

# BACHELORS DEGREE IN BUSINESS ADMINISTRATION

## BUSINESS ADMINISTRATION DEGREE PROGRAMME

## BUSINESS INFORMATION TECHNOLOGY DEGREE PROGRAMME

## INTERNATIONAL BUSINESS

**Head of School:** Heli Itkonen

**Study Secretary:** Merja Suutari

**Head of Degree Programmes:**

Päivi Malinen, Business Administration Degree Programme

Jarmo Happonen, Business Administration Degree Programme, Production Economics

Tarja Karjalainen, Business Information Technology Degree Programme

The Bachelors qualification in Business Administration prepares undergraduates for professional careers in business administration and economics and business information technology managerial or expert posts and as independent entrepreneurs. The international degree programme (delivered in English, Degree Programme in International Business) focuses on internationality and cooperation with commerce and industry.

Graduating students will be awarded a Bachelors Degree in Business Administration. There are 100 study places available in this school, 40 in the Business Information Technology Degree Programme, 60 in the Business Administration Degree Programme and 20 in the International Business Degree Programme. The Degree qualification is worth 210 credits and takes 3.5 years to complete.

## THE DEGREE PROGRAMMES

### GENERAL OBJECTIVES

The aim of the **degree programmes** is to ensure that students gain high-level, comprehensive knowledge of their own chosen professional field and the ability to apply such knowledge in real life. The degree programme also ensures that students will be able to understand how business, trade and industry is regulated by law and how business relies on and affects other networks, organizations, and society as a whole and how society relies on business.

### Bachelor of Business Administration language studies

During this degree programme Swedish studies are compulsory and the following language studies must be completed:

\* According to major in the Business Administration degree programme

- Marketing and advertising
- Business administration and law studies
- at least 2 languages

21 cr

- Production economics and logistics major  
at least 2 languages 16 cr

\* Business Information Technology  
at least 2 languages 17 cr

## **BUSINESS INFORMATION TECHNOLOGY DEGREE PROGRAMME 210 CR**

The skills and knowledge that correspond to the learning objectives of the degree programme include the following competences:

**Information systems competence**, with the aim that the business administration graduates:

- understand information systems and their production, acquisition methods and commissioning as a whole as well as the principles of information management from a development point of view
- will be able to define, plan and debug software, databases and user interfaces bearing in mind data security
- will be proficient in programming
- will be able to file and interpret documents for the purposes of maintaining software
- Will be able to plan and implement training

**ICT infrastructure competence**, with the aim that the business administration graduates:

- will understand the importance and operating principles of different components (hardware and software components)
- will be able to exploit information networks and their different components to create solutions
- will be able to construct and maintain basic network solutions
- will take data security into account in an organisation's ICT infrastructure solutions

**ICT project competence**, with the aim that the business administration graduates:

- will understand the nature of ICT projects and the overall role of project based activities within an organisation
- will understand the importance of a systematic approach to project work and will be able to participate responsibly in ICT projects
- will be able to use and supply ICT project planning and management methods
- will be able to identify and be prepared for risks involved in ICT project activities

**Business competence**, with the aim that the business administration graduates:

- Will understand central business processes and operations
- Will understand the significance of IT as part of an organisation's activities and its role in developing operations
- Will know how to develop business processes and to use it to support development solutions
- Will understand the significance of contracts, offers, licenses and copyright in their own work
- Will know how to serve customers

**Specialised ICT competence**, with the aim that the business administration graduates:

- will be able to apply acquired knowledge and skills to a specific area of ICT and to analyse, evaluate and develop operations in this area

The progression of professional development during the degree programme is described below:

### **1<sup>st</sup> yr: IT competence**

Business information technology students will be competent computer users with the ability to use computers for their everyday work. They will understand and be proficient in basic business concepts and be able to communicate and operate in groups.

### **2<sup>nd</sup> yr: IT professionals**

Students will gain the professional skills and knowledge needed in their own specialist field. Students can complete major studies in either software design or systems maintenance. Students will be able to utilise acquired teamwork skills in their professional studies.

### **3<sup>rd</sup> yr: IT applicator**

Students will develop expertise in their own major field, using different information retrieval methods and they will also be able to work as part of a team and to train others.

### **4<sup>th</sup> yr: IT specialist**

Students will be able to apply their acquired professional skills and knowledge in practice. They will also be able to produce a small-scale research and development project.

<b>COMMON BASIC STUDIES</b>	<b>69 cr</b>
Basic Competence in Information Systems	21 cr
Communication and Interaction Skills	28 cr
Basic Business Competence	8 cr
Business IT Methodological Studies	12 cr
 <b>BASIC PROFESSIONAL BUSINESS ICT COMPETENCE</b>	 <b>43 CR</b>
<b>SYSTEMS MAINTENANCE</b>	27 cr
Basic Systems Maintenance Competence	16 cr
Business Competence	
<b>OR</b>	
<b>GAME PRODUCTION</b>	
Basic Game Production Competence	37 cr
Information Systems Competence	6 cr
 <b>ADVANCED BUSINESS ICT COMPETENCE</b>	 <b>38 cr</b>
<b>SYSTEMS MAINTENANCE</b>	
Advanced Competence in Systems Maintenance	38 cr
 <b>OR</b>	
<b>GAME PRODUCTION</b>	
Game Business and Production Competence or	38 cr
Game Design Competence or	
Game Graphics Competence or	
Game Programming Competence	
 <b>COMMON FREE-CHOICE STUDIES</b>	 <b>15 cr</b>
 <b>PRACTICAL TRAINING</b>	 <b>30 cr</b>
5-month practical training period in Finland or abroad	
 <b>THESIS</b>	 <b>15 cr</b>

Students will be selected for the Systems Maintenance or Game Production major based on their academic record, aims and desires during the first autumn of their studies.

Students can opt for alternative or free-choice studies that are offered through the Information Processing Science degree programme in the Faculty of Science at the University of Oulu.

## SYSTEMS MAINTENANCE

The Systems Management major focuses on hardware and the installation and management of user systems, and the functioning and maintenance of information networks and servers. Students majoring in Systems Management will be qualified to work as systems experts, operator managers or instructors.

## GAME PRODUCTION

Students can select a major from amongst the Game Production specialised study modules listed as follows: Game Business and Production, Game Design, Game Graphics or Game Programming. Students will gain knowledge of and competence in traditional programming via the game programming studies. Graduates in this major will be able to work as software designers, game programmers, programmers or instructors.

## BUSINESS INFORMATION TECHNOLOGY MODULES

### COMMON BASIC STUDIES 69 CR

<b>Basic Information Systems Competence</b>	<b>21 cr</b>
Basic Use of Micro-computers	6 cr
Introduction to Information Networks	6 cr
Data Security of an Organisation	3 cr
Introduction to Programming	6 cr

<b>Communication and Interaction Skills</b>	<b>28 cr</b>
Communication and Presentation Skills	3 cr
Basics of Business and ICT English	5 cr
ICT English I	3 cr
Svenska i affärslivet	3 cr
ICT English II	3cr

**Systems Maintenance**

Instructor Training	3 cr
IT Swedish	3 cr
Research and Academic Writing	5 cr
<b>or</b>	

**Game Production**

Consultancy and Instruction	5 cr
Spel svenska	3 cr
Research Activities	3 cr

**Basic Business Competence 8 cr**

Project Work	5 cr
Business Economics and Planning	3 cr

**Systems Maintenance Methodological Competence 12 cr**

Personal Development Programme	3 cr
<u>Systems Maintenance:</u>	
Discrete Mathematics	3 cr
Mathematical Models and Formulas	3 cr
Introduction to Systems Development	3 cr
<b>or</b>	
<u>Game Production:</u>	
Prototyping	3cr
Version Management	3 cr
Testing and Test Planning	3 cr

**BASIC PROFESSIONAL BUSINESS ICT COMPETENCE****SYSTEMS MAINTENANCE****Basic Systems Maintenance Competence 27 cr**

Windows	4 cr
Linux	4 cr
Introduction to Operating Systems	3 cr
Introduction to Virtualisation	3 cr
User Support	3 cr
Technical Data Security	4 cr
Databases	6 cr

**Business Competence 16 cr**

Business Communication	3 cr
Meetings and Negotiations	3 cr
Leadership	3 cr
Corporate and Contractual Law	3 cr
Management Accounting	4 cr

**or**  
**GAME PRODUCTION**

**Basic Game Production Competence**

**37 cr**

Games and the Basics of Game Production	3 cr
The Visual Aspects of Games	5 cr
Game Analysis I	3 cr
Introduction to the Mathematics and Physics of Games	3 cr
Flash Technology	3 cr
Game Project Management	5 cr
Game Project I	6 cr
Game Project II	6 cr
Topical Seminar	3 cr

**Information Systems Competence**

**6 cr**

WWW and Internet

3 cr

Introduction to Databases

3 cr

**ADVANCED BUSINESS INFORMATION TECHNOLOGY  
 COMPETENCE 38 cr**

<b>ADVANCED BUSINESS INFORMATION          TECHNOLOGY COMPETENCE</b>	<b>38 cr</b>
Networks Continuation Course	6 cr
Server Virtualisation	6 cr
Windows Server Environment	6 cr
Skripti Programming	5 cr
Desk Top Virtualisation	6 cr
Linux Server Environment	6 cr

or

**GAME PRODUCTION**

<b>Game Business and Production Competence</b>	<b>38 cr</b>
Continuation Course in Game Production	3 cr
Business Operation Models and Financing in the Game Industry	5 cr
Game Engines	3 cr
Legal Issues and IP	3 cr
Selling and Sales Management	3 cr
Pre-production Planning and Concept Art	6 cr
Global and Scattered Game Production	3 cr
Management Accounting	3 cr
PR, Relationship Building and Pitching	6 cr
Localization	3 cr

<b>Game Design Competence</b>	<b>38 cr</b>
Game Engines	3 cr
Pre-production Planning and Concept Art	6 cr
Localization	3 cr
Introduction to Script Writing	5 cr
Concept Planning	3 cr
Social Innovations	3 cr
Game Usability	3 cr
Level Planning	6 cr
Scripting	3 cr
Game Architectures	3 cr



**PRACTICAL TRAINING 30 cr**

**THESIS** **15 cr**

# **COURSE DESCRIPTIONS FOR THE DEGREE PROGRAMME IN BUSINESS INFORMATION TECHNOLOGY**

## **BASIC STUDIES FOR ALL 69 cr**

### **(KTPT5Z) BASIC INFORMATION SYSTEMS COMPETENCE 21 cr**

#### **(KTPT010) Introduction to Computers**

Credits: 6 cr                      Timing: 1st yr

Learning Objectives: Students will gain an overview of IT, while knowing computer parts and peripheral devices and their basic functions. They will be proficient in the use of computer support programmes and can use computer tools programmes independently.

Contents: Introduction to data processing  
The Internet and email  
Computer equipment and peripheral devices  
Windows user environment and auxiliary programmes  
The main features of word processing programmes  
Presentation graphics  
Spreadsheet calculation

Learning Methods: Lectures, assignments

Assessment Methods: Exam, assignments submitted for evaluation

Bibliography: Reading as indicated by the lecturer

#### **(KTPT011) Introduction to Information Networks**

Credits: 6 cr                      Timing: 1st yr

Learning Objectives: Students will understand the basic concepts of networks, particularly local networks

Contents: Basic concepts of information networks  
Basics of local networks  
TCP/IP network basics  
Internet

Learning Methods: Lectures and exercises

Assessment Methods: Assignment and exam

Bibliography: To be announced

#### **(KTPT012) Data Security in Organisations**

Contents: Introduction to communication and the different areas of human communication.  
The structure and implementation of an oral presentation, stage fright  
Use of voice, body language

Preparing for an academic presentation, giving examples  
Using correct language and grammar structures and the writing process,  
Reporting, summarising, using quotes

Learning Methods: Small group teaching

Assessment Methods: Book exam, participation in group work, assignments and exercises

Bibliography: Andersson, Kylänpää: Käytännön puheviestintä  
Husu, Tarkoma, Vuorijärvi: Ammattisuomen käsikirja

## **(KTPV002) English/Basics of Business and ICT English**

Credits: 5 cr                      Timing: 1st yr

Learning Objectives: Students will be proficient in the central vocabulary and grammar of business and ADP English, being able to present a company's activities and products both orally and in writing. Students will also understand the significance of intercultural language and interpersonal skills.

Previous Learning: Proficiency test

Contents: Central professional grammar  
Reading comprehension and vocabulary  
Company and product presentations  
Cross-cultural interaction and international issues in working life

Learning Methods: Small group teaching (86 - 106 h)

Assessment Methods: Continuous assessment, oral presentations and written assignments and exams

Bibliography: Niskanen T., Vetter J., Urbom R., Business Express

## **(KTPV009) ICT English I**

Credits: 3 cr                      Timing: 2nd yr

Learning Objectives: Students will practise using spoken and written English in work-related situations such as applications, compiling reports and project descriptions and oral presentations.

Previous Learning: Basics of Business and ICT English

Contents: Texts based on major subject, vocabulary  
Speaking situations: presentation of own work and competences, project presentation, conversation concerning current trends in the field concerned  
Written assignments: blog concerning current trends in the field concerned, project description, script, application, presentation material, request for offer, offer, report, application and CV, lecture or learning diary etc depending on major subject

Learning Methods: Small group teaching

Assessment Methods: Portfolio consisting of written work Evaluated oral presentations and continuous assessment

Bibliography: Niskanen-Vetter-Urbom: Business Express

**(KTAV002) Computer Trainer Skills**

Assessment Methods:	Assignments, texts and language accuracy exam. Text analyses and exercises. Production of a text pertaining to the thesis report for evaluation (e.g. a seminar paper)
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Bibliography: Hirsjärvi, Remes & Sajavaara, Tutki ja kirjoita  
Lappalainen, Opinnäytetyöohjeita  
Further reading to be announced

## GAME PRODUCTION

### (KTPV007) Consultancy and Training

Credits: 5 cr Timing: 3rd yr

Learning Objectives: Students will learn the principles of consultancy and training and be proficient in organising a training session.

Contents: The tasks of the consultant and trainer  
Preparing training  
Planning and carrying out a training session  
Students will practise consulting and training by instructing and supervising students from lower year groups during their production projects.

Learning Methods: Lectures and assignments

Assessment Methods: Consulting the lower year groups and reporting the consultations, a training session that will be evaluated, written exam

Bibliography: To be announced

### (KTPV006) Spel svenska

Credits: 3 cr Timing: 3rd yr

Learning Objectives: Students will be competent to use Swedish in different types of IT and game related companies while following development in this field via the media. Students will be proficient in producing and understanding messages presented in the target language.

Previous Learning: Svenska i affärlivet

Contents: IT terminology  
Current trends: articles, news  
Product presentation

Learning Methods: Small group teaching

Assessment Methods: Continual assessment, oral presentation and written exam

Bibliography: Handout

### (KTPV008) Research Methods

Credits: 3 cr Timing: 3rd yr

Learning Objectives: Students will become familiar with the stages of the research process, information retrieval for the purposes of compiling a professional dissertation/thesis in a

cohesive and clear manner.

Previous Learning: This course must be accomplished before the embarking on the thesis

Contents: The forms and significance of research activities, philosophy of science points of departure  
The criteria of scientific knowledge  
Qualitative and action-based thesis, the research process and report  
The different trends in game research (serious games)  
Survey of theses in the field of computer games and review in the form of a seminar paper  
Theses guidelines

Learning Methods: Lectures and seminar paper

Assessment Methods: Exam and seminar paper The exam is based on the contents of the KvaliMOTV website

Bibliography: To be announced

## **(KTPB5Z) BASIC BUSINESS COMPETENCE 8 cr**

### **(KTPT018) Project Management**

Credits: 5 cr                      Timing: 1st yr

Learning Objectives: Students will adopt the goal-oriented working methods of game production development projects as the basis of their own activities. Students will be proficient in game production project planning and will be able to present and sell the plan effectively. Students will know the principles of compiling written reports.

