



LUND
UNIVERSITY

School of Economics and Management

EAGSY, Master's Programme (One year) in Information Systems, 60 credits

Magisterprogram i informationssystem, 60 högskolepoäng

Second cycle degree programme requiring previous university study / Program med akademiska förkunskapskrav och med slutlig examen på avancerad nivå

Decision

The programme syllabus was approved by Vice Dean of Education at the School of Economics and Management on 12-05-2025 (U2025/326). The syllabus comes into effect 15-10-2025 and is valid from the autumn semester 2026.

Programme description

This Master's programme equips students with advanced knowledge of Information Systems (IS) and their role at the intersection of technology, people and business. By graduation, students will have a comprehensive understanding of how digitalisation impacts organisations and how IS can be strategically leveraged to achieve organisational goals.

The programme emphasises the strategic use of Information Technology (IT), Artificial Intelligence (AI) and Business Intelligence (BI) within a broader business context. A strong focus is placed on sustainability, entrepreneurship and strategic management, fostering innovation as a core competency.

Key topics covered include Business Intelligence, IT and sustainability, Business Decision Management, the organisational impacts of digitalisation and the role of AI in business transformation. Students gain insights into current and emerging trends shaping IS and its strategic importance in modern organisations.

The programme's overall aim is to prepare students to lead and manage projects that harness IS to drive innovation and organisational change on both national and international scales.

Career opportunities

Graduates are highly sought after by organisations that depend on IS professionals. These professionals are essential for designing and managing systems critical to maintaining a competitive edge in the global marketplace. The programme offers outstanding career prospects in roles that bridge technology, people and business, both nationally and internationally.

Connection to further studies

Successful completion of the programme provides eligibility to pursue doctoral studies in informatics or information systems.

Goals

The programme builds on previous studies at the undergraduate level in information systems-related subject matters. In accordance with the Higher Education Ordinance, a Master of Science (60 credits) is awarded to students who at the completion of the programme accomplish the following:

Mission driven learning outcomes

Graduates of the programme will be trained as reflective practitioners in taking an active part in developing a sustainable society building on innovative thinking.

Knowledge and understanding

For a Master's degree (60 credits) students must:

- demonstrate knowledge and understanding within the field of information systems, including both a broad command of the field and deeper knowledge of certain parts of the field, together with insight into current research and development work
- demonstrate deeper methodological knowledge in the field of information systems
- demonstrate thorough knowledge and understanding of information systems, with a particular emphasis on the methods and practices of information systems design
- demonstrate an understanding of how information systems theories and models can be used to analyse a broad range of problems in today's business and society

Competence and skills

For a Master's degree (60 credits) students must:

- demonstrate an ability to integrate knowledge and to analyse, assess and deal with complex phenomena, issues and situations, even when limited information is available
- demonstrate an ability to independently identify and formulate issues and to plan and, using appropriate methods, carry out advanced tasks within specified time limits
- demonstrate an ability to clearly present and discuss their conclusions and the knowledge and arguments behind them, in dialogue with different groups, orally and in writing

- demonstrate the skill required to participate in research and development work or to work in other advanced contexts
- demonstrate an ability to solve information systems design problems
- demonstrate an ability to integrate methods from different areas of organisation, management, information systems and information and communication technology
- demonstrate an ability to work individually and in groups with students from different cultures in order to solve practical problems as well as to manage a more extensive project

Judgement and approach

For a Master's degree (60 credits) students must:

- demonstrate an ability to make assessments within information systems, taking into account relevant scientific, social and ethical aspects and demonstrate an awareness of ethical aspects of research and development work
- demonstrate insight into the potential and limitations of science, its role in society and people's responsibility for how it is used
- demonstrate an ability to identify their need of further knowledge and to take responsibility for developing their knowledge

Independent project (Master's thesis)

For a Master of Science (60 credits) students must have completed an independent project (Master's thesis) worth at least 15 credits in information systems within the framework of the course requirements.

Course information

The programme is full-time and delivered on campus at the School of Economics and Management in Lund. Instruction is in English and students must demonstrate full academic proficiency in the language, both spoken and written.

The curriculum includes courses designed to achieve the learning outcomes through active student participation. These feature a mix of oral and written examinations, problem-solving tasks and other practical applications.

The programme combines theoretical foundations with practical applications, employing diverse teaching methods such as lectures, case studies, workshops, laboratory work and text analysis.

Assessment methods are tailored to the content and objectives of each course and may include individual essays, assignments, hall or home examinations, group projects, seminars and presentations. Active participation in group work and seminar discussions is a core requirement, necessitating consistent on-campus engagement.

The academic year is divided into two semesters, each semester is comprised of courses with separate examinations. Progression through the programme requires passing courses sequentially unless exceptional circumstances arise. In order to have favourable conditions of being able to study according to the curriculum, there are study requirements within the programme that need to be fulfilled before continuing studies in the second semester. Students are expected to take responsibility for their learning and knowledge development throughout the academic year.

