Linnéuniversitetet
Linnaeus University

Examensbevis | *Degree Certificate*

Filosofie kandidatexamen
med inriktning mot utveckling och drift av mjukvarusystem
Huvudområde: Datavetenskap

Degree of Bachelor of Science

with specialization in software development and operations
Main field of Study: Computer Science

Victor Gustafsson

19911108-0538

Date of Birth: 8 November 1991

Linnéuniversitetet, den 21 augusti 2020
Linnaeus University, 21 August 2020

Utfärdad på rektors vägnar
Issued on behalf of the Vice-Chancellor

Britt-Marie Jonsson Widén

Examenshandläggare
Degree Evaluation Officer

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The original is only valid with the e-signature

Victor Gustafsson
Namn/*Name*

19911108-0538
Personnummer/ *Personal identity number*

har avlagt Filosofie kandidatexamen med inriktning mot utveckling och drift av mjukvarusystem på grundnivå vid Linnéuniversitetet, i enlighet med bestämmelserna i högskoleförordningen (1993:100) och erhållit följande betyg:

has achieved the degree of Bachelor of Science with specialization in software development and operations, first cycle, at Linnaeus University, in accordance with the Swedish Higher Education Ordinance (1993:100) and has obtained the following grades:

Kurs *Course*	Högskolepoäng *Credits*	Betyg *Grade*	Datum *Date*
Grundläggande programmering *Introduction to Programming*	7,5	Godkänd[1] *Pass*	2017-10-27
Webbteknik 1 *Web Technology 1*	7,5	Godkänd[1] *Pass*	2017-10-29
Klientbaserad webbprogrammering *Client-based Web Programming*	7,5	Godkänd[1] *Pass*	2018-01-11
Problemlösning och programmering *Problem Solving and Programming*	7,5	B[2] *B*	2018-01-29
Programvaruteknik *Software Technology*	7,5	D[2] *D*	2018-04-02
Programmering och datastrukturer *Programming and Data Structures*	7,5	C[2] *C*	2018-04-10
Systemadministration I *System Administration I*	7,5	Godkänd[1] *Pass*	2018-05-31
Individuellt mjukvaruutvecklingsprojekt *Individual Software Development Project*	7,5	Godkänd[3] *Pass*	2018-06-04
Systemadministration II *System Administration II*	7,5	Godkänd[1] *Pass*	2018-11-05
Objektorienterad analys och design med UML *Object Oriented Analysis and Design using UML*	7,5	E[2] *E*	2018-12-10
Mjukvarutestning *Software Testing*	7,5	D[2] *D*	2019-02-01
Databasteori *Database Theory*	7,5	B[2] *B*	2019-02-01
Serverbaserad webbprogrammering *Server-based Web Programming*	7,5	Godkänd[1] *Pass*	2019-03-21
Programvaruteknik - Design *Software Engineering - Design*	15,0	C[2] *C*	2019-06-12
Internetsäkerhet *Internet Security*	7,5	D[2] *D*	2019-11-02
Deployment Infrastructures *Deployment Infrastructures*	7,5	C[2] *C*	2019-11-04
Continuous Delivery *Continuous Delivery*	7,5	B[2] *B*	2020-01-21
Praktisk agil systemutveckling *Agile development and engineering practices*	7,5	A[2] *A*	2020-02-11
Applikationsutveckling och mobilitet[4] *App Development and Mobility*	7,5	Godkänd[1] *Pass*	2020-03-25
Allmän musiklära[4] *Elementary Music Theory*	7,5	Godkänd[5] *Pass*	2020-05-20
Entreprenörskap och grundläggande affärsutveckling *Entrepreneurship and Basic Business Development*	7,5	B[2] *B*	2020-06-10
Examensarbete på kandidatnivå *Degree Project at Bachelor Level*	15,0	C[2] *C*	2020-06-24

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Kurs *Course*	Högskolepoäng *Credits*	Betyg *Grade*	Datum *Date*

Självständigt arbete (examensarbete)
Independent project (Degree project)

Progressiva webbapplikationer : En analys av erfarenheter och omfattning av tekniken i Sverige
Progressive Web Applications : An Analysis of the Experience and Scope of the Technology in Sweden