Contents: The principles of project work, roles and project life span.  
Writing a project plan  
Reporting and documentation  
The course includes 2 cr Academic Writing for game production students

Learning Methods: Lectures and assignments Language accuracy test (games)

Assessment Methods: Assignments and exercises

Bibliography: To be announced

### **(KTPB004) Introduction to Business Economics**

Credits: 3 cr                      Timing: 2nd yr

Learning Objectives: Students will be proficient in the basics of business operations and will gain a general overview of business planning.

Contents: The basic concepts of business operations  
External and internal entrepreneurship  
Business operational processes and environment  
Business profitability monitoring  
Business planning

Learning Methods: Lectures and assignments



Assessment Methods:	Exam and business plan compilation
Bibliography:	Isokangas J., Kinkki S., Yrityksen perustoiminnot

## **(KTPM6Z) INFORMATION PROCESSING METHODOLOGICAL COMPETENCE 12 cr**

### **(KTPM004) Personal Development Programme**

Credits:	3 cr	Timing:	1st - 4th yr
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**Learning Objectives:** Students will get to know Kajaani University of Applied Sciences, the field of data processing and how to use student services. They will also know the content and teaching methods of their selected degree programme. The course also covers study planning, self-assessment and provides the tools for monitoring professional development.

**Contents:**

- Bootcamp
- Studying at a university of applied sciences
- Study skills and environment
- Students services
- Grouping
- Study planning
- Becoming an expert in your field
- The bridge to working life

**Learning Methods:** lectures, group work, online learning, planning and personal progress sessions

**Assessment Methods:** Participation and accomplishment of all tasks set

**Bibliography:** Study Guide, online material

## **SYSTEMS MAINTENANCE**

### **(KTPM005) Discrete Mathematics**

Credits:	3 cr	Timing:	1st yr
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**Learning Objectives:** Students will know basic computing mathematics, and the logical expressions required in programming, the significance of mathematical models and the basics of probability calculation.

**Previous Learning:** Proficiency test

**Contents:**

- Clarifying logical expressions
- Numerical systems and their conversions
- Boolean algebra
- Set theory
- An introduction to probability calculation

**Learning Methods:** Lectures and assignments

Assessment Methods: Exam and assignments

Bibliography: To be announced

## **(KTPM002) Mathematical Models and Expressions**

Credits: 3 cr                      Timing: 2nd yr

Learning Objectives: Students will be able to use basic mathematical expressions and functions; they will know number systems and be able to calculate using percentages and interest.

Previous Learning: Discrete mathematics

Contents: Numbers and calculations  
Logarithms and index functions  
Number sequences  
Interest and compound interest calculation models  
Probability distributions

Learning Methods: lectures and exercises

Assessment Methods: Will be announced in the course plan and at the beginning of the course.

Bibliography: To be announced

## **(KTPT005) Introduction to Systems Development**

Credits: 3 cr                      Timing: 2nd yr

Learning Objectives: Students will recognise the basic concepts of systems development and will know how to classify and describe the different phases of systems development. They will also know the different stages of sourcing an information system and be able to apply that knowledge when presenting the sourcing process for a practical information system.

Contents: Introduction to developing an information system  
An information system's stages of development  
Object-oriented modelling of data systems (UML): use case diagram, use case description, class diagram, sequence diagram and state transition diagram  
Information system sourcing process

Learning Methods: Lectures and group work

Assessment Methods: Exam and assignments

Bibliography: Haikala, I., Merijärvi, J., Ohjelmistotuotanto  
Pohjonen, R., Tietojärjestelmien kehittäminen

## **GAME PRODUCTION**

### **(KTAT033) Prototyping**

Bibliography: To be announced

**PROFESSIONAL STUDIES****BASIC INFORMATION PROCESSING  
PROFESSIONAL COMPETENCE 43 cr****(KTAT5Z) SYSTEMS MAINTENANCE BASIC COMPETENCE 27 cr****(KTPT014) Windows**

Credits: 4 cr                      Timing: 1st yr

Learning Objectives: Students will understand the principles of the Windows operating system and maintaining Windows work stations in an organisation.

Contents:                      Installation and basic maintenance of the operating system  
                                         Workstation maintenance and control  
                                         Automatic installation  
                                         Update distribution  
                                         Centralised control

Learning Methods: Small group teaching, lab assignments

Assessment                      Learning diary and lab assignments  
 Methods:

Bibliography: To be announced

**(KTPT015) Linux**

Credits: 4 cr                      Timing: 1st yr

Learning Objectives: Students will understand the functioning principles of the Linux operating system and be able to use it in desktop work.

Contents:                      Linux in general  
                                         Installation  
                                         Basic control  
                                         Kernal translation  
                                         Maintenance basics  
                                         Graphical user interface  
                                         Resource settings and management  
                                         Data Security

Learning Methods: Lectures and assignments

Assessment                      Learning diary and exam  
 Methods:

Bibliography: To be announced

**(KTPT021) Introduction to Operating Systems**

Credits: 3 cr                      Timing: 1st yr

Learning Objectives: Students will understand how computers work and the role of the operating system.

Previous Learning: Introduction to Programming

Contents: Structure and functioning of operating system  
Process and thread management  
Memory management and virtual memory  
Document systems

Learning Methods: Lectures and assignments

Assessment  
Methods: Exam

Bibliography: To be announced

## **(KTPT017) Introduction to Virtualization**

Credits: 3 cr                      Timing: 1st yr

Learning Objectives: Students will know virtualisation technology, different virtualisation products and virtualisation targets of use.

Contents: General overview  
Virtualisation technologies  
Virtualisation products  
Use of virtualisation in an organisation

Learning Methods: Lectures, lab work

Assessment  
Methods: Exam and assignment

Bibliography: To be announced

## **(KTAT009) User Support**

Credits: 3 cr                      Timing: 2nd yr

Learning Objectives: Students will know how to develop data processing at work and to solve data processing problems.

Contents: Computer support tasks and development  
User support  
Staff, architecture and work load distribution development  
Sourcing  
Problem solving

Learning Methods: Lectures and small group teaching

Assessment  
Methods: Exam

Bibliography: To be announced

## **(KTAT024) Technical Data Security**

Contents:	Disturbance-free communication
	Problem situations

Recruitment  
The features of a good document  
Documents

Learning Methods: Small group contact teaching

Assessment Methods: Literature based exam, active participation in contact teaching, written exercises and assignments

Bibliography: Kylänpää, Viestintätilanteet  
Kylänpää & Piirainen, Liike-elämän kirjallinen viestintä

## **(KTAV001) Meetings and Negotiation Skills**

Credits: 3 cr                      Timing: 1st - 2nd yr

Learning Objectives: Students will be conversant with meeting and negotiation procedure and duties.

Contents: This course covers group communication  
Meeting and negotiation techniques  
Making an impact, justification and decision-making  
Documents: invitation, agenda, memos, minutes, applications, request, statement, bulletin

Learning Methods: Lectures, small group work, visits

Assessment Methods: Wide-scale project, writing documents, sample meeting, negotiation follow-up, exercises and exam

Bibliography: Heiska, Kontio, Majapuro, Valtonen, Korkeakouluopiskelijan kokoustaito  
Jattu-Wahlström, Kallio, Neuvottelutaito  
Kylänpää, Viestintätilanteet

## **(KTAB003) Leadership**

Credits: 3 cr                      Timing: 2nd yr

Learning Objectives: Students will have basic knowledge of leadership and learn to understand the work of different members of an organisation. They will also know how to evaluate their activities and how they affect others.

Contents: The tasks and roles of a leader  
Leadership theories  
The individual in an organisation  
Groups and teams in an organisation  
Organisation culture  
Organisation structures

Learning Methods: Lectures and assignments

Assessment Methods: Assignments and exam

Bibliography: To be announced

## **(KTPB003) Contract and Corporate Law**

Assessment	Assignment: creation of a brief game plan
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Methods:

Bibliography: Manninen Tony, Pelisuunnittelijan käsikirja

## **(KTAT041) The Visual Aspects of Games**

Credits: 5 cr                      Timing: 1st yr

Learning Objectives: Students will have a broad overview of the visual aspect of games development. They will know the techniques used by practising 2d and 3d games artists.

Contents: Principles of game art including composition, colour, light, shape and texture  
Anatomy, perspective and animation  
Photoshop techniques  
3d Studio Max modelling and texturing  
Flash animation basics

Learning Methods: Lectures, assignments, small group work

Assessment                      Assignments and exam  
Methods:

Bibliography: To be announced

## **(KTAT042) Game Analysis I**

Credits: 3 cr                      Timing: 1st yr

Learning Objectives: Students understand how to analyse the structure of a computer game in detail.

Contents: Game design history  
Designing a basic board game concept  
Overview of different game genres  
Analysing a game's mechanics, objectives, gameplay, graphics and sound  
Analysing games on different platforms

Learning Methods: Lectures and group work

Assessment                      Assignments  
Methods:

Bibliography: To be announced

## **(KTAT030) Introduction to the Mathematics and Physics of Games**

Credits: 3 cr                      Timing: 1st yr

Learning Objectives: Students will understand the basic mathematics and physics used in games.

Contents: Use of trigonometry, vectors and matrixes in games  
Using physics in games  
How game engines work

Learning Methods: Lectures, exercises and small group work

Assessment                      Exam

Methods:

Bibliography: To be announced

## **(KTAT032) Flash Technology**

Credits: 3 cr                      Timing: 2nd yr

Learning Objectives: Students will know Flash vector techniques and the process of creating a casual game for the Internet.

Contents: Flash user interface and tools  
Game creation process  
Colour theory  
Background and character design  
Animation techniques including bones  
Creating interactive buttons  
Using sound effects

Learning Methods: Lectures, assignments and small group work

Assessment  
Methods: Assignment

Bibliography: To be announced

## **(KTAT031) Game Project Management**

Credits: 5 cr                      Timing: 2nd yr

Learning Objectives: Students will be able to systematically manage game projects in an organised fashion, while gaining basic knowledge and competence in systems work and methods. They will know meetings and negotiation procedures and be able to work in different roles during meetings and negotiations.

Contents: Main methods and description techniques used in data system and game planning and their application in practical design and planning situations.  
Quality awareness and the significance of quality control in game projects.  
Different forms of group communication, meetings and negotiation techniques, the principles of justification, decision-making and influencing, main project documentation

Learning Methods: Lectures and small group work, negotiation/meetings follow-up

Assessment  
Methods: Exam, assignments, documents and demonstration meeting

Bibliography: Kokous- ja neuvottelutaidon osalta:  
Heiska, Kontio, Majapuro, Valtonen, Korkeakouluopiskelijan kokoustaito;  
Juttu-Wahlström, Kallio, Neuvottelutaito  
Further reading will be announced

## **(KTAT034) Game Project I**

Credits: 6 cr                      Timing: 2nd yr

**Learning Objectives:** Student production teams will begin creating a game-demo for a game event in which they will participate. They will start the demo work by making an offer, which will form the basis for the work on the demo carried out throughout the spring by the production teams.

**Contents:** The production teams will start to create a game demo based on the previously created prototype  
Business communication skills  
Features of a good document  
Letters for problem situations and business recruitment for professional posts

**Learning Methods:** Lectures and small group work

**Assessment Methods:** Game demo and related reporting

**Bibliography:** To be announced

## **(KTAT035) Game Project II**

**Credits:** 6 cr                      **Timing:** 2nd yr

**Learning Objectives:** The production teams will test and perfect their game demo for a separately agreed game event where the demo will be presented.

**Previous Learning:** Game Project I

**Contents:** This course is a continuation of Game Project I. Testing and perfection of game demo and preparation for a game event.

**Learning Methods:** Lectures and small group work.

**Assessment Methods:** Game demo and its documentation

**Bibliography:** To be announced

## **(KTPT020) Topical Seminar**

**Credits:** 3 cr                      **Timing:** 3rd yr

**Learning Objectives:** Students will be familiar with the latest applications and the newest methods in game production while being able to retrieve information from professional magazines, other information sources and combine them into a presentable form.

**Contents:** Selection of seminar presentation topic, retrieval/use of source material, compilation and giving of seminar presentation and participation in seminars. This course prepares students for completing their thesis as it includes an information literacy training course organised by the library. The course is also linked with the course contents and schedules of the Consultation and Trainer and Research Methods courses.

**Learning Methods:** Small group teaching

**Assessment Methods:** Seminar presentation, participation in seminars as an active and critical listener

**Bibliography:** Current available material

## (KTAT020) Networks Continuation Course

Contents:       The different installations and configurations of the Windows server versions.  
                  The installation and use of active directories.  
                  Administration of basic services.

Learning Methods: Lectures and exercises

Assessment Methods: Exam and/or assignment

Bibliography: To be announced

### **(KTAT025) Programming with Skripti**

Credits: 5 cr                      Timing: 2nd yr

Learning Objectives: Students will understand the significance of scripting languages in system administration. They will be able to programme normal command scripts in the Windows and Linux environments.

Contents: Scripts in general  
Different options using Windows and Linux environments: e.g. PowerShell, bash and awk

Learning Methods: Contact teaching, supervised lab work

Assessment Methods: Assignments and exam

Bibliography: To be announced during the course.

### **(KTAT040) Desktop Virtualization**

Credits: 6 cr                      Timing: 2nd yr

Learning Objectives: Students will know workstation virtualisation technologies, solutions and uses

Previous Learning: Introduction to Virtualisation

Contents: Introduction to workstation virtualisation  
Application distribution  
Access control  
Equipment  
Uses and operational model in an organisation

Learning Methods: Lectures and lab work

Assessment Methods: Exam and/or assignments

Bibliography: To be announced

### **(KTAT022) Linux Server Environment**

Credits: 6 cr                      Timing: 2nd yr

Learning Objectives: Students will understand the server system for using Linux. They will be able to install and configure the Linux operating system to form a server environment. Students will also be able to plan, install and configure the most common server applications.

Contents:	Linux server planning and installation Commissioning and defining the services System maintenance from the services viewpoint Data security
Learning Methods:	Contact teaching, supervised lab work, group work
Assessment Methods:	Learning diary, project work
Bibliography:	To be announced

## **(KTAT019) Wireless Networks**

Credits:	3 cr	Timing:	3rd yr
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Learning Objectives: Students will understand the significance of wireless networks and how to create them. Students will be able to install and configure wireless networks.

Contents:	General overview of wireless data transfer Different network solutions WLAN Bluetooth 3G Others Connecting a wireless network with an organisations local network Data security of wireless networks
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Learning Methods:	Contact teaching, supervised lab work, group work
Assessment Methods:	Learning diary Project work (installation of network solutions)
Bibliography:	To be announced

## **(KTVS4Z) GAME BUSINESS AND PRODUCTION COMPETENCE 38 cr**

### **(KTVS001) Continuation Course in Game Production**

Credits:	3 cr	Timing:	1st yr
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Learning Objectives: Students will be proficient in the main areas of game production, the game development process and its roles, being able to control and lead them. The main aim of the course is to raise awareness of the producer's role and tasks during the different stages of game production.

