

Lelanthran Krishna Manickum 37 Keurboom Cr Midrand 1687 Gauteng South Africa

26 October 2016

University of Hertfordshire Higher Education Corporation Hatfield, Hertfordshire AL10 9AB

Telephone +44 (0) 1707 284000 Fax +44 (0) 1707 284115 Website www.herts.ac.uk

Dear Lelanthran

## **MSc Software Engineering**

Further to the recent meeting of the Programme Board of Examiners and on behalf of the staff of the School of Computer Science, I am writing to congratulate you on the successful completion of your Masters degree. Please find your Transcript enclosed.

The Awards Ceremonies will be held for eligible graduates in the Weston Auditorium, De Havilland Campus between the 8 – 10 December 2016. An invite to register for your ceremonies will be emailed to you in October. Compulsory registration before the deadline is required in order to attend. See <a href="https://www.herts.ac.uk/ceremonies">www.herts.ac.uk/ceremonies</a> for further details.

Don't forget to keep your home email address up to date and add <a href="mailto:exams@herts.ac.uk">exams@herts.ac.uk</a> to your address book or safe list so that you don't miss your invite to register.

If you wish to defer your invite to a September 2017 ceremony at the St Albans Abbey, Hertfordshire, you need to complete a deferral form by 13 January 2017 14:00 UK time. This is available on the 'Register to attend' page at <a href="https://www.herts.ac.uk/ceremonies">www.herts.ac.uk/ceremonies</a>

If you decide NOT to attend the Award Ceremony and would like your Certificate sent to your Home address, you must request it in writing to the Examinations Office at <a href="mailto:exams@herts.ac.uk">exams@herts.ac.uk</a>. In your email please quote your Student number, your programme (EIMASTW – Modular Masters Computer Science On-line) and the date of the Programme Board (19 October 2016).

Should you require any additional transcripts, please email <u>AskUHOnline@herts.ac.uk</u>. Additional transcripts cost £15 per request and Jackie or Gill will send you a link to the online store.

As a graduate of the University of Hertfordshire, you are eligible to join the Alumni Association and I would encourage you to do so. The Alumni Association will contact you in due course.

I would like to take the opportunity to wish you well in the future.

Yours ever

Prof Bruce Christianson Chair, Board of Examiners

Tel: 01707 286247

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# University of Hertfordshire

# Transcript

This transcript contains information required by the European Commission to be included in the European Diploma Supplement

Student

Manickum, Lelanthran Krishna

Date of Birth

17/08/1976

Student No

14186057

Hesa No

1510601860578

Qualification

MSc

Award Classification

Distinction

Level of Qualification

Postgraduate

Date of Award

19/10/2016

Award Name

Software Engineering

Awarding Institution

0060 University of Hertfordshire

Delivery

**UH Hatfield Campus** 

Language of Instruction

English

Language of Assessment

English

Chair of Board of Examiners/

Nominated Officer

Professor Quintin McKellar CBE Vice-Chancellor

# Skills Development

In addition to the subject specific knowledge students acquire in their modules, skills development is also included in all modules at the University of Hertfordshire. Over a complete programme of study, an appropriate range of communication, self-management, interpersonal, intellectual and applied skills will have been developed by the students. Details of the knowledge, skills and attributes associated with each module are contained within the Programme Specification and the Definitive Module Documents.

Numeric Grade	Under	graduate	Postgra	aduate
awarded	Grade Descriptor	Equivalent Classification Descriptor	Grade Descriptor	Equivalent Classification Descriptor
80-100 70-79	Outstanding Excellent	1st Class Honours	Outstanding Excellent	Distinction
60-69	Very good	Upper 2nd Class Honours	Very good	Commendation ·
50-59 50	Good	Lower 2nd Class Honours	Good/ satisfactory	Pass
40-49 40	Satisfactory	3rd Class Honours	Marginal fall	Not applicable
30-39 20-29 0-19	Marginal fail Clear fail Little or nothing of merit	Not applicable	Clear fail Clear fail Little or nothing of merit	Not applicable

Module results recorded on the previous UH alphanumeric scale have been converted for classification purpose according to a standard table which includes mapping the highest alphanumeric grade of A1 to 78%.

From September 2010 academic levels 1, 2, 3 and M have been redefined as 4, 5, 6 and 7. Previous module codes remain unchanged with their corresponding levels identified.

For further information on grading and if there is a grade or status code that does not appear to be listed, please refer to the following guidance note via the link below.

