

# English 2

- Code: ENG1TF001
- Extent: 2 cr
- Timing: Semester 3
- Language: English
- Level: core studies
- Type: compulsory

## Prerequisites

Students should have a basic grasp of English grammar to take this course.

## Learning objectives

The student will:

- learn advanced English grammar
- be able to apply this to texts related to the IT field

## Course contents

- Grammar exercises will be done in class, as will working with IT texts
- Short texts will be given as homework in which the students will correct errors in grammar, spelling, vocabulary, word order, etc.

## International dimension

The great majority of students taking this course are foreign, a number of them foreign exchange students

## Teaching and learning methods

Students will attend class two hours a week with an additional three hours reserved for homework.

## Teacher with the main responsibility for the course

Karl Robbins

## Course materials

Materials will be provided by the instructor.

## Assessment criteria

50% final exam

50% homework and participation

last modified 30.04.2010

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## English Level Course

- Code: ENG8TF003
- Extent: 3 ECTS (81 h)
- Semester: 1
- Language: English
- Level: core studies
- Type: free-choice

There is a compulsory level examination at the beginning of the course on the basis of which the student can be exempted. Credit points are given only to the students who complete the course successfully.

### Learning objectives

The objective is to bring the students' English skills to the level required in the other courses of the Degree Programme.

### Course description

Revision of the English grammar and ICT vocabulary.

### Prerequisites

No prerequisites.

### Course material

Material provided in class.

### Advisor

Anna Kimberley

### Teaching and learning methods

Contact hours 32 h

Independent studies 49 h

### Assessment

Verb test 70% correct

Final test 50% correct

In order to complete the course, both tests must be passed according to the above mentioned criteria.

Evaluation: PASS/FAIL

last modified 30.04.2010

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## Usability

- Code: SYS8TF250-1
- Extent: 5 cr (135 hours)
- Timing: Semester 6 or 7
- Language: English
- Level: Professional studies
- Type: Elective

### Learning outcomes

On completion of this course the student should be able to:

- State the components of user interface design
- Summarize trends in user-centered design
- Use a prototyping tool to create a user interface
- Complete a usability assessment or an end user ICT assessment
- Use an accessibility evaluator tool
- Develop an end user help interface

### Course description

User-centered design and usability are critical components in developing software and web sites. The term “usability” is broad. This course will focus on design principles relating to how computers interact with people, now and in the future, and applies those principles using developer and assessment tools.

### Course contents

- Human Computer Interaction(HCI)
- Usability Guidelines and Assessment
- Types of User Interfaces (UI)
- UI developer tools and prototype builders
- Accessibility Guidelines and Assessment

- End user ICT Literacy and embedded help
- Cross browser and platform compatibility

## **Prerequisites**

System development coursework (fourth semester IT courses or permission of teacher.)

## **Course materials**

- Class handouts
- Online tutorials or lectures
- Short current readings from organization websites, journals, e-books or books put into the library

## **Advisor**

Sandra Poindexter, visiting IT teacher from the United States

## **Teaching and learning methods**

The class is a mixture of theory and exercises to become familiar with tools and trends. Some lectures may be short recorded movies for online delivery in order to spend time in class on practical exercises and discussion.

- 64 h contact hours (4h /week)
- 69 h independent studies (4-5 h /week)
- 2 h exam
- Compulsory attendance at least 80 % of the contact hours

## **Assessment**

- 35% Assignments
- 25% Participation in class and compulsory in-class tasks
- 40% Exam

last modified 30.04.2010

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## **Work Placement**

- Code: PLA6TF001
- Extent: 30 ECTS (810 h)
- Timing: Semester 5
- Language: depends on the work placement organization
- Level: work placement

- Type: compulsory

The course follows the curriculum 2007

## **Prerequisites**

The student can start the work placement when all the compulsory and elective core studies have been completed. According to the normal study plan the work placement takes place after two years of studies.

## **Learning objectives**

The students:

- Familiarise themselves with the practical IT applications of the work placement organisation, as well as with the software development and maintenance practises

## **Course contents**

The work placement required of all students is an essential part of the studies. It accounts for 30 credit points (100 working days) and is completed without interruption.

The student applies for a job her-/himself. All IT work that supports the student's studies qualifies as work placement. Advisable areas are programming, system analysis, and design or similar development and maintenance tasks. PC- and network support tasks as well as computer operator's work are also suitable.

## **Teaching and learning methods**

Named work placement counsellors guide the student during the work placement. A work placement counsellor is appointed both by the work placement organisation and by Haaga-Helia. The student attends the meetings to be called by the Haaga-Helia's work placement counsellor prior/during and/or after the work placement, writes a work placement report and hands it in for evaluation to Haaga-Helia's work placement counsellor. In addition, the student answers the questions of the work placement feedback on Blackboard. This information is available to all students who want some help for looking for the work placement opportunity.