Contents:	The production viewpoint of game development The industrialisation of game production i.e. developing business competence and efficiency The role of different bodies involved and how they affect game production
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Learning Methods: Lectures and small group teaching

Assessment Methods:	Exam and production plan
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Bibliography: To be announced

**(KTVS002) Business Operation Models and Financing in the Game Industry**

Credits: 5 cr                      Timing: 1st yr

Learning Objectives: Students will understand the special features of the game industry and its financing opportunities

Contents: The game industry and its special features  
The effect of platforms (PC, console, mobile...) on business operational models and earnings logic  
Mobile game industry  
The course will be extensively delivered through the contents and schedule of the Project Work course in that the business operational model and definitions of earnings logic will be part of the Project Work course in the form of the project plan that must be completed as part of this course

Learning Methods: Visit lectures, lectures and group work

Assessment  
Methods: Exam and assignments

Bibliography: To be announced

**(KTVS007) Global and Distributed Game Production**

Credits: 3 cr                      Timing: 2nd yr

Learning Objectives: Students will become aware of the global game markets and the special features and demands of distributed game production (e.g. scattered/distributed production teams and outsourcing)

Previous Learning: Games and Basics of Game Production, Game Production Continuation Course

Contents: This course prepares students for leading production teams in the role of producer during Game Project I and II. The project team members will understand the effects of different changes and decisions on processes and business planning.

Learning Methods: Lectures and leading production teams and production

Assessment  
Methods: Exam and assignments

Bibliography: To be announced



**(KTVS008) Management Accounting**

Credits: 3 cr Timing: 2nd yr

Learning Objectives: Students will be able to compile and use accounting that supports company management decision-making, finances and profitability. They will be able to analyse the profitability of their own team using profit margin calculation, compile a profit and finance budget for their team and use activity-based accounting information in their own production teams.

Contents: Analysis of a company's financial position using financial statements  
Profit margin calculation  
Business planning  
Cost accounting  
Activity-based accounting  
Estimating the profit on investments  
The significance of the company's financial situation in business planning

Learning Methods: Lectures, exercises, production team group work

Assessment Methods: Exam and assignments

Bibliography: To be announced

**(KTVS009) PR, Relations Management and Pitching**

Credits: 6 cr Timing: 2nd yr

Learning Objectives: The main task is to offer students the possibility to learn from a practical point of view, how business ideas are generated, how business plans are made & how to turn plans into a profitable business venture. Students will learn the basis of entrepreneurial activities and the principles of profit making.

Contents: Business ideas  
Business plan  
Capital generation  
Basis of profit making  
Business operation  
Marketing  
Creativity  
Teamwork  
Problem solving

Learning Methods: Lectures, Practical project work to be accomplished in a team.

Assessment Methods: Presentation and report of Business Plan

Bibliography: Mariotti and Glackin  
Entrepreneurship: Starting and Operating a Small Business, 2nd edition  
Zimmerer, Scarborough and Wilson  
Essentials of Entrepreneurship and Small Business Management, 5th edition

**(KTVS004) Legal Issues and IP**

Credits: 3 cr Timing: 3rd yr

Learning Objectives: Students will be proficient in the general principles of contract law and business contracts.

Contents: The principles of sourcing  
The sourcing process  
Copyright issues  
Model protection and trademarks  
ADP contracts

Learning Methods: Online course

Assessment Methods: Learning assignments

Bibliography: To be announced

## **(KTVS005) Selling and Sales Management**

Credits: 3 cr                      Timing: 3rd yr

Learning Objectives: To develop an understanding of the role selling and sales negotiations play in marketing management. It examines the origins of selling and sales management and its development into a specific discipline.

Contents: View of different types of sales negotiations within industry  
Negotiation skills and development  
Negotiation Strategies and analysis

Learning Methods: Lectures, case studies, oral and written tasks.

Assessment Methods: Discussion, assessments and exam

Bibliography: David Jobber and Geoff Lancaster, Selling and Sales Management, 2000. Prentice Hall, U.K.  
Michael R Carrel, Christina Heavrin, JD. Negotiating Essentials; Theory, Skill & Practices, 2007. Prentice Hall.

## **(KTVS5Z) GAME DESIGN COMPETENCE 38 cr**

### **(KTVS003) Game Engines**

Credits: 3 cr                      Timing: 1st yr

Learning Objectives: Students will understand the structure and functioning principles of game engines, becoming familiar with the use of the Kajak3D game engine

Contents: The structure and functioning principles of game engines  
Basic use of game engines  
Kajak3D game engine and its use  
Unity3D game engine and its use

Learning Methods: Lectures, assignments and small group work

Assessment Methods: Assignment

Bibliography: Material as indicated by the teacher

## **(KTVS011) Introduction to Script Writing**

Credits: 5 cr                      Timing: 1st yr

**Learning Objectives:** Students will know the basic principles of script writing through active thinking, comparison and writing. Students will be able to analyse games from the players viewpoint. They will be proficient in breaking down games into series of actions, understanding what the background story, plot and characters mean in game narration. Students will also learn to perceive different game cultures and generate ideas and develop the game script concept while knowing the different stages of script writing in game production.

**Previous Learning:** Games and the Basics of Game Production

**Contents:** Offline game genres and playing, online games and playing them, the similarities between scriptwriting for the cinema and games, the principles and form of scriptwriting. Scripting the player's actions.  
The game planning process

**Learning Methods:** Lectures, assignments and group work

Assessment Methods: Assignment(s), project/practical assignment

**Bibliography:** Jesse Schell: The Art of Game Design (2008)  
Bateman: Game writing: narrative skills for videogames (2007)  
Crawford: The Art of Computer Game Design (1982)  
Rollings and Adams: Andrew Rollings and Ernest Adams on game design (2003)  
Rouse: Game Design, Theory and Practice (2000)  
Huhtamo-Kangas (toim:) Mariosofia Elektronisten pelien kulttuuri, (2002)  
Further reading as indicated by the teacher

## **(KTVS012) Concept Planning**

Credits: 3 cr                      Timing: 1st yr

**Learning Objectives:** Students will understand the principles of concept planning, being able to plan and produce documentation describing a game concept.

**Contents:** Narrative - plot, backgrounds, theme and target group  
Interaction and game mechanics  
Initial concept illustration  
Interaction planning - actions, rules, plans, playability, communication and user interface  
Initial field planning

**Learning Methods:** Lectures, assignments and group work

Assessment Methods: Assignment(s)

**Bibliography:** To be announced

**Learning Methods:** Lectures and small group work

Assessment Methods: Lectures, assignments and usability analysis

Bibliography: To be announced

## **(KTVS015) Level Planning**

Credits: 6 cr                      Timing: 2nd yr

Learning Objectives: Students will understand the basics of level planning as part of the game environment and will be proficient in planning levels.

Previous Learning: The Visual Aspect of Games

Contents: Level planning principles and process for 2D and 3D games  
Creating concept sketches for game levels  
How to create atmosphere by using colour and lighting effectively  
Planning, implementing and testing levels

Learning Methods: Lectures, assignments and group work

Assessment Methods: Assignment(s)

Bibliography: To be announced

## **(KTVS016) Scripting**

Credits: 3 cr                      Timing: 2nd yr

Learning Objectives: Students will understand the use of script language in game development and will be proficient in the basics of LUA language for creating scripts.

Contents: Use of scripts in game development  
Basics of LUA scripting language  
Programming game logic using script  
Communication between game objects  
Kajak3D game engine use in scripting

Learning Methods: Lectures, exercises and group work

Assessment Methods: Assignment

Bibliography: To be announced

## **(KTVS017) Game Architectures**

Credits: 3 cr                      Timing: 2nd yr

Learning Objectives: Students will be familiar with different types of architecture and how this effects the visual feel and atmosphere of a game.

Contents: The importance of research and concept sketches for game world architecture.  
Knowledge of architecture styles and history. 3D modelling techniques for designing architecture in game levels.

Photoshop techniques for creating realistic and stylised textures.  
How to use lighting correctly to create atmosphere.

Learning Methods: Lectures, assignments and group work

Assessment Methods: Assignment(s)

Bibliography: To be announced

## **(KTVS010) Localization**

Credits: 3 cr                      Timing: 3rd yr

Learning Objectives: Students will understand the geographical differences and requirements in game culture and the variety of demands this makes of game production.

Contents: Games from a cultural and social point of view  
The presence of culture, socialisation and values in games  
Ethical questions  
Students will carry out a small scale market analysis and marketing plan for selected geographical target areas  
The course will be organised in cooperation with language courses

Learning Methods: Lectures and group work

Assessment Methods: Exam, market analysis and marketing plan

Bibliography: To be announced

## **(KTVS6Z) GAME GRAPHICS COMPETENCE 38 cr**

### **(KTVS018) 2D/3D Avatar/Figure Design**

Credits: 5 cr                      Timing: 1st yr

Learning Objectives: Students will be proficient in the basic principles of character design and in the planning and production of 2D and 3D textured game figures.

Previous Learning: The Visual Aspects of Games

Contents: The basics of figure design  
Structure, shape, appearance and functionality of figure  
Figure concept sketching in Photoshop  
Modelling, unwrapping and texturing a low poly character  
Adding bones, skinning and rigging with basic animation in 3D Studio Max  
Exporting the character in MotionBuilder for real-time 3D animation

Learning Methods: Lectures, and assignments

Assessment Methods: Assignment(s)

Bibliography: To be announced

## **(KTVS019) Textures and Graphics**

Credits: 3 cr                      Timing: 2nd yr

Learning Objectives: Students will understand and be proficient in the basic principles of creating 2D graphics and textures for 3D models.

Previous Learning: The Visual Aspect of Games

Contents: Techniques for creating high and low resolution hand painted and photographic textures  
UVW mapping in 3Ds Max  
How to create bump, specular and normal maps  
2D painting techniques and creating tiles in Photoshop

Learning Methods: Lectures and assignments

Assessment Methods: Assignment(s)

Bibliography: To be announced

## **(KTVS020) Animation**

Credits: 3 cr                      Timing: 2nd yr

Learning Objectives: Students will understand the basic principles of animation and be proficient in planning and producing animated objects appropriate to the game environment.

Previous Learning: 2D/3D Avatar/Figure Design

Contents: Animation overview including 2D, 3D and stopmotion  
Animation principles of timing, spacing, weight and anticipation  
Creating 2D animation in Photoshop  
Using 3Ds Max to create walk, run and hit animations

Basic understanding of Character Studio

Learning Methods: Lectures, assignments and group work

Assessment Methods: Assignment(s)

Bibliography: To be announced

## **(KTVS021) Motion capture**

Credits: 3 cr                      Timing: 3rd yr

Learning Objectives: Students will be proficient in the basic principles and procedures of motion capture and be able to use motion capture knowledge in animation.

Previous Learning: Animation

Contents: Motion capture history  
Production process that includes pre-capture planning, script, storyboard, shot list and animatic  
How data is integrated with character rigs

Learning Methods: Lectures, assignments and group work

Assessment Methods: Assignment(s)

Bibliography: To be announced

## **(KTVS7Z) GAME PROGRAMMING COMPETENCE 38 cr**

### **(KTVS022) C++ and the Basics of Object Oriented Programming**

Credits: 6 cr                      Timing: 1st yr

Learning Objectives: Students will be proficient in the use of C++ and the basics of object-oriented programming and in planning, compiling, testing and documenting a small C++ game programme.

Previous Learning: Introduction to Programming

Contents: Basics  
Classes  
Encapsulation, assembly and inheritance  
Operator overload  
Models  
Exception handling  
Creating a small 2 D game

Learning Methods: Lectures, assignments and group work

Assessment Methods: Exam and assignment

Bibliography: Hietanen Päivi, C++ ja olio-ohjelmointi  
Further material as indicated by the teacher



Contents: Trigonometry, vector and matrix calculation and their application in games.

Geometrical conversions  
Cuts of 2D and 3D pieces

Learning Methods: Lectures, assignments and group work

Assessment  
Methods: Exam and assignment

Bibliography: To be announced

## **(KTVS026) Physics for Game Programmers**

Credits: 5 cr                      Timing: 2nd yr

Learning Objectives: Students will be proficient in the basics and application of physics required in games.

Previous Learning: The Basics of Physics and Mathematics for Game Production Introduction to C++ and Object Oriented Programming

Contents: Basics of differential calculus  
Location and movement  
Speed, acceleration and friction  
Examination of 2 and 3D objects in collision  
The kinematics of particles  
The functioning and use of physics engines

Learning Methods: Lectures, assignments and group work

Assessment  
Methods: Exam and assignment

Bibliography: Material as indicated by the teacher

## **(KTVS027) Game Programming II**

Credits: 5 cr                      Timing: 2nd yr

Learning Objectives: Students will understand the demands of different game architectures and will be proficient in using different planning models and data structures in game development. Additionally students will be conversant with visibility calculation and different basics of using different degrees of detail.

Previous Learning: Game Programming I

Contents: The demands of architecture for different types of games  
The basic functioning principles of a 3 D game  
Loading 3D assets  
3D game mechanics  
Game design patterns  
Game data structures  
Visibility calculation  
Level of detail (LOD)

Learning Methods: Lectures, assignments and group work

Assessment  
Methods: Assignment

Bibliography: To be announced

## **(KTVS028) Software Algorithms**

Credits: 3 cr                      Timing: 2nd yr

Learning Objectives: Students will be able to compile and carry out sorting, search and save algorithms and the most common game algorithms.

Previous Learning: Introduction to C++ and Object Oriented Programming

Contents:                      Sorting  
Collections  
Stacks and queues  
Lists and tree structures  
Simple route finder algorithms  
Common game algorithms

Learning Methods: Lectures, assignments and group work

Assessment                      Exam  
Methods:

Bibliography:                      Kokkarinen ja Alamutka, Tietorakenteet ja algoritmit  
Kolehmainen Kauko, C++ ohjelmointi - Algoritmit ja mallit  
Further material as indicated by the teacher

## **(KTVS029) Animation Programming**

Credits: 3 cr                      Timing: 2nd yr

Learning Objectives: Students will understand the principles of 2 and 3D animation and be able to load and use animated objects and particle effects in game development.

Previous Learning: Game Programming I

Contents:                      The principles of 2D and 3D object animation  
Timing and dolly shot  
Skeleton models and kinematics  
Loading and using an animated object  
Particle effects  
Physics based animations

Learning Methods: Lectures, assignments and group work

Assessment                      Assignment  
Methods:

Bibliography: To be announced

## **(KTVS030) Web Game Programming**

Credits: 3 cr                      Timing: 3rd yr

Learning Objectives: Students will understand the features and types of network games and will be able to develop a simple multiplayer network game.

Previous Learning: Game Programming I Game Programming II

Contents: Different types of network games  
Network architectures, protocols and data transfer  
Network game communication  
Forecasting and synchronising state  
Controlling exceptional action-based situations  
Online game security problems  
Preventing fraud and attacks

Learning Methods: Lectures, assignments and group work

Assessment Methods: Assignment: Adding network game features to the game project

Bibliography: Material as indicated by the teacher

## **(VAPAAZ) FREE-CHOICE STUDIES 15 cr**

Students can freely select 15 cr of studies that will support their professional development, from their own field/degree programme or from another degree programme in their own university of applied sciences, from another university of applied sciences or science university. Students will achieve wide-ranging expertise.

## **(KTWT033) Imagine Cup**

Credits: 5 cr                      Timing: 1st yr

Learning Objectives: Students will form teams and participate in Microsoft's Imagine Cup game competition with the game produced during the course

Contents: Students will form teams who will create a game using XNA or Silverlight or will participate in the IT Challenge series, aimed at systems maintenance operators. In the game production series, this course covers the use of XNA Game Studio or Silverlight software, the basics of creating 2D graphics and creating a game as a team. In the IT Challenge series, students will create systems using Microsoft's products.