External website: http://sitem.herts.ac.uk/secreg/upr/AmendmentstoRegs.htm

Internal site: http://www.studynet.herts.ac.uk/go/studentguidance

The following status co	odes may also be used:	The following table eq points to credits gaine	
Status Code	Interpretation of the code		
	Passed ·		
P(40)	Passed, capped at 40.	UH Credit points	ECTS .
P(50)	Passed, capped at 50.	5	2.5
COMP	Compensated.	10	5
FREE	Fail, referred in examination.	15	7.5
FREFC	Fail, referred in coursework.	20	10
FREFB	Fail, referred in both coursework and examination.	25	12.5
FRENE	Fail, re-enrol in examination	30	15
FRENC	Fail, re-enrol in coursework	45	22.5
FREN	Fail, re-enrol.	60	30
FNFA	Fail, no further attempts.		
DEFE	Deferred in examination.		
DEFC	Deferred in coursework,		
DEFB	Deferred in both coursework and examination.		
AT	Attendance Only.		
C	Competent (approved modules only)		
N	Non-competent (approved modules only)	Procedurate triciales in Grand Control of Co	
APCL	Credit for prior certified learning which has been achieved elsewhere.		
APEL	Credit for prior experiential learning which has been assessed.		

Student enquiries should be directed towards the School.

To check the validation of information on this form, please email ago@herts.ac.uk



Record of Learning and Achievement

14186057

Manickum, Lelanthran Krishna

Course: MSc Computer Science (Modular)- On-Line/Tutored E-Learning

Year	Sitting	Level	Module Code	Module	Grade	Status Code	Available Credits	Awarded Credits
2015	1st	7	7WCM0005-020	6Contemporary Practices in Informati Technology	ion62	Р	15	15
	1st	7	7WCM0019-090	1Measures and Models for Software Engineering	74	Р	30	30
	1st	7	7WCM0021-020	6Mobile Standards, Interfaces and Applications	77	Р	15	15
	1st	7	7WCM0031-060	Software Engineering MSc Project	72	Р	60	60
	1st	7	7WCM0033-020	6Software Engineering Practice and Experience	72	Р	30	30
	1st	7	7WCM0035-090	1Web Scripting and Application Development	78	Р	30	30
				·		Credit Awa	arded =	180
						Total Points Awa	arded =	180

Chair of Board of Examiners/ Nominated Officer alle.

Professor Quintin McKellar CBE Vice-Chancellor

# Skills Development

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The following status	codes may also be used:	The following table eq points to credits gains	uates University credit od through ECTS:
Status Code	Interpretation of the code		
P	Passed		от настоят по то
P(40)	Passed, capped at 40.	UH Credit points	ECTS
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Student enquiries should be directed towards the School.

To check the validation of information on this form, please email ago@herts.ac.uk

February 2012

# Diagram of higher education qualification levels in England, Wales and Northern Ireland

Framework for Higher Education Qualifications (FHEQ)5	HEQ)5	-Ģ	Credit		Progression for selection of students	National Qualifications Framework for England,	yland,
		EHEA			(FHEQ levels)	Wales and Northern Ireland <sup>6</sup>	
Typical Qualifications	Level	cycle	Typical UK	Typical ECTS credit ranges <sup>3</sup>		Typical Qualifications	Level
Doctoral Degrees (eg PhD, DPhil, EdD)	∞	3 <sup>rd</sup> cycle	Typically not credit rated1	Typically not credit rated	& <b>4</b>	Vocational Qualifications Level 8	ω
Masters Degrees Integrated Masters Degrees Postgraduate Diplomas Postgraduate Certificate of Education Postgraduate Certificates	7	2nd cycle	180	60-120²	<b>▼</b>	Fellowships NVQ Level 5 Vocational Qualifications Level 7	7
Bachelors Degrees with Honours Bachelors Degrees Professional Graduate Certificate in Education Graduate Diplomas Graduate Certificates	9	1st cycle	360	180-240	99	Vocational Qualifications Level 6	9
Foundation Degrees Diplomas of Higher Education Higher National Diplomas	5	Short	240	120	5	NVQ Level 4 Higher National Diplomas (HND) Higher National Certificates (HNC) Vocational Qualifications Level 5	വ
Higher National Certificates Certificates of Higher Education	4		120		4	Vocational Qualifications Level 4	4
Entry to HE via equivalent experiential or prior learning	valent expe	riential or pric	v learning		<b>4</b>	National Vocational Qualification (NVQ)  Level 3	က
<sup>1</sup> PhD and DPhil qualifications are typically not credit-rated. Newer doctoral degrees, such as the Professional Doctorate, are sometimes credit rated, typically 540 UK credits. <sup>2</sup> A range of 90-120 ECTS is typical of most awards <sup>3</sup> 1 ECTS credit is typically worth 2 UK credits <sup>4</sup> The Welsh Baccalaureate Qualification is part of the Credit and Qualifications Framework for Wales (CQFW)	edit-rated. Norate, are so	vewer ometimes and	<sup>5</sup> For students with the ne possible from the next lov Education Qualifications. <sup>6</sup> These levels will also ap (QCF). The QCF will ever Framework (NQF)	th the necessary prering a next lower level in the ications. If also apply to the Quient will eventually replact.	<sup>5</sup> For students with the necessary prerequisites, entry to each FHEQ level is possible from the next lower level in the NQF or Framework for Higher Education Qualifications. <sup>6</sup> These levels will also apply to the Qualifications and Credit Framework (QCF). The QCF will eventually replace the National Qualifications Framework (NQF)		Levels 2, 1 and entry





# University of Hertfordshire

# Description of Higher Education in England, Wales and Northern Ireland

In England, Wales and Northern Ireland<sup>1</sup>, higher education institutions are independent, self-governing bodies active in teaching, research and scholarship. They are established by Royal Charter or legislation and most are part-funded by government.

