



JÖNKÖPING UNIVERSITY  
*School of Engineering*

PROGRAMME SYLLABUS  
**New Media Design, 180 credits**

Programmestart: Autumn 2017



## PROGRAMME SYLLABUS

### **New Media Design, 180 credits**

*Grafisk design och webbutveckling, 180 högskolepoäng*

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**Programme code:** TGGD7

**Programmestart:** Autumn 2017

**Confirmed by:** Dean 2017-03-01

**Education Cycle:** First-cycle level

**Revised by:** Director of Education 2017-05-17

**Version:** 1,1

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#### **Title of qualification**

Degree of Bachelor with a major in Informatics, specialisation New Media Design

#### **Programme overview**

##### **Background**

A design strategy based on in-depth knowledge of digital media, interaction design, web architecture and visual communication is the key to being able to create and maintain satisfactory products and services for the benefit of both businesses and society. The New Media Design programme has been planned to provide multidisciplinary knowledge for various professions associated with the digital world of today and tomorrow, in which information, communication and technology come together to create these benefits.

The programme will provide knowledge about how the communicative message reaches the user in the intended manner. Creating digital platforms and other communication channels that are user-friendly and adapted to suit the target group are also important elements of achieving the objectives of the programme.

In addition, the programme will provide a scientific foundation enabling continued studies to be carried out at second-cycle level within informatics, and will also be of such an applied nature that students are employable immediately after completing the programme.

##### **Objectives**

The bachelor's programme aims to create an understanding of – and provide knowledge of – how digital products, services and messages are designed to achieve customer satisfaction and to meet the user's needs. The aim of the programme is also to clearly integrate current research within applicable areas of the field of informatics and specific knowledge in relation to design processes, working models and concept development methods. The objective is that, on graduation, students should have both an overall perspective and the skills needed in order to be able to work within the digital media industry.

##### **Post-graduation employment areas**

There are many different professional roles within the main area of informatics, and the programme provides the basic knowledge needed to work as a graphic designer, user experience designer, an information architect, a web designer, a front-end programmer or an application developer, or with digital media production, etc. The main prospective employers are

communication agencies, information and marketing departments at small and medium-sized companies, IT departments, game development companies and design companies, as well as the daily press and magazines.

### **Post-graduation studies**

The programme provides a basis for continued studies at second-cycle level. The School of Engineering at Jönköping University currently offers the following continuation course for this programme: User Experience Design and IT Architecture (120 credits).

### **Educational concept at the School of Engineering**

All programmes at the School of Engineering at Jönköping University (JTH) follow an educational concept. The educational concept can be seen as consisting of a number of elements that must be included in the study programmes in order to promote the quality and attractiveness of the education in a way that makes students professionally skilled and sought-after. The concept highlights the connection with industry and internationalisation in particular as two important elements in order to create successful programmes for which there will be a high number of applicants.

In the concept, there are common learning outcomes regarding the areas leadership, project management, economy, entrepreneurship, marketing, sustainable development, scientific methods and communication. There is also an Industrial Placement Course (IPC) included in all programmes, whereby students put their theoretical knowledge into practice. IPC is a 12 credit course (7 weeks practise at a company), and it is also possible to complete the course abroad.

Internationalisation means that, for example, the opportunity is provided to practise languages and intercultural communication through student exchanges with foreign universities. JTH has around 70 partner universities around the world, and takes part in a number of international student exchange programmes. There is the opportunity to spend part of the study period abroad and to accredit studies abroad towards the degree. As a result of this student exchange, a large number of courses at JTH are taught in English.

### **Objectives**

After the completion of the programme, students must meet the intended learning outcomes, as described in The Higher Education Ordinance by Degree of Bachelor (1-8) and also the intended learning outcomes, as described by JTH:

#### **Common learning outcomes**

##### **Knowledge and understanding**

1. 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 JTH. demonstrate knowledge of business (economics, entrepreneurship, business planning, marketing) in relevant activities within the chosen field of engineering

##### **Competence and skills**

2. 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
3. demonstrate the ability to identify, formulate and solve problems autonomously and to complete tasks within predetermined time frames
4. demonstrate the ability to, present and discuss information, problems and solutions in speech and writing and in dialogue with different audiences, in both national and international contexts
5. demonstrate the skills required to work autonomously in the main field of study JTH. demonstrate ability to apply the acquired knowledge in practical work and demonstrate insight into the future career

**Judgement and approach**

6. demonstrate the ability to make assessments in the main field of study informed by relevant disciplinary, social and ethical issues
7. demonstrate insight into the role of knowledge in society and the responsibility of the individual for how it is used
8. demonstrate the ability to identify the need for further knowledge and ongoing learning

**Programme-specific learning outcomes**

Upon completion of the program, the intended learning outcomes provided for programme must also be met:

