



What Responsible Management
Competencies do
HA ERHVERVSØKONOMI
INFORMATIONSTEKNOLOGI
Students Acquire?



This report was prepared by the CBS Office of Responsible Management Education and is part of our engagement in the UN-backed Principles for Responsible Management Education (PRME).

Photos: Bjarke MacCarthy, Jakob Boserup

INTRODUCTION

This report highlights the role that responsible management education plays in the HA Erhvervsøkonomi – informationsteknologi HA(it.) programme. Through the Curriculum Development project the CBS PRME office has sought to explore which competencies related to responsible management are acquired by HA(it.) students during their time in the programme. This report presents results based on findings from student focus groups as well as meetings and on-going interaction with faculty members. The purpose is to address explicitly how these HA(it.) competencies are integrated in different courses and to encourage a coherent progression across the entire programme.

HA(it.) is an inter-disciplinary programme that integrates knowledge, skills, and competencies in the interplay between information technology (IT), business and management. Responsible management not only plays an important role within each of the three disciplines in the programme, i.e. IT, Business Administration, and Organisation, but also

across the disciplines. Responsibility is a core value in the programme. It is strongly believed that the attitudes and behaviour that students develop during their studies will influence not only their future careers in IT and business but also impact societal conditions in the digital era.

The main focus on responsible management in the HA(it.) programme is in accordance with the guiding principles that are common to the three disciplines in the programme:

- The HA (it.) programme includes topics on responsible management in courses within and across the three disciplines.
- The HA (it.) programme reflects responsible approaches in teaching styles, learning objectives, teaching philosophies, theoretical perspectives, the composition of teachers, and exam activities.
- The HA (it.) programme helps develop conducts responsible practices by fostering reflective students who are responsible for their own learning and who

COMPETENCY PROFILE

Discussions with the members of the study board and faculty have identified the following competencies in responsible management acquired by HA (fil.) students:

- **The ability to understand the central role of responsible management within the context of IT, business, and management.**
- **The ability to explicitly account for the underlying principles behind responsible management practices in the interplay between IT, business, and management.**
- **The ability to recognise the complexity involved in practising responsible management, including its impact and consequences at individual, group, organisational, inter-organisational, and societal levels.**

While all courses are naturally aimed at supporting the development of these competencies in HA(it.) students, they are specifically addressed in the flagship course *Indføring i organisationers opbygning og funktion* and further elaborated on in the following corner stone courses: *Informationssystemer i organisationer og systemudvikling, Virksomhedernes beslutningssituationer* (1st semester); *Regnskabsvæsen, Indføring i organisationers opbygning og funktion II* (2nd semester); *IT-forandringsledelse, Makroøkonomi* (3rd semester); *IT-strategi, Udvikling af større systemer; Definition af IS, Virksomhedens interne økonomiske organisering* (4th semester); *Who Owns the Future? The Promise and Perils of the Coming Big Data Revolution, Innovation og ny teknologi, Den beslutnings- og den styringsorienterede økonomistyring* (5th semester); and *Videnskabsteori* and *Bachelor Project* (6th semester).

Finally, we would like to express our gratitude to all those who contributed to this project. In particular, we would like to thank Tina Blegind Jensen for all her help with the development of this report and for acting as an ambassador for the HA(it.) programme. We would also like to acknowledge the study board director, Kim Normann Andersen, for his continuous support.

SEMESTER REVIEW OF RESPONSIBLE MANAGEMENT AT HA (IT.)

