The degree of Master of Science is a higher university degree stipulated by Universities Act (558/2009), the Government Decree on University Degrees (794/2004).

The extent of the degree is 120 credits. Courses are quantified according to the work load required. The average input of 1600 working hours needed for studies of one academic year corresponds to 60 credits.

To be awarded a degree, the student must complete advanced studies in the major subject or a corresponding entity or the advanced studies of a degree programme and the internship supervised by the university possibly included in the degree. The student must also complete sufficient studies in minor subject(s), unless these have been completed in education leading to a lower university degree.

The student must demonstrate that he/she has attained the objectives set for the degree, studies and thesis and the language proficiency referred to in the Government Decree on University Degrees.

The student must write a maturity essay which shows command of the topic of the thesis and of the Finnish or Swedish language. This does not concern a student who has been educated in a language other than Finnish or Swedish or a student who has been educated abroad. The language proficiency of such students shall be determined by the university.

The student need not demonstrate command of the Finnish or Swedish language in the maturity essay included in the higher university degree if he/she has demonstrated his/her command of the language in a maturity essay included in a lower university degree studied in same language.

Grades used for assessment of degree components:

excellent (5) very good (4) good (3) satisfactory (2) sufficient (1) pass

UNIVERSITY OF OULU Faculty of Biochemistry and Molecular Medicine

DEGREE CERTIFICATE Master of Science

Quoc Bao Ngo (30 October 1996)

has attained the degree of Master of Science in Master's Programme in Biochemistry, as stipulated by the Government Decree on University Degrees (794/2004). Focus: Protein Science and Biotechnology, International Programme.

The extent of the degree is 120,00 credits and it includes the following studies:

Major Subject

Biochemistry

115,00 cr

excellent (5)

The Master's thesis included in advanced studies has been approved with the grade very good.

Language and Communication Studies

5.00 cr

Additional information: Ngo Quoc Bao has attained the degree of Master of Science in Biochemistry, with a focus on Protein Science and Biotechnology, as stipulated by the Government Decree on University Degrees (794/2004). As his mother tongue is neither Finnish nor Swedish and since the language of instruction of the degree was completely in English, the student has been exempted from the requisite Finnish and Swedish language skills referred to in subsection 1 of Section 6 of Government Decree on University Degrees (794/2004).

In addition to the lower degree (Bachelor of Science and Technology awarded 25.11.2017 from the Hanoi University of Science and Technology, Hanoi, Vietnam) the student has also completed 6 credits of Supplementary Studies.



Oulu, July 31, 2020

Tuomo Glumoff Education Dean

Piia Rantakokko Lead Specialist, Academic Affairs

This certificate includes two attachments. The official transcript of study records and the Diploma Supplement for international use with sufficient information about the university and about the studies or study attainments recorded in the diploma or certificate, and about their level and status in the



DIPLOMA SUPPLEMENT

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 (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 is free from any value judgements, equivalence statements or suggestions about recognition. This Diploma Supplement model was developed by the European Commission, Council of Europe and UNESCO.

1 INFORMATION IDENTIFYING THE HOLDER OF THE QUALIFICATION

1.1 Last name(s)

Ngo

1.2 Given name(s)

Quoc Bao

1.3 Date of birth (day/month/year)

30/10/1996

1.4 Student identification number or code

2595856

2 INFORMATION IDENTIFYING THE OUALIFICATION

2.1 Name of qualification and title conferred (in

Filosofian maisteri

original language)

Master of Science

2.2 Main field(s) of study for the qualification

Biochemistry

2.3 Name (in original language) and status of

Oulun yliopisto

awarding institution

(University of Oulu), state recognised university.

The quality assurance system of the university has passed the audit

conducted by the Finnish Education Evaluation Council.

2.4 Name and status of institution (if different

from 2.3) administering studies (in original

2.5 Language(s) of instruction/examination

language)

Not applicable

English

3 INFORMATION ON THE LEVEL OF THE QUALIFICATION

3.1 Level of qualification

Second cycle higher education degree (master level). The degree is on level 7 in the National and the European

Qualifications Framework.