**Knowledge and understanding**

9. demonstrate knowledge within the field of digital design and media design, including social media and new media platforms
10. demonstrate knowledge of different information-based applications and standards with regard to user-friendliness and to usability and functionality
11. demonstrate knowledge of the basics of marketing communication and an understanding of the importance of this in creating market-adapted products and services
12. demonstrate knowledge of business (economics, entrepreneurship, business planning and marketing) in relevant operations within the chosen area of technology

**Skills and abilities**

13. demonstrate an ability to produce structured, visual expressions for both new and traditional media
14. demonstrate an ability to realise digital products and services with a focus on structure, user-friendliness, interaction and messages
15. demonstrate an ability to apply acquired knowledge in practical work and demonstrate an insight into their future professional role

**Judgement and approach**

16. be able to analyse and reflect on the significance of the effects of graphical expression, visual identity and brand development
17. be familiar with the user's role and needs in information-based systems with regard to functionality, usability and user-friendliness
18. demonstrate an ability to create channels and communicate a message, and apply a target-oriented design process based on market and target group analyses
19. demonstrate an ability to take an interdisciplinary approach and to apply a systems perspective

**Contents****Programme principles**

The programme is worth 180 credits, and focuses on preparing students for further studies at a higher level, and on preparing them for working life. The programme's content revolves around the areas of digital information systems, communication and user experience. The programme's basic philosophy is to combine these areas so that students gain an overall perspective and are ready to encounter an ever-changing world within this subject.

Informatics is a broad area, and the programme is located within this main area. Here, and in this context, we take informatics to mean the following:

*Informatics encompasses interdisciplinary studies of the design, application, use and benefits of information technology.*

The programme is structured in accordance with the principle of basic knowledge first, and the first year consists of fundamental theories and basic skills. This involves visual communication, web technology, user interfaces and marketing communication. During year two, this knowledge is integrated and deepened through project courses and theory courses in subjects such as

information architecture and interaction design. The third year consists of a relatively free semester in which students have a great deal of choice, to facilitate studies abroad or to take supplementary courses required in order to study a specific master's programme. The programme concludes during the spring semester of the third year with a degree project and an eight-week Industrial Placement Course (work experience). The IPC can also be arranged as part of studies abroad during the autumn semester of year three. In this case, it will be replaced during the final semester by elective courses worth 12 credits within the subject area of informatics.

Within the courses, there is a great emphasis on both lectures and students' own work developing their analytical ability and holistic systems approach. The teaching consists of lectures, seminars, laboratory work and project work. Exercises and laboratory work are designed to correspond clearly to real cases and scenarios. During the teaching, there will also be several pieces of project work linked directly to industry. Compulsory coursework assignments throughout the period of studies will be added to students' portfolios. These portfolios will be compiled during year 3 in order to further equip students for applying for work. Scientific working methods provide an analytical and reflective approach in the practical applications and the project work with a particular focus on the main area of informatics. In the programme's advanced courses, students should be able to independently identify and resolve problems and carry out project tasks within set frameworks. The technology courses are carried out based on a sustainability perspective, taking economic, social and environmental responsibility.

### **Programme Progression**

The structure of the programme focuses on – and is directed towards – giving students interdisciplinary knowledge within the main area of informatics.

Year 1 includes courses that provide basic knowledge and principles within graphics/visual design and technology, and knowledge about digital information systems. Theoretical studies in marketing, marketing communication, economics and entrepreneurship are also included. After the first year, students should have sufficient theoretical knowledge to be able to create simple productions within the relevant sub-area.

During year 2, more in-depth knowledge is provided within the above, and the programme should also give an understanding of how information, communication and technology create benefits together for society and the individual. The concept of user experience design is introduced during year 1, and more in-depth knowledge within interaction design is provided during year 2. Here, knowledge is provided – and application projects are carried out – in connection with how to create different types of digital solutions and services with visual and graphical expressions, and that provide a consistent user experience on different platforms. One example could be improving or adapting a user interface for a smartphone that goes with another digital product or service.

Students' method knowledge is gradually deepened in terms of both design principles and digital solutions, and during year 3 concept thinking is expanded. Theoretical knowledge is interwoven into projects, in which students must take into account ethical values, cognition, benefits, design principles and economic conditions. In this way, they gain an overall perspective of how digital solutions and users interact, including both opportunities and limitations. Target group and competitor analyses, user tests, personas for choice of method and channel, etc. are carried out for the planning and implementation of the project. Current research within the subject area is introduced during year 1, and is then kept relevant and deepened throughout the programme so that students feel comfortable discussing relevant research issues.

The programme includes courses to provide greater breadth within project management, leadership and organisation. At the end of the programme, during the Industrial Placement Course, students apply and consolidate their theoretical knowledge in practice at a company, an organisation or similar during an extended period, ensuring that they are well prepared for their forthcoming professional lives. Through the degree project and the Industrial Placement Course, students gain an insight into their need for skills development and their need for additional knowledge within the field. Sustainable development is one of JTH's fundamental concepts, and is a recurring theme throughout the programme and the three concept courses.