Learning Methods: Lectures and group work

Assessment Methods: Game or other solution sent to competition and their documentation

Bibliography: To be announced

## **(KTWT055) KAJAK3D Game Engine and QT**

Credits: 5 cr                      Timing: Summer Course

Learning Objectives: Students will be able to develop a simple game using the Kajak3D game engine and will be proficient in the basics of QT programming.

Previous Learning: Introduction to C++ and Object-oriented Programming

Contents: Kajak3D game engine and its use

Basics of QT programming

Learning Methods: Lectures, exercises and group work

Assessment  
Methods: Assignment

Bibliography: As indicated by the teacher

## **(KTWT056) Developing a Commercial Game Application**

Credits: 10 cr                      Timing: Summer Course

Learning Objectives: Students will be capable of productive work as part of a team in a commercial game application or demo development project, in the role of game producer, game designer, game graphic designer or game programmer.

Previous Learning: Sufficient proficiency to take on the role of game producer, game designer, game graphic designer or game programmer

Contents: Game concept  
Production pre-planning  
Initial production  
Production  
Publication

Learning Methods: Developing a commercial game or game demo in small teams

Assessment  
Methods: Active participation in developing the game or game demo

## **(KTWT042) Advanced Studies in 3D Modelling**

Credits: 5 cr                      Timing: 2nd - 4th yr

Learning Objectives: To deepen students' knowledge of and skills in 3D modelling.

Previous Learning: 2D/3D Figure planning, Level Planning, Animation

Contents: Large-scale assignment on a separately agreed topic.

Learning Methods: Supervised independent assignment

Assessment  
Methods: Assignment for evaluation

Bibliography: To be announced

## **(KTVT021) Media Production and Audiovisual Technology**

Credits: 5 cr                      Timing: 1st - 3rd yr

Learning Objectives: Students will be able to design and produce multi and hypermedia for different forms of media and the 3D-environment and use them where appropriate in game production. Students will be proficient in the use of audiovisual communication methods and tools.

Previous Learning: Recommended in the first instance for Systems Maintenance majors

Contents: Production of multi and hypermedia with different media tools  
Audiovisual communication methods and tools  
Internet negotiation systems  
Virtual platforms

Learning Methods: Lectures and assignments

Assessment Methods: Exam

Bibliography: To be announced

### **(KTWT036) Study Trip**

Credits: 3 cr Timing: 2nd yr

Learning Objectives: Students will get to know practical information technology systems service solutions in different types of organisations and also sniff future trends by visiting IT trade fairs.

Contents: Study visit planning and contact making  
Study visit  
Compilation of report on study visit

Learning Methods: Preparatory lectures

Assessment Methods: Participation Written report Students have to pay part of the costs of the study trip themselves

### **(KTWT047) Server Equipment**

Credits: 5 cr Timing: 3rd yr

Learning Objectives: Students will be conversant with modern server equipment and be able to plan an organisation's server environment.

Contents: Server iron and virtualised servers  
Discs and disc systems  
Control solutions  
Thin clients and server farms  
Server infra maintenance

Learning Methods: Lectures and lab work

Assessment Methods: Exam, assignments

Bibliography: To be announced

### **(KTWT023) Introduction to PHP Programming**

Credits: 3 cr Timing: 2nd - 4th yr

Learning Objectives: Students will be able to install PHP in the server, use PHP basic syntax and will know the most typical library functions. Students will be able to create server based applications using PHP; e.g. dynamic pages

Previous Learning: Introduction to HTML

Contents: Installing PHP  
An introduction to PHP language  
Variables and control structures  
Tables and how to handle them  
Use of functions  
Use of document files

Learning Methods: Small group teaching

Assessment Methods: Participation in lectures and exercises, classroom assignments and an assignment that must be handed in.

Bibliography: Rami Heinisuo - Ilkka Rauta: PHP ja MySQL Tietokantapohjaiset verkkopalvelut  
Rantala Ari, PHP - Web-ohjelmoijan peruskirja  
Rantala Ari, Web-ohjelmointi

## **(KTWT052) Artificial Intelligence in Games**

Credits: 5 cr                      Timing: 2nd - 4th yr

Learning Objectives: Students will understand the functioning principles of artificial intelligence and be able to create space engine and route finder algorithms

Previous Learning: Game Programming I

Contents: Demands of game artificial intelligence  
The artificial intelligence of different types of games  
Route finder algorithms (Pathfinding)  
Perception of space and Finite State Machines  
Planning game agents and functionality  
Waypoints  
Decision making architectures

Learning Methods: Lectures, exercises and group work

Assessment Methods: Assignment

Bibliography: To be announced

## **(KTWT030) Information Summary and Training**

Credits: 5 cr                      Timing: 2nd - 4th yr

Learning Objectives: Students will be able to write a summary and training material based on a source of information for the purposes of delivering a training session.

Contents: Agreement concerning literature/sources for summarising  
Summary  
Compilation of training material  
Delivery of training session

Learning Methods: Students discuss the required literature or information source with their teacher, take in the information, summarise it and deliver a training session on the same.

Assessment a) a detailed summary and presentation or b) a comprehensive summary, brief

Methods: training package and session or c) a short summary, comprehensive training package and session

Bibliography: As indicated by the teacher

## **(KTWT021) Development of Network Games**

Credits: 3 cr                      Timing: 2nd - 4th yr

Learning Objectives: Students will understand the features and types of network games and be able to develop a simple network game.

Previous Learning: Game Programming I

Contents: Different types of network games  
Network architectures, protocols and data transfer  
Network game communication  
Space synchronisation and forecasting  
Special situations management  
Data security and attacks

Learning Methods: Lectures and assignments

Assessment Methods: Assignment: Creation of a small network game

Bibliography: To be announced

## **(KTWT046) Virtualization Project**

Credits: 6 cr                      Timing: 3rd yr

Learning Objectives: Students will be able to plan, carry out and test a large-scale virtualisation environment

Previous Learning: Introduction to Virtualisation Server Virtualisation Work station virtualisation

Contents: Planning a virtualisation environment,  
Carrying out a virtualisation environment,  
Planning the maintaining of a virtualisation environment  
Testing and documentation

Learning Methods: Supervised lab assignments and independent work

Assessment Methods: Project implementation and report

Bibliography: Product documents

## **(KTWT057) Business Project Management**

Credits: 3 cr                      Timing: 2nd - 4th yr

Learning Objectives: Students will be conversant with organization and management from an individual, group and organisational perspective, with the focus on human behavior and organizational structures and processes.



Contents: Foundations of management  
Cognitive processes of organizational behavior  
Dynamics of organizational behavior  
Organization design, change and innovation  
Managing and leading for high performance

Learning Methods: Lectures, case studies, and exercises

Assessment Methods: Case studies, exercises and exam

Bibliography: Hill and MacShane, Principles of Management  
Pettinger, Introduction to Management  
Luthans, Organizational Behavior

## **(KTWT019) Organizational Data Security**

Credits: 3 cr Timing:

Learning Objectives: Students will gain an overview of organisational data security.

Contents: Administrative data security  
Planning and leadership

Learning Methods: Independent study

Assessment Methods: Book-based exam

Bibliography: Hakala M., Vainio M., Vuorinen O., Tietoturvallisuuden käsikirja (sivut 1 -120),  
Vahti 1/2001, Valtion viranomaisen tietoturvallisuustyön yleisohje

## **(KTOO1Z) THESIS 15 cr**

### **(KTOO001) Thesis**

Credits: 15 cr Timing: 3rd - 4th yr

Learning Objectives: The aim of the thesis is to develop and demonstrate students' abilities to apply their acquired skills and knowledge to a task linked to their professional studies requiring expertise. The thesis can take the form of a piece of research or a practical data processing project within a theoretical framework. The thesis should be of use in working life and promote professional development.

Previous Learning: Research and Academic Writing

Contents: Thesis start-up seminar (During practical training)  
Approval of own topic and topic analysis  
Thesis plan  
Thesis  
Seminar and acting as opponent  
Maturity test - (Dates announced in advance)

Bibliography: Hirsjärvi, P., Remes, P., Sajavaara, P., Tutki ja kirjoita

**(KTHH1Z) PRACTICAL TRAINING 30 cr****(KTHH001) Practical Training**

Credits: 30 cr                      Timing: 3rd yr

Learning Objectives: The aim of practical training is to provide a supervised opportunity for students to gain knowledge of work tasks associated with their own specialised area, in Finland or abroad. Students will learn to apply theoretical knowledge and skills in practice and they will develop the ability required to work independently.

Previous Learning: Basic Studies of at least 90 cr

Contents: Practical training briefings before and a feedback seminar after the practical training period  
800 working hours (about 5 months) of continuous practical training.  
Practical training report and assignments

## BUSINESS ADMINISTRATION DEGREE PROGRAMME 210 cr

**The competences of the business administration degree program are:**

**Business competence:** Business administration graduates can recognize how the different areas of business economics and the operational environment affect each other and will adopt an entrepreneurial way of working and entrepreneurship as a whole. They will understand the significance of profitability and be able to operate in a profit-oriented manner. They will also understand the importance of each individual's contribution within the working community, as well as the significance of communication – being able to actively create new interactive business relationships at home and abroad.

**Advanced business competence:** Business administration graduates will possess in depth, specialized know-how and knowledge of their major subject (financial administration and law, marketing and advertising, production economics and logistics).

**Methodological business competence:** Business administration graduates will be conversant with the principles of research and development tasks required to gain in depth knowledge. They will be able to apply business mathematics and statistical methods using IT. They will also be proficient in applying quantitative and qualitative research methods.

**Applied business competence:** Business administration graduates will be able to apply business theory and creative problem solving in their work. They will also apply the newest business theories in their own working community. They will be able to develop business processes and to apply quality-oriented thinking.

**The progress of professional competence development is described using the following year group themes:**

### 1<sup>st</sup> yr

Business observer

- will understand business procedures
- will be conversant with the basic principles of business
- will be able to plan the start-up of business operations

### 2<sup>nd</sup> yr

Business apprentice

- will be conversant with the main contents of the major
- will be conversant with the main working methods of the major
- will develop information retrieval and teamwork skills

### 3<sup>rd</sup> yr

Applicator of knowledge

- will apply knowledge in practice
- will become an expert in his/her major subject
- will gain research and development skills

**4<sup>th</sup> yr****Business developer**

- will know how to apply the newest theories to develop the working community

**BASIC STUDIES****60 cr**

Introduction to Business Activities

24 cr

Operational Environment

8 cr

Methodological Competence

19 cr

Communication Competence

9 cr

**COMPULSORY PROFESSIONAL STUDIES****47 cr**

Advanced Business Competence

21 cr

Advanced Communication Competence

13 cr

Business Methodological Studies

13 cr

**OPTIONAL PROFESSIONAL STUDIES****43 cr**

Students opt for one of the three alternative professional studies offered

**PRACTICAL TRAINING****30 cr**

5 months of practical training in Finland or abroad

**FREE-CHOICE STUDIES****15 cr****THESIS AND SEMINAR****15 cr****BUSINESS ADMINISTRATION AND LAW**

The business administration and law major emphasises accounting and legal subjects: i.e. bookkeeping and management accounting, taxation and auditing studies, knowledge of the Finnish legal system, private and public law within different operational environments. This major provides students with the required skills and in depth knowledge to carry out a variety of demanding business and financial planning, control and analysis tasks and to operate in human resource management and internal business control and accounts auditing posts. Within this major students will also be able to complete courses required of the Certified HTM-auditor qualification.

Having completed this major, graduates will also be able to find appropriate legal guidelines for application to specific legal problems enabling them to apply such guidelines in decision-making processes required of their work. Through free-choice studies, practical training, and the thesis, students

can deepen their insight into legislation and law thus qualifying them for work in law administration posts (the courts, prosecutor's office, debt recovery office, legal aid and registry offices), or in posts that require legal expertise in tax administration, banking, insurance and business.

## **MARKETING AND ADVERTISING**

In the Marketing and Advertising major students will deepen their marketing skills in the fields of communication, sales, marketing planning, R&D project work and leadership. In their capacity as marketing professionals, students will understand the importance of profitable business operations and possess comprehensive IT skills for use in their work that will include demanding customer services and other communication situations. This major opens doors to a variety of sales and customer service posts, marketing planning, implementation and follow-up, advertising, pr and relationship building, trade fairs, briefing and information dissemination and posts in foreign trade and commerce. Students will be able to pick and choose from posts in different fields of commerce and industry, tourism and the public sector.

## **PRODUCTION ECONOMICS AND LOGISTICS MAJOR**

The Production Economics and Logistics major combines technical and commercial knowledge with the aim of providing business administration expertise and technical knowledge to enable graduates to manage the operations and processes of a manufacturing company.

This major will enable graduates to work within the following production oriented fields: materials management, tendering, operational planning, marketing and sales, quality management and project work. Posts may be linked to planning, development, research and services as part of a group, as an expert or manager.

Business Administration graduates who have majored in Production Economics will be able to work independently and actively in different commercial and industrial posts world-wide while possessing the know-how and knowledge to set up and run their own companies.

**BUSINESS ADMINISTRATION DEGREE PROGRAMME 210 CR****BUSINESS ADMINISTRATION COURSES****BASIC STUDIES 60 CR****Business competence 24 cr**

Introduction to Business Economics	3 cr
Planning a Business	3 cr
Introduction to Bookkeeping	5 cr
Contract and Corporate Law	4 cr
Customer-oriented Marketing	6 cr
Introduction to Financing	3 cr

**Operational Environment Competence 8 cr**

Introduction to Economics	5 cr
Finnish Economic Geography	3 cr

**Methodological Competence 19 cr**

Introduction to Data Processing	3 cr
Introduction to Spreadsheet Accounting	3 cr
Business Mathematics	5 cr
Word Processing and Office Skills	5 cr
Personal Development Programme	3 cr

**Communication Competence 9 cr**

Business Communications	3 cr
Svenska I affärlivet 1	3 cr
Basics of Business English	3 cr

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**COMPULSORY PROFESSIONAL STUDIES 47 cr****Advanced Business Competence 21 cr**

Service Marketing	4 cr
Management Accounting	5 cr
Payroll Administration	3 cr
Introduction to Production and Logistics	3 cr
Leadership	3 cr
Commercial Law	3 cr

<b>Advanced Communication Competence</b>	<b>13 cr</b>
Meetings and Negotiations	3 cr
English (course according to major)	3 cr
Business Communication Skills	4 cr
Svenska i affärslivet 2 (Content according to major)	3 cr
<b>Methodological Business Competence</b>	<b>13 cr</b>
R&D 1 Introduction to Development Operations	3 cr
Introduction to Statistics	4 cr
Academic Writing	3 cr
R&D 2 Quantitative and Qualitative Research	3 cr

## **SPECIALISED BUSINESS COMPETENCE**

### **OPTIONAL PROFESSIONAL STUDIES 43 CR**

<b>Business Administration and Law</b>	<b>43 cr</b>
Contract and Corporate Law	5 cr
Public Law	3 cr
Procedural Law	4 cr
Labour and Civil Servants Law	3 cr
Personal Taxation	3 cr
Bookkeeping Continuation Course	4 cr
Planning Taxation and Financial Statements	5 cr
Auditing	4 cr
Value Added Taxation	3 cr
Financial Statement Analysis	3 cr
R&D 3 Product Development	6 cr

<b>Marketing and Advertising</b>	<b>43 cr</b>
Product, Price and Availability	5 cr
Sales Negotiation and Promotion	5 cr
Advertising	4 cr
Marketing Research	3 cr
Focus Group Research	3 cr
Visual Planning and Printing Technology	5 cr
Marketing Planning	4 cr
Strategic Marketing Leadership	4 cr
Digital Marketing	4 cr
R&D 3 Product Development	6 cr

## PRODUCTION ECONOMICS AND LOGISTICS MAJOR

<b>Production Economics and Logistics</b>	<b>43 cr</b>
Production Technology	3 cr
Production Technology Laboratories	3 cr
Technical Drawing	3 cr
CAD Design	3 cr
Structural Materials	4 cr
Production Automation	5 cr
Quality Management Technology	3 cr
Production Planning	4 cr
Project Activities	3 cr
Introduction to Production Maintenance	3 cr
Import and Export Routines	3 cr
R&D 3 Product Development	6 cr



# COURSE DESCRIPTIONS FOR THE DEGREE PROGRAMME IN BUSINESS ADMINISTRATION

## BASIC STUDIES

### (KLPB1Z) BUSINESS COMPETENCE 24 cr

#### (KLPB001) Introduction to Business Economics

Credits: 3 cr                      Timing: 1st yr

Learning Objectives: Students will be conversant with basic business concepts and how a business works. They will also become aware of the significance of entrepreneurship.