## **Teacher responsible**

Aila Koivisto-Junni, Pasila

## **Assessment criteria**

Passed (H)/failed (no grade)

last modified 30.04.2010

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# Introduction to IT strategic thinking

- Code: BUS4TF007
- Extent: 6 credit points ( 162 h)
- Timing: 7th semester
- Language: English
- Level: Professional studies
- Type: Compulsary for Business IT Consultant study path

## Prerequisites

The student has passed course SYS4TF070 ERP Application and Business Process Development

## Learning objectives

The student

- understands what are the core concepts and what they mean in the field of business and IT strategy
- understands what is strategic thinking concerning organization's IT decisions, IT development and IT usage.
- can explain the most important strategic issues concerning people, skills, organizing and organization, software, hardware and data network.
- is able to support an SME organization to enhance its overall IT management through strategic thinking
- understands what requirements IT vendors meet in strategic level at the customer interface
- is able to create well thought IT strategic development proposals for IT user and/or vendor organizations

## Course contents

- What is strategy and what is strategic thinking
- What are the focus areas of a user organization's IT strategy
- IT strategic thinking and planning
- ERP systems and IT strategy
- Infrastructure, architecture and IT Strategy
- Outsourcing and offshoring
- IT strategic organizational, competence and process issues
- What is strategic thinking from a vendor organization's point of view

## Teaching and learning methods

- Intensive course, with 5 days of contact hours plus one additional workshop day at the end of the semester
- Individual and group assignments
- Half day workshop during the two last weeks of semester (date and time to be announced to

students during the intensive days)

## Course material

### Course book

- The Executive's Guide to Information Technology, Second Edition By: Baschab, John; Piot, Jon; Carr, Nicholas G. Publisher: John Wiley & Sons Pub. Date: March 23, 2007 (in HAAGA-HELIA's Library SAFARI E-books)

### Additional material

- Strategic Alignment: Leveraging information technology for transforming organizations, J.C. Henderson, N. Venkatraman, IBM Systems Journal, vol 38, os 2&3, 1999
- Enterprise Architecture as Strategy, Jeanne W. Ross, Peter Weill, David C. Robertson, Harvard Business Scholl Press, 2006.
- Isaca.org / COBIT papers
- Analysing the Relationship Between IT Governance and Business/IT Alignment Maturity, Steven De Haes, University of Antwerp Management School, Wim Van Grembergen, University of Antwerp, [www.uams.be/itag](http://www.uams.be/itag)
- other articles delivered during the contact hours

## Cooperation with the business and other organisations

### Guest lectures

### Teacher

Jarmo Peltoniemi, Pasila Campus

Tuomo Ryyänen, Pasila Campus

### Assesment Criteria

- 50% individual contribution
- 50% assignments

last modified 18.10.2010

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## Database Project

- Code: ITP4TF105
- Extent: 6 ECTS (162 h)
- Timing: 4th semester

- Language: English
- Level: Professional studies
- Type: Elective

## **Starting level and linkage with other courses**

Developing an e-Business Application (ITP1TF013)

## **Learning outcomes**

Upon successful completion of the course, the student should be able to

- Discuss main issues related to physical database design and implementation in general
- Implement a fully working database for multi-user environment
- Explain the basic ways to improve database performance
- Explain the basic concurrency mechanisms and transaction programming issues
- Use SQL transactions efficiently to prevent the common anomalies to occur
- Explain transaction logging and recovery
- Do database backup and restore

## **Course contents**

- Physical database design, implementation, and maintenance
- Protecting database integrity
- Improving database performance
- Concurrency control and transaction management
- Transaction logging and recovery
- Database backup and restore

The course provides practical guidance to database implementation. The student will learn the main problems and solutions for creating a relational database for multi-user environment.

On this course the framework for database implementation is as follows:

- ISO SQL:2003 as the SQL reference
- A DBMS instance running in a virtual machine
- SQL Server 2008 Developer Edition.

## **Teaching and learning methods**

The classes are a mixture of lectures and practical exercises in a computer classroom. Weekly homework assignments are an important part of the course.

Contact hours 60 h

Self-study 102 h

Compulsory attendance at least 80 % of the contact hours

## **Recognition of prior learning (RPL)**



Portfolio and written exam

## **Teacher with the main responsibility for the course**

Kari Silpiö, Pasila

## **Course Materials**

Connolly, T. & Begg, C. 2005. Database Systems. A Practical Approach to Design, Implementation, and Management. 3rd edition (or later). Addison-Wesley.

Course pages and handouts.

For additional reading: Dewson, R. 2008. Beginning SQL Server 2008 for Developers: From Novice to Professional. New York: Springer-Verlag New York Inc.