3.2 Official duration of programme in credits

and/or years

At least 120 credits, appr. 2 years of full-time study

3.3 Access requirement(s)

The admission requirement for the second-cycle university degree is a first-cycle degree or education of a corresponding level. There is numerus clausus, i.e. restricted entry, to all fields of study.

4 INFORMATION ON THE CONTENTS AND RESULTS GAINED

4.1 Mode of study

Full-time

4.2 Programme learning outcomes

See 8, second-cycle university degree.

Compulsory studies in major subject: advanced studies, minimum of

60 credits; Master's thesis 20-40 credits. Minor subject(s) can be chosen freely.

4.3 Programme details (e.g. modules or units

studied), and the individual grades/marks/credits obtained:

See transcript of records. Thesis topic as follows:

Deciphering the effects of leptin single amino acid mutations on leptin/leptin receptor interactions using in silico techniques.

4.4 Grading scheme and, if available, grade See transcript of records for grading scheme.

distribution guidance





4.5 Overall classification of the qualification

Not applicable

5 INFORMATION ON THE FUNCTION OF THE QUALIFICATION

5.1 Access to further study

5.2 Access to a regulated profession (if applicable)

Eligible for doctoral studies

Under the Finnish legislation, a person who has taken the degree of "filosofian maisteri" is qualified for posts or positions in the public sector for which the qualification requirement is a second-cycle higher education degree. In some cases, the qualification requirement also includes the completion of studies in certain specified fields of study.

The degree falls under the Article 11 of the Directive 2005/36/EC of the European Parliament and of the Council on the recognition of professional qualifications, level e.

6 ADDITIONAL INFORMATION

6.1 Additional information

Ngo Quoc Bao has attained the degree of Master of Science in Biochemistry, with a focus on Protein Science and Biotechnology, as stipulated by the Government Decree on University Degrees (794/2004). As his mother tongue is neither Finnish nor Swedish and since the language of instruction of the degree was completely in English, the student has been exempted from the requisite Finnish and Swedish language skills referred to in subsection 1 of Section 6 of Government Decree on University Degrees (794/2004). In addition to the lower degree (Bachelor of Science and Technology awarded 25.11.2017 from the Hanoi University of Science and Technology, Hanoi, Vietnam) the student has also completed 6 credits of Supplementary Studies.

6.2 Further information sources

University of Oulu, http://www.oulu.fi/yliopisto/
Ministry of Education and Culture, www.minedu.fi
The Finnish National Agency of Education, the ENIC: European
Network of Information Centres in the European Region, and the
NARIC: National Academic Recognition Information Centres in the
European Union), and the National Coordination Point for the
European Qualifications Framework (EQF), www.oph.fi/recognition,
www.oph.fi/qualificationsframework
The Finnish Education Evaluation Centre, www.karvi.fi

7 CERTIFICATION OF THE SUPPLEMENT

7.1 Date

7.2 Signature

7.3 Capacity

7.4 Official stamp or seal

31/07/2020

Piia Rantakokko Lead Specialist, Academic Affairs

8 INFORMATION ON THE NATIONAL HIGHER EDUCATION SYSTEM

The description of the higher education system has been prepared by the Finnish National Agency of Education and approved by the Ministry of Education and Culture. See the enclosed attachment.

Ngo Quoc Bao

2595856

30.10.1996

Date of enrolment

01.08.2018

PRIMARY RIGHT OF STUDY

Decree on Degrees

Decree on Degrees 794/2004

Degree

Master of Science

Degree Programme

Master's Programme in Biochemistry

Area of specialization

Protein Science and Biotechnology, International Programme

Major subject

Biochemistry

Valid

01.08.2018 - 31.07.2022

Date of

01.08.2018

commencement

COMPLETED COURSES

		Credits	Grade	Date	Examiner
Other courses					
A300095	Supplementary Studies	6,00	pass	30.07.2020	Kastaniotis
740080Y	Bridging studies	6,00	pass	31.08.2018	Kastaniotis
Total number of	credits 6,00				

