<Universitets navn>DIPLOMA SUPPLEMENT

This 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.

1. INFORMATION IDENTIFYING THE HOLDER OF THE QUALIFICATION

- 1.1. Family name(s): Jensen
- 1.2. Given name(s): Jens
- 1.3. Date of birth: 99 October 9999
- 1.4. Civil registration number: 999999-9999

2. INFORMATION IDENTIFYING THE QUALIFICATION

2.1. Name of qualification and title conferred (in original language):

Master i it har tre linjer: "Master i it, Organisation", "Master i it, Interaktionsdesign og Multimedier" og "Master i it, Softwarekonstruktion", med mulig specialisering i It-sikkerhed.

Name of qualification and title conferred (in English):

The programme has three tracks: "Master of IT, Organisation", "Master of IT, Interaction Design and Multimedia" and "Master of IT, Software Construction", with the possibility of specialising in IT security.

2.2. Main fields of study:

Information Technology.

2.3. Name and status of awarding institution:

<Universitetsnavn på dansk/engelsk> (official abbreviated <forkortelse for universitetsnavn>) is a self-governing institution within public administration under the supervision of the Minister for Science, Technology and Innovation, regulated according to the University Act no. 960 of 14 August 2014.

2.4. Name and status of institution administering the studies:

Not applicable.

2.5. Language(s) of instruction/examination:

Danish. (In some courses, literature is in English)

3. INFORMATION ON THE LEVEL OF THE QUALIFICATION

3.1. Level of qualification:

A complete Master's degree programme consists of 60 ECTS credits – or the equivalent to a one-year full-time study. The level of the programme equals a university postgraduate programme. Almost all participants in the Master of IT programme are part-time students. They are required to finish the study within 6 years, if they want a diploma for the Master's degree programme.

3.2. Official length of programme:

One-year Master = 60 ECTS credits, However, students are recommended to spend at least two years on a complete Master's degree programme.

3.3. Admission requirements:

Admission requirements to the tracks in Organisation and Interaction Design and Multimedia

Admission requirements regarding the Master of IT degrees to the track in Organisation and the track in Interaction Design and Multimedia are:

a) an Academic Bachelor's degree or

- b) a Academy Profession degree programme (for example an Academic Bachelor's degree in Software Development) or
- c) an intermediate long-cycle higher education degree programme or
- d) a Diploma degree completed as a regular course.

In addition, the applicant must have at least two years of relevant professional experience. The University cannot grant exceptions from the relevant professional experience requirement.

Definition of relevant professional experience regarding:

- Interaction Design and Multimedia: working with the development or implementation of IT or teaching within IT.
- Organisation: working with IT-professionals and organisational issues within the academic field of Master of IT Organisation.

Admission requirements to the track in Software Construction:

Admission requirements regarding Master of IT, Software Construction, are:

- a) an Academic Bachelor's degree in Computer Science or Diploma degree programme in Information Technology (Software Development) or
- b) an Academic Profession degree in Software Development or
- c) a diploma degree in Software Development with elective courses in contract-based system development or
- d) ICT engineering degree programme or
- e) equivalent degree programme.

Other degree programmes, which fall within the general rules on admission, can provide access, if the applicant is able to document knowledge of and skills in working with programming in a modern object-oriented language, simultaneous and distributed systems, databases, software testing and verification, software architecture based on design patterns and frameworks, development methods and discrete mathematics.

Certain courses may require mathematics at danish A level.

In addition, the applicant must have at least two years of relevant professional experience. The University cannot make exceptions from the professional experience requirement. Relevant professional experience implies working with development and implementation of IT or teaching in IT.

If a student wishes to take an optional course (included in the overall master's programme) from another track than the track to which the student is admitted, the student must meet the admission requirements for that course and the track of the optional course.

4. INFORMATION ON THE CONTENTS AND RESULTS GAINED

4.1. Mode of study:

Part time study programme corresponding to 60 ECTS credits.

4.2. Programme requirements:

The complete Master's degree programme consists of 60 ECTS credits, which equals one year of full-time study. The level of the programme equals a university postgraduate programme.

The Master of IT degree programme consists of three courses and a Master's Thesis. The student is free to choose the optimum combination of courses. However, at least two of the courses and the Master's Thesis must be on the same track.

Education competence profile

In general, and applying to all the tracks, Master of IT gives the student the following knowledge, skills and competencies:

Knowledge and understanding

A Master of IT has:

- > Research-based knowledge of theory, method and practice within the chosen track
- > Deep understanding of IT issues based on the highest international research within the track
- Understanding of theories and methods within the track and ability to reflect on their use in connection with information technology issues.

