IIB	6.0	7.0*	Spring 2014
STÆ203G	Probability and Statistics	6.0	7.5*	Spring 2014
EDL201G	Physics 2 V	6.0	Transf*	Spring 2014
VÉL302G	Microcomputers and Instrumentation	6.0	8.0*	Autumn 2014
STÆ302G	Mathematical Analysis IIIIB	6.0	8.5*	Autumn 2014
EDL302G	Classical Mechanics	6.0	Transf*	Autumn 2014
STÆ605G	Mathematical Analysis IVB	6.0	Transf*	Spring 2015
STÆ405G	Numerical Analysis	6.0	9.0*	Spring 2015
IDN502G	Engineering Economics	6.0	Transf*	Autumn 2015
VÉL504G	Automatic Control Systems	6.0	Transf*	Autumn 2015
VÉL103M	Finite Element Analysis	6.0	Transf*	Autumn 2015
TÖL104G	Mathematical Structures for Computer Science	8.0	10.0*	Autumn 2015
IDN401G	Operations Research	6.0	9.0*	Spring 2016
HBV201G	Graphical User Interface Programming	8.0	8.0	Spring 2016
TÖL203G	Computer Science 2	6.0	9.0*	Spring 2016
TÖV301G	Computer Organization	6.0	10.0	Autumn 2016
TÖL106G	Computers and Operation Systems	2.0	9.5	Autumn 2016
TÖL303G	Data Base Theory and Practice	6.0	8.0	Autumn 2016
TÖL304G	Programming Languages	6.0	9.0	Autumn 2016
TÖL301G	Formal Languages and Computability	6.0	10.0	Autumn 2016
TÖL306G	Web Programming	6.0	9.0	Autumn 2016
TÖV302G	Computer Organization - Lab	1.0	Passed	Autumn 2016
HBV401G	Software Development	6.0	9.0	Spring 2017
TÖL403G	Analysis of Algorithms	6.0	10.0	Spring 2017
TÖL203M	Computer Graphics	6.0	10.0	Spring 2017
REI202M	Nonlinear Optimization	6.0	9.0	Spring 2017
Total completed credits		181.0 ECTS		

* This course has previously been used toward a degree.

Fyrsta einkunn (First Class): 8.83

Reykjavík June 24, 2017



Diploma Supplement

UNIVERSITY OF ICELAND

1 Information identifying the holder of the qualification

1.1 Family name(s)

Egilsson

1.2 Given name(s)

Hallgrímur Davið

1.3 Date of birth (day/month/year)

12 September 1993

1.4 Student identification number or code (if available)

120993-2329

2 Information identifying the qualification

2.1 Name of qualification

BS

2.2 Main field(s) of study for the qualification

Computer Science

2.3 Name and status of awarding institution (in the original language)

Háskóli Íslands (University of Iceland), state recognised and state-financed higher education institution. Accredited by the Ministry of Education and Culture after an accreditation process in 2007 and 2008.

2.4 Name and status of institution (if different from 2.3) administering studies (in the original language)

Same as 2.3

2.5 Language(s) of instruction/examination

Icelandic. Most textbooks are in English.

3 Information on the level of the qualification

3.1 Level of qualification

Three years at first cycle of higher education.

3.2 Official length of programme

Full time study for three academic years.

3.3 Admission requirements

Icelandic matriculation examination or a comparable qualification. The faculty strongly recommends that students complete at least 21 credits in mathematics (for the "reiknifræði" (computational science) line, at least 24 credits in mathematics and 21 credits in science).

4 Information on the contents and results gained

4.1 Mode of study

Full time studies.

4.2 Programme requirements

180 ECTS credits have to be completed for the qualification. Organised as a three year programme.

Learning Outcomes

Knowledge, competence and skills

On completion of the study programme the student can demonstrate knowledge, skills and competence as detailed below:

1. Knowledge and understanding:

- 1.1. The student has knowledge of the main fundamental elements of computer science.
- 1.2. The student has the knowledge in mathematics and statistics that is needed to analyse projects and to adopt abstract methods in computer science.
- 1.3. The student has knowledge and understanding of the capabilities of computers to solve problems and also of the limitations of decidability of problems.
- 1.4. The student understands the influence of ICT on society and its application in other domains.

