



## Programme Syllabus

Study Programme in IT, Project Management and ERP Systems

<b>Programme Code:</b>	SGIPA
<b>Programme Title:</b>	Study Programme in IT, Project Management and ERP Systems IT, projektledning och affärssystem
<b>Credits:</b>	180 ECTS
<b>Programme Approval:</b>	The programme syllabus was approved by the Faculty Board of Arts and Social Science on 4 February 2021, and applies as of the autumn semester of 2021.
<b>Language of Instruction:</b>	Swedish and English
<b>Education Cycle:</b>	First cycle
<b>Degree Type:</b>	General
<b>Entry Requirements:</b>	General entry requirements, plus Mathematics 2a/2b/2c and Social Studies 1b or 1a1 + 1a2.

### General Information

The programme provides a broad basis in the IT field with specialisation in systems development, project management, and enterprise systems. Studies are based on the principle that information systems are constituted by the interaction between humans, IT systems, and enterprises. The potentials and limitations of digitalisation are studied theoretically and practically through application of various methods and models.

The programme is designed to prepare for project work and future project management in which information systems are analysed, designed, adapted, acquired, implemented and modified on the basis of business needs.

The programme is offered by Information Systems at the Business School, Karlstad University. An overriding objective of the Business School is that students develop skills to apply knowledge and take responsibility for sustainable development and equality. Programme courses are therefore based on teaching approaches, assignments and literature supporting this objective.

Students can opt to complete the programme with a Higher Education Diploma in Information Systems after two years or move on to a third year for a Degree of Bachelor in Information Systems.

Students who aim for a Degree of Bachelor have good opportunities to choose their own specialisation/profile in Project Management and Information Systems. In addition, the large proportion of elective courses (30 ECTS credits in semesters five and six) allow students to customise their studies. Graduates also qualify for second-cycle studies in Information Systems.

### **Programme Outcomes**

#### National Higher Education Diploma outcomes

##### *Knowledge and understanding*

For a Higher Education Diploma the student shall

- demonstrate knowledge and understanding in the principal field (main field of study) of the study programme, including awareness of the disciplinary foundation of the field and knowledge of some applicable methodologies in the field.

##### *Competence and skills*

For a Higher Education Diploma the student shall

- demonstrate the ability to search for, gather and critically interpret the relevant information in order to formulate answers to well defined issues in the main field of study,
- demonstrate the ability to present and discuss his or her knowledge with different audiences, and
- demonstrate the skills required to work autonomously with specific tasks in the main field of study.

##### *Judgement and approach*

For a Higher Education Diploma the student shall

- demonstrate knowledge about and be equipped to deal with ethical issues in the main field of study.

##### *Independent project (degree project)*

A requirement for the award of a Higher Education Diploma is completion by the student of an independent project (degree project) in the main field of study.

#### National Degree of Bachelor outcomes

##### *Knowledge and understanding*

For a Degree of Bachelor the student shall

- demonstrate knowledge and understanding in the main field of study, including knowledge of the disciplinary foundation of the field, knowledge of applicable

methodologies in the field, specialised study in some aspect of the field as well as awareness of current research issues.

#### *Competence and skills*

For a Degree of Bachelor the student shall

- demonstrate the ability to search for, gather, evaluate and critically interpret the relevant information for a formulated problem and also discuss phenomena, issues and situations critically,
- demonstrate the ability to identify, formulate and solve problems autonomously and to complete tasks within predetermined time frames,
- demonstrate the ability to present and discuss information, problems and solutions in speech and writing and in dialogue with different audiences, and
- demonstrate the skills required to work autonomously in the main field of study.

#### *Judgement and approach*

For a Degree of Bachelor the student shall

- demonstrate the ability to make assessments informed by relevant disciplinary, social and ethical aspects,
- demonstrate insight into the role of knowledge in society and the responsibility of the individual for how it is used, and
- demonstrate the ability to identify the need for further knowledge and undertake ongoing development of his or her skills.

#### *Independent project (degree project)*

A requirement for the award of a Degree of Bachelor is completion by the student of an independent project (degree project) for at least 15 credits in the main field of study.

### **Programme Structure**

Instruction is provided via web-based distance education.

The programme includes mandatory courses and general electives. General electives can be freely chosen from any academic area at Karlstad University or elsewhere. A degree project, preferably carried out in partnership with a corporation or public agency, concludes the education.

Students have the opportunity to study programme electives abroad (max. 37.5 ECTS credits).

Graduates have the opportunity to pursue either a Degree of Master (60 credits) by completing another 60 ECTS credits or a Degree of Master (120 credits) by completing another 120 ECTS credits.