For those students who intend to study the User Experience Design and IT Architecture (120 credits) master's programme in informatics at JTH, an adapted preparatory course package is offered. During year 3, students also have the opportunity to carry out studies abroad with relevant course content.

## Courses

### Mandatory courses

Course Name	Credits	Main field of study	Specialised in	Course Code
User Research	7.5	Informatics	G1N	TABG17
Digital Marketing and Social Media	7.5		G1F	TDMK17
Business and Entrepreneurship	7.5		G1N	TEFG18
Final Project Work in Informatics	15	Informatics	G2E	TWIP17
Research Methods in Computer Science and Informatics	7.5	Computer Engineering	G2F	TFIN18
Graphic Design for New Media	15	Informatics	G1F	TGNK18
Graphic Design and Visual Communication	15	Informatics	G1N	TG1G17
Information Architecture	7.5	Informatics	G1F	TAUK17
Interaction Design	7.5	Informatics	G1F	TINK18
Client-side Programming	15	Informatics	G1F	TKPK18
Client-Server Communication	7.5	Informatics	G1F	TSPK18
Marketing Communication	7.5		G1F	TMCK18
Industrial Placement Course in Informatics	12	Informatics	G2F	TNIN19
Portfolio and Visual Presentation	3	Informatics	G1F	TPVK18
Custom Project Management	7.5		G1F	TPNK18
Project Management and Methods	7.5		G1N	TPJG17
Motion Graphics	7.5	Informatics	G1F	TRGK18
Applied Web Architecture	15	Informatics	G1F	TAWK17
Web and User Interface Design	7.5	Informatics	G1N	TWUG17

### Elective credits

### Programme overview

**Year 1**

Semester 1		Semester 2	
Period 1	Period 2	Period 3	Period 4
User Research, 7.5 credits	Web and User Interface Design, 7.5 credits	Business and Entrepreneurship, 7.5 credits	Marketing Communication, 7.5 credits
Graphic Design and Visual Communication, 15 credits		Client-side Programming, 15 credits	

**Year 2**

Semester 3		Semester 4	
Period 1	Period 2	Period 3	Period 4
Project Management and Methods, 7.5 credits	Information Architecture, 7.5 credits	Research Methods in Computer Science and Informatics, 7.5 credits	Interaction Design, 7.5 credits
Applied Web Architecture, 15 credits		Graphic Design for New Media, 15 credits	

**Year 3**

Semester 5		Semester 6	
Period 1	Period 2	Period 3	Period 4
Client-Server Communication, 7.5 credits	Custom Project Management, 7.5 credits	Portfolio and Visual Presentation, 3 credits	Industrial Placement Course in Informatics, 12 credits
Motion Graphics, 7.5 credits	Digital Marketing and Social Media, 7.5 credits	Final Project Work in Informatics, 15 credits	
Optional credits, 30,00 credits			

**Teaching and examination**

Throughout the academic year, typically, two courses are taken in parallel. Examination forms and grades are given by each course module, respectively. The programme overview shows the programme structure for both years and may be changed during the programme. For updated programme overview visit <http://www.ju.se>

**Prerequisites**

General entry requirements and Mathematics 2a or 2b or 2c or Mathematics B and English 6 or English B with required grade passed in the Swedish upper secondary school system or international equivalent.

**Continuation Requirements**

In order to begin the second year, at least 30 credits from the programme's first year must be completed.

In order to begin the third year, at least 90 credits from the programme's first and second year must be completed.

**Qualification Requirements**

To obtain a Degree of Bachelor with a major in Informatics, specialisation in New Media Design, students must complete a minimum of 180 higher education credits in accordance with the current programme syllabus, at least 90 of which must be in the main field of Informatics.

**Quality Development**

Management councils, Head of Programmes, teachers and students work together with the development of the programmes and courses. All students get the opportunity to do a course evaluation after each completed course and before graduation time. The results of the evaluation are presented to the Head of Programmes, Head of Departments, Course Coordinators and to the Director of Education for further development.

Head of Departments, or corresponding, and Head of Programmes raise questions regarding the programme development within the Council of Programmes.

Representatives of students and programme managers gather continuously to discuss the recently completed programme courses.

### **Other Information**

If formal competence is missing, the applicant's substantial competence is tested if the applicant has acquired equivalent knowledge in some other way. The aim is to assess the collective competence and if the applicant has the opportunity to meet selected training. Substantial competence can be about knowledge and experience from working life, long-term mobility or other courses.

Course included in the programme can be read as a separate course, subject to availability. Prerequisites are stated in the syllabus.

Admission is under "Admission arrangements for first and second level" at Jönköping University.

This syllabus is based on "Regulations and guidelines for education at undergraduate, postgraduate and doctoral studies at Jönköping"