## **Assessment criteria**

Written mid-term exam and final exam 80 %

Activity and assignments 20 %

Learning diary

last modified 30.04.2010

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# **Finnish and Communication 1**

- Code: COM4TF001
- Extent: 3 cr (81 h)
- Semester: 1
- Language: Finnish
- Level: core studies
- Type: compulsory \*

\* Required only of native Finnish students in the Bite programme.

## **Prerequisites**

Students should complete this course during the first semester.

## **Learning objectives**

Students are able to:

- Orient themselves to their studies and the working life by understanding the importance of

- communication in these areas
- Communicate appropriately both orally and in writing both as individuals and group members

## **Course contents**

- Basics of business communication
- Oral and written communication in the business profession
- Language correctness
- Different text types (memo, announcement, job application, CV)

The course is an introduction to business communication (especially information technology).

## **Teaching and learning methods**

Contact hours 32 h

Independent studies and group work 49 h

## **The teacher with main responsibility for the course, teacher/s**

Taija Hämäläinen, Pasila

## **Course materials**

Course material will be provided by the teacher.

The students are advised to use HAAGA-HELIA's leaflet Raporttien laatiminen HAAGA-HELIAssa and different language guides of their own choice.

## **Assessment criteria**

Attendance 20%

Regular attendance and active participation in class (80% attendance required)

Assignments 80%

Successful completion of all the assignments:

Assignment 1: SWOT-analysis

Assignment 2: Speech

Assignment 3: Memo

Assignment 4: Announcement

Assignment 5: CV and application letter

Assignment 6: Presentation

last modified 30.04.2010

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# Finnish and Communication 2

- Code: COM4TF030
- Extent: 3 cr (81 h)
- Timing: Semester 3
- Language: Finnish
- Level: core studies
- Type: compulsory \*

\* Required only of native Finnish speakers in the Bite programme.

## Prerequisites

Finnish and Communication 1 (COM4TF001)

## Learning objectives

The students will:

- Be able to prepare speeches and speak in different situations, especially in meetings and negotiations
- Be able to write documents related to these occasions
- Learn what should be taken into account when being responsible for a training situation
- Be able to write operating instructions related to IT business
- Write academic text using references

## Course contents

- Writing an operating instruction
- Writing documents related to negotiations and meetings and participating in them as an individual and as a member of a group
- The basics of adult education, planning a lesson and putting it into practise
- Speeches
- Writing using references and bibliographies
- Differences between traditional writing and writing in the internet

The course develops the students' oral and written communication skills. The students will also become acquainted with some documents in IT business. In addition to this, the course includes the basics of negotiating skills and adult education.

## Teaching and learning methods

Contact hours (2 hours/week) 32 h

Independent studies and group work 49 h

## **The teacher with main responsibility for the course, teacher/s**

Taija Hämäläinen, Pasila

## **Course materials**

Course material provided by the teacher. Students may also use the leaflet Raporttien laatiminen HAAGA-HELIAssa and grammar books and other material of their own choice.

## **Assessment criteria**

Spoken and written exercises. To pass the course the students must complete all exercises.

Exercises 80 %

Participation 20 %

last modified 30.04.2010

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# **Developing a Web Application**

- Code: ITP1TF012
- Extent: 12 ECTS (324 h)
- Timing: 2nd semester
- Language: English
- Level: Core studies
- Type: Compulsory

## **Starting level and linkage with other courses**

Introduction to Web Site Development (ITP1TF001)

Introduction to Programming (ITP1TF011)

## **Learning outcomes**

Upon successful completion of this course, the student should be able to

- Discuss main issues related to Web applications and database systems in general
- Write a simple single-user Web application based on the 3-layer architecture
- Use XHTML and ASP.NET to write the user interface
- Use C# to write the application logic
- Use SQL for simple database queries and updates
- Use Microsoft SQL Server to create and maintain database tables

## **Course contents**

- Introduction to Web application programming and ASP.NET
- Writing user interfaces using ASP.NET, XHTML, and CSS
- Writing application logic in C#
- Introduction to data management, database concepts, and relational databases
- Creating and maintaining database tables with SQL Server
- Writing basic database queries and updates in SQL

The course provides practical introduction to Web application development. During the course students will implement a small single-user Web application using ASP.NET, C#, and SQL Server in the Visual Studio integrated development environment. In addition to Web application programming, students will learn the basic concepts of data management, relational databases and SQL.

## **Teaching and learning methods**

The classes are a mixture of lectures, in-class exercises, group work, and practical programming sessions. Weekly homework assignments give students hands-on experiences in application development and data management.

Contact hours 168 h

Self-study 156 h (average 10 h / week)

Compulsory attendance at least 80 % of the contact hours.