### **Programme Curriculum**

The education comprises 120 ECTS credits including at least 60 ECTS credits in information systems or 180 ECTS cr. including at least 90 ECTS credits in information systems. Please note that titles of programme courses can change over time.

In year 1, students take basic courses in Information Systems. Year 2 is a profile year with studies in Project Management and ERP Systems. Students who aim for a Higher Education Diploma may conclude their studies in semester 4 after a degree project.

Year 3 offers students the opportunity to specialise in the profile areas of Project Management and ERP Systems or specialise via programme electives.

### **Semester 1**

*Mandatory courses totalling 30 ECTS credits*

- Business by Web and Web Analytics, 7.5 ECTS credits
- Information Systems and IT, 7.5 ECTS credits
- Introductory Programming, 7.5 ECTS credits
- Enterprise and Information Technology (IT), 7.5 ECTS Credits

### **Semester 2**

*Mandatory courses totalling 30 ECTS credits*

- Acquisition of Information Systems, 7.5 ECTS credits
- Database Design, 7.5 ECTS credits
- Continuation Course in Programming, 7.5 ECTS credits
- Object-Oriented Modelling, 7.5 ECTS credits

### **Semester 3**

*Mandatory courses totalling 30 ECTS credits*

- Business Simulation and Analytics, 7.5 ECTS credits
- Individuals and Teams in Projects, 7.5 ECTS credits
- General Project Management Methodology, 7.5 ECTS credits
- Introductory Business Administration for ERP Systems, 7.5 ECTS credits

### **Semester 4**

*For a Higher Education Diploma (final semester)*

*Mandatory courses totalling 30 ECTS credits*

- Enterprise Systems I: Models for Analysis, 7.5 ECTS Credits
- Information Systems - Smaller Thesis Work, 7.5 ECTS credits
- Leadership in Projects, 7.5 ECTS credits
- Project Governance, 7.5 ECTS credits

*For a Degree of Bachelor*

*Mandatory courses for 22.5 ECTS credits and general electives for 7.5 ECTS credits*

*Mandatory courses (22.5 ECTS credits)*

- Enterprise Systems I: Models for Analysis, 7.5 ECTS Credits
- Leadership in Projects, 7.5 ECTS credits
- Project Governance, 7.5 ECTS credits

*Electives (7.5 ECTS credits) recommended courses*

- Enterprise Systems II: Development Models, 7.5 ECTS credits, *or*
- Information for Business Decisions, 7.5 ECTS credits

### **Semester 5**

*Mandatory courses for 15 ECTS credits and general electives for 15 ECTS credits*

*Mandatory courses (15 ECTS credits)*

Agile Project Management, 7.5 ECTS credits  
 Digitalisation –Cloud Service Procurement, 7.5 ECTS credits

Electives (15 ECTS credits) recommended courses

*Design Patterns, Java, and UML, 7.5 ECTS credits*  
*Information Systems: Practical Training, 7.5 ECTS Credits*  
*Interaction Design, 7.5 ECTS credits*

**Semester 6**

*Mandatory courses for 15 ECTS credits and general electives for 15 ECTS credits*

Mandatory courses (15 ECTS credits)

*Information Systems - Bachelor's thesis, 15 ECTS credits*

Electives (15 ECTS credits) recommended courses

*Business Development from a Process and Partnership Perspective, 7.5 ECTS credits*  
*System Analysis and Design, 7.5 ECTS credits*  
*Web Programming, 15 ECTS credits*

**Title of Qualification**

Higher Education Diploma  
 Specialisation: Information Systems

Högskoleexamen  
 Inriktning: Informatik

Degree of Bachelor of Science  
 Major: Information Systems

Filosofie kandidatexamen  
 Huvudområde: Informatik

**Credit Transfer**

According to the Higher Education Ordinance Ch. 6 Sec. 6–8 students have the right to transfer credits and have prior learning recognised upon approval.

**Additional Information**

The local regulations for first and second cycle education at Karlstad University stipulate the obligations and rights of students and staff.

Previous versions of the programme syllabus have been approved:

14 December 2006, reg.no. FAK1 2006/193, applies from the autumn semester 2007  
 5 March 2008, reg.no. FAK1 2008/43, applies from the autumn semester 2008  
 5 May 2011, reg.no. FAK1 2011/88, applies from the autumn semester 2011  
 25 February 2013, reg.no. HS 2013/118, applies from the autumn semester 2013  
 4 March 2020, reg.no. HS 2020/217, applies from the autumn semester 2020