Totalsumma: 180 högskolepoäng
Total sum: 180 credits

Datum för avslutade studier: den 24 juni 2020
Date of completed studies: 24 June 2020

Noter/*Notes*

1   Betygsskala: Väl godkänd (VG), Godkänd (G)
     Grading scale: Pass with distinction (VG), Pass (G)
2   Betygsskala: A (A), B (B), C (C), D (D), E (E)
     Grading scale: A (A), B (B), C (C), D (D), E (E)
3   Betygsskala: Mycket väl godkänd (5), Väl godkänd (4), Godkänd (3)
     Grading scale: Pass with distinction (5), Pass with credit (4), Pass (3)
4   Kurs läst vid Uppsala universitet
     Course taken at Uppsala University
5   Betygsskala: Godkänd (G)
     Grading scale: Pass (G)

1. Information identifying the holder of the qualification

1.1 **Family name(s)** Gustafsson

1.2 **Given name(s)** Victor

1.3 **Date of birth (day/month/year)** 8 November 1991

1.4 **Student identification number or code (if available)** 19911108-0538

2. Information identifying the qualification

2.1 **Name of qualification and (if applicable) title conferred (in original language)**
Filosofie kandidatexamen (Degree of Bachelor of Science)

2.2 **Main field(s) of study for the qualification**
Computer Science with specialization in software development and operations

2.3 **Name and status of awarding institution (in original language)**
Linnéuniversitetet (Linnaeus University).
State recognised university.

2.4 **Name and status of institution (if different from 2.3) administering studies (in original language)**
Not applicable.

2.5 **Language(s) of instruction/examination**
For studies at Linnaeus University included in this degree: Mainly Swedish.

3. Information on the level of the qualification

3.1 **Level of qualification**
Grundnivå/First-cycle QF-EHEA SeQF 6/EQF 6. For information on the Swedish higher education system, see section 8.

3.2 **Official length of programme**
180 högskolepoäng (credits)/180 ECTS. Duration of 3 years of full-time studies. A normal 40-week academic year corresponds to 60 credits (högskolepoäng). One credit corresponds to 1 ECTS credit.

3.3 **Access requirement(s)**
There are general and (additional) specific entry requirements that should be fulfilled for access to higher education within all cycles. The general entry requirements for first-cycle studies are the same for all higher education. General entry requirements can be attained by completing an upper-secondary school programme, via adult education at upper-secondary school level or the applicants achieving a comparable level of learning outcomes through other education, practical experience or other circumstances.

4. Information on the contents and results gained

4.1 **Mode of study**
Full-time equivalent.

4.2 **Programme requirements**
The Swedish Higher Education Act takes account of 1) courses and study programmes based on scholarship or artistic practice and on proven experience, and 2) research and artistic research as well as development work. Reference to research below also applies to artistic research.

According to the Swedish Higher Education Act, first-cycle courses and study programmes shall develop the students': ability to make independent and critical assessments; ability to identify, formulate and solve problems autonomously; and the preparedness to deal with changes in working life. In addition to knowledge and skills in their field of study, students shall develop the ability to: gather and interpret information at a scholarly level; stay abreast of the development of knowledge; and communicate their knowledge to others, including those who lack specialist knowledge in their field.
The graduate has demonstrated knowledge and understanding in the main field of study, including knowledge of the disciplinary foundation of the field; knowledge of applicable methodologies in the field; specialised study in some aspect of the field; as well as awareness of current research issues. Furthermore, the graduate has demonstrated abilities to critically interpret relevant information for a formulated problem; to discuss phenomena, issues and situations critically; to identify, formulate and solve problems autonomously; to make assessments informed by relevant disciplinary, social and ethical issues;

and to identify the need for further knowledge and ongoing learning. The graduate has also shown insight into the role of knowledge in society. The degree has prepared the graduate to work autonomously in the main field of study.
(For further information, see The Swedish Higher Education Act and The Higher Education Degree Ordinance: www.uhr.se/en)

4.3 **Programme details (e.g. modules or units studied), and the individual grades/marks/credits obtained (if this information is available on an official transcript this should be used here)**
A Degree of Bachelor is awarded after the student has completed the courses required to gain 180 credits in a defined specialisation determined by each higher education institution itself, of which 90 credits are for progressively specialised study in the principal field (main field of study) of the programme.