Period 1

In the first study period the students follow the courses:

IT, Innovation, and Sustainability, 7.5 credits

The course examines how ICT can be used as a tool that enables evaluation and innovation in how firms communicate and optimise environmental performance. The course further discusses sustainability from different IS perspectives where the focus is on digitalisation of our society whether that be Smart Cities, Smart grids or just the general use and disposal of technical products.

The end result of the course should be an increased understanding of IS and ICT in a sustainability context that companies and individuals need to relate to. After completion of course objectives, the student will have the ability to discuss and evaluate different sustainability initiatives as well as argue for how companies can increase IT effectiveness and efficiency and thereby lower their carbon footprint, as well as have an ability to discuss IT's role in any formal sustainability programme.

Business Intelligence, 7.5 credits

The course aims to give an introduction and overview of Business Intelligence (BI), which encompasses a broad category of technologies, applications and processes for gathering, storing, accessing and analysing data. This facilitates better decision-making for various users within the organisation, ultimately enhancing organisational performance. The course's main goal is to strike a balance between theory and practice by considering the demands of the current employment requirements in ICT and business trends.

The course explores BI at both micro and macro levels. At the micro level, the development of BI applications is covered by defining a business problem and identifying the necessary data to answer the identified problem.

At the macro level, the course explores theoretical advancements of BI from the standpoint of information systems and overarching effects of BI across the entire organisation. Issues related to data integration, data modelling, data quality, meta-data, data management, BI architecture, data visualisation, data storytelling, Big Data and scalability are addressed.

Period 2

In the second study period the students follow the courses:

Strategic Management and Information Systems, 7.5 credits

The course gives increased knowledge in Strategic Planning of ICT support for business development, and provides a clear understanding of control principles for coordination of business development and ICT. The course examines strategic structures in the enterprise. Further the course covers control models for business oriented IT-Governance. Control of ICT investments and ICT costs related to enterprise efficiency and business development is studied. The course addresses planning,

control and use of enterprise systems in organisations.

Business Decision Management, 7.5 credits

Through this course the students will be able to understand the design and implementation of highly servitised and agile businesses where processes and decisions are managed as two distinct but interrelated aspects and assets. In more detail you will: further your understanding of the need for Separation of Concerns in Information Systems Design (ISD); learn how to design, model and manage operational business decisions according to Decision Model and Notation (an OMG standard); learn how to digitalise, automate and manage decision logic using a Business Rules Management System (BRMS) for hot deployment; learn business process modelling on a basic level to automate operational work flows that connect decision tasks to decisions services.

Period 3

In the third study period the students follow the courses:

Research Methods in Information Systems, 7.5 credits

The course on IS Research Methods provides knowledge about dominant research methods and approaches in the field of Information Systems. It offers a discussion of the basics of scientific research in IS, the debate among the 'qualitatives' and the 'quantitatives', a wide range of data collection methods and analysis, foundational research philosophies, design science research in IS, scientific quality and research ethics, and research writing.

The ultimate aim of the course is to help students in selecting and using appropriate research methods and theoretical frameworks in the empirical research process and argue for their methodological selections. Knowledge developed in this course is therefore vital for the Master's thesis work.

The course includes lectures, guest lectures by known IS scholars, interactive discussion seminars, and workshops. The examination is based on student group work during the seminars which involves student-led lectures and literature summaries as well as writing a final research proposal.

Business and Artificial Intelligence, 7.5 credits

All organisations are affected by and dependent on processes, decisions and their digitalisation. Most of today's managerial work requires knowledge and toolsets to manage business to be supported by and automated through Artificial Intelligence (AI). Moreover, to get real business value from AI, businesses must focus their efforts in AI on improving processes and decisions. This course aims to provide an insight into designing business and Artificial Intelligence supporting business.

On completion of the course, students shall have a thorough understanding of how processes, decisions and AI shape today's businesses and their design. Students shall be able to identify problems that can be solved by, or decisions that can be made or supported by AI in a business and be able to implement solutions to aid the

aforementioned.

The course focuses on the challenges that business digitalisation and Artificial Intelligence poses in the modern organisation. To properly manage business, both managerial and technological aspects must be considered in conjunction. By studying business and Artificial Intelligence and through hands on workshops, the course focuses on how AI and business digitalisation alters internal and external parts of business within and across organisations.

Period 4

The fourth study period is devoted to the Master's thesis where the students conduct their own research and demonstrate their ability to independently apply the knowledge gained from the course work. In the Master's thesis, the students further enhance their knowledge and understanding of information systems. The Master's thesis is conducted in pairs and a supervisor is assigned to each thesis.