Contents:                      Going into business and a basic business model  
Business operations and operational environment  
Profitability and business monitoring  
Entrepreneurship interview

Learning Methods: Lectures, assignments

Assessment                      Assignments and exam  
Methods:

Bibliography:                      Kinkki, Isokangas, Yrityksen perustoiminnot, Basic Business Operations

#### (KLPB005) Business Planning

Credits: 3 cr                      Timing: 1st yr

Learning Objectives: Students will be able to compile a business plan

Contents:                      The strategic business planning process  
Business idea, values and vision  
Business ideas and clarifying the business idea  
Analyses  
Calculations  
Business plan

Learning Methods: Blended and online studies

Assessment                      Compiling a business plan  
Methods:

#### (KLPB006) Introduction to Accounting

Credits: 5 cr                      Timing: 1st yr

Learning Objectives: Students will be aware of the significance of bookkeeping and accounting as a part of entrepreneurial activities. They will know the basic principles of compiling accounts and financial statements. Additionally they will be able to assess a company's financial situation based on the profit and loss statement and balance sheet as well as understanding the significance of the financial statement as the basis of corporate taxation.

Contents:                      Accounting as a part of business operations

Double-entry bookkeeping  
 Financial statement structure  
 ADP bookkeeping  
 The basics of VAT and company taxation  
 Introduction to financial statement analysis and management accounting

Learning Methods: Lectures and exercises

Assessment Methods: Assignments and exam

Bibliography: Jormakka R. - Koivusalo K. - Lappalainen J. - Niskanen M., Laskentatoimi

## **(KLPB010) Contract and Law**

Credits: 4 cr                      Timing: 1st yr

Learning Objectives: Students will be proficient in the general principles of contract law and the most important business contracts.

Contents: General contract law  
 - general contract law stipulations  
 - how a contract is made and invalidity  
 - representation/agency  
 Specialised contract law  
 - forms of contract

Learning Methods: Online course

Assessment Methods: Online exercises

Bibliography: Suojanen, Ojajärvi, Savolainen, Vanhanen. Opi oikeutta 1 ja 2.

## **(KLPB009) Introduction to Financing**

Credits: 3 cr                      Timing: 1st yr

Learning Objectives: Students will possess knowledge of small business financing. They will be capable of describing funding structures, determining funding options and preparing for finance negotiations. Students will be able to name finance services and compile a business financing plan.

Contents: Small business funding and profitability  
 Business funding problems  
 Company financing plans  
 Finance markets and services

Learning Methods: Lectures including lectures by experts in this field

Assessment Methods: Exam and assignments

Bibliography: Leppiniemi J., Rahoitus  
 Lecture handout

**Learning Objectives:** Students will know the basic concepts of regional economics and the factors affecting regional economic development.

Contents: An introduction to regional economic structures  
 The world as an operational environment  
 Population theory factors and their effects on the economy  
 Europe as an economic area and EU development  
 The structure and requirements of manufacturing in Finland  
 Forms of energy and energy issues in economic decision making

Learning Methods: Lectures and group work

Assessment Methods: Exam and assignments

Bibliography: Vuoristo, K.-V., Maailman talousalueet, WSOY 2001 soveltuvin osin  
 Hautala, Heikki, Suomen talouselämän rakenne ja kehitys (ss.1-148), WSOY 2003  
 Further reading/material provided by lecturer

## **(KLPM3Z) METHODOLOGICAL COMPETENCE 19 cr**

### **(KLPM001) Introduction to Data Processing**

Credits: 3 cr                      Timing: 1st yr

Learning Objectives: Students will gain a comprehensive overview of the opportunities and effects of information technology in business. Students will be able to utilise a microcomputer and communication technology.

Contents: Introduction to data processing  
 Internet and e mail  
 Computer hardware and peripheral devices  
 Using the Windows environment  
 Using presentation graphics software

Learning Methods: Lectures and group work

Assessment Methods: Exam, assignments

Bibliography: To be announced in the progress plan

### **(KLPM002) Introduction to Spreadsheet Accounting**

Credits: 3 cr                      Timing: 1st yr

Learning Objectives: Students will be conversant with the basic functions of spreadsheet accounting and how to use them in their work.

Contents: Basic concepts and data input  
 Using formulae and functions  
 Graphical presentation of information  
 Data separation and filtering

Learning Methods: Group work

Assessment Methods: Exam, assignments

Bibliography: Handouts

**Learning Objectives:** Students will get to know Kajaani University of Applied Sciences, their chosen field and how to use student services. Students will learn to plan their studies, assess their own learning and gain the tools to monitor their own professional development.

They will be proficient in the basics of project work.

Contents: Studying at a university of applied sciences, study skills and learning environments  
Student services  
Forming groups  
Basic principles of project work  
Study planning  
Developing expertise  
Transfer to working life

Learning Methods: Lectures, group work, online studies, planning and personal progress reviews.

Assessment Methods: Participation and completing all course work set

Bibliography: Study Guide, e-material, learning toolbox

## **(KLPV4Z) COMMUNICATION COMPETENCE 9 cr**

### **(KLPV001) Finnish/Business Communication Skills**

Credits: 3 cr                      Timing: 1st yr

Learning Objectives: Students will gain knowledge of the principles of communication and learn to express themselves clearly and in a modern goal-oriented way in writing and in speech.

Previous Learning: Word Processing

Contents: Oral and written communication:  
The structure and implementation of a presentation  
Academic speeches, use of voice, wordless communication  
The features of a good document  
Business correspondence for problem situations  
Job applications

Learning Methods: Contact teaching/groups

Assessment Methods: Book exam, participation in group work, oral and written exercises and assignments

Bibliography: Kansanen, Puheviestinnän perusteet  
Kylänpää & Piirainen, Liike-elämän kirjallinen viestintä

### **(KLPV004) Swedish/Business Swedish 1**

Credits: 3 cr                      Timing: 1st yr

Learning Objectives: Students will maintain and develop existing Swedish language skills for use in daily business tasks.

Previous Learning: Proficiency test

Contents: Spoken Swedish in the work place  
Training, structure of studies and contents  
Nordic business  
Company presentations

Job applications

Learning Methods: Small group teaching

Assessment Methods: Continuous assessment, written exam

Bibliography: To be announced

### **(KLPV003) English/Introduction to Business English**

Credits: 3 cr                      Timing: 1st yr

Learning Objectives: Students will be proficient in basic business English and they will come to understand the significance of language and interaction skills in international business relations.

Previous Learning: Proficiency test

Contents: Grammar review  
Commercial training  
The central grammar and vocabulary of Business English  
Internationalisation and cultural interaction in working life  
Job applications  
Company presentation

Learning Methods: Small group teaching

Assessment Methods: Continual assessment, oral presentation, written exercises and exam

Bibliography: Niskanen-Vetter-Urbom:  
Business Express

## **PROFESSIONAL STUDIES**

### **(KLAB1Z) ADVANCED BUSINESS COMPETENCE 21 cr**

#### **(KLAB002) Management Accounting**

Credits: 5 cr                      Timing: 2nd yr

Learning Objectives: Students will have knowledge of management accounting as well as the compilation and use of financial and profitability accounting.

Contents: Planning activities  
Monitoring profitability  
Cost accounting  
Investment accounting  
An introduction to activity-based accounting

Learning Methods: Lectures, e-learning and exercises

Assessment Methods: Exam and assignments

Bibliography: Jormakka, R. , Koivusalo, K., Lappalainen, J., Niskanen, M.

Laskentatoimi

**(KLAB004) Introduction to Production and Logistics**

Credits: 3 cr Timing: 1st yr

Learning Objectives: Students will understand logistical processes. They will be able to calculate central characteristics and will understand how the efficiency of logistics can be improved.

Contents: The basic concepts of production activities  
The basic concepts of logistics  
Warehouse and storage  
Deliveries and terms of delivery  
Characteristics  
Planning and developing logistics

Learning Methods: Blended methods

Assessment Methods: Exam and exercises or online studies

Bibliography: Handout  
Sakki J., Tilaus-toimitusketjun hallinta (2001)  
Karrus K., Logistiikka

**(KLAB005) Leadership**

Credits: 3 cr Timing: 2nd yr

Learning Objectives: This course covers management and leadership issues and provides students with an understanding of what people do in an organisation. Students will also learn to assess how their own actions affect others.

Contents: The role and tasks of a leader  
Guiding leadership theories  
The individual and organisation  
Groups and teams in an organisation  
Organisation culture  
Organisational structure models

Learning Methods: Lectures and assignments

Assessment Methods: Assignments and exam

Bibliography: To be announced in the course plan

**(KLAB008) Payroll Administration**

Credits: 3 cr Timing: 2nd yr

Learning Objectives: Students will be able to calculate salaries manually and using ADP applications.

Contents: Form and content of salary  
Overtime, fringe benefits, reimbursement of costs, annual holiday issues, employer payments, Nova salary calculation programme



Learning Methods: Group teaching

Assessment Methods: Exams, assignments, independent assignment

Bibliography: Eskola, A., Palkka - Työsuhteen ja palkanlaskennan perusteet  
Handouts

## **(KLAB006) Marketing Law**

Credits: 3 cr                      Timing: 3rd yr

Learning Objectives: Students will be conversant with marketing restrictions concerning consumer; competition procedure and prohibited competition restrictions concerning entrepreneur protection.

Contents: Consumer protection  
Entrepreneur protection  
Competition restrictions  
Authorities

Learning Methods: Online studies

Assessment Methods: Online assignments

Bibliography: To be announced in the course plan.

## **(KLAB012) Service Marketing**

Credits: 4 cr                      Timing: 2nd yr

Learning Objectives: To provide students with a comprehensive view of services marketing. Participants will gain a thorough understanding of the distinctive characteristics of services, whilst understanding the importance of services marketing in today's international business environment.

Contents: The service product  
The service encounter  
Services buying behaviour  
Service positioning and targeting Service quality  
Making services accessible to consumers The pricing of services  
Promoting services  
Managing capacity  
Service scapes

Learning Methods: Lectures, case studies

Assessment Methods: To be announced in course plan.

Bibliography: To be announced in course plan.

## **(KLA V2Z) ADVANCED COMMUNICATION COMPETENCE 13 cr**



Legal vocabulary

Learning Methods: Small group teaching Written task Oral presentation

Assessment Methods: Continual assessment, written and spoken presentations and a exam

Bibliography: Study handout

## **(KLA V002) English/English for Marketing**

Credits: 3 cr Timing: 2nd yr

Learning Objectives: Students will be proficient in the vocabulary required for different marketing situations and they will also activate their spoken presentation skills through product presentations and other marketing and sales promotion exercises.

Previous Learning: Basics of Business English

Contents: Customer service, Network sales  
Product presentation, trade fairs  
Marketing communication, sales promotion  
Distribution

Learning Methods: Small group teaching

Assessment Methods: Continual assessment, product presentation, written exercises and exam

Bibliography: To be announced in the progress plan

## **(KLA V004) English/English for Production Economics**

Credits: 3 cr Timing: 2nd - 3rd yr

Learning Objectives: Students will activate and proactise their written and spoken presentation skills in English and be conversant with the central topics vocabulary of production economics.

Previous Learning: Basics of Business English

Contents: Product life-cycle issues - from idea to the market  
Describing a production process  
Resolving problem situations  
Logistics  
Occupational safety

Learning Methods: Small group teaching

Assessment Methods: Continual assessment, written and spoken presentations and exam

Bibliography: Handout

## **(KLA V011) Swedish/Svenska i affärlivet 2**

Contents:

- Logistics
- E-trade
- Packaging
- Warehouse and storage control
- Forwarding and deliveries
- Business communication

Learning Methods: Small group teaching

Assessment Methods: Continual assessment, oral, presentation, written assignments and exam

Bibliography: To be announced in the course plan

## **(KLAM3Z) METHODOLOGICAL BUSINESS COMPETENCE 13 cr**

### **(KLAB010) R&D 1 Introduction to Development Activities**

Credits: 3 cr                      Timing: 2nd yr

Learning Objectives: Students will know the main methods used in the research based development work process.

Previous Learning: Personal Development Programme: Introduction to Project Work

Contents: Development-oriented thinking  
Development procedure and methods

Learning Methods: Lectures, assignments

Assessment Methods: Exam and assignments

Bibliography: To be announced in the course plan

### **(KLAM001) Statistics**

Credits: 4 cr                      Timing: 2nd yr

Learning Objectives: Students will be proficient in in handling statistical material, distribution numbers, common statistical methods, statistical tests, SPSS statistics programme use and interpretation of results.

Previous Learning: Students should know the basics of research but it is not strictly necessary

Contents: Handling and interpreting quantitative research material:  
Basic concepts and tables  
Statistical numbers  
Dependence: cross tabling, correlation analysis and regression analysis  
Test theory and statistical tests  
Use of statistics programme  
Individual assignment

Learning Methods: Lectures, exercises and independent online studies unit before course begins

Assessment Methods: Exams, exercises and assignment

Bibliography: Karjalainen, L., Tilastomatematiikka, 2004

### **(KLAM003) Academic Writing**



Liability  
Changes in company form  
Other restructuring issues

Learning Methods: Delivered online

Assessment Methods: Online exercises

Bibliography: To be announced in the progress plan

## **(KLV TJ02) Public Law**

Credits: 3 cr                      Timing: 2nd yr

Learning Objectives: Students will be conversant with the basic mechanisms of the legal system within the sphere of public law and the norms concerning the legal safeguard of individuals. This course also covers public power and official activities (state, municipalities), decision-making and appeal regulations.

Contents: Basic rights  
The structure and activities of an authority and the civil service  
Government and municipal administration  
Legal protection for citizens

Learning Methods: Lectures and assignments

Assessment Methods: Exam and assignments

Bibliography: To be announced in the course plan

## **(KLV TJ03) Procedural Law**

Credits: 4 cr                      Timing: 2nd yr

Learning Objectives: Students will possess knowledge of trial procedure concerning civil action and disputes, the handling, decision-making and procedural regulations for petitions and the set of norms governing enforcement.

Contents: Petitions  
Civil action  
Appeal  
Collection  
Bankruptcy

Learning Methods: Delivered online

Assessment Methods: Exam and assignments

Bibliography: To be announced in the progress plan

## **(KLV TJ04) Labour and Civil Service Law**

Credits: 3 cr                      Timing: 2nd yr

**Learning Objectives:** Students will know the laws and regulations concerning work and official post contracts, the special features, differences and similarities between them, the rights and duties of each partner, the most significant legal procedures and work and collective bargaining agreement systems.