A requirement for the award of a Degree of Bachelor is completion by the student of an independent project (degree project) for at least 15 credits in the main field of study.
Local regulations at Linnaeus University for the designation Filosofie (of Science)
A Bachelor of Science is gained by fulfilling the requirements in the regulations above, and
- at least 30 credits are from courses outside the main field of study
For more information, see Degree Certificate/Official Transcript.

4.4 **Grading scheme and, if available, grade distribution guidance**
There is no national grading system in Sweden. Higher education institutions may determine which grading system is to be used. For more information, see Degree Certificate/Official Transcript.

4.5 **Overall classification of the qualification (in original language)**
Not applicable for Swedish qualifications, since no overall grade is awarded for a degree and students are not ranked. For example, Grade Point Average (GPA) and other ranking systems are not used in Sweden.

5. Information on the function of the qualification

5.1 **Access to further study**
The degree gives access to second-cycle studies (master studies).

5.2 **Professional status (if applicable)**
The Degree of Bachelor corresponds to the qualification level referred to in point (d) of Article 11 of Directive 2005/36/EC.

6. Additional information

6.1 **Additional information**
None.

6.2 **Further information sources**
Linnaeus University
SE-391 82 Kalmar/SE-351 95 Växjö
SWEDEN
lnu.se
The Swedish Council for Higher Education (Universitets- och högskolerådet) has been commissioned to act as the Swedish NARIC and is also part of ENIC. The ENIC-NARIC office provide information on education in Sweden. Please see: http://www.uhr.se
For information on Professional Qualifications Directive, Swedish National Assistance Centre for the Recognition of Professional Qualifications (Professional Qualifications Directive 2005/36/EC):
pqinfo@uhr.se
For information on quality assurance, Swedish Higher Education Authority: http://english.uka.se

7. Certification of the supplement

7.1 **Date** 21 August 2020

7.2 **Signature**

Britt-Marie Jonsson Widén

7.3 **Capacity** Degree Evaluation Officer

7.4 **Official stamp or seal**
The e-signature can be verified through clicking on the signature or the transaction number:
Adobe Sign-transaktionsnummer: CBJCHBCAABAAPi8-_CfenFfSH8-XE_k9sBO7d78AMBEt

8. Information on the national higher education system
See attached information on the The Swedish higher education system.

The Swedish higher education system

According to legislation **after** 1 January 2007.
The following description is approved by the Swedish Council for Higher Education.

The Swedish higher education system is based on the Swedish Higher Education Act (SFS 1992:1434) and the 1 January 2007 amendments to the Higher Education Ordinance (1993:100). The following description is a short summary based on the legislation regulating the Swedish higher education system.

Qualifications from all higher education institutions (universities, university colleges and independent higher education providers) that are recognized by the Government are of equal official value. The same legislation governs all state higher education institutions. All Swedish degrees are issued in accordance with the same degree ordinances.

Quality assurance

The Swedish Higher Education Authority has been responsible for the quality assurance system for all higher education since 1 January 2013. For more information, please visit www.uka.se. Evaluation reports are available to the public.

National Qualification Frameworks

The Swedish Higher Education Act and the Higher Education Ordinance have been amended in accordance with the agreements reached as part of the Bologna Process, including the Qualifications Frameworks in the European Higher Education Area (QF-EHEA). Legislation for a three-cycle structure of higher education started to apply in July 2007, and is now the only one in use in all Swedish higher education. Transitional provisions apply to courses and programmes that started prior to this. For more information, please visit www.uhr.se/en or enic-naric.net.

In 2015, the Swedish Government decided on a national qualifications framework (SeQF), based on the European Qualifications Framework for Lifelong Learning (EQF). The SeQF has eight levels that are in accordance with the EQF levels. Higher education qualifications are at levels six to eight. For more information, please visit www.seqf.se.

Credit system

Sweden has a system of credits (högskolepoäng); a normal 40-week academic year corresponds to 60 credits. The system is compatible with ECTS credits.