Master's Thesis in Information Systems, 15 credits

The Master's thesis involves independent work in teams of two students addressing a research problem. This is an independent piece of work, which means that the student-teams must themselves find a problem-area, they will not be provided with pre-defined problems. The problem-area must be relevant to information systems/informatics as a social science. Next, the student-team must formulate a research-question and present a relevant theoretical framework, which provides the basis for planning and conducting an empirical investigation. The student-team must also draw conclusions from the empirical investigation and the theoretical framework. Finally, the investigation and the findings must be presented in a written thesis, which is examined at a seminar.

In the thesis the students will use quantitative or qualitative approaches, or some combination of these. The course Research Methods in Information Systems provides them with the appropriate knowledge and tools.

Additional information in appendix EAGIF Programme structure.

Degree

Degree titles

Degree of Master of Science (60 credits)

Major: Information Systems

Filosofie magisterexamen

Huvudområde: Informationssystem

Degree requirements

The degree requirements for a Degree of Master of Science, major in Information Systems consists of 60 credits at advanced level. The following must be included in the degree: the courses that comprises the current programme structure (see appendix) which includes the course *INFM12 Master's Thesis in Information Systems*, 15 cr.

Requirements and Selection method

Requirements

An undergraduate degree (BA/BSc) with at least 60 credits in Information Systems, including:

1. Foundations of Information Systems and Their Role in Organisations and Society,
2. Systems Analysis and Design,
3. Data and Business Process Modelling,
4. Database Design and
5. Software Development.

If the applicant's courses do not explicitly match the names listed above, they should include a course syllabus (or equivalent documentation) in their application to demonstrate how they meet the specific requirements.

The applicant must also meet the requirement for English 6 (advanced proficiency).

Selection method

Based on previous university/college studies and Statement of Purpose.

Transition rules

In case of revision of the curriculum of EAGSY, Master's Programme in Information Systems, 60 credits, a student has the right to pursue and complete the programme for the nominal duration of the programme plus three semesters.

Other information

Programme management

The programme directors, who are appointed by the Board of LUSEM, are responsible for the quality development and quality assurance of the programme. The Board of the School also assigns each programme to a host department at LUSEM. The host department is responsible for providing professional services to the students and faculty of the programme.

Each programme also organises a programme council, in which student representatives and faculty representatives of the programme, together with the programme directors, coordinator and other professional services meet regularly.

All programmes at LUSEM are evaluated yearly and the outcome of a programme evaluation summary is presented to the Board of the School as part of LUSEM's Quality Development and Assurance system.

Grading scale

At the School of Economics and Management grades are awarded in accordance with a criterion-based grading scale A-U(F):

A (Excellent) 85-100 points/percent. A distinguished result that is excellent with regard to theoretical depth, practical relevance, analytical ability and independent thought.

B (Very good) 75-84 points/percent. A very good result with regard to theoretical depth, practical relevance, analytical ability and independent thought.

C (Good) 65-74 points/percent. The result is of a good standard with regard to theoretical depth, practical relevance, analytical ability and independent thought and lives up to expectations.

D (Satisfactory) 55-64 points/percent. The result is of a satisfactory standard with regard to theoretical depth, practical relevance, analytical ability and independent thought.

E (Sufficient) 50-54 points/percent. The result satisfies the minimum requirements with regard to theoretical depth, practical relevance, analytical ability and independent thought, but not more.

U/F (Fail) 0-49 points/percent. The result does not meet the minimum requirements with regard to theoretical depth, practical relevance, analytical ability and independent thought.

To pass the course, the students must have been awarded the grade of E or higher.

It is up to the teaching professor to decide whether the credits of a course should be converted into a total of 100 points for each course, or if the scale above should be used as percentage points of any chosen scale instead.

Academic integrity

The University views plagiarism very seriously and will take disciplinary actions against students for any kind of attempted malpractice in examinations and assessments. The penalty that may be imposed for this, and other unfair practice in examinations or assessments, includes suspension from the University.

Programme structure for Master's Programme in Information Systems

The programme of 60 credits has the following structure:

Semester 1, Autumn (30 cr)		Semester 2, Spring (30 cr)	
Period1 Sept-Oct	Period 2 Nov-Dec	Period 3 Jan-March	Period 4 Apr-June
INFN25 IT, Innovation, and Sustainability (7.5 cr)	INFN40 Strategic Management and IS (7.5 cr)	INFN02 Research Methods in Information Systems (7.5 cr)	INFM12 Master's Thesis in Information Systems (15 cr)
INFN45 Business Intelligence (7.5 cr)	INFN50 Business Decision Management (7.5 cr)	INFN65 Business and Artificial Intelligence (7.5 cr)	

The School's programme portfolio is continuously developed and sometimes changes to courses may occur after you have accepted your study seat. These changes are usually a result of student feedback, or research development. Changes can take the form of altered course content, teaching formats or assessment styles. Any such changes are intended to enhance the student learning experience. If the programme includes elective courses, students will in most cases be placed in the elective(s) of their choice, but there are no guaranteed places.

1 credit (cr) = 1 ECTS credit