**Contents:** Work and official post contract  
The creation, conditions and termination of a work and official post contract  
Work and collective bargaining agreements  
Work time and annual holiday issues  
Equality and confidentiality issues  
Joint action procedures

**Learning Methods:** Online studies

**Assessment Methods:** Online exercises

**Bibliography:** To be announced in the course plan

## **(KLV TJ05) Personal Taxation**

**Credits:** 3 cr                      **Timing:** 1st - 4th yr

**Learning Objectives:** Students will be conversant with the principles, procedures and appeal in personal taxation.

**Contents:** Tax liability  
Proportional and graded taxation  
Taxable income (capital gains and earned income)  
Deductible outgoings  
Tax declaration and appeal

**Learning Methods:** Online studies

**Assessment Methods:** Online exercises

**Bibliography:** To be announced in the course plan

## **(KLV TJ06) Follow-up Course in Bookkeeping**

**Credits:** 4 cr                      **Timing:** 2nd yr

**Learning Objectives:** Students will deepen their knowledge of bookkeeping and concentrate on separate aspects of this discipline. By the end of the course students will be able to cope with demanding bookkeeping tasks.

**Previous Learning:** Introduction to Accounting

**Contents:** Good bookkeeping  
Valuation of current assets and the principles of entering as an income item  
Planned depreciation and depreciation difference  
Provision and revaluation  
Financing entries  
Limited company  
Association

**Learning Methods:** Lectures and exercises





Taxation procedure  
Special issues

Learning Methods: Lectures and exercises

Assessment  
Methods: Exam and assignments

Bibliography: Äärilä, L. & Nyrhinen, R., Arvonlisäveroitus käytännössä

## **(KLV TJ10) Financial Statement Analysis**

Credits: 3 cr                      Timing: 3rd yr

Learning Objectives: Students will learn to draw conclusions concerning the profitability, liquidity and solvency of a company from financial statement information published by companies.

Previous Learning: Introduction to Accounting

Contents: Quick-analysis  
Traditional financial statement analysis  
Cash-flow analysis  
Interpretation of business ratios  
ADP-analysis programme

Learning Methods: Lectures and exercises

Assessment  
Methods: Exam and exercises

Bibliography: Niskanen, J., Niskanen, M., Tilinpäätösanalyysi  
Yritystutkimusneuvottelukunta, Yritystutkimuksen tilinpäätösanalyysi

## **(KLV TJ12) T&K 3 Product Development**

Credits: 6 cr                      Timing: 2nd - 3rd yr

Learning Objectives: Students will know how to develop products in cooperation with other fields and within teams including members from other sectors and fields. They will also know how to implement a product development project in practice.

Contents: Stages of a product development project  
Customer needs mapping  
Commoditization

Learning Methods: RDI - studies

Assessment  
Methods: Project documentation

Bibliography: To be announced in the course plan

## **(KLV MAZ) MARKETING AND ADVERTISING 43 cr**

### **(KLV MM01) Product, Price and Availability**

Bibliography: Havunen, Risto, Uusi näkökulma asiakkaaseen - oivaltamisen kautta tuloksiin, Edita 2000.  
Chitwood, Roy, Huipputason myyntitaito. Asiakaslähtöisen myyntityön 7 vaihetta, Oy Rastor Ab  
Further reading to be announced

**Learning Methods:** Contact teaching and group supervision. R&D&I module.

Assessment Methods: Planning, carrying out and reporting a research project

Bibliography: Solatie, Jim: Focusryhmät - kvalitatiiviset ryhmäkeskustelut strategisen markkinointitutkimuksen apuna, 2001.  
Further reading to be announced

## **(KLVMM06) Visual Planning and Printing Techniques**

Credits: 5 cr                      Timing: 3rd yr

Learning Objectives: Students will understand the principles of planning a company's visual identity. Students will know how to combine visual elements in different communication situations and can coordinate communication in practice.

Previous Learning: Students will become proficient in image manipulation and page folding.

Contents: Readability and typographical planning  
Layout and visual expression  
The basis of creating an impression in marketing communication  
Design management/house style  
Printer cooperation  
Posters as a tool of visual expression

Learning Methods: Contact teaching, assignments and study visits

Assessment Methods: Portfolio, planning a poster

Bibliography: Study handouts

## **(KLVMM07) Planning in Marketing**

Credits: 4 cr                      Timing: 2nd - 3rd yr

Learning Objectives: Students will understand campaign planning as part of the overall marketing planning process. They will be capable of planning, evaluating and carrying out different types of advertising campaigns.

Contents: Campaign planning as part of a company's marketing communication planning  
The stages of campaign planning and the main points of a commission  
The aims of the campaign  
Customer/target group analysis  
Media advertising and how to choose a form of advertising  
Time and action programme/budgeting

Learning Methods: Lectures, assignments, written assignments and visits

Assessment Methods: Written assignments and a larger campaign plan assignment

Bibliography: A study package, study handouts during classwork and separate background reading

## **(KLVMM08) Leading Strategic Marketing**

Credits: 4 cr                      Timing: 3rd yr

**Learning Objectives:** Students will understand the principles of strategic marketing management and leadership.

**Contents:** Marketing strategy as a concept  
Coordinating action processes  
Company offerings and business  
Marketing strategies  
Planning a development strategy

**Learning Methods:** Lectures and assignments, presentations

**Assessment Methods:** Assignments, exam

**Bibliography:** Aaker David: Strategic Marketing Management (2005)  
Further reading will be announced when the course begins.

## **(KLVMM09) Digital Marketing**

**Credits:** 4 cr **Timing:** 3rd yr

**Learning Objectives:** This course outlines the corner stones and main principles of digital marketing while providing an understanding of the importance of community based and engaged media in a company's marketing and business operations.

**Contents:** Marketing and the digital breakthrough  
Digital marketing as part of company strategy  
Channels and areas of digital marketing  
The processes of digital marketing

**Learning Methods:** Lectures, assignments, study visits

**Assessment Methods:** Assignments, written exercises and exam

**Bibliography:** Merisavo, Vesanen, Raulas, Virtanen: Digitaalinen markkinointi  
Salmenkivi, Nyman: Yhteisöllinen media ja muuttuva markkinointi 2.0

## **(KLV TJ12) T&K 3 Product Development**

**Credits:** 6 cr **Timing:** 2nd - 3rd yr

**Learning Objectives:** Students will know how to develop products in cooperation with other fields and within teams including members from other sectors and fields. They will also know how to implement a product development project in practice.

**Contents:** Stages of a product development project  
Customer needs mapping  
Commoditiation

**Learning Methods:** RDI - studies

**Assessment Methods:** Project documentation

**Bibliography:** To be announced in the course plan

Contents:

- Standards
- Projections and axonometry
- Cross sections
- Dimensions and tolerance
- Discipline-specific marks, symbols and graphs

Learning Methods: Lectures and assignments

Assessment Methods: Exam and assignments

Bibliography: Heikkilä M., Tekniset piirustukset  
Autio, A., Hasari, H., Koneenpiirustus ammattikorkeakouluille ja teknisille oppilaitoksille

## **(KLVTL15) Computer-aided Design**

Credits: 3 cr                      Timing: 2nd yr

Learning Objectives: Students will be able to use CAD software for 2D design with an awareness of the opportunities presented by computer-aided design

Contents: CAD systems and their features  
Basic drawing functions and commands  
Edit functions  
Dimensions  
Symbols and their use  
Printing drawings

Learning Methods: Small group teaching and exercises

Assessment Methods: Skills demonstration test (evaluation 1 - 5), assignments

Bibliography: Basics of Autocad as PDF files  
Further material will be indicated by the teacher

## **(KLVTL16) Construction Materials**

Credits: 4 cr                      Timing: 2nd yr

Learning Objectives: Students will understand the overall economic significance of modern materials in product manufacturing, cost structuring and use.

Contents: The common features of metals  
Material testing procedures  
Metals  
The general principles of polymers  
Technical plastics  
Technical ceramics  
Composite materials

Learning Methods: Lectures and group work

Assessment Methods: Exam and assignments

Bibliography: Koivisto, K., Laitinen, E., Niinimäki, M., Tiainen, T., Tiilikka, P., Tuomikoski, J.,  
Konetekniikan materiaalioppi

## **(KLVTL07) Quality Technology**



Contents:

- Introduction to maintenance
- Maintenance functions
- The maintenance and efficiency of maintenance
- Maintenance information systems
- Failure

Runnability

Learning Methods: Lectures and assignments

Assessment  
Methods: Exam and assignment

## **(KLVTL11) Export and Import Routines**

Credits: 3 cr                      Timing: 2nd yr

Learning Objectives: Students will know the basic routines and procedures in export/import trade, being able to negotiate terms and actions related to foreign trade.

Contents: Entry strategies, distributorship and agency contracts  
Quotations  
Incoterms  
Terms of payment  
Documents in foreign trade  
Transportation  
Customs clearance  
Insurance

Learning Methods: Online studies

Assessment  
Methods: Short tasks and assignments

Bibliography: Course material in the virtual studying environment and internet

## **(KLVTL17) Piece Work Handling Equipment**

Credits: 2 cr                      Timing: 2nd yr

Learning Objectives: Students will gain knowledge of equipment used in automated production such as conveyors, storage and dosing feeders

Contents: Introduction  
Different types of production systems  
Conveyors and piece storage  
Dosing feeder, turning equipment, and pallettes.

Learning Methods: Lectures, assignments and visit to industry

Assessment  
Methods: Exam, (evaluation 1 - 5), attendance and accomplished visit

Bibliography: Lecture handout  
Further material indicated by teacher

## **(KLVTL18) Robotics**

Credits: 3 cr                      Timing: 2nd yr

Learning Objectives: Students will gain an overview of the use of modern robots in piece production and in the workshop while also being able to apply and programme robots.

Contents:	Robot statistics Robot structures Grabbers and tools Robot sensors Use and programming of robots Application examples and peripheral devices Connecting robots to other automation systems Safety of robot systems
Learning Methods:	Lectures, exercises, lab. work and study visits
Assessment Methods:	Exam (evaluation 1-5), attendance and accomplished study visit
Bibliography:	Lecture handouts Kuivanen, R., Robotiikka, Suomen robotiikkayhdistys RY:n julkaisu, 1999 Salmelin, B., Temmes, J., Robottiautomaatio, Suomen robotiikkayhdistys RY:n julkaisu 9.

### **(KLVTL09) Project Management Skills**

Credits:	3 cr	Timing:	2nd yr
Learning Objectives:	Students will adopt a systematic and goal-oriented way of working that can be applied to the planning and management of one-off sets of assignments.		
Contents:	Management procedure General principles of project work Project plan structure Planning and supervision techniques and technology Use of IT in project management Schedule and time follow-up		
Learning Methods:	Lectures and assignments		
Assessment Methods:	Exam and assignments		
Bibliography:	Silfverberg, P., Ideasta projektiksi Virkki, P., Somermeri, A., Projektityö - kehittämisen moottori Pelin, R., Projektihallinnan käsikirja		

### **(KLV TJ13) T&K 3 Product Development**

Credits:	5 cr	Timing:	2nd -3rd yr
Learning Objectives:	Students will know how to develop products in cooperation with other fields and within teams including members from other sectors and fields. They will also know how to implement a product development project in practice.		
Contents:	Stages of a product development project Customer needs mapping Commoditisation		
Learning Methods:	RDI - studies		
Assessment	Project documentation		

**Bibliography:** Online material and other appropriate Internet sources of information

Contents:

- Colour theories
- Image manipulation basics - basic, editing and drawing tools
- Masks and layers
- Special tools and effects
- Filming and scanning

Planning, creating and assessing a publication  
 Copyright  
 Panorama 3D filming

Learning Methods: Lectures, group work, practical exercises

Assessment Methods: Exam, assignments, presentations

Bibliography: Laakso A., Paint Shop Pro X (+cd)  
 Flyktman R, Digikuvaajan käsikirja  
 Walker M., Barstow N., Digikuvan värinhallinta & -korjailu

## **(KLVY005) Management Communication**

Credits: 5 cr                      Timing: 2nd - 4th yr

Learning Objectives: Students will become familiar with a range of management communication forms and how to recognise and assess them.

Contents: Managing communication and interactive situations.  
 Spoken and wordless communication in management  
 Fear and uncertainty in communication.  
 Internal and external communication  
 Interest group analysis

Learning Methods: Group teaching and online teaching

Assessment Methods: Learning diary

Bibliography: Puro, Esimiehen viestintätaidot, Juholin, communicate!

## **(KLVO009) EU Law**

Credits: 3 cr                      Timing: 2nd yr

Learning Objectives: Students will gain an overview of the birth of the EU and its decision-making bodies, functions and their power. Students will be conversant with the main aims and leading principles of European law and its links with the Finnish legal system.

Contents: The birth and development of the EU  
 Functioning bodies and their responsibilities  
 The principles of European law and legal procedure

Learning Methods: Lectures and assignments

Assessment Methods: Exam and assignments

Bibliography: To be announced

## **(KLVY032) Financial Mathematics**

Credits: 3 cr                      Timing: 2nd - 4th yr

**Learning Objectives:** Students will be conversant with investment calculation, different forms of funding and investment calculations and how to determine annual percentage rates of interest.

**Previous Learning:** Business Mathematics

**Contents:** Investment procedures  
Interpreting and comparing results of different investment procedures  
Forms of funding  
Annual rates of interest  
Investment calculations  
Continuous compound interest calculation and payment flow  
Linear optimization  
Calculations using Excel

**Learning Methods:** Lectures and exercises

**Assessment Methods:** Exam and assignments

**Bibliography:** Karjalainen, L., Optimi -matematiikkaa talouselämän ammattilaisille, 2005

## **(KLVY095) Introduction to Public Contracts Legislation**

**Credits:** 3 cr **Timing:** 1st - 4th year

**Learning Objectives:** Students will know the basic principles of acquiring public contracts, the rules of procedure and the tendering process.

**Contents:** The general principles of the Public Contracts Act  
Methods of procurement  
Announcing procurements  
Tendering  
Appeal for amendment

**Learning Methods:** Online course

**Assessment Methods:** Online assignments

**Bibliography:** To be announced when the course begins.

## **(KLWY039) Personal Safety and Crime Prevention**

**Credits:** 3 cr **Timing:** 2nd - 4th yr

**Learning Objectives:** This course introduces students to central aspects of legislation and regulations concerning personal safety and crime prevention. Students will be able to recognise threats to personal safety and criminal threats and how to combat them. They will also be proficient in travel safety issues.

**Contents:** Threatening situations  
The safety of outsiders, clients  
The safety of key persons  
Recruitment and actions at the end of a work contract  
Travel safety  
Criminal activities aimed at a company's operations, staff or property

(Internal/external threat)  
 Cooperation with the authorities (police, insurance companies)  
 Actions in a criminal case  
 Legislation (use of force, citizen's arrest)

Learning Methods: Lectures and assignments

Assessment  
 Methods: Exam

Bibliography: To be announced

## **(KLVY030) Generally Accepted Accounting Principles**

Credits: 3 cr                      Timing: 2nd - 4th yr

Learning Objectives: Students will be able to apply rules and laws of accounting in practical situations.

Previous Learning: Introduction to Accounting

Contents: Good accounting principles:  
 Accountancy act  
 Accountancy statutory order  
 Accountancy Standards Board guidelines  
 Good accountancy principles

Learning Methods: Book exam

Assessment  
 Methods: Book exam

Bibliography: Leppiniemi, Hyvä kirjanpitolapa - Mikä on sallittua, mahdollista, kiellettyä? (uusin painos)  
 Articles provided by lecturer

## **(KLVY016) Effective Use of InDesign and Publisher**

Credits: 3 cr                      Timing: 2nd - 4th yr

Learning Objectives: Students will be proficient in the features of InDesign and Publisher desk-top publishing programmes, being able to make up newspaper announcements, adverts and other multi-part and form publications.