## **Recognition of prior learning (RPL)**

Portfolio and exam

## **Teachers responsible**

Markku Kuitunen, Pasila

Kari Silpiö, Pasila

Juhani Välimäki, Pasila

## **Course materials**

Connolly, T. & Begg, C. 2005. Database Systems. A Practical Approach to Design, Implementation, and Management. 3rd edition (or later). Addison-Wesley.

Silpiö, K. 2008. C# Quick Reference Guide.

Course pages and handouts

Course materials from the courses Introduction to Web Site Development and Introduction to Programming.

## **Assessment criteria**

Activity and assignments

Written examinations  
Learning diary

last modified 30.04.2010

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## IT Swedish

- Code: SWE4TF044
- Extent: 3 cr (81 h)
- Timing: 2nd or 3rd Semester
- Language: Swedish
- Level: core studies
- Type: elective \*

\*required only of native Finnish speakers in the BIT-programme

### Prerequisites

SWE1TD061 Entry Level test or SWE8TD062 Intermediate Swedish.

### Learning objectives

The student:

- Becomes familiar with IT vocabulary as well as business vocabulary in both oral and written form
- Is able to discuss IT-related phenomena in Swedish

### Course contents

- Central IT-related subjects

### Teaching and learning methods

Contact hours 28 h  
Independent studies 53 h

### Recognition of Prior Learning (RPL)

If student consider having acquired such language skills (for example in working life) that correspond to the goals and contents of the course, they can discuss the Recognition of Prior Learning - procedures with their teacher.

## **Advisor**

Maarit Ohinen-Salvén, Pasila

## **Course materials**

Ohinen-Salvén M. 2008. Jobba med IT. Svenska för högskolor. Edita. Helsinki.

## **Assessment criteria**

Written grade: Written examination 60 %, acceptable distance assignments 40 %.

Oral grade: Group discussions 70 %, continuous assessment 30 %.

last modified 30.04.2010

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# **Business Case Development and Application Selection**

- Code: BUS8TF009
- Extent: 6 ECTS (162 h)
- Semester: 6th semester
- Language: English
- Level: Professional studies
- Type: Optional

## **Starting level and linkage with other courses**

Compulsory Business and IT studies have to be completed.

## **Learning outcomes**

Upon successful completion of the course, the student

- understands meaning of business and IT-strategies for the procurement of an application software.
- is able to participate in an procurement process of an application software.
- knows the IT 2000 Terms and conditions for the IT procurement.

## **Course contents**

- Business case: special features of the business
- Business and IT strategies as bases for the acquisition of an application

- Application selection life cycle - business needs, selection criteria for the acquisitions of a software product, market supply analysis and invitation for tenders, analysis of the tenders and selection
- Investment calculations
- Proposals for the acquisition of an application software
- IT2000 Terms and Conditions for IT Procurement

### **Cooperation with the business community**

- Demonstration of the software products.
- Visiting lectures

### **Teaching and learning methods**

A business case study, the project based learning and an exam.

Contact hours 40 h

Independent studies 118 h

Exam 2 h

### **Recognition of prior learning (RPL)**

is specified later

### **Teacher(s) responsible**

N.N

### **Course materials**

A business case.

An IT procurement book, named later.

IT2000 Terms and Conditions for Procurement.

Other material given by the teacher.

### **Assessment criteria**

Exam 40 %

Procurements project assignments 60 %.

last modified 30.04.2010

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# **ABAP Programming**



## **(SAP)**

- Code: ITP8TF037
- Extent: 3 cr (81 h)
- Timing: 3rd - 7th semester
- Language: English
- Level: professional studies
- Type: free-choice

This course follows the curriculum of 2007.

### **Starting level and linkage with other courses**

Basic Programming and SQL skills

### **Learning outcomes**

Student is able to:

- Understand the basic structure of an SAP System
- Use the ABAP Workbench Environment
- Write simple report programs using ABAP programming language
- Use the function library

### **Course contents**

- Introduction to the SAP System and SAPGUI user interface
- Fundamentals of the ABAP Programming Language, the ABAP Function Library and Open SQL

The study unit familiarizes students with the SAP System and the ABAP Programming Language.

### **Teaching and learning methods**

35 Contact hours (5 h/week)

46 Independent studies and consultation (5-6h/week)

### **Teacher**

Seija Wolfer

### **Course materials**

Course material in Blackboard

Keller, H., 2nd edition 2005. The Official ABAP Reference (Volume I and II). SAP Press

### **Assessment criteria**

Assignments 50 %

Final Exam 50 %

last modified 30.04.2010

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# Introduction to the Finnish Language 1

- Code: FIN4TF001
- Extent: 3 cr (81 h)
- Timing: 1st semester
- Language: English and Finnish
- Level: core studies
- Type: compulsory \*

\*Required only of foreign students in the Bite programme.