<u>Skills</u>

On an academic basis, a Master of IT can choose and apply relevant theories from the courses on in order to:

> Plan, implement and manage IT, the development of IT, the implementation of IT or teaching in IT

- Identify, analyse and assess IT issues using relevant research-based theories and methods from the selected track or adjacent areas
- The ability to draw up new analytical and solution models relating to the management of IT, the development of IT, the implementation of IT or teaching in IT, on an academic basis

- The ability to communicate information about information technology issues and solution models to both specialists as well as users and decision-makers
- Assess the relevance of and apply relevant theories and methods related to information technology issues
- > Assess and evaluate the importance of information technology in relation to the contexts in which it is used

Competences

A Master of IT has competencies to:

- Create and further develop their own IT academic profile based on their own educational and professional background
- > Reflect on and develop their own practice in relation to the management, development or implementation of IT
- Engage in interdisciplinary collaboration and assume responsibility for managing and developing complex workrelated situations that require new solution models

Competence profile for the Software Construction track

In addition to the general competencies for the Master of IT degree programme, the track Software Construction complements by providing the student with the following knowledge, skills and competencies:

Knowledge and understanding

A Master of IT, Software Construction

- Has broad knowledge of software design
- Has in central, selected areas detailed knowledge of theories, technologies and methods for use in the development of software
- Can, on an academic basis, reflect on and assess the applicability of technologies, disciplines, methods and techniques in connection with, for example:
 - o Specification, design, construction, analysis and verification of software
 - o Interaction between theory, technology, method and techniques
 - Qualitative a quantitative characteristics of technologies
 - Viewing technology in context (focus on applications).

Skills and competencies

On an academic basis, a Master of IT, Software Construction, can choose and apply relevant theories from the courses in order to:

- Analyse and assess issues in the design of software
- Specify, design, construct, analyse and verify software as well as integrate these activities in a systematic development process
- Use tools and resources in relation to specific technologies
- Explain and apply the theory behind technologies for the construction of software
- > Analyse and assess the possibilities and limitations of technologies
- Assess and integrate technologies in relation to specific tasks.

IT-security specialization, skills

A student on the Master of IT, Software Construction degree programme may choose to specialise in IT-security which gives the student a holistic understanding of IT security.

On an academic basis, a Master of IT, Software Construction with the specialisation in IT security can:

- Reflect on theories, methods, techniques and tools in connection with network security, secure software development or cryptology
- Understand areas of significance for the work within IT security in organisations such as IT ethics, IT law and management of IT security.

Competence profile for the Interaction Design and Multimedia track

In addition to the general competencies for the Master of IT degree programme, the track Interaction Design and Multimedia complements by providing the student with the following knowledge, skills and competencies:

Knowledge and understanding

A Master of IT, Interaction Design and Multimedia

- Has broad knowledge of interaction design
- Has detailed knowledge on how to make IT usable in central, selected areas when using interactive systems and products must be applied
- Can, on an academic basis, reflect on and assess the applicability of technologies, methods and techniques in connection with, for example:
 - Assessment of applicability when the interactive systems and products are identified, described and analysed
 - o Planning, realisation and testing of interactive systems and products with the aim of adding value
 - o The interaction between product, process and technology
 - Functional, aesthetic and symbolic qualities

 \circ $\,$ $\,$ The view of interaction design compared to the usage situation.

Each of the courses of the Interaction Design and Multimedia track covers compulsory content in relation to user experience.

Skills and competences

On an academic basis, a Master of IT, Interaction Design and Multimedia, can choose and apply relevant theories from the courses in order to:

- > Analyse and assess the qualities, possibilities and limitations of various forms of interaction,
- > Assess methods and techniques for development and implementation of various types of forms of interaction,
- > Develop interactive systems and products using various types of interaction.

Competence profile for the Organisation track

In addition to the general competencies for the Master of IT degree programme, the Organisation track complements by providing the student with the following knowledge, skills and competencies:

Knowledge and understanding

Master of IT, Organisation

- Has broad knowledge of the work with organisational and business issues in connection with the development and implementation of IT,
- Has in central, selected areas of information systems in organisations deep theoretical as well as practical competences and overview,
- Can on an academic basis, reflect on and assess the applicability of technologies and methods in connection with, for example:
 - o Development and implementation of IT, including working with organisational and business issues
 - Running and management of change processes involving application of IT
 - IT project management
 - o Communication, collaboration, learning and knowledge sharing
 - o IT strategies and the link between these and business strategies
 - IT use in various contexts possibilities and consequences.

