



## COURSE SYLLABUS

# Master Thesis in Informatics (Two Years), 30 credits

*Master Thesis in Informatics (Two Years), 30 högskolepoäng*

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<b>Course Code:</b> JTIV27	<b>Education Cycle:</b> Second-cycle level
<b>Confirmed by:</b> Council for Undergraduate and Masters Education Mar 23, 2016	<b>Disciplinary domain:</b> Technology
<b>Valid From:</b> Jan 16, 2017	<b>Subject group:</b> IF1
<b>Version:</b> 1	<b>Specialised in:</b> A2E
<b>Reg number:</b> IHH2016/4842-313	<b>Main field of study:</b> Informatics

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### Intended Learning Outcomes (ILO)

On completion of the course the student will be able to:

Knowledge and understanding

1. demonstrate in-depth knowledge and insights into the current status of research in a defined area of Informatics.
2. demonstrate specialized methodological knowledge applied in Informatics.

Skills and abilities

3. demonstrate the ability to critically and systematically select, integrate and apply knowledge to create theoretical frameworks relevant for the chosen field of study in Informatics.
4. demonstrate the ability to independently and critically identify and formulate research problems using relevant methods to collect data and contributing to knowledge development in a given field of Informatics.
5. demonstrate the ability to plan and execute advanced research tasks within a predetermined time frame.
6. demonstrate the ability in speech and writing to clearly report and discuss findings, analyses and conclusions, in dialogue with different audiences.
7. demonstrate skills needed for participating in research and development work in Informatics.

Judgement and approach

8. demonstrate the ability to defend findings presented in a synthesized and argumentative text as well as critically and constructively assess the works of others.
9. demonstrate the ability to critically discuss the limitations of research in informatics.
10. demonstrate the ability to make assessments, taking into account relevant scientific, societal and ethical issues and also demonstrate awareness of ethical aspects in research and development work.

### Contents

The course consists of writing a master thesis. The course includes coaching seminars. To secure and maintain a research connection, it is compulsory for the student to actively participate

in four seminars at the Informatics department during the semester in order to pass the course. The master-students are further required to present their research proposal to the faculty members at the Informatics department. At the end of the course all students must present and defend their thesis at a public seminar, and act as main opponent at another student's seminar. The purpose of this course is as follows:

The course focus on the knowledge, abilities and skills necessary to prepare students for independent scientific work. This includes the ability to independently search for and integrate current knowledge of a research field, critically chose and use appropriate research approaches and methods for data collection, analyze, synthesize and present findings, and identify and position the knowledge contribution of the master thesis in Informatics.

### **Type of instruction**

The course is based on independent reading, data collection, analysis, thesis writing, seminars and supervision. Participation in seminars, thesis presentation, and thesis defense are all compulsory parts of the course. Students will be required to take the role as opponent for fellow students' work at various stages in the thesis process. Students write individually or in pairs.

The teaching is conducted in English.

### **Prerequisites**

Bachelor's degree in Informatics equal to 180 credits (i.e the equivalent of 180 credits at an accredited university) and 45 credits advanced level courses with a minimum of 30 credits in Informatics including Research Methods in Informatics (or equivalent) (or the equivalent).

### **Examination and grades**

The course is graded A, B, C, D, E, FX or F.

All intended learning outcomes are assessed and part of the course grade.

The written thesis is assessed by ILOs 1-7 and 10.

The thesis process is assessed by ILOs 5-9. (Presence and activities in thesis presentation and defense, opposition, active participation at four research seminars, as well as project and time management.)

Examination form:

ILO 1-7 and 10 examined by the written thesis and account for 80% of the total grade

ILO 5-9; participation and activity in four research seminars, final presentation and defense, and opposition account for 20% of the total grade in the course. These activities are individually graded.

Note: A course grade can only be given if all ILOs are passed (grade E).

Registration of examination:

Name of the Test	Value	Grading
Examination <sup>1</sup>	30 credits	A/B/C/D/E/FX/F

<sup>1</sup> Determines the final grade of the course, which is issued only when all course units have been passed.

### **Course evaluation**

The examiner is responsible for ensuring that each course is evaluated. A survey is sent out to the thesis students at the end of May (after submitting final version). This is followed by an examiner group meeting in June, where the outcome is discussed.

Finally, survey results and any subsequent improvement actions are discussed at program meetings in August and with relevant others (. The next time the course runs, students should be informed about any measures taken to improve the course based on the previous course evaluation.

### **Other information**

#### Academic integrity

JIBS students are expected to maintain a strong academic integrity. This implies to behave within the boundaries of academic rules and expectations relating to all types of teaching and examination.

Copying someone else's work is a particularly serious offence and can lead to disciplinary action. When you copy someone else's work, you are plagiarizing. You must not copy sections of work (such as paragraphs, diagrams, tables and words) from any other person, including another student or any other author. Cutting and pasting is a clear example of plagiarism. There is a workshop and online resources to assist you in not plagiarizing called the Interactive Anti-Plagiarism Guide.

Other forms of breaking academic integrity include (but are not limited to) adding your name to a project you did not work on (or allowing someone to add their name), cheating on an examination, helping other students to cheat and submitting other students work as your own, and using non-allowed electronic equipment during an examination. All of these make you liable to disciplinary action.

### **Course literature**

#### Literature

#### Compulsory literature

Selected individually based on the thesis topic. The selection will be based on a discussion between students and tutors in relation to the chosen thesis topic.

#### Reference literature

Glasman-Deal, H. (2010). *Science Research Writing for Non-Native Speakers of English*. London: Imperial College Press.