## Starting level and linkage with other courses

No previous knowledge of Finnish.

## Learning objectives

Upon successful completion of the course, the student;

- Gets an idea of the nature of Finnish language and learns strategic skills of learning Finnish
- Is able to deal with everyday social situations, handle simple shopping situations etc.
- Can introduce oneself, give basic information about oneself and ask simple questions

Target level A1. Level descriptions can be found at <http://www.haaga-helia.fi/en/studies/language-studies/levels-of-language-competence>

## Course contents

The course is an introduction to Finnish language and culture

- Pronunciation
- Greetings, basic small talk phrases
- Introducing oneself and telling about family, home etc.
- Nationalities, names of the countries
- Numbers, prices
- Family
- Asking questions and giving basic information in routine everyday situations
- Conjugation of some basic the verbs
- To have, to have not
- Partitive

- Some pronouns

## **Recognition of prior learning (PRL)**

The students who are in the Bite programme and already know Finnish, can pass the course by attending a level test during the orientation week in August.

## **Teaching and learning methods**

Contact hours 32 h (4 h / week): oral and written exercises individually and in pairs, group work  
Independent studies 49 h (6 h / week): homework and preparation for lessons, exams and assignments

## **Teacher responsible**

Taija Hämäläinen, Pasila

## **Course materials**

Provided by the teacher

## **Assessment criteria**

Active participation in lessons 20 %  
Small tests and/or assignments 30 %  
Final examination 50 %

last modified 30.04.2010

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# **Introduction to the Finnish Language 2**

- Code: FIN4TF002
- Extent: 3 cr (81 h)
- Timing: 1th semester
- Language: English and Finnish
- Level: core studies
- Type: compulsory \*

\*Required only of foreign students in the Bite programme.

## **Starting level and linkage with other courses**

Introduction to the Finnish Language 1 (FIN4TF001) or A1

## **Learning objectives**

Upon successful completion of the course, the student:

- Is able to deal with everyday social situations
- Increases his/her knowledge of the basics of Finnish language and culture
- Can understand and use basic expressions and simple sentences in routine everyday situations
- Is able to tell about his/her education and current studies

Target level A1+, Level descriptions can be found at <http://www.haaga-helia.fi/en/studies/language-studies/levels-of-language-competence>

## **Course contents**

The course is a continuation of FIN01F. It is an introduction to the Finnish language and the Finnish society.

- Telling about oneself and some personal matters (home, educational background, current studies)
- Prices, quantities and time expressions
- Verb conjugation in present tense, types 1 - 5
- Consonant gradation in verbs
- T-plural

## **Recognition of prior learning (RPL)**

The students, who are in the Bite programme and already know Finnish, can pass the course by attending a level test during the orientation week in August.

## **Teaching and learning methods**

Contact hours 32 h (4 h / week): oral and written exercises individually and in pairs, group work  
Independent studies 49 h (6 h / week): homework and preparation for lessons, exams and assignments.

## **Teacher responsible**

Taija Hämäläinen, Pasila

## **Course materials**

Provided by the teacher

## **Assessment criteria**

Active participation in lessons 20 %  
Small tests and/or assignments 30 %

Final examination 50 %

last modified 30.04.2010

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## **Finnish 3**

- Code: FIN4TF003
- Extent: 3 cr (81 h)
- Timing: 2nd semester
- Language: English and Finnish
- Level: core studies
- Type: compulsory \*

\*Required only of foreign students in the Bite programme.

### **Starting level and linkage with other courses**

Introduction to the Finnish Language 1 (FIN4TF001) and Introduction to the Finnish Language 2 (FIN4TF002) or A1+

### **Learning objectives**

Upon successful completion of the course, the student

- Can handle different social situations
- Can ask for information
- Can deal with simple situations likely to arise when travelling

Upon successful completion of the course, the student should be on his/her way towards level A2 in most of the language skill areas - speaking, listening, reading and writing. Level descriptions can be found at <http://www.haaga-helia.fi/en/studies/language-studies/levels-of-language-competence>

### **Course contents**

This course increases student's knowledge of Finnish language and culture. The purpose is for students to achieve basic language skills that enable them to cope in everyday situations and participate in everyday communication. Themes handled during this course are everyday life, work, shopping and ordering, travelling and local environment.

- Consonant gradation and other changes (in the stem) of nouns
- Have to do -sentences
- Local cases of nouns (Where? Where from? Where to?)
- Conditional forms of verbs

## **Recognition of prior learning (RPL)**

The students who are in the Bite programme and already know Finnish, can pass the course by attending a level test during the orientation week in August.

