



JÖNKÖPING UNIVERSITY
Jönköping International Business School

PROGRAMME SYLLABUS
IT, Management and Innovation (Two Years), 120 credits

Programmestart: Autumn 2017



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IT, Management and Innovation (Two Years), 120 högskolepoäng

Programme code:	JAIM2	Programmestart:	Autumn 2017
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Title of qualification

Degree of Master of Science (120 credits) with a major in Informatics

Programme overview

In the global economy, organizations, industries and companies are dependent on their ability to develop and launch innovative products and services. Information systems and information technology and their applications are currently essential parts in these activities. Accordingly there are new demands on organizations on how to coordinate and manage development with IT, i.e. to develop virtual markets and electronic products and services. This programme focuses key managerial factors for organizations and their use of information systems in order to gain competitive and efficiency advantages. It particularly highlights the innovative aspects of IT as an enabling technology in creating new opportunities, including those in product and services development and those in furthering international relations.

Objectives

General aims

Second cycle education shall essentially build on the knowledge students acquire in first cycle education or corresponding knowledge. Second cycle education shall involve a deepening of knowledge, skills and abilities relative to first cycle education and, in addition to what applies to first cycle education, shall;

- further develop the students' ability to independently integrate and use knowledge,
- develop the students' ability to deal with complex phenomena, issues and situations, and
- develop the students' potential for professional activities that demand considerable independence or for research and development work

Programme specific learning goals

Knowledge and Understanding

Graduates of the programme will have a general knowledge and understanding of informatics principles and a specialised and considerably deep knowledge in the specialization of IT, management and innovation.

Corresponding Objectives:

Graduates of the programme will be able to

- demonstrate knowledge and understanding in informatics as an academic discipline, including

both broad knowledge in the field of informatics and a considerable degree of specialised knowledge of the relationship between IT, management and innovation;

- demonstrate knowledge and understanding of concept and theoretical perspectives related to IT, management and innovation in a global context;
- demonstrate an ability to solve problem and exercise analytical skills for activities related to IT, management and innovation in a global context;
- demonstrate insights in informatics to balance societal and ethical issues;
- demonstrate specialised methodological knowledge in business administration and specifically related to IT, management and innovation; and
- demonstrate understanding of issues of IT, management and innovation and how they can be interpreted with different theoretical approaches;
- demonstrate capability to extend approaches from other disciplines to the area of informatics

Skills and Abilities

Graduates of the programme will have acquired the skills to integrate knowledge critically and systematically and to analyse complex issues encountered for a career that deals with IT in relation to management and innovation, and be effective communicators of activities associated with these skills.

Corresponding Objectives:

Graduates of the programme will be able to

- demonstrate the ability to critically and systematically integrate knowledge and analyse, assess and deal with complex phenomena, issues and situations associated with IT, management and innovation, even with limited information;
- demonstrate the ability to identify and formulate issues critically, autonomously and creatively as well as to plan and, using appropriate methods, undertake advanced tasks within predetermined time frames and so contribute to the formation of knowledge as well as the ability to evaluate this work;
- demonstrate an ability in speech and writing to report clearly on informatics issues and discuss their conclusions and the knowledge and arguments on which they are based, in dialogue with different national and international audiences; and
- demonstrate the skills required for participation in research and development work or to work autonomously in other advanced contexts, including in academic research related to IT, management and innovation

Judgement and Approach

Graduates of the programme will understand the scientific, social, ethical, and personal responsibility aspects of practical work and research in informatics, including the role, use, and development of knowledge and the ethical aspects and possibilities of scientific endeavour.

Corresponding Objectives:

Graduates of the programme will be able to

- demonstrate the ability to make assessments in informatics, taking into account relevant scientific, societal and ethical issues and also to demonstrate awareness of ethical aspects of research and development work;
- demonstrate insight into the possibilities and limitations of research, its role in society and the responsibility of the individual for how it is used and;
- demonstrate the ability to identify their need for further knowledge and to take responsibility for his or her ongoing learning

Mission driven learning goals

Graduates of the programme will be equipped to contribute to the advancement of business practice in a global environment with particular emphasis on aspects of Entrepreneurship and renewal.

Corresponding Objectives:

Graduates of the programme will be able to

- demonstrate in-depth knowledge about the role of information technology as an enabler of entrepreneurship
- demonstrate an ability to capture and analyse effects of information technology innovations in organisation renewal.