Contents: Editing and paging texts, text frame processing, graphics  
 Page templates i.e. basic style formats  
 Models  
 Paragraph styles  
 Tables  
 Publication indexes, references and tables of contents  
 Paging publications - from A4 forms to distinguished presentations

Learning Methods: Small group teaching

Assessment  
 Methods: Exam, assignments, independent tasks

Bibliography: Handouts



Bibliography: Background reading:  
Ståhle, Grönroos, Knowledge Management

Viitala, R., Henkilöstöjohtaminen ss. 1-223  
 Lumijärvi ym., Toimintojohtaminen - Activity Based Managementin suomalaisia sovelluksia  
 Ojala, L., Oppimisen etu - kilpailukykyä muutoksessa ss. 1-274  
 Other literature concerning leadership and management

## **(KLVY072) Public Administration**

Credits: 3 cr                      Timing: 1st - 3rd yr

Learning Objectives: Students will gain insight into the Finnish political system and how it works, state and municipal administration, public sector decision making processes, the provincial development programme and the operations of EU bodies

Contents: The basic principles of the political system  
 State administration  
 Municipal administration  
 EU bodies and the main points of the provincial development programme

Learning Methods: Independent online studies

Assessment Methods: Assignments completed and submitted for assessment online

Bibliography: Internet -sources

## **(KLVY079) Public Sector Economy**

Credits: 3 cr                      Timing: 2nd -3rd yr

Learning Objectives: Students will know the basic principles of public sector accounting particularly municipal accounting.

Contents: Strategic municipal planning  
 Municipal finances (e.g. budget, financial statement, VAT, financial monitoring, internal accounting)  
 Parish and state finances

Learning Methods: Lectures and exercises

Assessment Methods: Exam and exercises

Bibliography: Study handout

## **(KLVY071) Organisation Activities**

Credits: 4 cr                      Timing: 2nd - 4th yr

Learning Objectives: Students will be competent, active members of society and the community, while at the same time developing their interaction skills, and know the principles of being active in committees and associations

Contents: - membership and participation in the activities of the student union board  
 - the UAS system and decision making  
 - meeting and negotiation techniques

- arranging events and meetings

Learning Methods: Project learning

Assessment Methods: Report on student activities, participating in the board's activities

Bibliography: Opiskelijakunnan säännöt ja ohjesäännöt, SAMOK ry:n Publications and training materials, rules and regulations of associations and UAS legislation SAMOK ry

## **(KLVY041) Global Business Manners**

Credits: 3 cr Timing: 1st - 4th yr

Learning Objectives: Students will become familiar with business manners, unwritten rules and representation in different cultures. This course also covers how to behave appropriately in an international setting and how to welcome visitors from different cultures. Students will also learn about business codes of dress, travel, dining, meetings and seminar procedure.

Contents: Why are manners required?  
Do as the Romans do - business dress  
Dining and business etiquette  
International politesse and the ways of your client

Learning Methods: Online studies and assignments

Assessment Methods: Learning diary based on online course and one of the books concerning manners and etiquette

Bibliography: Fintra, Suomalainen ensivaikutelma, lehtileikkeet

## **(KLVY040) House and Estate Agency**

Credits: 3 cr Timing: 1st - 4th yr

Learning Objectives: Students will be conversant with the legal regulations concerning house and estate agencies.

Contents: Legislation  
Housing and property trade  
Consumer protection  
Special issues in house and estate agency

Learning Methods: Online course

Assessment Methods: Online assignments

Bibliography: To be announced

## **(KLVY061) Consolidated Financial Statement**

Credits: 3 cr Timing: 2nd - 3rd yr

Learning Objectives: Students will know the principles of compiling a consolidated financial statement.

Previous Learning: Introduction to Accounting

Contents: Consolidated financial statement

Learning Methods: lectures and exercises

Assessment  
Methods: Exam and assignments

Bibliography: Tomperi, S., Kehittyvä kirjanpitolaitto - oppikirja ja harjoituskirja

## **(KLVY035) Consumer Behaviour**

Credits: 3 cr                      Timing: 2nd - 4th year

Learning Objectives: Students will be conversant with the factors affecting a consumer's and an organisation's decision to purchase and with how to analyse factors that lead to the decision to purchase.

Previous Learning: Customer-oriented marketing

Contents: Consumer behaviour model  
Factors affecting consumer behaviour  
Reference groups and their influence  
Consumer decision making processes  
The purchasing process of an organisation and factors affecting the decision to buy

Learning Methods: Course delivered online (Moodle)(independent study)

Assessment  
Methods: Analysis assignments according to set tasks

Bibliography: Blythe, Essence of Consumer Behaviour  
Solomon, M. Bamossy, G. & Askegaard S: Consumer behaviour  
Students' selected reading

## **(KLVY034) Quality Management Tools**

Credits: 3 cr                      Timing: 3rd yr

Learning Objectives: Students will be conversant with the central principles of process leadership. They will be able to describe quality systems in terms of process and use quality management tools to assess and develop quality.

Contents: Core processes and business achievement capability  
Progress model for process leadership  
Ways of describing a process  
The Finnish prize for quality  
Benchmarking

Learning Methods: Lectures and exercises

Assessment  
Methods: Exam and assignments

Bibliography: Lecklin, Olli, Laatu yrityksen menestystekijänä

Contents:

- Publicity in the work of officials
- Privacy and data security
- Data security as a legal phenomenon
- Privacy and confidentiality in working life

Learning Methods: Delivered online

Assessment Methods: Course work assignments and exercises that must be submitted for evaluation

Bibliography: To be announced when the course begins

## **(KLVY012) Organizational Psychology**

Credits: 3 cr                      Timing: 2nd - 4th yr

Learning Objectives: Students will have in depth knowledge of organisational behaviour, being able to take into account the effects of organisation psychological factors on staff and management.

Contents: Leadership tasks and responsibility in conflict situations, dealing with problems in the working community, work satisfaction, encouragement and rewards and skills development.

Learning Methods: Online independent study using related literature. Students can also write the essay on another theme related to the subject as previously agreed with the teacher.

Assessment Methods: Online long essay returned for assessment

Bibliography: Background reading:  
Järvinen Esimiestyö ongelmatilanteissa;  
Ruohotie, Honka Palkitseva ja kannustava johtaminen, Järvinen Ammattina esimies;  
Other related literature chosen by student

## **(KLVY053) Payroll Administration**

Credits: 3 cr                      Timing: 2nd - 4th yr

Learning Objectives: Students will be conversant with manual and computer-aided payroll calculation.

Contents: Basis of salaries and how they formed  
Overtime  
Fringe benefits  
Reimbursement of expenses  
Annual holiday issues  
Employer's contributions  
Payroll administration documents  
Nova- wage calculation programme

Learning Methods: Small group teaching

Assessment Methods: Exams, assignments, independent task

Bibliography: Eskola, A., Palkka - Työsuhteen ja palkanlaskennan perusteet  
Handouts

## **(KLVY088) Commodification of Services**

Credits: 4 cr                      Timing: 3rd - 4th yr

**Learning Objectives:** Students will be proficient in the basic principles of service commoditisation and they will understand the opportunities that commoditisation offers to the commercial development of a company.

**Contents:** Forming a service product  
The progression of the commoditisation process  
Creating a product description and leaflet

**Learning Methods:** Contact teaching and independent study

**Assessment Methods:** Creating a description and leaflet for a new service product

**Bibliography:** Parantainen, Jari Tuotteistaminen - Rakenna palvelusta tuote 10 päivässä. Helsinki, Talentum 2007  
Sipilä, Jorma. Asiantuntijapalvelujen tuotteistaminen. Helsinki WSOY

## **(KLVO002) Family and Inheritance Law**

**Credits:** 3 cr **Timing:** 1st - 4th yr

**Learning Objectives:** Students will know laws and regulations concerning marriage, cohabitation, a child's legal status, property of the deceased, inheritance and gift taxation for application in practical situations.

**Contents:** Engagement, marriage, the legal status of the spouses, common law marriage  
The legal status of children, maintenance (affiliation), custody and visiting rights  
Testate succession  
Legacy law  
Drawing up deed of inventory, distribution of the estate, inheritance tax

**Learning Methods:** Online studies

**Assessment Methods:** Online assignments

**Bibliography:** To be announced in the course plan.

## **(KLVE003) Learning by Projects**

**Credits:** 5 cr **Timing:** 1st - 4th yr

**Learning Objectives:** This course grounds students in the art of team and project work, enabling them to generate ideas, plan, carry out and evaluate projects. They will be proficient in acquiring higher education level theoretical information appropriate to the contents of the project. Projects can also be implemented in the Intotalo business incubator. The amount of credits gained from this course depends on the size and extent of the project.

**Previous Learning:** Introduction to Project Work

**Contents:** Project idea and planning  
Project contents-based theory back-up  
Project implementation  
Project assessment  
Self-assessment

**Learning Methods:** Learning by doing, project work, reflection, can also be considered as an RDI course

Assessment Methods:	Learning the theory, compiling a project plan, active participation in the implementation of the project, reporting, assessment of own learning
Bibliography:	Kajaani University of Applied Sciences tool pack on the Internet Reading based on the project subject area

## **(KLVY066) Finance**

Credits:	5 cr	Timing:	2nd - 4th yr
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Learning Objectives: Students will understand the principles of financing and its main topics.

Previous Learning: Introduction to Finance

Contents: The basic questions in business financing  
Different debt instruments  
Structure and selection of finance  
Finance risks

Learning Methods: lectures, exercises

Assessment Methods: exam, case study

Bibliography: To be announced in the course plan

## **(KLVY096)**

Credits:	3 cr	Timing:	1st - 4th yr
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Learning Objectives: Students will know the most common criminal law decrees, its nomenclature, and initial investigation and criminal trial procedure, the sanction system and the most typical indications of an offence

Contents: General decrees of the criminal act  
Initial investigation and coercive measures  
Indications of an offence  
Sanctions  
Criminal trial proceedings

Learning Methods: Online studies

Assessment Methods: Online assignments

Bibliography: Pekka Koskinen Rikosoikeuden perusteet.  
Helsingin yliopiston oikeustieteellinen tiedekunta

## **(KLVY014) Risk Management**

Credits:	3 cr	Timing:	2nd - 3rd yr
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Learning Objectives: Students will gain knowledge of the different areas of risk management and be able to make a company risk management plan.

Contents: Risk analysis starting points, risk analysis, estimating commercial and other risks,



risk management, methods and decision making

Learning Methods: Independent online learning using appropriate available online material.

Assessment Methods: Online learning assignment - risk management plan and insurance exercises

Bibliography: Online material  
Arto Suominen, Riskienhallinta ja Kai-Erik Berg, Yrityksen riskinhallinta.  
Other literature concerning risk management

## **(KLVY087) Strategic Marketing**

Credits: 4 cr                                      Timing: 2nd - 4th yr

Learning Objectives: Students will understand the principles of strategic marketing thinking as a part of developing a company's business strategy.

Previous Learning: Basic studies in Marketing

Contents: Strategic marketing thinking as a part of strategic business leadership:  
- analysis of the business environment and competition  
- recognising customer needs  
- developing customer-oriented operations and products  
- creating and implementing a competitive marketing strategy

Learning Methods: Delivered as an online course, independent studies (Moodle)

Assessment Methods: Long essay consisting of the analysis of an example company

Bibliography: Aaker, David A & McLoughlin Damien: Strategic Market Management (2007 European Edition)  
Drummond, Graeme: Strategic marketing planning and control (2002)  
Tikkanen, H. & Vassinen, A. StratMark: Strateginen markkinointiosaaminen (2010)  
Students' own selected reading

## **(KLWY042) Finnish Culture**

Credits: 3 cr                                      Timing: 2nd yr

Learning Objectives: Students will be familiar with the Finnish way of life and its history and be able to apply this knowledge to the tourism industry.

Contents: Background to Finnish culture  
National and local culture  
Significant events, people, environments and phenomena.  
Finnish culture in tourism product development.

Learning Methods: Lectures and assignments. Course partly delivered online

Assessment Methods: Assignments and exam

Bibliography: To be announced in the course plan

Contents:

- Editing work books and tables
- Designing and editing diagrams and charts
- Statistics, funding and search functions and logical functions

Data base operations, filtering and compiling information, subtotals and pivot table  
Recording and editing functional macros  
Shared use of tools programmes

Learning Methods: Exam and assignments

Assessment Methods: Small group teaching

Bibliography: Kivimäki, Rousku, Excel - hyötykäyttäjän opas  
Lammi Outi, Excel 2007

## **(KLVY009) Statistical Research**

Credits: 3 cr                      Timing: 2nd - 3rd yr

Learning Objectives: Students will be conversant with the handling, analysis and outcome reporting of quantitative research material as well as with new methods of statistical research.

Previous Learning: Introduction to Statistics

Contents: All statistical material linked to a piece of research/thesis:  
Entering and handling material (SPSS)  
Statistical methods (SPSS)  
Interpretation of results  
Presenting and reporting on outcomes

Learning Methods: Lectures, exercises

Assessment Methods: Assignments, exam

Bibliography: Handout

## **(KLVY025) Special Issues in Auditing**

Credits: 3 cr                      Timing: 2nd - 4th yr

Learning Objectives: Students will possess in depth knowledge of auditing and auditing special issues.

Previous Learning: Introduction to Auditing

Contents: Auditing reports  
Bankruptcy  
Changes in company form  
Auditing a corporate financial statement

Learning Methods: Lectures and exercises

Assessment Methods: Exam and assignments

Bibliography: To be announced in the course plan

## **(KLVY020) Effective Use of Word and Adobe Acrobat Professional**

Contents:

- Contracts
- Quotations as a basis for commercial agreements
- Supply and delivery contracts
- Terms of payment
- Insurances
- Export and import customs routines
- International trade documents

Learning Methods: Web -course

Assessment Methods: Independent study in the Internet, completed and returned assignments

Bibliography: Pehkonen, E., Vienti- ja tuontitoiminta, web -course material and other material linked to the subject

## **(KLVY069) Communication in Student Recruitment**

Credits: 2 cr                                      Timing: 2nd - 3rd yr

Learning Objectives: Students will develop their interaction, presentation and group supervision skills. They will gain in depth knowledge of student recruitment and presentation skills.

Contents: The tasks and responsibilities of a peer to peer tutor, tutoring, interaction and presentation skills. Student recruitment.

Learning Methods: Project Learning

Assessment Methods: Active tutoring, learning diary and essay

Bibliography: To be agreed in conjunction with essay

## **(KLVY018) WWW Page Production**

Credits: 3 cr                                      Timing: 2nd - 4th yr

Learning Objectives: Students know how to plan and create web pages using the latest product, MS Expression Web 2

Contents: Main concepts and services of the Web  
Planning Web pages and their structure  
Use of the MS Expression Web 2 programme and HTML

Learning Methods: Lectures and exercises

Assessment Methods: Exam and assignments

Bibliography: To be announced in the course plan

## **(KLVL003) Corporate Communications**

Credits: 5 cr                                      Timing: 2nd - 4th year

Learning Objectives: Students will be able to handle external and internal briefings for a public organisation/company/project. The course emphasises the significance of providing information as part of wider integrated communication.

Contents: Introduction to corporate communications  
Internal and external communications  
Briefing and media relations  
Crisis communications  
Informative writing

Communication strategic planning as part of corporate communications as a whole

Learning Methods: Lectures, written assignments and study visits

Assessment Methods: Exercises and assignments, portfolio

Bibliography: Study handout and further reading e.g. Juholin Elisa, Communicare!