## **Teaching and learning methods**

Contact hours 32 h (4 h / week): oral and written exercises individually and in pairs, group work  
Independent studies 49 h (6 h / week): homework and preparation for lessons, exams and assignments

## **Teacher responsible**

Taija Hämäläinen, Pasila

## **Course materials**

Provided by the teacher

## **Assessment**

Attendance, active participation in lessons 20 %

Assignments 15 %

Examinations 65 %

last modified 30.04.2010

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# **Finnish 4**

- Code: FIN4TF004
- Extent: 3 cr (81 h)
- Timing: 2nd semester
- Language: Finnish
- Level: core studies
- Type: compulsory \*

\*Required only of foreign students in the Bite programme.

## **Starting level and linkage with other courses**

Introduction to the Finnish Language 1 (FIN4TF001), Introduction to the Finnish Language 2 (FIN4TF002) and Finnish 3 (FIN4TF003) or A1+

## **Learning objectives**

This course develops student's ability to understand and use Finnish language further and activates the language skills learned earlier. The purpose is that students will be encouraged and able to use Finnish in everyday situations.

Upon successful completion of the course, the student

- Can communicate in simple everyday situations requiring exchange of information on familiar matters
- Can tell about traditions and celebrating different holidays
- Can tell about his/her hobbies and free time
- Can express his/her feelings.

Upon successful completion of the course, the student should be at level A2 in most of the language skill areas - speaking, listening, reading and writing. Level descriptions can be found at <http://www.haaga-helia.fi/en/studies/language-studies/levels-of-language-competence>

## **Course contents**

Themes handled during this course are everyday life, travelling, celebrating different holidays in Finland and elsewhere, hobbies, free time and sports. The grammar studied during this course:

- Passive forms of verbs
- Pronouns
- Rections of verbs

## **Recognition of prior learning (RPL)**

The students who are in the Bite programme and already know Finnish, can pass the course by attending a level test during the orientation week in August.

## **Teaching and learning methods**

Contact hours 32 h (4 h / week): oral and written exercises individually and in pairs, group work  
Independent studies 49 h (6 h / week): homework and preparation for lessons, exams and assignments

## **Teacher responsible**

Taija Hämäläinen, Pasila

## **Course materials**

Provided by the teacher

## **Assessment criteria**

Attendance, active participation in lessons 20 %

Assignments 15 %  
Examinations 65 %

last modified 30.04.2010

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# Finnish for Business Purposes 1

- Code: FIN8TF700
- Extent: 3 cr (81 h)
- Timing: 4th - 7th semester
- Language: English
- Level: core studies
- Type: compulsory / elective / free-choice

Finnish for Business Purposes 1 is elective for non-native speakers of Finnish. The course was previously called Finnish 7.

Finnish for Business Purposes 1 is organized in co-operation with HSE (Helsinki School of Economics, Runeberginkatu 14-16, 00100 Helsinki), where the same course is called Finnish Business Communication 1. The course is arranged twice a year: during the first period of the autumn term, and during the first period of the spring term. More precise information about the course schedule, classrooms etc. can be found in HAAGA-HELIA's Excel-timetable. The academic year at HSE differs from HAAGA-HELIA's academic year (courses might begin earlier or later, no lessons during HSE's examinations week, there are no intensive weeks etc.), and students participating in HSE's courses have to follow their schedule.

## Starting level and linkage with other courses

Common European Framework of Reference (CEF), minimum starting level: B1 (See detailed level descriptions of language competence at: [http://www.coe.int/T/DG4/Portfolio/?L=E&M=/main\\_pages/levels.html](http://www.coe.int/T/DG4/Portfolio/?L=E&M=/main_pages/levels.html)). The student should master all basic structures of the Finnish language. Please contact your Finnish language teacher at HAAGA-HELIA if you have questions about the prerequisites.

## Learning objectives

The student will be able to write e-mails in Finnish. He/she will know the basics of meeting techniques. He/she can give a brief presentation of a company. His/her business vocabulary will be increased.

## Course contents

The course introduces the fundamentals of oral and written business communication in Finnish. It provides training in spoken and written communication fluency, grammatical accuracy, and business terminology (e-mail, informative business presentations, meetings, memos, advanced



Finnish grammar). The grammar will be determined by the needs of the students.

## **Teaching and learning methods**

Contact hours 32 h, mandatory attendance. Independent studies 49 h: homework, assignments and preparation for lessons and exams.

## **Teacher responsible**

Susanna Virtanen (Helsinki School of Economics)

For more information at HAAGA-HELIA, please contact Taija Hämäläinen.

## **Course materials**

Course materials provided by the lecturer.

## **Assessment criteria**

Assignments 20 %. Exams 50 %. Class contribution 30 %.

last modified 30.04.2010

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# **Finnish for Business Purposes 2**

- Code: FIN8TF800
- Extent: 3 cr (81 h)
- Timing: 4th - 7th semester
- Language: English
- Level: core studies
- Type: free-choice

Finnish for Business Purposes 2 is elective for non-native speakers of Finnish. The course was previously called Finnish 8.

