IT - Master of Science (MSc) in Business Administration and Information Systems

Preamble

Pursuant to section 45 of Ministerial Order no. 2285 of 1 December 2021 on Full-time Programmes at Universities (the University Programme Order); section 28(3) and section 30(1) of Ministerial Order no. 69 of 26 January 2023 on Admission and Enrolment on Full-time Programmes at Universities (the Admission Order); Ministerial Order no. 2271 of 1 December 2021 on University Examinations and Grading (the Examination Order) and Ministerial Order no. 1125 of 4 July 2022 on the Grading Scale of Educations within the Sphere of the Ministry of Higher Education and Science (the Grading Scale Order) the Dean of Education, acting on a proposal prepared by the study board, has approved the following programme regulations.

Content

Part 1: Programme specific regulations

Part 2: General regulations for master's (candidatus) programmes

12. Teaching and examination language
13. Prerequisites for participating in the exam: compulsory activities
14. Registration for and withdrawal from courses and exams
15. Re-exams
16. Study start test
17. Extraordinary re-exams and offers of re-assessment / re-exam
18. Entrepreneurs
19. Examination forms
20. Examination rules
21. Examination aids
22. Examinations under special circumstances
23. Sitting examinations abroad
24. Assessment

25. Announcement of results
26.-27. Pass requirements and exam attempts
28. Diploma
29. Leave
30. Programme regulations
31. Exemption from the programme regulations
32.-35. Credit transfer

Part 3: Complaints

Commencement and transition regulations

Appendix: Competency profile

Part 1: Programme specific regulations

Degree title and duration

1. Students who successfully complete the programme earn the degree Master of Science (MSc) in Business Administration and Information Systems, in Danish: cand.merc.(it.). The Latin title is candidatus/candidata mercaturae et informationis technologiae.

(2) This programme is governed by the Study Board for the BSc and MSc in Business Administration and Information Systems, MSc in Business Administration and Ebusiness, and MSc in Business Administration and Data Science.

(3) The master's (candidatus) programme is a two-year full-time program, corresponding to 120 ECTS credits. The deadline for completing the programme is rated time of study + one year after the student commenced the programme. Leave periods, if any, are not included in this time frame. Level of qualification: Master's degree at NQF/EQF Level 7 referring to Second Cycle in the Bologna QF.

(4) The programme duration refers to the number of student full-time equivalents according to which the programme is structured. A full-time equivalent corresponds to one year of work by a full-time student and corresponds to an annual workload of 1650 working hours corresponding to 60 ECTS credits (European Credit Transfer System). The workload includes scheduled classes, preparation for classes, completion of written assignments, other teaching activities, independent study as well as preparation for, and participation in examinations.

Admission requirements and qualifying degrees

1A. The CBS bachelor degrees *BSc in Business Administration and Information Systems* and *BA in Information Management* give the right to admission to the MSc in Business Administration and Information Systems programme, even if there are a limited number of places offered. A precondition for this right to admission is that the applicant is admitted to this programme no later than three years after completion of the bachelor's degree. This right to admission can only be used once.

(2) No other bachelor degrees from CBS or other universities give access to admission to this programme, see however subsection (5).

(3) Admission to the MSc in Business Administration and Information Systems programme requires that the applicant has completed a qualifying bachelor degree, among these a professional bachelor degree, or other Danish or foreign degree at the same level. During the education the applicant must have covered the following academic disciplines to a sufficient degree on an overall, individual assessment:

- 5 ECTS-points in Micro and/or Macro Economics
- 25 ECTS-points in Business Administration
- 30 ECTS-points in one or more of the following areas:

1. Information technology

2. Computer science
3. Programming
4. Computer algorithms
5. Information systems
6. Information management
7. Computer-mediated communication
8. Information architecture and design
9. Systems design

(4) The requirements for language skills are available on CBS' homepage: cbs.dk/graduateadmission.

(5) Standard assessments of a number of degrees from CBS or other universities are available on cbs.dk/graduateadmission.

(6) In the event that there are more applicants who fulfil the admission requirements than there are places offered at this programme, the selection shall be made according to criteria laid down in advance and published on cbs.dk/graduateadmission.

(7) Available at cbs.dk/graduateadmission are the application and admission procedures, including deadlines, as well as information about the date when the offer or the rejection of a place of study is made and about the requirement to accept a place of study.

Purpose

2. The purpose of the business administration and information systems master's programme is for the students to acquire competences, skills, and capabilities at an advanced level to be able to manage information and information technology in organizations.

(2) In the MSc in Business Administration and Information Systems, students will acquire interdisciplinary skills, competences, and capabilities that will enable them to bridge organizational functions and professional backgrounds, and to meet challenges and address problems related to information and information technology. These capabilities involve exploiting technologies to improve or generate new business models, solving complex technological organizational challenges, and aligning technical design with local, national, and global strategic business challenges. Students will be provided with the skills to work with information-intense business practices, knowledge intense collaboration, business communication, strategy development, and design of shared information environments in the digital era. Finally, the programme aims to qualify the student for postgraduate studies, including Ph.D. studies.

Competency profile

3. The Study Board has developed a competency profile, which describes the expected learning outcomes of this degree programme. Please, see the appendix below.

Content and structure

4. The table below lists the structure of the programme and the ECTS credits of the individual courses (30 ECTS per semester). The course descriptions are available in the online course catalogue. Direct links are inserted in the table.

Module and semester

(2) The program consists of four modules and four semesters:

- The first module is dedicated as a shared module with four mandatory courses.
- The second module enables the student to select among a limited set of courses
- The third module is dedicated to electives, study abroad, and internship
- The fourth module is dedicated to the Master's Thesis.