## **(KLVY077) The Special Features of Corporate Taxation**

Credits: 5 cr                                      Timing: 2nd - 3rd yr

Learning Objectives: Students will know how taxation is affected when a company changes form, undergoes a generation change or is restructured. Students will also be conversant with international taxation.

Previous Learning: Corporate Taxation and Financial Statement Planning

Contents: Differences in taxation of different types of companies  
Changing company form  
Capital transfer tax  
Consequences of value added tax  
Consequences of direct taxation  
Generation changes in business - taxation issues  
Restructuring  
Introduction to international taxation

Learning Methods: Lectures and assignments

Assessment Methods: Exam and assignments

Bibliography: Alhola, K., Koivikko, A. & Rätty, P., Tilinpäätöksen suunnittelu - Yritysverotus ja yritysjärjestelyt  
Articles - to be announced

## **(KLVK005) English/Academic Writing**

Credits: 3 cr                                      Timing: 2nd - 4th yr

Learning Objectives: To be able to write short academic texts in English, e.g. the abstract for the thesis and to be able to analyse source material and use help tools

Previous Learning: Basic and professional English studies

Contents: Sentence structure, fluent writing  
Text analysis, style  
Summaries, memos, reports  
Thesis abstract

Learning Methods: Small group sessions

Assessment Methods: Continuous assessment, return tasks, written exam

Bibliography: Handout

Previous Learning: Anfängerstufe Deutsch im Beruf I or proficiency test

Contents:	Basic grammar Everyday German Telephoning Emails German culture and business etiquette
Learning Methods:	Small group teaching
Assessment Methods:	Continuous assessment and written exam
Bibliography:	Kudel-Kyyhkynen: Einverstande 1 and study handout

### **(KLWK005) Italian for Beginners**

Credits:	5 cr	Timing:	1st - 4th yr
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Learning Objectives: To equip a complete beginner with the skills needed to communicate in practical everyday situations in Italian and to give some background information about Italy and its society and culture.

Contents:	Pronunciation, grammar and writing Service situations Culture
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Learning Methods: Small group teaching

Assessment Methods:	Continuous assessment and written exam
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Bibliography:	Espresso 1
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### **(KLVK020) Italian Business Communication**

Credits:	3 cr	Timing:	2nd - 4th yr
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Learning Objectives: This course covers spoken and written communication in business and students will improve their capabilities to understand, speak and write Italian.

Previous Learning: Beginners and continuation studies in Italian

Contents:	Job applications, job interviews Company presentations and routine correspondence.
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Learning Methods: Independent study, supervised distance learning

Assessment Methods:	Written exercises, written and spoken exam, listening comprehension test
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Bibliography:	Cherubini, N., L'italiano per gli affari
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### **(KLWK001) Spanish for Beginners - Curso de español elemental - nivel 1**

Credits:	5 cr	Timing:	1st - 4th yr
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Learning Objectives: To equip a complete beginner with the skills needed in practical everyday situations



and to give background information about Spain, its society and culture.

Contents: Basic grammar, pronunciation and written exercises  
Service situations  
Culture

Learning Methods: Small group teaching

Assessment Methods: Continuous assessment, written exam

Bibliography: to be announced later

### **(KLVK008) Continuation Course in Spanish**

Credits: 3 cr Timing: 1st - 4th yr

Learning Objectives: Students will improve their knowledge and skills in Spanish, including grammar, vocabulary, speaking skills and knowledge of Spanish culture and countries.

Previous Learning: Approved grade for 5 cr of basic studies in Spanish or earlier equivalent studies

Contents: Verbs, pronunciation  
travel, hobbies, trade  
Culture

Learning Methods: Small group teaching

Assessment Methods: Continuous assessment, written exam

Bibliography: to be announced later

### **(KLVK030) Swedish/Det låter bra!**

Credits: 3 cr Timing: 2nd - 4th yr

Learning Objectives: Students will develop their spoken Swedish so as to be able to participate in different types of discussions and conversations.

Previous Learning: Basic and professional Swedish studies

Contents: Speaking exercises through drama  
The topics of conversation will be agreed with the group

Learning Methods: Small group teaching

Assessment Methods: Evaluated conversation completed in pairs or other form of assessment as agreed.

Bibliography: Study handout

### **(KLVK015) German Grammar**

Credits: 3 cr Timing: 1st - 3rd yr

**Learning Objectives:** Students will gain in depth knowledge of German grammar and vocabulary enabling them to improve their speaking and writing skills.

**Previous Learning:** Anfängerstufe Deutsch im Beruf II or proficiency test

**Contents:**  
Verbs  
Adjectives  
Nouns  
Adverbs  
Pronouns  
Word Order  
Style

**Learning Methods:** Independent study

**Assessment Methods:** Written exam

**Bibliography:** Handout

### **(KLVK007) English Conversation**

**Credits:** 3 cr                      **Timing:** 2nd -3rd year

**Learning Objectives:** The student will diversify oral language skills and recognise variations of the English language

**Contents:**  
Conversation sessions on current topics from various fields.  
Possibly foreign discussion leaders.  
Oral presentation on a free-choice current topic and leading a conversation on the basis of the topic.

**Learning Methods:** Small group sessions Oral presentation

**Assessment Methods:** Conversational activity Oral presentation Oral group exam

**Bibliography:** To be agreed at the beginning of the course

### **(KLWY038) Español elemental - nivel 3**

**Credits:** 3 cr                      **Timing:** 1st - 4th yr

**Learning Objectives:** Students will strengthen and widen their knowledge and use of Spanish grammar and vocabulary, develop their spoken Spanish and acquire a variety of knowledge on Spanish-speaking countries and their cultures.

**Previous Learning:** Previously accomplished beginners' courses or equivalent studies/knowledge

**Contents:**  
Verb tenses and moods, family, everyday and work related situations, cultural perspectives

**Learning Methods:** Small group teaching

**Assessment Methods:** Continual assessment, written exam

**Bibliography:** To be announced

Contents: Students will be equipped with the skills needed to cope in service situations in business and in the tourism and hospitality business according to the requirements of German etiquette. They will be able to present the company's services and to provide

information about their own region and country.

Learning Methods: Small group teaching

Assessment Methods: Continual assessment and written exam

Bibliography: Study handout

### **(KLVK032) Swedish/Fakta inom din bransch**

Credits: 3 cr                      Timing: 2nd - 4th yr

Learning Objectives: Students have a deeper knowledge of their field of business in Swedish

Previous Learning: Basic and professional Swedish studies

Contents: Economic life  
Tourism services  
The world of business

Learning Methods: Independent study

Assessment Methods: Chat, comments and exercises in the moodle learning environment

Bibliography: Web-based material

### **(KLVK018) German/Facts about Finland**

Credits: 3 cr                      Timing: 1st - 4th yr

Learning Objectives: Students will improve their spoken and written German and their German vocabulary enabling them to provide varied information on Finland and to discuss Finland- related topics.

Previous Learning: Earlier studies in German are necessary

Contents: The history, nature, people and languages of Finland  
Economic life  
Culture  
Finland as a tourist destination  
Kainuu

Learning Methods: Independent study

Assessment Methods: Distance assignments and oral exam

Bibliography: Handout

### **(KLVK031) Swedish/Finland och Norden i nötskal**

Credits: 3 cr                      Timing: 2nd - 4th yr

Learning Objectives: Students will develop their Swedish skills and their knowledge of nordic business/tourism culture.

Previous Learning: Basic and professional studies in Swedish

Contents: The Nordic countries and the special features of their cultures.

Learning Methods: Independent study

Assessment Methods: Distance assignments and essay exam

Bibliography: Study handout

## **(KLWK002) French for Beginners**

Credits: 5 cr                      Timing: 1st - 4th yr

Learning Objectives: To equip a beginner with the French language skills required in various everyday situations and with knowledge of French culture.

Contents: Grammar, pronunciation and writing exercises  
Greetings, introductions, reception of visitors  
Restaurant, travelling  
Telephoning  
Time expressions

Learning Methods: Small group teaching

Assessment Methods: Continuous assesment, written exam

Bibliography: Eevi Nivanka, Soile Sutinen:  
Chez Marianne: French for Beginners.

## **(KLWK006) Français élémentaire - niveau de base 2**

Credits: 3 cr                      Timing: 1st - 4th yr

Learning Objectives: Students will develop their grammar use, vocabulary and speaking skills in French.

Previous Learning: 5 cr of approved basic studies or previous equivalent studies

Contents: Pronunciation and grammar exercises  
Customer service situations  
French table manners  
Communication, computer vocabulary  
Working life language

Learning Methods: Small group teaching

Assessment Methods: Continuous assessment, written exam

Bibliography: Eevi Nivanka, Soili Sutinen:  
Chez Marianne: French for Beginners

Assessment Methods:	Continual assessment, oral presentations, written assignments and exam
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Bibliography: Handout

## **(KLVK027) Landeskunde und Kultur**

Credits: 3 cr                      Timing: 2nd - 4th yr

Learning Objectives: Students will improve their German skills and their knowledge of German speaking areas and the main manners and etiquette of working life appropriate to the area.

Previous Learning: Geschäftsdeutsch für Fortgeschrittene

Contents: The special features of German etiquette and manners

Learning Methods: Independent study

Assessment Methods: Distance learning and written exam

Bibliography: Handout

## **(KLVK013 ) Introduction to Business Russian**

Credits: 3 cr                      Timing: 2nd - 3rd yr

Learning Objectives: Students will be proficient enough in Russian grammar to be able to understand and write basic business letters and other documents.

Previous Learning: Basic and continuation studies in Russian or equivalent to 8 cr Russian language studies

Contents: Grammar exercises  
Vocabulary and reading comprehension exercises  
Introduction to business correspondence

Assessment Methods: Continuous assessment, written exercises, written exam

Bibliography: Salenius, P., Liikekirjeet venäjäksi  
Binder, Kärnä jne Liikeviestinnän käsikirja  
Salenius P., Lehmuskallio A., Biznes grammatika

## **(KLVY091) Practice first**

Credits: 3 cr                      Timing: 1st - 3rd yr

Learning Objectives: Students will be able to name and use basic English grammar for speaking and writing to the level required in university of applied sciences professional English studies.

Contents: Basic English Grammar:  
Pronunciation  
Grammar terminology  
Tenses  
The passive voice  
The word order of sentences  
I and II conditional

Verbs  
Nouns  
Pronouns  
Adjectives

Learning Methods: Online studies and supervision (90%), contact teaching and supervision (10%)

Assessment Methods: All online exercises, final exam, 100% participation in contact sessions, written final exam

Bibliography: Material available online/in Moodle

## **(KLVY100) Uppdatera din svenska**

Credits: 3 cr                      Timing: 1st yr

Learning Objectives: Students will know the basic grammar of Swedish.

Contents: Swedish grammar

Learning Methods: Contact teaching and independent work, pair and group work

Assessment Methods: Active participation, exam

Bibliography: Handout

## **(KLWY049) French Grammar Exercises**

Credits: 3 cr                      Timing: 1st - 4th yr

Learning Objectives: Students will strengthen and broaden their proficiency in French grammar and vocabulary.

Previous Learning: High School short course or equivalent studies

Contents: Exercises in French grammar

Learning Methods: Guided independent studies

Assessment Methods: Written grammar exercises, written exam

Bibliography: Study handout

## **(KLWK003) Russian for Beginners**

Credits: 5 cr                      Timing: 1st - 4th yr

Learning Objectives: Students will be able to read and write the Cyrillic alphabet, both printed and hand written; They will know the basics of pronunciation and intonation and the main grammar structures of Russian, possessing the competence to cope with simple everyday speaking situations and easy service and tourism situations.

Contents: Reading and writing exercises  
Pronunciation and intonation exercises



Greetings, introductions, talking about yourself and your family  
 Service situations  
 Travelling

Learning Methods: Small group teaching: listening, pronunciation and writing exercises, pair-work

Assessment Methods: Continuous assessment, written tests

Bibliography: Alestalo, M., Kafe Piter 1  
 Alestalo, M., Venäjää matkailijoille

## **(KLVK012) Continuation Course in Russian**

Credits: 3 cr                      Timing: 1st - 4th yr

Learning Objectives: Students will learn to read, write and pronounce Russian fluently for conversing and communicating in service situations and on the telephone.

Previous Learning: Russian for Beginners

Contents: Numerals  
 Verbs  
 Adjectives and adverbs  
 Grammatical cases  
 On the phone  
 Hobbies  
 Sales and purchasing  
 Hotel and restaurant situations

Learning Methods: Small group teaching: listening, pronunciation and writing exercises, pair-work

Assessment Methods: Continuous assessment, written tests, oral test

Bibliography: Alestalo M., Kafe Piter 1  
 Alestalo M., Venäjää matkailijoille  
 Vassilieva E., Kto? Gde? Kogda? Intensiivinen puhutun venäjän peruskurssi

## **(KLWY048) Russian Continuation Course 2**

Credits: 3 cr                      Timing: 1st - 4th yr

Learning Objectives: Students will strengthen and widen their proficiency in Russian grammar and vocabulary, develop their spoken Russian and knowledge of Russian culture and ways of conducting business.

Previous Learning: Russian for beginners, Russian Continuation course (total 8 credits) or equivalent studies

Contents: Commercial texts  
 Vocabulary practice  
 Role-plays  
 Grammar exercises: verb tenses, declensions, cases and their use in the singular and plural

Learning Methods: Small group teaching

Assessment Methods:	Written exercises, spoken and written exam
Bibliography:	Study handout Alestalo, M., Kafe Piter 1

## **(KLOO1Z) THESIS 15 cr**

### **(KLOO001) Thesis**

Credits:	15 cr	Timing:	3rd - 4th yr
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**Learning Objectives:** The aim of the thesis is to develop and demonstrate the students' ability to apply their knowledge and skills to a practical task requiring expertise related to their professional studies. The thesis can be either a piece of research or developmental project or a project linked with working life and it must promote the students' professional development and be of use in working life.

**Previous Learning:** R&D 2 Quantitative and qualitative Research Introduction to Statistics

**Contents:** Thesis start-up seminar (during practical training)  
Approval of topic and topic analysis  
Compilation of thesis plan, presentation and acting as an opponent  
Thesis  
Seminars  
Maturity test

**Learning Methods:** RDI module

**Assessment Methods:** Topic analysis  
Compilation of thesis plan, presentation and acting as an opponent  
Research/development work or project and report (written and oral presentation)  
Seminars  
Maturity test

**Bibliography:** Hirsjärvi, S., Remes, P., Sajavaara, P., Tutki ja kirjoita  
<http://www.kajak.fi/opari>  
Thesis-specific literature

## **(KLHH1Z) PRACTICAL TRAINING 30 cr**

### **(KLHH001) Practical Training**

Credits:	30 cr	Timing:	3rd year
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**Learning Objectives:** The Polytechnic Act (16.6.2005/423) defines practical training as a part of University of Applied Sciences studies and according to this act the aim of the practical training period is to provide a supervised introduction to the main work tasks associated with their own specialism and to applying knowledge and competences in working life. The function of practical training is to support conscious development, practical working life and personal competence development. Practical training can be accomplished abroad or in Finland in a working environment related to the students' field of study.

**Previous Learning:** Basic studies and a sufficient amount of professional studies. Students are assumed

to have at least 90 cr (training in the autumn of the 3rd yr) and at least 115 cr (training period in the spring of the 3rd academic year). Attendance of practical training information briefings.

Contents:

Information briefings before the training period  
Approval of practical training contract, plan and work tasks form,  
Uninterrupted training period in a working environment appropriate to students' field of study  
Assignment  
Practical training diary  
Feedback seminar after period is over  
Practical training evaluation and report