Finnish for Business Purposes 2 is organized in co-operation with HSE (Helsinki School of Economics, Runeberginkatu 14-16, 00100 Helsinki), where the same course is called Finnish Business Communication 2. The course is arranged twice a year: during the second period of the autumn term, and during the second period of the spring term. More precise information about the course schedule, classrooms etc. can be found in Haaga-Helia's Excel-timetable. The academic year at HSE differs from Haaga-Helia's academic year (courses might begin earlier or later, no lessons during HSE's examinations week, there are no intensive weeks etc.), and students participating in HSE's courses have to follow their schedule.

## **Starting level and linkage with other courses**

Common European Framework of Reference (CEF), minimum starting level: B1 (or Finnish for Business Purposes 1 Finnish 7 = Finnish Business Communication 1 at HSE). See detailed level descriptions of language competence at

[http://www.coe.int/T/DG4/Portfolio/?L=E&M=/main\\_pages/levels.html](http://www.coe.int/T/DG4/Portfolio/?L=E&M=/main_pages/levels.html) Please contact your Finnish language teacher at HAAGA-HELIA if you have questions about the prerequisites.

## **Learning objectives**

The student can participate in a negotiation or argumentation discussion and can express his/her opinion. He can write a memo and a report. He knows the characteristics of persuasive language.

## **Course contents**

The course focuses on the fundamentals of oral and written business communication in Finnish. It provides training in spoken and written communication fluency, grammatical accuracy, and business terminology (product demonstrations, negotiations, memos, reporting, advanced Finnish grammar). The grammar will be determined by the needs of the students.

## **Teaching and learning methods**

Contact hours 32 h, mandatory attendance. Independent studies 49 h: homework, assignments and preparation for lessons and exams.

## **Teacher responsible**

Susanna Virtanen (Helsinki School of Economics)

For more information at HAAGA-HELIA, please contact Taija Hämäläinen.

## **Course materials**

Course materials provided by the lecturer.

## **Assessment criteria**

Assignments 20 %. Exams 50 %. Class contribution 30 %.

last modified 30.04.2010

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# **Spoken Finnish**

- Code: FIN8TF100

- Extent: 3 cr (81 h)
- Timing: 3rd semester or later
- Language: Finnish
- Level: professional studies
- Type: free choice

## **Starting level and linkage with other courses**

Finnish 1–5 or A2 (See detailed level descriptions of language competence at: <http://www.haaga-helia.fi/en/studies/language-studies/levels-of-language-competence>)

## **Learning objectives**

Upon successful completion of the course, the student

- gain self-confidence to be relaxed and converse more spontaneously in Finnish
- deliver various kinds of speeches (impromptu, informative)
- demonstrate an ability to express oneself more effectively in business and social situations
- improve pronunciation and enhance vocabulary of especially the ICT-field.

## **Course contents**

The course is designed to activate and enhance oral skills in Finnish as well as to give practice in Finnish conversation by focusing on situations in different areas of everyday life.

Students read short articles and discuss them, give small individual/group presentations and participate in group discussions and simulations, for which they prepare at home and in class.

## **Teaching and learning methods**

- Contact hours 32 h (4 h/week): pair and team assignments, team discussions, oral presentations
- Independent studies 49 h (6h/week): homework and preparation for lessons, discussions, presentations and exercises

## **Teacher responsible**

Taija Hämäläinen, Pasila

## **Course materials**

Provided by the teacher

## **Assessment**

Attendance 20%

Regular attendance and active participation in class (80% attendance required)

- Points are given when you are present in class.
- In the case of documented illness, you will receive points.

Assignments 80%

Successful completion of all the assignments:

Assignment 1: Impromptu Speech

Assignment 2: Group Presentation / Simulation

Assignment 3: Listening Comprehension

Assignment 4: Discussion Contribution

Assignment 5: Speech

last modified 30.04.2010

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## Linux Basics

- Code: DAT8TF063
- Extent: 3 cr (81 h)
- Timing: 4th semester
- Language: English
- Level: professional studies
- Type: elective

This course follows the curriculum of 2005.

### Starting level and linkage with other courses

No Linux experience required.

Student learns pre-exam material given in course web page and passes the pre-exam on the first class. Pre-exam was created, because there are often more students coming to the course than there are places.

### Learning objectives

Upon successful completion of the course, the student

- Can install a Linux based workstation with software
- Can use command line interface
- Can install 1-2 most important daemons
- Knows the idea of Free software, knows the main features of the most important Free licenses
- Knows how to keep learning Linux independently

## **Course contents**

- Installation
- Linux as a workstation
- Command line interface
- Administration and package management
- Apache Web-server, LAMP
- Remote control SSH client and server
- Programming tools

During this course students get acquainted with the Linux operating system and the most important Free programs. Linux is used both as a server and as a workstation.