Skills and competencies

A Master of IT, Organisation, can, on an academic basis, choose and apply relevant theories from the courses to:

- > Develop solution strategies in relation to complex organisational and information technology issues
- Analyse and assess the potential and consequences of information technology as well as develop strategy and solution models for IT use
- Conduct management of design, development or change processes relating to IT and navigate in the high degree of complexity that exists in the work.

4.3. Programme details and individual grades/marks/credits obtained:

Please refer to the diploma.

4.4. Grading scheme and if applicable grade distribution information: Please refer to the grade transcript in this diploma supplement.

4.5. Overall classification of the qualification:

Not applicable for Danish qualifications.

5. INFORMATION ON THE FUNCTION OF THE QUALIFICATION

5.1. Access to further study:

EX.: A completed BA in Humanistic Informatics gives access to MA studies in Human Centered Informatics, Communication, Multimedia, or equivalent MA studies.

5.2. Professional status:

The Master of IT degree programme is a continuing degree programme aimed at professionals within the fields of

- IT development
- IT implementation
- IT management
- IT teaching

The Master of IT degree programme provides research-based knowledge of the latest theories and principles behind the development and use of IT. It presents the students with methods and techniques that are relevant for the students' current and future work profile.

The Master of IT degree programme is intended as a part-time programme, similar to, e.g., an MBA programme, for practitioners working with ICT. The programme is very flexible, and participants can create their own programme at their own pace, choosing from a number of course packages where each package consists of 1-3 courses, offered by the Universities in the It-vest network. The courses consist of a combination of seminars and ICT supported activities in order to make it possible to combine a busy work and family life with studies at the university. The common and overall purpose of the three Master of IT tracks (Software Construction, Interaction Design and Multimedia, and Organisation) is to continue to educate people who work with IT on a professional level and who want to obtain specialised competences in relevant IT professional areas. The programme qualifies the student, on a scientific basis, to deal with the management of IT, the evelopment of IT, the implementation of IT or the teaching of IT within the academic field.

6. ADDITIONAL INFORMATION

6.1. Additional information
 search

6.2. Further information sources

Information in English on <<u>Universitetsnavn></u> (study programmes, contents of the programmes, research, faculties and departments) is available at the University's website at <<u>Navn på website</u>, samt mailadress for international kontakt>.

General information on higher education can be obtained from the Danish Ministry of Higher Education and Science at ufm.dk/en, and from Universities Denmark at http://dkuni.dk/english.

7. CERTIFICATION OF THE SUPPLEMENT

- 7.1. Date:
- 7.2. Signature:

<Navn>

7.3. Capacity: Administrative officer

7.4. Official stamp or seal:

THE DANISH HIGHER EDUCATION SYSTEM

This description of the Danish Higher Education System has been approved by the Danish Ministry of Education, the Ministry of Science, Technology and Innovation and the Ministry of Culture.

Public higher education institutions in Denmark are governed by national legislation concerning degree structures, teacher qualifications and examinations. All programmes are accredited by national, independent accreditation agencies and the Accreditation Council.

Higher education institutions

Higher education is offered by four types of higher education institutions and regulated by three Ministries:

- Academies of Professional Higher Education (Erhvervsakademi) and University Colleges (Professionshøjskole) are regulated by the Ministry of Education and offer professionally oriented first cycle degree programmes.
- Research universities (Universitet) are regulated by the Ministry of Science, Technology and Innovation and
 offer first, second and third cycle degree programmes in all academic disciplines.
- A number of university level institutions are regulated by the Ministry of Culture and offer first, second and third cycle degree programmes in subject fields such as architecture, design, music and fine and performing arts.

Overview of degrees in the Danish Higher Education System

Danish higher education institutions use the European Credit Transfer System (ECTS) for measuring study activities. 60 ECTS correspond to one year of full-time study.

Danish qualifications levels	Ordinary higher education degrees	Adult/Continuing higher education degrees	Qualifications Framework for the European Higher Education Area ? Bologna Framework	European/National Qualifications Framework for Lifelong Learning ? EQF/NQF
Academy Profession level	Academy Profession degree (90-150 ECTS)	Academy Profession degree (60 ECTS)	Short cycle	Level 5
Bachelor's level	Professional Bachelor's degree (180-240 ECTS)* Bachelor's degree (within fine arts) (180 ECTS) Bachelor's degree (180 ECTS)	Diploma degree (60 ECTS)	First cycle	Level 6
Master's level	Master's degree (within fine arts) (120-180 ECTS) Master's degree (120 ECTS)	Master degree (60-90 ECTS)	Second cycle	Level 7
PhD level	PhD degree (180 ECTS		Third cycle	Level 8

* Can be obtained through a full regular bachelor's programme (180-240 ECTS) or a top up bachelor's programme (90 ECTS) following an Academy Profession degree. A few Professional Bachelor programmes are 270 ECTS. ** A few Master's programmes are up to 180 ECTS.