First semester

(3) Four mandatory courses

Managing IT Project Complexities (7½ ECTS)

(4) The context and conditions of contemporary IT software and systems development are complex and constantly changing. While the traditional large scale (in-house or vendor based) monolithic projects are still carried out, today's software development range from small phone apps to large complex inter-organizational systems, and from embedded software to standard products. Projects may involve several teams and vendors from different continents. At the same time, development paradigms, principles, and practices have evolved from the traditional waterfall over agile to (current) explorations into continuous delivery and deployment. The course supports students in learning how to understand and manage today's complex and diverse IT projects. Building on the students' knowledge about basic project management concepts, techniques and challenges, it will introduce advanced planning and management techniques in the context of contemporary project management challenges, theories, techniques, and practices. The aim of the course is to improve the students' ability to plan, control and improve Information Systems Development in contemporary as well as future contexts and settings.

Innovation in a Digital World (7½ ECTS)

(5) The overall objective of the course is to provide students with an understanding of the strategies that organizations use in order to go about digital innovation. In doing so, the course combines traditional perspectives on the foundations of innovation and value creation with a state of the art perspective on the characteristics and architectural structures of digital technologies that promote digital innovation. Students will also learn to use theory for describing value creation and capture for digital innovation by considering open and closed architectures, standards battles and tensions of control and generativity in managing innovation.

Strategy Making and Information Technology (7½ ECTS)

(6) The objective of this course is to provide students with an understanding of the field of corporate strategy in relation to information technology, and provide students with tools and methodologies enabling to take a key role in assessing and developing IT strategy. The pedagogical model is intended to familiarize the students with issues and debates in strategic management research, and to take the students from theory to application through the use of case studies.

Big Data Management (7½ ECTS)

(7) The goal of this course is to equip students with techniques and tools for analyzing and exploiting large sets of data, and to link these to strategies for effectively managing big data in the organization. The course will explore the transformative potential of big data management in

different sectors across different regions of the world. The learning activities include flipped classroom elements and an independently chosen project. This project will take the form of a business case analysis. Students will select a case organization and investigate the transformative potential of big data management for the organization, through the utilization of contemporary big data tools and techniques.

Second semester

(8) In the second semester, students must choose four of the following six courses.

Technology and Organization in a Digital World (7½ ECTS)

(9) The course will focus on different ways to describe and analyse the intersections between technology and people in organizations. The course is enabling the students to unfold how organizations are constructed and managed by technology and how social relations influence the technology's ability to contribute to a company's success.

Information Economics and Business (7½ ECTS)

(10) Economics of information and organization in relation to digitalization, (e.g. introduction of machine learning, datafication) form the core of this course. The students will develop analytical skills and abilities to assess industry and market developments due to digitalization, and thereby, improve their capabilities to engage in individual and group decision-making under uncertainty and solve specific business problems. Upon completion of the course the students will be able to develop and present concrete solutions to industry and market problems and advise firms about how to deal with digitalization challenges and opportunities.

Advanced Strategic Information Management (7½ ECTS)

(11) The course will provide students with a thorough understanding of central elements in strategic information management processes and will develop competences that allow students to address strategic information issues from different theoretical perspectives at an advanced level, independently to present, apply and discuss a selected number of key concepts and analytical approaches for information strategy making and value creation, new ways to measure and make effective use of an organization's information, and methods and means to energize capabilities for innovation, organizational effectiveness and entrepreneurial development.

Internet of Things (7½ ECTS)

(12) Virtually every physical thing can also become or be part of a computer that is connected to the Internet. In business, Internet of Things can create new business models, improve business processes, and reduce costs and risks. Students will gain advanced knowledge of key theories and concepts of the Internet of Things. They will acquire specialised problem-solving skills, being able to analyse and design new business solutions based on Internet of Things technology. They shall take responsibility to conduct design and implementation of new business solutions, and evaluate the business value.

Artificial Intelligence and Machine Learning (7½ ECTS)

(13) AI and machine learning are poised to transform the business and technology landscape, and it has become essential for business leaders to understand the key technologies and concepts involved. This course covers several of the main AI and machine learning technologies, including natural language processing, image recognition, and autonomous vehicles. The primary focus is technical, and students are expected to be able to program in Python or a similar language, and to understand

and be able to implement machine learning systems such as classification and regression. The business impact, as well as societal and ethical topics, will also be considered.

Researching Technologies: Explanatory and Design Strategies (7½ ECTS)

(14) In the research project course, students prepare for their master thesis (which has registration mid-semester 3rd semester). The project needs to be anchored in current research topics and incorporate theory and/or contribute to theory-building, problems, methodologies, and solutions. The project must collect and analyse data. The project can be artefact/ prototype oriented or it can be explanation of a phenomenon. The project is a pilot project going a full research cycle in small scale, and a stepping stone towards the student's master thesis.

Third semester

(15) In the third semester students can choose their courses at CBS, other Danish universities, internship, or study abroad.

(16) The activities in the third semester need to be in correspondence with the overall objective of the study program. Thus, there needs to be progression in the learning curve and elements that point forward to the thesis in the 4th semester.

(17) Elective courses provide an opportunity for a progression and in-depth study of the core competence area *or* other courses that provide a broader academic orientation. They can be chosen among electives offered by the MSc programme in Business Administration and Information Systems, other programs at CBS, other Danish universities, or universities abroad.

(18) The electives' curricula may not overlap with the compulsory curriculum and enrolment must be pre-approved by the Study Board.

(19) At third semester, research, group, and company internships can be approved as electives for up to 15 ECTS credits. The Study Board sets specific criteria for the approval of internships. The criteria are available on the student intranet my.cbs

Fourth semester

(20) At the fourth semester, students write their master's thesis. The thesis needs to in line with the objectives listed in section 4A. The thesis is a progression of study activities at the first, second, and third semester of the study program.

Additional specific regulations

(21) It is expected that the student can read academic texts in English. Exam papers may contain English words and sentences, and there might be appendices in English.