Grading system

There is no national grading system in Sweden. Higher education institutions may determine which grading system is to be used. No overall grade is awarded for a degree and students are not ranked. For example, Grade Point Average (GPA) and other ranking systems are not used in Sweden.

Access and admission

There are general and specific entry requirements for access to higher education within all cycles. The specific entry requirements vary according to the field of higher education and/or should be essential for students to be able to benefit from the course or study programme. The number of places is limited on all study programmes and courses.

The general entry requirements for first-cycle studies are the same for all higher education. General entry requirements can be attained by completing an upper-secondary school programme, via adult education at upper-secondary school level or the applicants achieving a comparable level of learning outcomes through other education, practical experience or other circumstances.

The general entry requirements for second-cycle studies are a first-cycle qualification of at least 180 credits, or a corresponding foreign qualification. An applicant may also be accepted on the basis of a comparable level of learning outcomes obtained through other education, practical experience or other circumstances. →

The general entry requirements for third-cycle studies are a second-cycle qualification, or completed courses worth at least 240 credits (of which 60 credits are at second-cycle level) or the equivalent level of knowledge acquired in Sweden or abroad. Furthermore, for entry to third-cycle studies, the applicant must be deemed able to benefit from the education.

Qualifications

All courses, study programmes and qualifications are on one of three levels: first-, second- or third-cycle. In the Higher Education Ordinance, the Government has determined which qualifications may be awarded, as well as their scope, requirements and intended learning outcomes. There are three categories of qualifications: general; the fine, applied and performing arts; and professional qualifications. For some more information, please see below.

General qualifications

First-cycle (SeQF/EQF 6)
Högskoleexamen (Higher Education Diploma) requires 120 credits and an independent project (degree project).

Kandidatexamen (Degree of Bachelor) requires 180 credits. At least 90 credits must be completed in the main field of study, including an independent project (degree project) worth 15 credits.

Second-cycle (SeQF/EQF 7)
Magisterexamen (Degree of Master (60 credits)) requires 60 credits. At least 30 credits must be completed in the main field of study, including an independent project (degree project) worth 15 credits. In addition, the student must normally hold a kandidatexamen, or a professional degree of at least 180 credits, or an equivalent foreign degree.

Masterexamen (Degree of Master (120 credits)) requires 120 credits. At least 60 credits must be completed in the main field of study, including an independent project (degree project) worth at least 30 credits. In addition, the student must normally hold a kandidatexamen, or a professional degree of at least 180 credits or an equivalent foreign degree.

Third-cycle (SeQF/EQF 8)
Licentiatexamen (Degree of Licentiate) requires at least 120 credits, including a research thesis worth at least 60 credits. A higher education institution may decide that a licentiatexamen can be awarded as a separate qualification or as a step on the way to doktorsexamen (see below).

Doktorsexamen (Degree of Doctor) requires 240 credits, including a research thesis (doctoral thesis) worth at least 120 credits. The thesis must be presented at a public defence.

Qualifications in the fine, applied and performing arts

Qualifications in the fine, applied and performing arts are awarded at all three cycles and corresponding SeQF levels. At first-cycle level: konstnärlig högskoleexamen (Higher Education Diploma) and konstnärlig kandidatexamen (Degree of Bachelor of Fine Arts). At second-cycle level: konstnärlig magisterexamen (Degree of Master of Fine Arts (60 credits)) and konstnärlig masterexamen (Degree of Master of Fine Arts (120 credits)). Two third-cycle qualifications are awarded: konstnärlig licentiatexamen (Degree of Licentiate) and konstnärlig doktorsexamen (Degree of Doctor).

Professional qualifications

Professional qualifications are offered at either first- or second-cycle level and corresponding SeQF levels. These qualifications may stretch over two cycles and are awarded in areas that include engineering, health care, agriculture, law, and education. Professional qualifications are regulated by national legislation and are considered regulated education subject to the Professional Qualifications Directive 2005/36/EC.

Titles of qualifications

Translations into English of all titles of qualifications are regulated at the national level. Higher education institutions may decide to add a prefix to a qualification title e.g. filosofie kandidatexamen or medicine doktorsexamen or/and add a major field of studies e.g. civilingenjörsexamen i maskinteknik.