FIRST SEMESTER

RESPONSIBILITY DAY is the first opportunity for HA(it.) students to reflect on business practices through the lens of their study programme. During this day, responsible management education is presented through a selected case, which is then critically discussed by the students. Responsibility Day for HA(it.) students is organised in collaboration with BA IM students. Mareike Buus, Matthias Trier, and Tina Blegind Jensen were the HA(it.) representatives at Responsibility Day from 2013 to 2015, while Attila Marton

facilitated the day in 2016. During the day, students are given a general introduction to responsibility management in the context of IT, business, and management, and more specifically in relation to the HA(it.) programme (i.e., content and structure). The topics presented to students include input on how to ethically manage intellectual property, safeguard information privacy, maintain secure and virus-free computer systems, utilise energy-efficient technologies, and support efforts to reduce the digital divide. Students also discuss ethical concerns related to the programming of autonomous cars. In addition, students are challenged to reflect on the question of 'What is an (ir)responsible teacher, student or CIO?'

The course **INFORMATIONSSYSTEMER I ORGANISATIONER OG SYSTEMUDVIKLING** includes a session dedicated to the topic of ethical responsibilities in relation to information systems. Students discuss, for example, the responsibility of managers in controlling or granting employee access to internet resources, and the responsibilities of employees in using these resources in their day-to-day work. The course book dedicates an entire chapter to presenting these ethical, legal, and moral responsibilities that follow from designing, developing, and managing computer-based information systems. Other chapters also present the corporate and societal risks of crime related to computer and information technology, the impact of technology on employment and personal privacy, as well as the professional duties that come with working in the IT world, including the protection of sensitive and/or confidential information.

INDFØRING I ORGANISATIONERS OPBYGNING OG FUNKTION introduces students to responsibility issues as a central part of all organisational life. This is done by discussing responsible and ethical behaviour with respect to strategy, structure, culture, decision-making, motivation, and management/leadership. Specifically, an introductory chapter in the course reading material reflects on corporate social responsibility (CSR), including economic, legal, ethical and philanthropic issues. Furthermore, the course provides a very diverse set of theories and perspectives on organisational behaviour to allow for a broad foundation or toolbox for students to form insights and solid arguments. The course emphasises close collaboration with industry by inviting guest lecturers and by asking students to conduct a project within an organisation. This is done to ensure that theory and practice are closely interrelated. This is the flagship course of the HA(it.) programme in terms of responsible management education.

The course **VIKRSOMHEDENS ØKONOMISKE STYRING (1), VIKRSOMHEDERNES BESLUTNINGSSITUATIONER** presents students with the problem of how to optimise the scarce resources of an organisation and in this way optimise the resources of society. Students are introduced to the challenges that confront many organisations, including the need to take into account a diverse range of expectations from the surrounding society, which can be crucial for the survival of the organisation.

Semester 1

Informationssystemer i organisationer
og systemudvikling

Indføring i organisationers
opbygning og funktion

Virksomhedernes beslutningssituationer

Programmering og udvikling af små
systemer og databaser

SECOND SEMESTER

VIRKSOMHEDENS ØKONOMISKE STYRING (2), REGNSKABSVÆSEN touches upon responsible management education by partly incorporating ethics into the subject of accounting. Regarding financial accounting, the importance of acting within legal and ethical frameworks is highlighted when preparing income statements. The importance of transparency and increasing stakeholder demands is introduced in combination with ethical, normative, and social issues related to the professional practice of financial accounting.

Semester 2

Regnskabsvæsen
IT-projektledelse
Programmering og udvikling af små systemer samt databaser II
Indføring i organisationers opbygning og funktion II

THIRD SEMESTER

IT-FORANDRINGSLEDELSE looks at the factors that drove ‘the big three’ in the American automobile industry to bankruptcy in 2007. The case addresses the ability of organisations to drive change in a responsible and timely manner. The case foregrounds the different mind-sets of the CEOs in the three big automobile companies in US and Japan. It also addresses the issue of large corporations being ‘too big to fail’ and other relevant themes that influence sustainable behaviour. This specific course addresses the

difference between ‘a conscious mind-set’ and being ‘on autopilot’. The theory is that a conscious mind-set can better help in leading transformations within organisations in a more effective and more responsible way.

MAKROØKONOMI addresses the importance of optimising the scarce resources of society as a whole, both at industry and organisational level. Moral issues regarding maximising the wealth of society, the distribution of wealth – in a society and between societies/countries – and growth are discussed in many models, from Pareto-efficient equilibria over solidarity (lack of) in monetary regimes to long-run growth models (Solow).