(22) Students admitted to the program must in their first year follow the courses offered by the programme, meeting a requirement of 60 ECTS.

(23) The Study Board may decide not to establish an elective if too few students enrol for it.

Teaching format

(24) The teaching format in the programme is a mix of lectures, workshops, supervision and online learning. Active and engaged use of new technologies, among these information and communication technologies, is an essential part of the teaching format.

First year - first semester

Four mandatory courses

Course	ECTS
Managing IT Project Complexities	7.5
Innovation in a Digital World	7.5
Strategy Making and Information Technology	7.5
Big Data Management	7.5

First year - second semester

Students can choose four courses among the six courses below (30 ECTS in total).

Course	ECTS
Technology and Organization in a Digital World	7.5
Information Economics and Business	7.5
Advanced Strategic Information Management	7.5
Internet of Things	7.5
Artificial Intelligence and Machine Learning	7.5
Researching Technologies: Explanatory and Design Strategies	7.5

Second year - third semester

Electives and/or internship (30 ECTS in total)

Course	ECTS
Electives	30
Internship	7.5
Internship	15

Second year - fourth semester

Course	ECTS
Master's Thesis	30

Master’s thesis

4A. The master's (candidatus) thesis must document skills in applying scientific theories and methodologies to a clearly defined academic topic. The thesis must be placed at the second year of study of the master’s candidatus programme.

(2) The Programme Director, or the person the Programme Director has empowered to do so, approves the research question of the master’s thesis and at the same time determines a submission deadline for the thesis, see subsection (3), and a plan for the thesis supervision. The deadline for submitting the thesis contract is 15 November in the student’s 3rd semester, by submission of the thesis contract; see however section 14(3). See also section 19(7).

(3) The deadline for submitting the thesis is 15 May in the student’s 4th semester, and it is not possible to withdraw from the exam once the thesis contract has been approved. If the student does not submit within the deadline, the student has used one examination attempt, unless a dispensation has been granted under section 14(7).

(4) If the student does not submit the thesis within the time frame specified in subsection (3), the Programme Director, or the person the Programme Director has empowered to do so, approves a modified problem formulation within the same field and lays down a new three-month deadline for submission at the same time. If the student does not submit the thesis by the new deadline, the

student may be granted a third examination attempt, see the Examination Order, in accordance with the same rules which applied to the second examination attempt.

(5) The rules in subsection (4) also apply for a master's thesis for which the student has not obtained at least the grade 02, see the Grading Scale Order.

Examinations

5. The programme consists of the examinations listed below. The learning objectives and the regulations of the individual examinations are prescribed in the online course catalogue. Direct links to the individual examinations are inserted in the table below.

First year - first semester

Exam name	Exam form	Gradingscale	Internal/external exam	ECTS
Managing IT Project Complexities	Home assignment - written product	7-point grading scale	External exam	7.5
Innovation in a Digital World	Home assignment - written product	7-point grading scale	Internal exam	7.5
Strategy Making and Information Technology	Written sit-in exam on CBS' computers	7-point grading scale	External exam	7.5
Big Data Management	Oral exam based on written product	7-point grading scale	Internal exam	7.5

First year - second semester

Four exam (30 ECTS in total) depending on the students choice of courses.

Exam name	Exam form	Gradingscale	Internal/external exam	ECTS
Technology and Organization in a Digital World	Home assignment - written product	7-point grading scale	Internal exam	7.5
Information, Economics and Business	Oral exam based on written product	7-point grading scale	Internal exam	7.5
Advanced Strategic Information Management	Home assignment - written product	7-point grading scale	Internal exam	7.5
Internet of Things	Home assignment - written product	7-point grading scale	Internal exam	7.5
Artificial Intelligence and Machine Learning	Oral exam based on written product	7-point grading scale	Internal exam	7.5
Researching Technologies: Explanatory and Design Strategies	Oral exam based on written product	7-point grading scale	Internal exam	7.5

Second year - third semester

Electives and/or Internship (30 ECTS in total).

Exam name	Exam form	Gradingscale	Internal/external exam	ECTS
Electives	see individual course description	see individual course description	see individual course description	30
Internship	Home assignment - written product	7-point grading scale	Internal exam	7.5
Internship	Home assignment - written product	7-point grading scale	Internal exam	15

Second year - fourth semester

Exam name	Exam form	Gradingscale	Internal/external exam	ECTS
Master's Thesis	Oral exam based on written product	7-point grading scale	External exam	30

Prerequisites for registering for the exam – compulsory activities

5A. The following courses have compulsory assignments or other compulsory activities, see section 13. Further specifications and regulations are listed in the relevant course description in the online course catalogue, see the below link(s).

Course	Number of mandatory activities
Innovation in a Digital World	1
Strategy Making and Information Technology	3
Internet of Things	1
Artificial Intelligence and Machine Learning	2
Researching Technologies: Explanatory and Design Strategies	3

Body of external examiners

6. This degree programme is covered by the body of external examiners for the business administration programmes.

Pass requirements

7. The general pass requirements are stipulated in section 26.

Double degree - Mannheim Business School

8. As a student in the Master of Science in Business Administration and Information Systems programme you are eligible to apply for the double degree arrangement between Copenhagen Business School and The University of Mannheim Business School in Germany. For further information, see www.cbs.dk.

9-10. (not in use)

Part 2: General regulations for master's (candidatus) programmes

11. The teaching is organised in a collaboration between the Programme Director, the course coordinators and the teachers. The Study Board approves the organisation of the teaching.

Examination language

12. Examinations are conducted in English; see however subsection (2).

(2) If a course has been taught in a language other than English, the examination is conducted in that language.

(3) The Study Board may decide to deviate from the rules stipulated in subsections (1)-(2), except when documenting the student's skills in a specific other language is part of the objective of the examination.

(4) The provisions in subsections (1)-(2) apply to oral and written sit-in examinations and to all types of written take-home assignments (seminar papers, projects etc.) subject to assessment.

