

Programme Description

Master in IT and Management

SAIVE-H24

Decision taken by	Head of Department, Thomas Winman
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Programme description is a supplement to the programme syllabus which is the legally binding document.

Ground data

Department	School of Business, Economics and IT
Section	Division of Informatics
Name of Programme, Swedish	IT och verksamhetsutveckling, magisterprogram i informatik
Name of Programme, English	Master in IT and Management
HE credits (number of credits)	60
Level (1st Cycle, 2nd Cycle)	2nd Cycle
Entry requirements, Swedish	Kandidatexamen i informatik eller motsvarande. Engelska 6 eller motsvarande
Entry requirements, English	Degree of Bachelor of Science with a major in Informatics, Information systems or equivalent. Verified knowledge of English corresponding to the course English 6 in the Swedish Upper Secondary School (high school) or equivalent.
Main field of study, Swedish	Informatik
Main field of study, English	Informatics
Degree, Swedish	Filosofie magisterexamen med huvudområdet informatik
Degree, English	Degree of Master of Science (60 credits) with a major in Informatics Cycle: Second
Rate of study (full-time, part-time)	Full-time
Type of instruction (on campus, distance teaching)	On campus
Language of instruction (Sw, Eng)	Eng

General programme information

IT and Management is a stimulating and future-focused one-year master's programme. Fully taught in English, it's designed for students with a background in social and/or computer sciences who are keenly interested in analysing, developing, implementing and evaluating ICT interventions for organisations. We've developed your programme in close cooperation with local industries and municipalities, focusing on current IT issues that concern your potential employers. After two foundational courses, you'll choose one of the three specialisations. Your programme integrates work practice with research and theory in informatics. In this way, you will develop both in-depth subject knowledge and crucial work experience in your chosen specialisation, delving into cutting edge research in your field. Your studies culminate in a thesis degree project where you will test your new competencies with a real project or problem. After graduation, you'll be prepared for jobs in many different types of IT environments, both national and international – or you can choose to go on and pursue doctoral studies.

Programme contents, structure, and progression

This one-year master's programme offers a choice of three areas of specialisation:

- Advanced Software Development – Full Stack Developer
- Virtual and Augmented Reality (VR/AR) – Immersive Computing
- IT Strategy and Architecture – IT Management

This programme is built around the most pressing needs of professionals in the IT field. Designed for students with a background in social and/or computer sciences, this programme prepares you for work in Information and Communication Technology (ICT) interventions. Become an important part of advanced IT solutions while having great social impact. After completing this programme, you'll be qualified to work in IT or conduct research in informatics.

Courses that the study programme comprises:

- Advanced Project Methodology, 7,5 HE credits
- Advanced Research theory and Methodology in Informatics, 7,5 HE credits
- Informatics influencing our lives, 7,5 HE credits
- Literature review in Informatics, 7,5 HE credits
- Degree project in Informatics, Master (60 credits), 15 HE credits

Options within the study programme:

- Full-stack developer, 15 HE credits
- Immersive computing, 15 HE credits
- IT management and digital transformation, 15 HE credits

Upon completion of this master's programme you will receive a Master of Science (MSc, 60 credits) with a major in Informatics.

The research basis for the programme

Informatics research explores the relationships between people, information, and technology. This programme helps you build a strong foundation in this field and develop the qualifications you need to pursue your PhD in the broader fields of informatics. After graduation, you will be eligible to continue studying as a PhD student at University West or at other universities. In the context of a thesis, a student works individually and independently on a major research task. The thesis work is supported by a course in research methods, an assigned supervisor, and seminar sessions for presenting and discussing a student's work with other thesis writers. The individual foundational skills to which the thesis work contributes include critical thinking, problem-solving, creativity, ethical analysis and oral and written communication.

The labour market, collaboration, and work-integrated learning¹

University West is Sweden's leading university when it comes to Work Integrated Learning (WIL). The university was tasked with the development of WIL by the Swedish government 15+ years ago and continues to lead the field today. In this programme, you'll earn an academic degree while also gaining practical work experience. Real-world projects at local companies and organisations will be an important part of your studies.

The majority of your courses combine academic theory and work practice in some way. For example, ideally, you'll finish your chosen specialisation course and your master's thesis project by completing real projects in cooperation with local industry

¹ Work-integrated learning is a pedagogical practice in which students' learning takes place through the integration of theoretical and practical knowledge and experience, derived from an educational context within the framework of both higher education as a work environment and civil society.

partners. Students assume responsibility in working with programme staff to help secure these collaborations.

Sustainable development

In our program, sustainable development is addressed both as a goal and as content in several courses since the program's graduates will have responsibility and influence for economic, ecological, and social aspects at different levels of society. Students review, evaluate, and analyze research and theories regarding the effects and impact of digitization on individuals, organizations, and society within various, given themes such as virtual and augmented reality, IT transformation, and system development.

Internationalisation

Students from around the globe come together to create a unique and international environment. Your programme is fully taught in English, and you will study together with students from Sweden as well as international students from countries in Asia, Europe, Africa, and North and South America. Most of your instructors also have international experience in both research and education. This will enhance your cultural experience and English-language proficiency.

Other information

You will have access to advanced labs and equipment, for example, a variety of software, Immersive media such as VR and AR, but also among other things, laser etchers/cutting and 3D printers.