Semester 3

Finansiering
IT-forandringsledelse
Distribuerede Systemer
Makroøkonomi

FOURTH SEMESTER

VIRKSOMHEDENS ØKONOMISKE STYRING (4), VIRKSOMHEDENS INTERNE ØKONOMISKE ORGANISERING includes a discussion on the issue of self-interested individuals and profit-maximising companies, as well as the possibilities of aligning these different interests in a decision-making environment. The course teaches students how they can identify and thus prevent self-interested behaviour (sometimes called ‘gaming’), thereby saving costs for both companies and society. The focus is on how such self-interest and profit maximisation is

a harsh reality that students should be aware of and understand its consequences and implications.

Semester 4

Virksomhedens interne økonomiske organisering
Definition af IS
Udvikling af større systemer
IT-strategi

The courses, **DEFINITION AF IS** and **UDVIKLING AF STØRRE SYSTEMER**, are tandem courses intended to provide students with the methods, techniques, and tools needed to develop IS systems for complex organisational settings. Students are also presented tools and techniques to undertake a systematic exploration of how different stakeholders frame problems and solutions in complex IS projects. A professional approach to complex IS development is presented, including the need to adopt a responsible approach to documentation and communication, and to reflect on one’s own role (and its limitations) in relation to other stakeholders.

IT-STRATEGI focuses on how organisations align their IT portfolios with their overall strategic goals. The course introduces the general strategy models and tools applied by businesses, and students discuss how IT can be used in a responsible manner both within organisations and in relation to external stakeholders. The course touches upon IT-driven optimisation of work processes and the importance of not compromising the privacy and integrity of individual employees. Another perspective of responsible management within organisations relates to the governance of IT. The governance perspective includes an introduction to recognised models for responsible behaviour and procedures to avoid systematic fraud, for example SoX and ITIL. Data and the use of data is a key issue in the course, in particular in relationship to customers. Ethical behaviour in the use of customer data, together with data generated through social media, is a theme touched upon throughout the course and in relation to the generic strategy models traditionally taught at business schools.

FIFTH SEMESTER

VIRKSOMHEDENS ØKONOMISKE STYRING (5), DEN BESLUTNINGS- OG DEN STYRINGSORIENTEREDE ØKONOMISTYRING builds upon the same framing as VØS (4) but with an extended focus on companies' costing side. The following issues are highlighted for the students in various dimensions and models: the importance of taxing some of the scarce resources of organisations; the need to allocate different kinds of costs to decentralised units to prevent over-use and slack in the organisation. The course also raises students' awareness

of the importance of considering 'externalities', including the need for decision-makers to be aware of the consequences for wealth and distribution when they act and affect other individuals, organisations, companies or society.

INNOVATION AND NEW TECHNOLOGY exposes students to contemporary technological trends with an explicit emphasis on business opportunities and challenges associated with IT-driven innovations. Specifically, the course covers a wide range of topics related to the strategic management of technological innovations, including The Innovator's Dilemma, ecosystems, platform thinking, crowdsourcing, and social networks. The concluding lectures in this course are dedicated to discussing the 'dark side of technological innovation', emphasising privacy and security concerns, misguided expectations and cyber-bullying.

This semester is also dedicated to exchange and/or elective courses. One of the electives available to the HA(it.) programme is **WHO OWNS THE FUTURE? THE PROMISE AND PERILS OF THE COMING BIG DATA REVOLUTION**. This course deals with the potential social and ethical consequences of technological developments involving Big Data and Artificial Intelligence. It provides the basis for a critical examination of these developments, relating to issues like privacy, inequality, and job security. The ability to critically assess the potential effects of technological development is an important aspect of the responsible management of technology.