Prerequisites for participating in the exam: compulsory activities

13. Besides the examinations listed in section 5, which are included in the final grade point average, on some courses there are one or more compulsory activities. That means that as part of the teaching, one or more written assignments must be submitted and/or one or more oral presentations or other compulsory activities must be carried out. In order for students to participate in the final examination of the course in question, it is a condition that, within a set deadline, the required number of compulsory activities have been submitted/carried out and have been approved by the teacher. What is evaluated is the student's effort; i.e. whether the student has made a try at solving/answering the assignment or has participated in the activity. A blank or irrelevant submission is not regarded as having participated in the activity. Students who do not fulfil the requirements for participating in the examination have used an examination attempt, see section 14(6). Further specifications regarding the number of compulsory activities, format etc. are stated in the course description of the individual course.

(2) A student who, within the deadline determined under subsection (1), is short on having one or more activities approved as regards the required number of approved activities in the course may, to a reasonable extent, be given one or more extra assignments/participate in one or more extra activities, prior to the ordinary examination (1st examination attempt) in the final examination in the course, see however subsection (3). However, it is a precondition that the student has participated in all set activities, unless it can be documented that lack of submission/participation was caused by illness or similar circumstances. If necessary for practical reasons, a different type of activity may be decided.

(3) In courses where the number of set activities during the teaching period is higher than the number of activities that are required to be approved (x number of y number set activities must be approved), the student may not be given extra assignments/participate in extra activities prior to the ordinary examination in the final examination in the course; this also applies in cases of illness or similar circumstances.

(4) A student who, prior to the re-exam (2nd examination attempt) in the final examination in the course, is still short on having one or more activities approved as regards the required number of

approved activities in the course may, to a reasonable extent, be given extra assignments/participate in extra activities prior to the re-take examination. However, it is a precondition that the student has participated in all set activities, unless it can be documented that lack of submission/participation was caused by illness or similar circumstances. Further specifications regarding the number of compulsory activities, format etc. are stated in the course description of the individual course.

(5) For a student who is to participate in a re-exam under programme regulations which are entered into force after the first time the student was registered for the course in question, the student shall not be subject to any new requirements about compulsory activites resulting from the newer programme regulations.

Registration for and withdrawal from courses and exams

14. CBS registers the student for the 60 ECTS comprising the coming year of study, and in addition CBS makes a semestrial registration for the student to any not completed courses from previous years of study.

(2) The students register for electives via the Self Service. Students not registered for mandatory courses and electives for a total of minimum 60 ECTS in a year of study, must register for electives, including summer school courses, corresponding to the lacking ECTS in the coming year of study, resulting in the student being registered for a minimum of 60 ECTS in the coming year of study.

(3) If the registration made under subsection (1) is more than 60 ECTS for the student's second year of study, the student may withdraw from elective courses, so that the student is registered for no more than a total of 60 ECTS, or the student may apply for an individual study plan.

(4) The student can be deregistered from one or more courses or course elements where 1) the students is an elite athlete, or where 2) there are extraordinary circumstances, including impairment, and where the student will be unable to fulfil the registration requirement, or where 3) the student is an entrepreneur, see section 18, or where 4) the student is the chairperson of a voluntary organisation under *Dansk Ungdoms Fællesråd (DUF)* and where the student will be unable to fulfil the registration requirement. Deadlines for submitting dispensation applications are determined on the student intranet.

(5) When selecting students for elective courses, a draw is made among the students who fulfil the conditions for taking the elective course in question if there are more applicants for the course than there are available places. For certain electives the selection is not made by lot, but on the basis of a motivational essay; this will be stated on the list with the offered electives on cbs.dk.

(6) Students are automatically registered for an examination or examinations when they are registered for a course or course element with which one or more examinations are associated. Withdrawal from the ordinary exam (1st examination attempt) is not possible, and students have used an examination attempt, see section 27(1), unless an exemption has been granted pursuant to subsection (7). Students who do not fulfil the requirements for participating in the examination as laid down by the university, see section 13(1), have used an examination attempt, see section 27(1), unless an exemption has been granted pursuant to subsection (7).

(7) The university may grant exemptions from the rules set out in subsection (6) where 1) the students is an elite athlete, or where 2) there are extraordinary circumstances, including impairment, or where 3) the student is an entrepreneur, see section 18, or where 4) the student is the chairperson

of a voluntary organisation under *Dansk Ungdoms Fællesråd (DUF)*, see the University Programme Order. Deadlines for submitting dispensation applications are determined on the student intranet.

(8) When a student has used one or more exam attempts in a mandatory course, the student cannot deregister from the course, see s. 12() of the University Programme Order.

(9) The university may grant an exemption to the rule stipulated in subsection (8) if warranted by extraordinary circumstances. When assessing whether extraordinary circumstances apply, none of these circumstances can be taken into consideration: prolongation of the period of study; academic aptitude; and the student's desires as regards the academic content of the degree programme. In addition, in order for an exemption to be granted, the extraordinary circumstance must be both directly linked to the course in question and, over a longer period of time, be preventing the student from completing the mandatory course.

(10) When a student has used one or more exam attempts in an elective course, the student cannot deregister from the course, see s. 13(1) of the University Programme Order.

(11) The university may grant an exemption to the rule stipulated in subsection (10) if warranted by extraordinary circumstances. When assessing whether extraordinary circumstances apply, none of these circumstances can be taken into consideration: prolongation of the period of study; academic aptitude; and the student's desires as regards the academic content of the degree programme. In addition, in order for an exemption to be granted, the extraordinary circumstance must be both directly linked to the course in question and, over a longer period of time, be preventing the student from completing the elective course.