Total of study units 6,00

SIGNATURE

Eeva-Kaisa Tuominen

Secretary, Academic Affairs

ex juduell

Ngo Quoc Bao

2595856

301096-303Y

Kirjoilletulopvm

01.08.2018

Suoritukset

- 31.07.2020

SUORITETUN TUTKINNON OPINTO-OIKEUS

Tutkintoasetus

Tutkintoasetus 794/2004

Tutkinto

Filosofian maisteri, luonnontieteellinen ala

Koulutusohjelma

Biokemian maisteriohjelma

Suuntautumisvaihtoehto / opintosuunta

Protein Science and Biotechnology, International Programme

Pääaine

Biokemia

Voimassa

01.08.2018 - 31.07.2022

Aloituspym

01.08.2018

SUORITETTU TUTKINTO

		Ор	Suor.pvm	Hyväksyjä
FM-LUON	Filosofian maisteri, luonnontieteellinen ala	120,00	31.07.2020	BMTK

TUTKINTOON SISÄLTYVÄT OPINTOSUORITUKSET

		Op	Arv.	Suor.pvm	Hyväksyjä	
Pääaine						
A3254	Biokemia	115,00	5	30.07.2020	Kastaniotis	
A325403	Biokemian syventävät opinnot	115,00	hyv	30.07.2020	Kastaniotis	
744691S	MSc thesis (Pro gradu)	30,00	4	09.06.2020	BMTK	
	Deciphering the effects of leptin single amino acid mutations on leptin/leptin receptor interactions using in silico techniques. Opinnäytetyö on tarkistettu viitteiden tarkistamiseen tarkoitetun Urkundtietojärjestelmän avulla.					
740672S	Kypsyysnäyte (FM-tutkinto)	0,00	hyv	26.05.2020	BMTK	
743663S	Developmental biology, stem cells and	5,00	5	10.06.2019	Rak-Raszewska,	
	tissue engineering				Vainio	
743666S	Introduction to immunology	5,00	4	12.03.2019	Chen	
744627S	Molecular biology II	5,00	hyv	24.10.2018	Dimova	
744630S	Systems biology	5,00	5	18.04.2019	Wei	
747615S	Introduction to structure-based drug discovery	5,00	4	08.04.2019	Lehtiö	
747616S	Biochemical methodologies II	10,00	5	17.01.2019	Bergmann	
747617S	Biochemistry and biotechnology of protein folding	5,00	5.	27.05.2019	Ruddock	
747618S	Protein production and analysis	10,00	4	19.11.2018	Ruddock	
744628S	Orientation to research work	15,00	hyv	02.08.2019	Kastaniotis	
744692S	MSc thesis, additional experimental work	20,00	hyv	13.03.2020	Kastaniotis	

Opintopisteet yhteensä 115,00

Kiali.	ia	viocti	ntän	ninnot

A300091	Kieli- ja viestintäopinnot	5,00	hyv	30.07.2020	Kasta
902154Y	Scientific Communication for Biochemists	5,00	hyv	02.05.2019	_McA

Ngo Quoc Bao

2595856

301096-303Y

TUTKINTOON SISÄLTYVÄT OPINTOSUORITUKSET

Op Arv. Suor.pvm Hyväksyjä

Opintopisteet yhteensä 5,00

Opiskelijan opintopisteet yhteensä 120,00

ALLEKIRJOITTAJA

Eeva-Kaisa Tuominen Opintoasiainsihteeri

Tutkintojen laajuudet:

Kandidaatin tutkinto: 180 opintopistettä

Maisterin/Diplomi-insinöörin/Arkkitehdin tutkinto: 120 opintopistettä

Lääketieteen lisensiaatin tutkinto: 360 opintopistettä

Hammaslääketieteen lisensiaatin tutkinto: 300 opintopistettä (asetus 794/2004) tai 330 op (asetus 351/2011)

Yhden lukuvuoden opintojen suorittamiseen keskimäärin vaadittava 1 600 tunnin työpanos vastaa 60 opintopistettä.

Opintosuoritusten arvostelussa on käytössä kaksi asteikkoa: 1) numeerinen asteikko 0 - 5 kokonaislukuina, jossa nolla merkitsee hylättyä suoritusta; 2) sanallinen arvio hyväksytty (hyv) tai hylätty.