Semester 5

Den beslutnings- og den styringsorienterede økonomistyring
Innovation og ny teknologi
Valgfag/udlandsophold
Valgfag/udlandsophold

SIXTH SEMESTER

In **VIDENSKABSTEORI**, and as part of the **BACHELOR PROJECT**, students are expected to use, discuss and reflect upon the different perspectives, underlying assumptions, theories and methods included in the HA(it.) programme, and consequently in their specialisation in IT, business, and management.

Semester 6

Bachelor Project
Videnskabsteori
IT-kontrakter

Semester Overview: HA (it.)

RESPONSIBILITY DAY	SEMESTER 1	SEMESTER 2	SEMESTER 3	SEMESTER 4	SEMESTER 5	SEMESTER 6
2016  Attila Marton	Informationssystemer i organisationer og systemudvikling  Tiil Winkler (ITM)	Regnskabsvæsen  Tamas Vamosi (OM)	Finansiering  Tamas Vamosi (OM)	Definition af IS  Jacob Nørbjerg (ITM)	Den beslutnings- og den styringsorienterede økonomistyring  Tamas Vamosi (OM)	Videnskabsteori  Tina Blegind Jensen (ITM)
2013 - 2015 Mareike Buus Tine Blegind Jensen	Virksomhedens beslutningssituationer  Tamas Vamosi (OM)	IT-projektledelse  Tina Blegind Jensen (ITM)	IT-forandringsledelse  Tina Blegind Jensen (ITM)	Udvikling af større systemer  Torkil Clemmensen (ITM)	Innovation og ny teknologi  Chee-Wee Tan (ITM)	IT-kontrakter  Jan Izaskowski (LAW)
2012 Helle Zimmer Henriksen	Indføring i organisationers opbygning og funktion  Tina Blegind Jensen (ITM)	Indføring i organisationers opbygning og funktion II  Tina Blegind Jensen (ITM)	Makroøkonomi  Tamas Vamosi (OM)	Virksomhedens interne økonomiske organisering  Tamas Vamosi (OM)	Elective Course	Bachelorprojekt  Tina Blegind Jensen (ITM)
	Programmering og udvikling af små systemer og databaser  Daniel Hardt (ITM)	Programmering og udvikling af små systemer samt databaser II  Daniel Hardt (ITM)	Distribuerede Systemer  Daniel Hardt (ITM)	IT-strategi  Helle Zimmer Henriksen (ITM)	Elective Course	

Flagship Course Flagship courses act as anchors in the programme and play a central role in coordinating the generation of responsible management competencies.

Corner Stone Course Corner stone courses act as binding blocks between the semesters and ensure a systematic progression of content and competencies related to responsible management.

CONTACTS AND RESOURCES

Below we have a list of the key people associated with HA (it.), which you may find useful:

HA (IT.) AMBASSADOR

Tina Blegind Jensen has agreed to be the ambassador for HA(it.). Please feel free to contact her if you have any questions regarding responsible management education within the programme.



Tina Blegind Jensen:

Tel: 3815 2455
E-mail: tbj.itm@cbs.dk

HA (IT.) STUDY DIRECTOR

Kim Normann Andersen serves as the Study Director for the HA(it.) programme.



Kim Normann Andersen:

Tel: 3815 2437
E-mail: kna.itm@cbs.dk

HA (IT.) PROGRAMME MANAGER

Susanne Stockholm serves as the study secretary for the HA(it.) programme.



Susanne Stockholm:

Tel: 3815 5729
E-mail: sst.stu@cbs.dk

PRME ACADEMIC DIRECTOR

Professor Kai Hockerts is the Academic Director of the Curriculum Development project.



Kai Hockerts:

Tel: 3815 3175
E-mail: kho.msc@cbs.dk
cc: mmms.edu@cbs.dk

PRME PROJECT MANAGER

Lavinia Iosif-Lazar is responsible for the Curriculum Development project. Please send any suggestions for amendments to her.



Lavinia Iosif-Lazar:

Tel: 3815 3123
E-mail: li.msc@cbs.dk