Qualification framework

The Danish qualification levels form the basis for the Danish National Qualifications Framework for Higher Education, which is certified in accordance with the overarching Bologna Framework according to the principles adopted by the European Ministers of Higher Education. Danish higher education qualifications at levels 5-8 in the Danish Qualifications Framework for Lifelong Learning (NQF) are also compatible with the levels 5-8 in the European Qualifications Framework (EQF).

Admission and progression

General access to higher education in Denmark requires a secondary school leaving examination or comparable qualifications. Admission to some particular programmes requires entrance examination or submission of a portfolio of artistic work.

Completion of a short cycle degree qualifies students for admission to a first cycle degree. Degree holders with a short cycle Academy Profession degree can obtain a Professional Bachelor's degree within the same field of study with a top up programme (90 ECTS). Completion of a first cycle degree qualifies students for admission to the second cycle.

Ordinary Higher Education degrees

The Academy Profession degree is awarded after 90-150 ECTS and includes a period of work placement of at least 15 ECTS. The programmes are development-based and combine theoretical studies with a practical approach. Programmes are, among others, offered within Marketing Management, Computer Science and Chemical and Biotechnical Science. The Danish title is field of study followed by the abbreviation AK and the English title is AP Graduate in [field of study].

The Academy Profession degree is awarded after 90-150 ECTS and includes a period of work placement of at least 15 ECTS. The programmes are development-based and combine theoretical studies with a practical approach. Programmes are, among others, offered within Marketing Management, Computer Science and Chemical and Biotechnical Science. The Danish title is field of study followed by the abbreviation AK and the English title is AP Graduate in [field of study].

The Bachelor's degree from a university is awarded after completion of a 3-year programme (180 ECTS). The programmes are research-based and are offered in all scientific fields. The Danish title is Bachelor (BA) i [field of study] or Bachelor (BSc) i [field of study] and the English title is Bachelor of Arts (BA) in [field of study] or Bachelor of Science (BSc) in [field of study].

The Bachelor's degree (within fine arts) is awarded after 180 ECTS. The programmes are based on research and artistic research. Programmes are offered within the arts. The Danish title is Bachelor (BA) i [field of study] or Bachelor i musik (BMus) [field of study] and the English title is Bachelor of Arts (BA) in [field of study] or Bachelor of Music (BMus) [field of study].

A higher education degree within theatre or filmmaking is awarded after 4 years of study (240 ECTS).

The Master's degree is awarded after 120 ECTS. The programmes are research-based and are offered in all scientific fields. The Danish title is abbreviated to cand.[latin abbreviation of academic area] i [field of study]. The English title is Master of Arts (MA) in [field of study] or Master of Science (MSc) in [field of study].

The Master's degree (within fine arts) is awarded after 120-180 ECTS. The programmes are based on research and artistic research. The Danish title is abbreviated to cand.[latin abbreviation of academic area] [field of study]. The English title is Master of Arts (MA) in [field of study] or Master of Music (MMus) [field of study]. Music Academies offer a specialist degree of 2 to 4 years following the master's degree.

The PhD degree is awarded after 180 ECTS. PhD programmes are offered by the universities and some institutions under the Ministry of Culture.

Detailed descriptions of degrees and degree levels can be found in the Qualifications Framework for Danish Higher Education at www.iu.dk.

Please consult the relevant Diploma Supplement for information about the learning outcome of the specific degrees.

Adult and continuing higher education

The programmes normally consist of 2 years of part-time study, equivalent to 1 year of full-time study (60 ECTS credits). Certain master programmes require 1½ years of full-time study (90 ECTS credits). Admission requirements are a relevant educational qualification and at least 2 years of relevant work experience. Adult education qualifications are available at levels corresponding to those of the ordinary higher education system.

- The Academy Profession degree (videregående voksenuddannelse) is awarded after studies at short cycle level
 and gives access to diploma programmes.
- The Diploma degree (diplomuddannelse) is awarded after studies at first cycle level and gives access to master programmes.
- The Master degree (masteruddannelse) is awarded after studies at second cycle level.

The 7-point grading scale

The grading system used in all state-regulated education programmes as of September 2007 is the 7-point grading scale. The grading scale is compatible with the ECTS grading scale

The 7-point grading scale	12	10	7	4	02	00	-3
The ECTS grading scale	A	В	С	D	E	Fx	F

Apart from the 7-point grading scale, pass/fail assessment may also be used. 02 is the minimum grade for passing an exam.