Re-exams

15. Students are automatically registered for the re-exam (2nd and 3rd examination attempt) when the student has not passed the exam in question. Within a deadline, the student can withdraw from a re-exam (2nd and 3rd examination attempt), see subsection (5). However, it is not possible to withdraw from the 2nd and 3rd examination attempt as regards the master's thesis. If the student has not withdrawn within the deadline, the student has used and examination attempt, see section 27(1).

(2) On programmes with two annual examination periods (semester examinations), students who have not passed an ordinary examination are automatically registered for the re-exam (2nd examination attempt) in the same examination period or immediately thereafter.

(3) On programmes with more examination periods than in subsection (2), students who have not passed an ordinary examination are automatically registered for the re-exam (2nd examination attempt), which will be held as soon as possible; however, no later than six months after the ordinary examination.

(4) The rules on automatic registration for a re-exam (2nd examination attempt) are dispensed with if the student is not offered the opportunity to fulfil the requirements laid down pursuant to section 13(1) and (3) before the second examination attempt is held. The student is registered for the next examination attempt as soon as possible.

(5) The deadline for withdrawal from an examination is 1 month before the start of the examination in question. However, a student who awaits an assessment is exempt from this deadline as regards the re-exam of the course in question.

(6) For the requirements regarding documentation etc. concerning illness during an examination, reference is made to CBS' rules regarding illness in connection with an examination. Attention must be paid to the documentation deadline stated in those rules.

(7) Re-exams are subject to the learning objectives of the ordinary examination of the examination in question.

(8) Re-exams are conducted according to the examination regulations of the ordinary examination of the examination in question, except when:

1. the examination regulations for the examination in question explicitly contain differing provisions for the re-exam, or
2. it is a written examination and the number of registered candidates for the re-exam warrants that it may most appropriately be held as an oral examination.

(9) It is not possible to determine another examination form for the re-exam of the master's thesis.

Study start test

16. The student must pass the study start test in order to continue on the programme. An online-course will be available prior to the study start test, and the student will be able to take the online-course as many times as needed. The purpose of the study start test and the online course is to make the students acquainted with academic integrity and provide them with an introduction to source management and correct referencing. In order to pass the study start test, the student must show that he/she knows the rules on academic conduct.

(2) The study start test is held within the first to 2 months from the beginning of the programme. The study start test is a multiple-choice test, and the student has 2 attempts to pass the exam. The re-take will be held within the first 3 months from the beginning of the programme and is also a multiple-choice test.

(3) The student is automatically registered for the study start test. If the student does not participate in the exam, he/she fails the exam and has used one attempt. If a student fails the study start test, he/she will be able to participate in the re-take. If the student does not participate in the re-take, he/she has used one attempt. If the study start test is not passed after 2 attempts, the university will cancel the student's enrolment.

(4) The university may grant exemptions from subsection (1) and (2) when warranted by extraordinay circumstances.

Extraordinary re-exams and offers of re-assessment/re-exam

17. If an extraordinary re-examination is arranged or offered in accordance with section 30 of the Examination Order (regarding examination irregularities) or the offer of a re-evaluation/re-examination is given in accordance with section 38 or 41 of the Examination Order (regarding complaints about the exam), the re-examination is subject to the learning objectives of the ordinary examination of the examination in question.

(2) Examinations under subsection 1 can be conducted in accordance with the regulations of the re-exam if the examination is an offer of an extraordinary re-exam.

Entrepreneurs

18. Students who are entrepreneurs in parallel with their studies must document that they are either self-employed with a turnover and productive assets or are part of an entrepreneurial environment, e.g. university incubators and regional growth environments, cf. section 14 (2) of the University Programme Order.

(2) A student who has a registered CVR number in a start-up company with relevance for the student's studies or is able to document that he/she has been enrolled in one of the programmes which are offered by Copenhagen School of Entrepreneurship (CSE) or the like is considered an entrepreneur under subsection (1). The student must follow the registered entrepreneurship programme in accordance with the continuous requirements of the programme.

Examination forms

19. Examinations are organised as individual examinations or as group examinations. The specific examination form of a given examination, including whether it is an individual or a group examination, or a mixture of the two, is stated in the relevant course description, see links in section 5.

(2) At both individual and group examinations the student's individual performance must be assessed, and grading must be individual, see subsections (3)-(4).

(3) At oral group examinations the individual student must be examined in such a way that it is ensured that the student's individual performance is assessed.

(4) If a written product is produced by more than one student, and if there is no oral defence of the product, it must be stated in the group product which parts of the product the individual student has written, so that individual assessments can be made of the individual students' performances. It must be stated both in the table of contents and at the introduction of the parts of the product which the individual student is responsible for. The individual student's student number is to be noted, not the student's name. The introduction, the problem statement, methodology sections, and the conclusion – including any subconclusions – can be written jointly. If it within the given exam format makes sense to write other relevant sub-elements of the assignment jointly, it must be described in the exam regulations in the course description for the course.

(5) For group examinations, see subsection (1), rules about those of the following factors that are relevant for the examination form in question must be stated in the regulations of the individual examination:

1. maximum group size
2. the allotted time at the oral examination – see subsection (3)
3. requirements regarding individual contributions – see subsection (4).

(6) Where it is stipulated in the regulations of a given examination that it is a group examination, it is stated in the course description if the students can choose to take the examination as an individual examination instead, see however subsection (7). When the examination in question contains both a written and an oral part, both parts must then be taken as an individual examination.

(7) The student can choose to write the master's thesis individually. When the master's thesis has been made by a group, the student can choose to have an individual oral exam.

(8) When it is an oral exam based on a written product, the following applies to all variations:

1. Submission of the written product is a requirement to be able to attend the oral examination.
2. Both the written product and the oral presentation count in the assessment.
3. The assessment is an overall evaluation of the written product and the oral presentation.

(9) If the written element is of a limited extent and only serves as a basis for a broader oral examination in the syllabus (e.g. as at an oral exam based on a synopsis) it will usually be the oral element that constitutes the central basis of the evaluation. The written element will usually only have a marginal effect on the grade.

