JÖNKÖPING UNIVERSITY
School of Engineering

PROGRAMME SYLLABUS

New Media Design, 180 credits

Programmestart: Autumn 2023

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PROGRAMME SYLLABUS

New Media Design, 180 credits

Grafisk design och webbutveckling, 180 högskolepoäng

Programme code:	TGGD7	**Programmestart:**	Autumn 2023
Confirmed by:	Dean 2023-03-01	**Education Cycle:**	First-cycle level
Version:	8		

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 and visual communication is the key to being able to create and maintain satisfactory messages, 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 interactive 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 New Media and informatics, and the programme provides the basic knowledge needed to work as a graphic designer, user experience designer, web designer, front-end programmer or with digital media production, etc. The main prospective employers are communication and ad agencies, information and marketing departments at small and medium-sized companies, IT departments 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 within informatics.

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 15 credit course (9 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 media design and the production of visual content for new media platforms
10. demonstrate knowledge of different internet-based applications as well as standards regarding user experience design and interactivity
Competence and skills
11. demonstrate an ability to produce visual expressions for both new and traditional media following a structured design process
12. demonstrate an ability to develop internet-based products and services with a user-oriented focus
Judgement and approach
13. analyse and reflect on visual expressions in regard to intended target audiences, brand identities, aesthetic genres and design processes
14. analyse and reflect on the functionality and development process of internet-based applications as well as the user's role and experience of these applications

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 encopasses 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 the basics in graphic design and visual communication, human-computer interaction, user interfaces design and programming. During year two, this knowledge is integrated and deepened through project courses and theory courses in subjects such as web development, content design and marketing communication. The second year concludes with a 15 credit Industrial Placement Course, where the student conducts an internship of nine weeks at a company. 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 in the form of a bachelor thesis as well as advanced courses in visual design and web development.

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. 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 internet-based applications and the development of these. Foundational studies in Human-Computer Interaction and programming are also provided. After the first year, students should have sufficient theoretical knowledge to be able to create simple web products and visual communication 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 human-computer interaction 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 and content with visual and graphical expressions, and that provide a consistent user experience on different platforms. .

Students' method knowledge is gradually deepened in terms of both design principles and digital solutions, and during year 3 concept thinking is expanded during the final thesis project. 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 projects. 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. In year 2, 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.

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
Business Planning and Entrepreneurship	7.5	Industrial Engineering and Management	G1N	TBPG19
Final Project Work in Informatics	15	Informatics	G2E	TWIP17
Research Methods in Computer Science and Informatics	7.5	Computer Engineering, Informatics	G2F	TFIN13
Web Development - Advanced Concepts	7.5	Computer Engineering, Informatics	G2F	TFWN14
Fundamentals of Graphic Design	7.5		G1N	TGGG11
Foundations of Programming	7.5	Informatics	G1F	TGPK12
Web Development Fundamentals	7.5	Computer Engineering, Informatics	G1F	TGWK12
Content Design for New Media	7.5	Informatics	G1F	TINK12
Introduction to Human-Computer Interaction	7.5	Informatics	G1N	TIGG10
Marketing Communication	7.5		G1F	TMCK18
Industrial Placement Course for New Media Design	15	Informatics	G2F	TNGN19
Project Management and Methods	7.5		G1N	TPJG17
Trends in Human-Computer Interaction	7.5	Informatics	G2F	THCN13
User Experience Design	7.5	Informatics	G1F	TUEK13
Web and User Interface Design	15	Informatics	G1F	TWTG10
Visual Lab	7.5	Informatics	G2F	TVLN14
Visual Communication	7.5	Informatics	G1F	TVKK12

Elective credits

The programme comprises 30 credits elective courses during the study-abroad semester (fifth semester). The student can elect courses within Computer Engineering, Computer Science, Graphic Design, Informatics, UX-design or related areas. Up to 7.5 credits, out of the 30 credits, might be elected for courses in line with the School of Engineering's education concept (i.e. courses in foreign language, economics or project management). Students that choose not to go abroad during the fifth semester are recommended to take the courses scheduled in the programme.

For students that do not go abroad during the fifth semester the following courses are (preliminary) scheduled: *Digital Marketing & Social Media 7,5 credits, Creative Coding 7,5 hp, Motion Graphics 7,5 credits* and*Custom Project Management 7,5 credits.*

Programme overview

Year 1

Semester 1		Semester 2	
Period 1	Period 2	Period 3	Period 4
Fundamentals of Graphic Design, 7.5 credits	Web and User Interface Design, 15 credits	Business Planning and Entrepreneurship, 7.5 credits	User Experience Design, 7.5 credits
Introduction to Human-Computer Interaction, 7.5 credits		Foundations of Programming, 7.5 credits	
		Visual Communication, 7.5 credits	

Year 2

Semester 3		Semester 4	
Period 1	Period 2	Period 3	Period 4
Project Management and Methods, 7.5 credits	Content Design for New Media, 7.5 credits	Research Methods in Computer Science and Informatics, 7.5 credits	Industrial Placement Course for New Media Design, 15 credits
Web Development Fundamentals, 7.5 credits	Marketing Communication, 7.5 credits	Trends in Human-Computer Interaction, 7.5 credits	

Year 3

Semester 5		Semester 6	
Period 1	Period 2	Period 3	Period 4
Optional credits, 30,00 credits		Web Development - Advanced Concepts, 7.5 credits	Visual Lab, 7.5 credits
		Final Project Work in Informatics, 15 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 Matematics 2a or 2b or 2c, English 6 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

The School of Engineering’s quality assurance process involves continuous development and quality assurance of degree programmes and courses. This means, among other things, that great importance is attributed to student feedback and that a proactive approach is taken to the development of degree programmes and courses. The quality assurance process is carried out following applicable steering documents.

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 University (JU)"