The above is in accordance with the intended learning outcomes set for a two-year Master's degree in the Swedish Higher Education Ordinance and JIBS mission.

Contents

The master's programme IT, Management and Innovation (Two-Years) is a programme in informatics that addresses students with a background in informatics/information systems, business administration or computer science who want to increase their competence in utilizing information technology (IT) in creating organizational and industrial innovations. The programme features three key areas: project management; the use of IT in an innovative context; and the evaluation of IT in organizations.

The programme's overall purpose is to contribute to the education of a new generation of researchers and practitioners who want (1) to understand the value of IT, (2) to develop skills on how to effectively implement and manage innovative IT-based products and services in the global virtual economy and (3) to learn how to capture effects of IT. The programme provides deeper knowledge for those already holding a bachelor degree in informatics, business administration, computer science, computer engineering, or information engineering education.

The programme includes eight mandatory courses held in the autumn and spring semesters of the first year. The first course, *Information Technology and Innovation Management* provides an understanding of innovations in a digital context. In the two courses *IT Project Management in International Settings* and *Project in Informatics* students learn skills of IT- project management in a multi-cultural context and perform a real project in an organization or an enterprise. The course *Methods to Evaluate Information Technology Ventures*, provides students with a holistic perspective over approaches, methods and models for the analysis and evaluation of IT/IS processes and for the management of innovative IS/IT applications, and of their effects and expectations for users, enterprises, organizations, and society as a whole. The spring semester of the first year includes the courses *Enterprise Architecture and IT Architecture* and *Information Management*. The course *Entrepreneurial Governance of IT* focuses on the value of IT and the importance of its governance in organizations. The first year of the programme is finalized by the course *Research Methods in Informatics*.

The third semester consists of 30 elective credits and gives the opportunity for students to build a custom-made profile in composition of course package and choice of university. The recommendation is to select master level courses within the specialization but some complimentary topics might be relevant given students' personal preferences and career-plans. Students are recommended to choose courses within the fields of Informatics, business administration, computer science, media communication, economics, statistics, economic geography, commercial law and language. For international exchange, students choose the courses at a partner university in coordination with JIBS faculty, and accreditation of the courses is also conducted by JIBS faculty. An option to international exchange is to stay at JIBS during

the third semester with the same limitation on types of courses as there are for students studying abroad. The elective semester at JIBS can include an academic internship of 7,5 or 15 credits as part of the course package. Students have the responsibility to find these internship themselves.

The fourth and last, semester consists of a 30 credit thesis course. The thesis in informatics should cover a topic of IT, Management and Innovation.

All courses are taught in English. Due to the fact that Jönköping International Business School (JIBS) has an exchange programme including a number of partner universities, and the fact that this master programme and a number of other master programmes at JIBS are open to students from around the world, the courses have a diverse international participation of students. The international atmosphere is reinforced with international subject matter in this programme, in particular IT, management and innovation.

After successfully completing the programme, students will be qualified to work with companies and organizations with a national and/or international presence due to having acquired good analytical skills and ability to think strategically in terms of both business and technology. The education is meant to prepare the students for work in business and/or organizational positions that require contributions for strategic decision-making on information systems, e.g. project manager, chief information officer (CIO) or IT/IS consultant or advisor to a CIO. The education is also meant to prepare students for research in informatics.

Courses

Mandatory courses

Course Name	Credits	Main field of study	Specialised in	Course Code
Design of Smart Enterprises	7.5	Informatics	A1N	JDSR28
Entrepreneurial Governance of IT	7.5	Informatics	A1N	JEGR25
Information Management	7.5	Informatics	A1N	JIMR25
Information Technology and Innovation Management	7.5	Informatics	A1N	INOR23
IT-Project Management in International Settings	7.5	Informatics	A1N	INPR23
Master Thesis in Informatics (Two Years)	30	Informatics	A2E	JTIV27
Methods to Evaluate Information Technology Ventures	7.5	Informatics	A1N	INLR23
Project in Informatics	7.5	Informatics	A1N	INQR23
Research Methods in Informatics	7.5	Informatics	A1N	INTR23

Elective courses

Course Name	Credits	Main field of study	Specialised in	Course Code
Electronic Commerce [†]	7.5	Informatics	G1N	MLAG13
Entrepreneurial Growth [†]	7.5	Business Administration	A1N	ENOR23
Environment, Logistics and IT [†]	7.5	Business Administration, Informatics	A1N	MLPR23
Social Media and New Media [†]	7.5	Informatics	A1N	JSMR26

Elective credits

1) For all 2-year master programmes, in the autumn of the 2nd year students have options for courses either at JIBS or through exchange. The elective courses noted during this period are default courses at JIBS if the students do not participate in exchange, academic internship or actively select other courses. The default courses at the optional semester are subject to change.

