

# Minor in Information Systems

## Description

### The Minor concept

A minor gives you the opportunity of having a second specialization in your degree. The minor is a bundle of three to four electives that can be chosen separately but if chosen together rewards a minor. In order to gain the minor certificate on *Minor in Information Systems* the bundle of the four courses has to be taken.

The *Minor in Information Systems* also gives CBS students the opportunity to supplement your bachelor degree with a specialization that fulfills the IT admission requirements for CM(it.). The pathway minor can be taken during the 5th semester of a CBS undergraduate program.

### Purpose

The *Minor in Information Systems* provides knowledge about IT in organizations (Information Systems) and skills in systems analysis, design, and programming. The courses are designed for students with a background in management economic corresponding to the first two years of CBS' undergraduate programs.

### Structure

The below table lists the structure and the ECTS credits of the individual courses. The course descriptions are available in the online course catalogue. Direct links are inserted in the below table.

Course	ECTS
<a href="#">Introduction to Information Systems</a>	7.5
<a href="#">Programming and Data Analysis for Business</a>	7.5
<a href="#">Analysis and Design of Business Information Systems</a>	7.5
<a href="#">Internet and Cybersecurity</a>	7.5

## Content

### Introduction to Information Systems

This course is a mandatory course in the first semester of the HA(it) program.

The course provides an introduction to the technology, development and management of business information systems (BIS). The course assumes no prior knowledge of IS or IT, new concepts and

terms are defined with comprehensive explanations. In this fast-moving area, the course covers both the crucial underpinnings of the subject as well as the most recent business and technology applications.

### **Programming and Data Analytics for Business**

Starting from scratch, the students will after the course have the basis for working with simple data analysis and programming.

The course can be used as a basis for more advanced courses where programming, mathematical modelling, and data handling is increasingly important, for instance finance, economy, information systems, communications, etc.

### **Analysis and Design of Business Information Systems**

Defining and creating IT based Information Systems for Business are complex undertakings that require managerial and organizational, as well as technical skills and knowledge. With a focus on the IT side of IS analysis and design, this course teaches the business student to

- Find and describe business needs and opportunities
- Transform needs and opportunities into systems requirements
- Describe an IT solution
- Plan, manage, and execute an IT analysis and design project.

The course does not advocate a specific approach to systems analysis and design but introduces different processes, techniques, and notations suitable for various situations and context. Thus, an important goal of the course is to enable the students to make informed choices when planning, managing and executing an SA&D project.

### **Internet and Cybersecurity**

The course aims are twofold: First, it gives the students an introduction to the functions and architecture of the Internet and the World Wide Web. Second, to discuss the security threats and available countermeasures, e.g., data encryption and decryption, Denial of Service attacks, ransomware attacks, etc.

The course assumes no prior knowledge of IT, new concepts and terms are defined with comprehensive explanations

### **Examinations**

The minor 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.

Exam name	Exam form	Grading scale	Internal/external exam	ECTS
<a href="#">Introduction to Information Systems</a>	Written sit-in exam on CBS' computers	7-point grading scale	Internal exam	7.5

Exam name	Exam form	Grading scale	Internal/external exam	ECTS
<a href="#">Programming and Data Analysis for Business</a>	Home assignment - written product	7-point grading scale	Internal exam	7.5
<a href="#">Analysis and Design of Business Information Systems</a>	Oral exam based on written product	7-point grading scale	Internal exam	7.5
<a href="#">Internet and Cybersecurity</a>	Home assignment - written product	7-point grading scale	Internal exam	7.5

### Prerequisites for registering for the exam – compulsory activities

The following courses have compulsory assignments or requirements about active class participation. 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
<a href="#">Introduction to Information Systems</a>	1
<a href="#">Programming and Data Analysis for Business</a>	3
<a href="#">Internet and Cybersecurity</a>	2

### Further information

#### Minor Coordinator:

Jacob Nørbjerg, line coordinator for HA(it.), Department of Digitalization

#### Study Board

The minor in *Information Systems* is offered by the Study Board for BSc and MSc in Business Administration and Information Systems, MSc in Business Administration and Ebusiness, and MSc in Business Administration and Data Science.

#### How to sign up

The minor is offered to all CBS students. You can see in the positive-negative list on my.cbs, if your study board approves the minor.

If you like to sign up for the Minor in *Information Systems*, you have to select BINTM1001U when you sign up for electives. You will then subsequently be signed up for all four courses. You do not have to select all four courses individually.

BINTO1078U - Introduction to Information Systems

BINTV2006U - Programming and Data Analysis for Business

BINTV2007U - Analysis and Design of Business Information Systems

BINTV2008U - Internet and Cybersecurity