Tutkielmien arvostelussa on numeerisen asteikon lisäksi käytössä myös asteikko: L = laudatur, E = eximia cum laude approbatur, M = magna cum laude approbatur, C = cum laude approbatur, N = non sine laude approbatur, B = lubenter approbatur, A = approbatur. Lisensiaatintutkimusten ja väitöskirjojen arvostelussa on käytössä lisäksi asteikko kiittäen hyväksytty (khy), hyväksytty (hyv), hylätty.

Ngo Quoc Bao

2595856

301096-303Y

Date of enrolment

01.08.2018

Completed courses

- 31.07.2020

RIGHT OF STUDY

Decree on Degrees

Decree on Degrees 794/2004

Degree

Master of Science

Degree Programme

Master's Programme in Biochemistry

Area of specialization

Major subject

Protein Science and Biotechnology, International Programme

Biochemistry

Valid

01.08.2018 - 31.07.2022

Date of

01.08.2018

commencement

DEGREE

FM-LUON Master of Science 120,00 31.07.2020 FBMM

COMPLETED COURSES

		Credits	Grade	Date	Examiner	
Major Subject						
A3254	Biochemistry	115,00	5	30.07.2020	Kastaniotis	
A325403	Biochemistry, advanced studies	115,00	pass	30.07.2020	Kastaniotis	
744691S	MSc thesis (Pro gradu)	30,00	4	09.06.2020	FBMM	
	Deciphering the effects of leptin single amino acid mutations on leptin/leptin receptor interactions using in silico techniques. The thesis has been analysed in the Urkund anti-plagiarism system.					
740672S	Maturity test (M.Sc. degree)	0,00	pass	26.05.2020	FBMM	
743663S	Developmental biology, stem cells and	5,00	5	10.06.2019	Rak-Raszewska,	
	tissue engineering				Vainio	
743666S	Introduction to immunology	5,00	4	12.03.2019	Chen	
744627S	Molecular biology II	5,00	pass	24.10.2018	Dimova	
744630S	Systems biology	5,00	5	18.04.2019	Wei	
747615S	Introduction to structure-based drug discovery	5,00	4	08.04.2019	Lehtiö	
747616S	Biochemical methodologies II	10,00	5	17.01.2019	Bergmann	
747617S	Biochemistry and biotechnology of protein folding	5,00	5	27.05.2019	Ruddock	
747618S	Protein production and analysis	10,00	4	19.11.2018	Ruddock	
744628S	Orientation to research work	15,00	pass	02.08.2019	Kastaniotis	
744692S	MSc thesis, additional experimental work	20,00	pass	13.03.2020	Kastaniotis	

Total number of credits 115,00

Language and Communication Studies

A300091 Language and Communication Studies 5,00 pass 30.07.2020 902154Y Scientific Communication for Biochemists 5,00 pass 02.05.2019

Total number of credits 5,00

Kastaniotis McAnsh

Ngo Quoc Bao

2595856

301096-303Y

COMPLETED COURSES

Total of study units 120,00

SIGNATURE

Eeva-Kaisa Tuominen Secretary, Academic Affairs

The extent of degrees:

Bachelor's degree: 180 credits Master's degree: 120 credits Licentiate of Medicine: 360 credits

Licentiate of Dentistry: 300 credits (decree 794/2004) or 330 credits (decree 351/2011)

On average 1 600 hours of student work is required to achieve 60 credits annually. 1 Finnish credit equals 1 ECTS credit.

Grades used in assessment of studies are pass/failed or numeric values: 5 (excellent; ECTS A), 4 (very good; ECTS B), 3 (good; ECTS C), 2 (satisfactory; ECTS D), 1 (sufficient; ECTS E), 0 failed.

In addition to numeric values, grades used in assessment of the Master's Thesis can also be: L = laudatur (outstanding; ECTS A), E = eximia cum laude approbatur (excellent; ECTS B), M = magna cum laude approbatur (very good; ECTS B), C = cum laude approbatur (good; ECTS C), N = non sine laude approbatur (fairly good; ECTS C), B = lubenter approbatur (satisfactory; ECTS D), A = approbatur (pass; ECTS E). Grades used in assessment of the Doctoral Thesis and Licentiate Thesis can also be excellent/pass/failed.