2 Type of knowledge:

- 2.1 Discrete mathematics and logic, fundamentals of programming, algorithms and complexity, computer architecture, operating

systems, network devices, programming languages, human computer interaction, computer graphics and data visualization, intelligent systems, information management (database theory), analysis, design and software development, software engineering including quality management and software processes, scientific computing and societal and professional issues.

3 Practical competence

- 3.1 The student has developed the ability to work independently, can define complex tasks, define goals, make a work plan and follow it.
- 3.2 The student can analyse a software project and design a solution for it.
- 3.3 The student can understand a design specification and implement it in an appropriate programming language.
- 3.4 The student is trained to adopt new programming languages and new software technology.

4 Theoretical skills:

- 4.1 The student knows the fundamental principles of thorough review of sources.
- 4.2 The student comprehends what constitutes conscientious and accepted academic practices.
- 4.3 The student has the ability to apply abstract notation and methods in analysing a problem.
- 4.4 The student is competent to present and describe complex academic issues and research conclusions.

5 Communication competence

- 5.1 The student is independent and shows initiative in his work.
- 5.2 The student is trained in group work.
- 5.3 The student can express himself clearly and systematically both orally and in writing.
- 5.4 The student understands debatable ethical and societal issues related to the use of computers.

6 General academic competence

- 6.1 The student has sufficient learning competence to be able to undertake further studies in this field.
- 6.2 The student has gained self-confidence, broad-mindedness and critical thinking that helps him in his work.
- 6.3 The student understands the need to maintain and renew his knowledge and competence.

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

Number	Course	Credits	Grade	Finished
IDN101G	Operation Management	6.0	Transf*	Autumn 2013
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TÖL203M	Computer Graphics	6.0	10.0	Spring 2017
REI202M	Nonlinear Optimization	6.0	9.0	Spring 2017
Total completed credits		181.0		ECTS

* This course has previously been used toward a degree.

Major specialization: Computational Science.

4.4 Grading scheme and, if available, grade distribution guidance

As a general rule grades are expressed on the 0-10 scale. Course grades are given in increments of 0.5. In BS-studies pass requirements are 5.0. In MS- and Ph.D.-studies pass requirements are 6.0, i.e Second Class minimum in each subject. Grade averages are computed to two decimal places. 5.00 to 5.99 are Third Class, 6.00 to 7.24 are Second Class, 7.25 to 8.99 are First Class, 9.00 to 10.00 are First Class with distinction.

4.5 Overall classification of the qualification (in original language)

Fyrsta einkunn (First Class): 8.83

5 Information on the function of the qualification

5.1 Access to further study

The BS-degree gives access to MS-studies in Iceland if the grade point average is 6.50 or higher.

5.2 Professional status (if applicable)

The BS-degree gives a chartered title as a Computer Scientist in Iceland.

6 Additional information

6.1 Additional information

6.2 Further information sources

The University of Iceland homepage: <http://www.hi.is>
University of Iceland, Office for Academic Affairs (ENIC/NARIC), Sudurgata, 101 Reykjavik.

7 Certification of the supplement

7.1 Date

June 24, 2017

7.2 Signature



Guðrún Helga Agnarsdóttir

7.3 Capacity

Administrative Officer

7.4 Official stamp or seal



UNIVERSITY OF ICELAND
SCHOOL OF ENGINEERING
AND NATURAL SCIENCES

8 Information on the national higher education system

The Ministry of Education, Science and Culture has the overall responsibility for higher education in Iceland. The legal framework covering higher education in Iceland is the Higher Education Institution Act no. 63/2006. This framework act applies to all educational institutions providing higher education leading to a degree and which have been accredited by the Ministry of Education, Science and Culture, according to rules on accreditation no. 1067/2006. Each institution of higher education is accredited in particular fields of study and subdivisions therein.