Higher education (HE) is provided by many different types of institution. In addition to universities and university colleges, whose charters and statutes are made through the Privy Council which advises the Queen on the granting of Royal Charters and incorporation of universities, there are a number of publicly-designated and autonomous institutions within the higher education sector. Publicly funded higher education provision is available in some colleges of further education by the authority of another duly empowered institution. Teaching to prepare students for the award of higher education qualifications can be conducted in any higher education institution and in some further education colleges.

### Degree awarding powers and the title 'university'

All universities and many higher education colleges have the legal power to develop their own courses and award their own degrees, as well as determine the conditions on which they are awarded. Some HE colleges and specialist institutions without these powers offer programmes, with varying extents of devolved authority, leading to the degrees of an institution which does have them. All universities in existence before 2005 have the power to award degrees on the basis of completion of taught courses and the power to award research degrees. From 2005, institutions in England and Wales that award only taught degrees ('first' and 'second cycle') and which meet certain numerical criteria, may also be permitted to use the title 'university'. Higher education institutions that award only taught degrees but which do not meet the numerical criteria may apply to use the title 'university college', although not all choose to do so. All of these institutions are subject to the same regulatory quality assurance and funding requirements as universities; and all institutions decide for themselves which students to admit and which staff to appoint. Degrees and other higher education qualifications are legally owned by the awarding institution, not by the state. The names of institutions with their own degree awarding powers ("Recognised Bodies") are available for download at: http://www.dcsf.gov.uk/recognisedukdegrees/index.cfm?fuseaction=inst itutes.list&InstituteCategoryID=1

Higher education institutions, further education colleges and other organisations able to offer courses leading to a degree of a Recognised Body are listed by the English, Welsh and Northern Irish authorities, and are known as "Listed Bodies". View the list at:

http://www.dcsf.gov.uk/recognisedukdegrees/index.cfm?fuseaction=inst itutes.list&InstituteCategoryID=2

### Qualifications

The types of qualifications awarded by higher education institutions at subdegree and undergraduate (first cycle) and postgraduate level (second and third cycles) are described in the Framework for Higher Education Qualifications in England, Wales and Northern Ireland (FHEQ). This also includes qualification descriptors that were developed with the HE sector by the Quality Assurance Agency for Higher Education (QAA - established in 1997 as an independent UK-wide body to monitor the standard of higher education provision - www.qaa.ac.uk). The FHEQ was self-certified as compatible with the Framework for Qualifications of the European Higher Education Area, the qualifications framework adopted as part of the Bologna Process, in February 2009. Foundation degrees, designed to create intermediate awards strongly oriented towards specific employment

opportunities, were introduced in 2001. In terms of the European Higher Education Area they are "short cycle" qualifications within the first cycle. The FHEQ is one component of the Credit and Qualifications Framework for Wales (CQFW). The Qualifications and Curriculum Authority (QCA), the Department for Children, Education, Lifelong Learning and Skills, Wales (DCELLS) and the Council for Curriculum Examination and Assessment, Northern Ireland (CCEA) have established the Qualifications and Credit Framework (to replace, in time, the National Qualifications Framework (NQF)). These authorities regulate a number of professional, statutory and other awarding bodies which control VET and general qualifications at all levels. The QCF is also incorporated into the CQFW. There is a close association between the levels of the FHEQ and the NQF (as shown overleaf), and other frameworks of the UK and Ireland (see 'Qualifications can cross Boundaries'

http://www.qaa.ac.uk/standardsandquality/otherrefpoints/Qualsboundaries09.pdf)

### **Quality Assurance**

Academic standards are established and maintained by higher education institutions themselves using an extensive and sophisticated range of shared quality assurance approaches and structures. Standards and quality in institutions are underpinned by the universal use of external examiners, a standard set of indicators and other reports, by the activities of the QAA, and in professional areas by relevant professional, statutory and regulatory bodies. This ensures that institutions meet national expectations described in the FHEQ: subject benchmark statements, the Code of Practice and programme specifications. QAA conducts peer-review based audits and reviews of higher education institutions with the opportunity for subject-based review as the need arises. The accuracy and adequacy of quality-related information published by the higher education institutions is also reviewed. QAA also reviews publicly funded higher education provision in further education colleges.