(10) If the written element clearly constitutes a greater part of the effort, and is therefore the element most central in achieving the learning objectives for this exam (e.g. as a final written exam with oral defense), it will usually be this element that constitutes the central basis of the evaluation. The oral element will usually only have a marginal effect on the grade.

Examination rules

20. All students have an obligation to familiarise themselves with and to observe the examination rules of the examinations which they participate in, including the general rules that apply to the individual examination. Those rules are in particular:

- The examination rules, as stipulated in the relevant course description, see links in section 5.
- *Rules about written sit-in examinations at CBS, including rules about electronic aids*, see section 21(3).
- *Rules about online oral exams*
- Rules on good academic conduct, see section 4 of *Copenhagen Business School's rules and regulations on academic conduct, including penalties*.

(2) Audio and video recordings of an examination or of the examiners' discussion of a student's performance are not allowed, unless such recordings are considered an integral part of the examination process. Such recordings will then be made by CBS.

(3) It is stipulated in the examination regulations of the individual examination what the maximum number of pages is for a given written product. This pertains to the examination forms written home assignment and oral exam based on a written product. In addition, the following applies for the written product with these two examination forms:

1. In the page count the front page, the bibliography and any appendices are not included. Appendices are not part of the assessment.
2. All pages must have a margin of min. 3 cm in top and bottom and min. 2 cm to each of the sides. The font must be minimum 11 points.
3. The table of contents, tables, diagrams, illustrations etc. are not included in the number of characters, but will not justify exceeding the maximum number of pages.
4. On average, one page must not contain more than 2,275 characters (including spaces).

(4) Upon digital submission the student declares that the submitted product complies with the rules for good academic conduct, form requirements and maximum size, via a digital declaration of authorship.

(5) Any violation of rules and regulations under subsections (1)-(2) will be sanctioned in accordance with *Copenhagen Business School's rules and regulations on academic conduct, including penalties.*

(6) Violation of form or layout requirements stipulated in subsection (3)-(4) or form requirements laid down under section 19(4) may result in a rejection of the exam paper, see section 22 of the Examination Order. If the exam paper is rejected, it will not be assessed, and the student will have used an exam attempt.

Examination aids

21. The examination aids that students are allowed to bring with them to written sit-in examinations are specified in the examination regulations of the individual examination/course.

(2) Unless otherwise stated in the examination regulations, see subsection (1), no examination aids, whether written or technical, are allowed in the examination room, except simple writing and drawing utensils.

(3) In cases where the examination regulations, see subsection (1), stipulate that electronic aids can be brought to the examination room, the provisions stipulated in *Rules about written sit-in examinations at CBS, including rules about electronic aids* apply.

Examinations under special circumstances

22. The Study Board may decide to deviate from the examination regulations stipulated for the individual examination with the purpose of allowing students with special needs to sit examinations under special circumstances. Such exemption can be granted to students who are physically or mentally disabled, to students whose mother tongue is not Danish, and to students who have similar difficulties when this is considered necessary in order to place them on even terms with their fellow students in the examination situation. It is a condition that it does not change the academic level of the examination.

(2) When it is stipulated in the objectives of the examination in question that the student's spelling and writing skills are included in the assessment, the Study Board may grant exemption from this to a student who is able to document a relevant and specific impairment.

(3) Students who wish to apply for permission to sit an exam under special circumstances according to subsection (1) or apply for an exemption according to subsection (2) must submit an application via dispensation.cbs.dk. no later than 2 months before the exam is to take place.

Conducting virtual examinations and examinations abroad

23. The university may conduct oral exams as virtual examinations.

(2) The Programme Director decides, when warranted by special extraordinary circumstances, whether - an oral exam can be conducted as an online oral exam.

(3) When an examination is conducted as a virtual exam CBS' rules about online oral exams apply.

23a. The university may conduct examinations at a Danish representation or at other locations abroad, provided the reason for doing so is that the student is unable to participate in the university's examinations in Denmark for practical or financial reasons and if the student and the exam location

reach an appropriate agreement. Danish examinations held abroad must comply with all the other rules laid down in the Examination Order.

(2) The Programme Director decides whether the examination can be conducted abroad and appoints or approves persons to organise the practical aspects of conducting the examination abroad.

(3) The university defrays the special costs associated with conducting examinations abroad.

(4) The Ministerial Order on Payment for the Services of Civil Servants Serving Abroad (Bekendtgørelse om betaling for tjenestehandlinger i udenrigstjenesten) applies to conducting examinations at Danish representations abroad.

(5) The university may ask the student to pay part or all of the costs incurred by the university to conduct the examination abroad. However, it is a condition that the student confirms in writing in advance his or her willingness to pay the costs in question, on the basis of an estimate made by the university of the expected costs. The university may make it a condition for conducting the examination that the amount is paid in advance.

(6) When an examination is conducted abroad, the conditions and regulations in CBS' guidelines for examinations conducted abroad apply.

Assessment

24. Examinations are either internal or external:

- Internal examinations are assessed by one or more teachers (internal examiners) appointed by CBS from among the teachers at the university or from other universities that offer the same or similar study programmes.
- External examinations are assessed by one or more internal examiners and one external examiner (in Danish: censor) appointed by the Danish Agency for Higher Education and Science.

(2) It is stipulated in the exam regulations of the individual examination whether it is an internal or an external examination, see link in section 5.

(3) Assessment of the examinations is carried out in accordance with the Grading Scale Order.

(4) Compulsory assignments and class participation, see section 13, are assessed by the teacher(s) of the specific course. The assessment type 'Approved/Not approved' is used.

Announcement of results

25. In connection with examinations where the result is not announced immediately after the examination, the result must be announced within 4 weeks after the examination has been held, see however subsection (2). The month of July is not included in the calculation of these 4 weeks.