There are currently seven accredited institutions of higher education in Iceland. University of Iceland, University of Akureyri, The Agricultural University of Iceland and Holar University College are public institutions of higher education and are subject to the Act on Public Higher Education Institutions no. 85/2008 with amendments. Reykjavik University, Bifröst University and Iceland Academy of the Arts are private institutions and operate under structural charters approved by the Ministry of Education, Science and Culture. All higher education institutions receive state funding. The Ministry concludes performance-related contracts with all higher education institutions under its administration.

Quality assurance of higher education institutions, both with regards to research and teaching, is carried out by an internal evaluation of higher education institutions as well as by periodic external evaluation. The Icelandic Quality Board for Higher Education monitors the quality of the education offered in accordance with the Icelandic Quality Enhancement Framework and rules no. 321/2009.

The admission requirements for entry into tertiary education are a matriculation exam (Stúdentspróf) from an upper secondary school or an equivalent final examination. Some fields of study have additional entrance requirements. Currently, compulsory education in Iceland is between the ages of six and sixteen. Upper secondary education leading to matriculation examination is usually organized as three to four years of study.

According to the Higher Education Act no. 63/2006, teaching in higher education institutions shall be organised in courses that are evaluated according to standardized credits (ECTS). The higher education level applies credits equivalent to the European Credit Transfer System. A full study programme shall normally consist of 60 credits per academic year and reflect the total student workload during that time.

The academic year at Icelandic higher education institutions generally runs from August/September until May, and it is divided into two semesters, an autumn semester and a spring semester. Student assessment is generally based on written, oral or practical examinations, held at the end of each semester, in addition to semester papers and assignments carried out throughout the course of study.

The Minister of Education, Science and Culture issues a National Qualification Framework for Iceland, a systematic description of the structure and the degrees of higher education specifically based on learning outcomes (no. 530/2011). All accredited higher education institutes in Iceland shall follow this framework.

Organisation and structure of qualifications and degrees awarded at higher education institutions in Iceland:

ISCED		Credits (ECTS)	Total credits (ECTS)
5	Cycle 1.1 Diploma	30 – 120	30 – 120
6	Cycle 1.2 Bachelor's degree	180 - 240	180 - 240
7	Cycle 2.1 Qualification at master level	30 – 120	210 – 360
	Cycle 2.2 Master's degree	90 – 120	270 - 360
8	Cycle 3 Doctoral degree	180 -	450 -

The first higher education cycle includes two stages, Diploma (1.1) and Bachelor's degree (1.2).

Diploma is defined as a qualification obtained at a higher education institution where the holder has completed 30 – 120 ECTS credits of an organised study programme.

Bachelor's Degree (BA, BS, B.Ed.) is defined as a qualification obtained at a higher education institution where the holder has completed 180 – 240 ECTS credits of an organised study programme.

The second higher education cycle includes two stages, the first stage is a Qualification at Master level (2.1) and the second stage is a Master's degree (2.2).

Qualification at Master level is defined as a qualification obtained at a higher education institution where the holder has completed 30 – 120 ECTS credits of an organised study programme at the second cycle of higher education. Qualification at Master level includes qualifications which either do not include a research project, or where the project is of less than 30 ECTS credits.

Examples of degrees and qualifications at this stage (2.1.) are MBA, Diploma at Master level, Cand. Med. et Chir. and Cand.Odont

Master's Degree

is defined as a qualification obtained at a higher education institution where the holder has completed 90 – 120 ECTS credits of an organised study programme at the second cycle of higher education. A Master's degree includes a research project of at least 30 ECTS credits.

Examples of qualifications at this stage (2.2) are: MS, MA, Mag.Jur, ML and Cand.Psych.

The third higher education cycle has one stage, the Doctoral degree (3) Doctoral degree (Ph.D.) is defined as a qualification from a higher education institution where the holder has completed at least 180 ECTS credits of an organised study programme at the third cycle of higher education. A Doctoral degree shall include a research project that fulfills international criteria for a Doctoral thesis.