### Credit Systems

Most higher education institutions in England and Northern Ireland belong to one of several credit consortia and some operate local credit accumulation and transfer systems for students moving between programmes and/or institutions. A framework of national guidelines, the Higher Education Credit Framework for England, was launched in 2008. Credit is also an integral part of the CQFW and the QCF. It may be possible for credit awarded in one framework to be recognised by education providers whose qualifications sit within a different framework. HE credit systems in use in England, Wales and Northern Ireland are compatible with the European Credit Transfer System (ECTS) for accumulation and transfers within the European Higher Education Area, and are used to recognise learning gained by students in institutions elsewhere in Europe.

### Admission

The most common qualification for entry to higher education is the General Certificate of Education at 'Advanced' (A) level. Other appropriate NQF level 3 qualifications and the kite-marked Access to HE Diploma may also provide entry to HE. Level 3 qualifications in the CQFW, including the Welsh Baccalaureate, also provide entry, as do Scottish Highers, Advanced Highers or qualifications at the same levels of the Scottish Credit and Qualifications Framework. Part-time and mature students may enter HE with these qualifications or alternatives with evidenced equivalent prior formal and/or experiential learning. Institutions will admit students whom they believe to have the potential to complete their programmes successfully.

National Recognition Information Centre for the United Kingdom (UK NARIC), Version 5, 30 March 2011

<sup>1</sup>The UK has a system of devolved government, including for higher education, to Scotland, to Wales and to Northern Ireland. This description is approved by the High Level Policy Forum which includes representatives of the Department for Business, Innovation and Skills, the Scottish Government, the Welsh Assembly Government, the Higher Education Funding Councils for England, Scotland and Wales, the Quality Assurance Agency (QAA), Universities UK (UUK), GuildHE and the National Recognition Information Centre for the UK (UK NARIC).

### **DIPLOMA SUPPLEMENT**

The Diploma Supplement follows the model developed by the European Commission, Council of Europe and UNESCO/CEPES. The purpose of the 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 should be free from any value-judgements, equivalence statements or suggestions about recognition. Information in all eight sections should be provided. Where information is not provided, an explanation should give the reason why.

### TRANSCRIPT

Your transcript contains information required by the European Commission to be included in the European Diploma Supplement.

- 1. INFORMATION IDENTIFYING THE HOLDER OF QUALIFICATION\*
- 2. INFORMATION IDENTIFYING THE QUALIFICATION\*
- 3. INFORMATION OF THE LEVEL OF THE QUALIFICATION\*
  - 3.1 Official Length of Programme and 3.2 Information on Access Requirement(s) are detailed within the Programme Specification: Programme Specifications can be found at: http://www.herts.ac.uk/
- 4. INFORMATION ON THE CONTENTS AND RESULTS GAINED\*
  - 4.1 Mode of Study, 4.2 Programme Requirements, 4.3 Programme Details and 4.4 Grading scheme and, if available, grade distribution guidance: are detailed within the Programme Specification also learners must satisfy programme requirements as described in the University's Policies and Regulations: Programme Specifications can be found at: http://www.herts.ac.uk/ and University's Policies and Regulations http://www.herts.ac.uk/secreg/upr
- 5. INFORMATION ON THE FUNCTION OF THE QUALIFICATION
  - 5.1 Access to Further Study and 5.2 Professional Status are detailed with the programme specification.
- 6. ADDITIONAL INFORMATION
  - 6.1 General:

The University of Hertfordshire is an ambitious and entrepreneurial University. It offers excellence in teaching, learning and research and puts students at the heart of its activities. It is a model of a 21st Century University, international, business-facing and business-like in approach - making it distinctive in an ever changing Higher Education environment.

The University of Hertfordshire is one of its region's largest employers with over 2,500 staff and a turnover of more than £160 million. With a student community of over 24,000, including more than 2,000 international students from over 85 different countries, the University has a global network of over 100,000 alumni.

For more information, please visit www.herts.ac.uk

7. CERTIFICATION OF THE SUPPLEMENT

7.1 Date 30 March 2011

7.2 Signature

7.3 Capacity Vice-Chancellor

7.4 Official Stamp or seal



University of Hertfordshire

# 8. INFORMATION ON THE NATIONAL HIGHER EDUCATION SYSTEM

Please note: During the implementation period of the framework for Higher Education Qualifications (FHEQ), the levels used at University of Hertfordshire, referred to in section 3 of this document, do not correspond with those described in the attached addendum, which provides information on the Higher Education System in England, Wales and Northern Ireland. As clarification, the levels are as follows, with the University of Hertfordshire's levels appearing first and with the corresponding FHEQ levels appearing in brackets: Level 1 (4); Level 2 (5); Level 3 (6); Level M (7).