Programme overview

Year 1

Semester 1		Semester 2	
Period 1	Period 2	Period 3	Period 4
Information Technology and Innovation Management, 7.5 credits	Methods to Evaluate Information Technology Ventures, 7.5 credits	Design of Smart Enterprises, 7.5 credits	Entrepreneurial Governance of IT, 7.5 credits
IT-Project Management in International Settings, 7.5 credits	Project in Informatics, 7.5 credits	Information Management, 7.5 credits	Research Methods in Informatics, 7.5 credits

Year 2

Semester 3		Semester 4	
Period 1	Period 2	Period 3	Period 4
Optional credits, 30,00 credits		Master Thesis in Informatics (Two Years), 30 credits	
<i>Electronic Commerce</i> ¹ , 7.5 credits	<i>Environment, Logistics and IT</i> ¹ , 7.5 credits		
<i>Entrepreneurial Growth</i> ¹ , 7.5 credits	<i>Social Media and New Media</i> ¹ , 7.5 credits		

Teaching and examination

To pass a course, the student needs to fulfil all the course requirements. Examination will be executed by written exam, oral exam or term papers. Different methods of examination can be used within a single course. The student will be offered at least three examination opportunities in each examined section. The university is not obligated to offer re-exams in courses a student has already passed. Mandatory workshops and assignments can figure within the frame of the course.

All courses offered by JIBS will be graded according to the following six levels: A-E constitutes a pass and FX or F is equal to a fail.

For most workshops and mandatory assignments, only Pass or Fail is given.

Prerequisites

The applicant must hold the minimum of a bachelors degree (i.e the equivalent of 180 ECTS credits at an accredited university) with at least 60 ECTS credits in informatics, business administration, computer science, computer engineering, information engineering, or equivalent. Proof of English proficiency is required.

Continuation Requirements

To be eligible for study abroad, the student should, at the time of the study abroad application, have completed at least 15 ECTS of the programme course credits scheduled prior to the study abroad.

The following requirements need to be met for students to proceed to the second academic year within the programme the student must not fall behind more than 30 credits.

Qualification Requirements

To obtain the Master of Science (120 Credits) with a major in Informatics, the student must complete the course requirements of at least 120 credits at the higher education level that were not used for the bachelor degree, with at least 90 credits overall in second cycle courses and at least 60 of those second cycle credits in informatic.

To obtain the Master of Science (120 Credits) with a major in Informatics, with a focus on IT, Management and Innovation the student must complete: (1) the requirements for the Master of Science (120 Credits) with a major in Informatics (2) all mandatory programme courses as listed

in the above Contents section, or their equivalent, and (3) a Master thesis (30 credits) in Informatics should cover a topic of IT, management and innovation.

Quality Development

Our cooperation with JSA, the student organization, is crucial. This work is conducted on two levels, programmes and courses.

Programme level

On the programme level students elect student representatives for each track of the programme and each study year of the programme. The student representatives and the programme managers meet regularly to discuss courses and the progress of the programme. The representatives stay in contact with course coordinators to share the overall impression and student experiences from courses. In addition, the programme manager, student representatives, JSA and faculty meet annually to discuss the entire programme.

Course level

On the course level, student representatives from the course and the course coordinator meet shortly after the course has started. The purpose is to ensure that the course is working well and if necessary make minor changes. After each course is finished all students perform course evaluations in PingPong, and student representatives evaluate the course on the aggregate level and communicate with the programme manager and the course coordinator.

Other Information

Credits from internship courses cannot be used to fulfill the credit requirement in the main field of study.

Additional information, regarding the programme, will be presented on JIBS homepage before each application period.

Credit Transfer

A student who wishes to accredit earlier education and activities to be included in the programme degree, should contact the Academic Registrar.