(2) In connection with bachelor projects, master's (candidatus) theses and master's projects, the result must be announced no later than 6 weeks after the project/thesis has been submitted.

(3) When special circumstances warrant it, the Programme Director can set aside the deadlines stipulated in subsections (1) and (2). If the assessment cannot be completed by the fixed deadline,

the student(s) must be notified as soon as possible and be informed about the reason for the delay and when the result will be announced.

Pass requirements

26. Each examination must be passed separately. An examination shall be passed when the student achieves a grade of at least 02 or the assessment ‘Pass’.

(2) Each examination can be retaken separately. However, passed examinations cannot be retaken.

(3) If a grade consists of several partial grades for various categories of performance (partial examinations), the grade shall be the average of the partial grades, rounded off to the nearest grade on the grading scale, see however subsection (4). The grade shall be rounded up if the average is half-way between two grades.

(4) If the partial grades are given different weights when the combined grade is to be calculated, this is stipulated in the exam overview in section 5. If so, the grade shall be the sum of the individual grades, each multiplied by the weighting of the grade, divided by the sum of the weightings and then rounded off to the nearest grade on the grading scale. The grade shall be rounded up if the average is half-way between two grades.

(5) If an examination consists of partial examinations, each partial examination can be retaken separately. However, passed partial examinations and not-passed partial examinations that are part of a passed examination cannot be retaken.

(6) Any requirements about a certain grade on the grading scale being required as achieved in one or more partial examinations are stipulated in section7.

(7) If an elective course has partial exams, the pass requirements for the specific elective course apply.

(8) The calculation of the overall grade point average is based on the weights of the individual grades, which are listed in the table in section 5.

(9) If a student retakes an examination or another type of assessment, the highest grade applies – see however section 42 of the Examination Order.

27. Students have a maximum of three attempts in passing each examination, see however subsection (2). The Study Board may grant more attempts, if warranted by extraordinary circumstances. The question of academic aptitude may not be included when assessing whether extraordinary circumstances apply.

(2) No later than 16 months after the end of the teaching of the course, the student must participate in the third examination attempt if the course is no longer offered. If the course is offered each semester, the deadline for completing the course is 10 months after the end of the teaching of the course.

(3) Students who are to have their class participation assessed a second time may require an examination instead. However, where class participation includes practical exercises, it cannot be replaced by an examination.

Diploma

28. CBS issues a diploma to students who have completed their study programme, in accordance with the requirements stipulated in section 51 of the Examination Order. The diploma is issued to the graduate no later than 2 months after the announcement of the result of the final examination. July is not included in the calculation of these 2 months.

(2) Students who leave the programme without having completed it are entitled to receive a transcript documenting the completed parts of the programme, with the relevant number of ECTS credits stated.

Leave

29. A student may be granted leave from the programme on personal grounds. The specific rules for obtaining leave and the provisions that apply to students while on leave are stipulated in CBS' *Rules regarding leave on bachelor and master programmes at CBS*.

Programme regulations

30. The programme regulations and various regulations etc. referred to in this document are publicly available on CBS' website, more specifically on studieordninger.cbs.dk and in the study administrative rules (SAR).

Exemption from the programme regulations

31. The university may, when warranted by extraordinary circumstances, grant exemptions from those rules in the programme regulations which are solely laid down by the university.

(2) An exemption from the programme regulations that requires an exemption from a ministerial order may be brought before the Danish Agency for Higher Education and Science.

Credit transfer

32. Programme elements passed at another university are regarded as equivalent to corresponding programme elements covered by these programme regulations.

(2) The Study Board may grant approval for students to substitute passed programme elements from another Danish or foreign programme of the same level, for programme elements covered by these regulations.

(3) Decisions under subsections (1) and (2) are made on the basis of a professional assessment.

33. Students who, as part of their studies, wish to complete programme elements at another university or another institution of higher education in Denmark or abroad may apply to their home university for pre-approved credit transfer for planned programme elements.

(2) Approval of pre-approved credit transfer pursuant to subsection (1) may only be granted if, in connection with the application for preapproved credit transfer, the student undertakes to submit to the home university the necessary documentation to show whether the programme elements have been passed or failed upon completion of the programme elements for which pre-approved credit transfer has been granted. Students must also consent to the home university requesting the

necessary information from the host institution if students are unable to procure the documentation themselves.

(3) Once documentation is available that the student has passed the programme elements for which pre-approved credit transfer has been granted, the home university administratively approves the transfer of the credit to the relevant programme at the university.

(4) In cases where the programme elements for which pre-approved credit transfer has been granted are, for example, not offered by the host institution, the university may, upon the student's request, change the approval of pre-approved credit transfer pursuant to subsection (1). The student is responsible for and is obliged to take the initiative to compose a proposal for a study plan. The university offers academic support if requested by the student. In special cases, the chair of the Study Board may approve changes to the Study Board’s decisions about pre-approved credit transfer.

(5) Decisions under subsections (1) and (4) are made on the basis of a professional assessment.

(6) Credit transfer of Master theses is not possible when the thesis is the basis of the awarding of a different title in another Master programme.

34. Programme elements which students wish to have transferred from other programmes will be transferred on the basis of the normalised workload specified in ECTS points and stipulated in the relevant degree regulations. Due to the structure of the programme, discrepancies may occur between the equivalent number of ECTS credits and the actual amount of ECTS transferred, as the number of ECTS credits for the programme must total the number of ECTS credits stated in section 1(1).

(2) If the programme element in question is assessed according to the 7-point grading scale or the 13-point grading scale at the academic institution at which the examination was taken, and if this programme element equates or replaces a programme element which according to the exam regulations of these study regulations is assessed according to the 7-point scale or the 13-point scale, the grade will be transferable, but converted into the 7-point scale if assessed according to the 13-point scale. In all other cases, the assessment will be transferred as ‘Pass’. Examinations transferred as ‘Pass’ are not included in the calculation of the final grade point average.

35. Applications for pre-approval or credit transfer must be sent to the Study Board via credit.cbs.dk. See guidance on credit transfer applications on the student intranet.

(2) Concerning complaints about credit transfer decisions, see part 3.

Part 3: Complaints

Complaints about examinations etc.

36. A student is entitled to file a complaint about an examination or other assessment. Concerning the specific rules and procedures, including deadlines, for filing written and reasoned complaints reference is made to the rules in part 9 of the Examination Order and to CBS' guidelines on CBS' student intranet.

Complaints about decisions concerning credit transfer

37. Complaints about decisions made by the Study Board on whether education qualifications acquired at another Danish University may replace parts of the programme (credit transfer) as well as complaints about the decisions made by the Study Board on whether Danish or foreign education qualifications, not yet passed, may replace parts of the programme (pre-approval of credit transfer), may be brought before the Appeals Board for decisions on credit transfer, see Ministerial Order no. 826 of 16 Juner 2023 on credit transfer in university study programmes (meritbekendtgørelsen).

(2) The deadline for filing a complaint is 2 weeks from the date when the complainant was informed of the decision. The complaint must be addressed to the Appeals Board for decisions on credit transfer but sent to the President of CBS; the reasoned complaint should be sent to CBS Legal, Solbjerg Plads 3, 2000 Frederiksberg. It is also possible to send the complaint to: legal@cbs.dk. CBS has the option to process the application again. If the decision is upheld, CBS will forward the complaint to the Appeals Board, accompanied by a statement. CBS will give the complainant the opportunity to comment on the statement within a time limit of 1 week. The complainant's comments, if any, will be enclosed when the complaint is forwarded to the Appeals Board. The Appeals Board will make the final administrative decision.

38. Complaints about decisions made by the Study Board on whether education qualifications acquired abroad may replace parts of the programme (credit transfer) may be brought before the Qualifications Board, see Assessment of Foreign Qualifications etc. Act.

(2) The deadline for filing a complaint is 4 weeks from the date when the complainant was informed of the decision. The complaint must be addressed to the Appeals Board for decisions on credit transfer but sent to the President of CBS; the reasoned complaint should be sent to CBS Legal, Solbjerg Plads 3, 2000 Frederiksberg. It is also possible to send the complaint to: legal@cbs.dk. CBS has the option to process the application again. If the decision is upheld, CBS will forward the complaint to the Qualifications Board, accompanied by a statement. CBS will give the complainant the opportunity to comment on the statement, within a time limit of 1 week. The complainant's comments, if any, will be enclosed when the complaint is forwarded to the Qualifications Board. The Qualifications Board will make the final administrative decision.

Complaints about other decisions

39. Complaints about decisions made by the Study Board or the Programme Director according to these programme regulations have to be filed with the President of CBS. The deadline for filing a complaint is 2 weeks from the date when the complainant was informed of the decision.

(2) A decision made by CBS according to subsection (1) may be appealed by the complainant to the Danish Agency for Higher Education and Science when the complaint is concerned with an error of law or procedure. The deadline for lodging an appeal is 2 weeks from the date when the

complainant was informed of the decision. The reasoned appeal should be addressed to the agency but sent to CBS Legal, Solbjerg Plads 3, 2000 Frederiksberg. It is also possible to send the complaint to: legal@cbs.dk. CBS will forward the appeal to the agency, accompanied by a statement. CBS will give the complainant the opportunity to comment on the statement, with a time limit of at least 1 week. The complainant's comments, if any, will be enclosed with the other case files when the appeal is forwarded to the agency.

(3) Moreover, students are referred to CBS' Guidelines regarding students' right to file a complaint about decisions made by study boards, programme directors and programme administration.

Complaints about the teaching etc.

40. Complaints about the teaching, academic supervision or other issues concerning the organisation of the degree programme can be brought before the Study Board.

Commencement and transition regulations

41. These Programme Regulations are effective for students enrolled in the programme in September 2023 or later, and for students who are transferred to these Programme Regulations, see section 42 (1).

(2) The 2022 Programme Regulations are repealed as of 1 September 2023.

42. Students who began their studies under the September 2022 Programme Regulations or according to transition regulations were transferred to the September 2022 regulations, are transferred to these 2023 Programme Regulations, so that these Programme Regulations are effective for the remainder of the programme.

Appendix

Competency profile for MSc. in Business Administration and Information Systems

Purpose and academic profile

The study program is a research-based, full-time graduate level programme with a diversity of learning activities and formats (lectures, group assignments, blended learning, projects, internships, etc.). We emphasize interaction with other students and companies throughout the program. The candidates from the study program's 30+ years history have extremely good job opportunities. Graduates work as, for example, consultants, IT project managers, application managers, big data analysts, and system designers.

Learning outcomes

- a high scientific level within design and development of IT and within business economics (business models, management, and organizational change)
- ability to use theories and methods to analyze, describe, and solve complex and interdisciplinary challenges within design, development, adoption, implementation, and exploitation of IT in business
- a solid understanding of and ability to aid managerial aspects of digitalization
- a global and local perspective on digital strategies and business models
- ability to use IT-enabled tools and methods to analyze and ground managerial decisions in data
- ability to acquire, produce, use and spread new knowledge - also within new domain areas
- possess an analytical and conceptual arsenal of competences reflecting multiple factettes and appreciating ambiguity in decision-making
- innovative capacity and capability to independently reflect and act
- act in consideration of societal and ethical implications of decisions
- oral and written communication
- ability to work independently and collaborate constructively in diverse teams
- ability to work with and lead people with diversity in competences and backgrounds

- can work in and bridge local and international environments
- can decompose complex problems and take forward actions in situations with uncertainty of outcome or information in-completeness