## **Cooperation with the business community**

Course takes small part in the international development by reporting bugs and bug bypasses upstream.

## **Teaching and learning methods**

Contact hours 32 h  
Independent work 49 h

Contact hours in a computer class, independent exercises in a computer class. Exercises will be documented.

## **Alternative completions**

A student knowing Linux well beforehand can pass the course by completing a project. The project is only meant for those who already have the skills taught in the course, as there is no hands on guidance available for alternative project. To pass the course with an alternative project, student must get the project accepted on the first class.

## **Recognition of prior learning (RPL)**

Earlier knowledge and skills can be shown with a Linux project as described above.

## **Teacher responsible**

Tero Karvinen, Pasila [www.iki.fi/karvinen](http://www.iki.fi/karvinen)

## **Course materials**

Material distributed during the course, including links.

## **Assessment criteria**

Exercises 50 %

Exam 50 %

## Feedback

Written course feedback is collected twice a course. Major improvements to course have been made with the help of course feedback: even more interactivity into teaching; interleaving theory and practical exercises; bigger part of homework as mandatory; pre-exam to deal places fairly when there is more demand than places in the course.

last modified 30.04.2010

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## Finnish 5

- Code: FIN4TF005
- Extent: 3 cr (81 h)
- Timing: 3rd Semester
- Language: English and Finnish
- Level: core studies
- Type: compulsory \*

\* Required only of foreign students in the BITE programme.

### Starting level and linkage with other courses

Introduction to the Finnish Language 1 (FIN4TF001), Introduction to the Finnish Language 2 (FIN4TF002), Finnish 3 (FIN4TF003), Finnish 4 (FIN4TF004) or A2

### Learning outcomes

This course develops student's ability to understand and use Finnish language further and activates the language skills learned earlier. The students are encouraged and able to use Finnish in everyday situations.

Upon successful completion of the course, the student

- Can introduce his/her own culture or other topics of interest
- Knows the basics of Finnish working life and job application process
- Has experience of preparing and having a short presentation in Finnish
- Can tell about his/her past
- Develops vocabulary and speaking skills, and also the knowledge of Finnish grammar.

Upon successful completion of the course the students should be at level A2+ in most of the language skill areas - speaking, listening, reading and writing. Level descriptions can be found at <http://www.haaga-helia.fi/en/studies/language-studies/levels-of-language-competence>

## **Course contents**

Themes handled during the course are Finnish working life, history and travelling, presentations. The grammar which is studied during the course:

- past tense forms of verbs (simple past and perfect tenses)
- object
- translative.

## **Recognition of prior learning**

The students who study in the BIT programme and already know some Finnish can pass the course and get the credits by attending an entry level test during the orientation week in August.

## **Teaching and learning methods**

Contact hours 32 h: oral and written exercises individually and in pairs, group work.  
Independent studies 49 h: homework, assignments and preparation for lessons and exam.

## **Teachers responsible**

Taija Hämäläinen, Pasila

Tarja Paasi-May, Pasila

## **Course materials**

Material will be provided by the teacher.

## **Assessment criteria**

Attendance, active participation in lessons 20 %

Assignments 30 %

Examination(s) 50 %

last modified 31.05.2010

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# **Finnish 6**

- Code: FIN4TF006
- Extent: 3 cr (81 h)
- Timing: 3rd semester
- Language: English and Finnish
- Level: core studies

- Type: compulsory \*

\* Required only of foreign students in the BITE programme.

## **Starting level and linkage with other courses**

Introduction to the Finnish Language 1 (FIN4TF001), Introduction to the Finnish Language 2 (FIN4TF002), Finnish 3 (FIN4TF003), Finnish 4 (FIN4TF004), Finnish 5 (FIN4TF005) or A2+

## **Learning outcomes**

This course develops student's ability to understand and use Finnish language further and activates the language skills learned earlier. The students are encouraged and able to use Finnish in everyday situations.

Upon successful completion of the course, the student

- Can introduce his/her own culture or other topics of interest
- Knows the basics of job application process in Finnish
- Has experience of preparing an oral summary of a newspaper article / piece of news
- Can tell about his/her past
- Develops vocabulary and speaking skills, and also the knowledge of Finnish grammar.

Upon successful completion of the course the students should be at level A2+, on their way to level B1 in most of the language skill areas - speaking, listening, reading and writing. Level descriptions can be found at <http://www.haaga-helia.fi/en/studies/language-studies/levels-of-language-competence>

## **Course contents**

Themes handled during the course are Finnish working life, CV and job application, news, health and sickness.

The grammar which is studied during the course:

- object
- imperative forms of verbs
- pluperfect forms of verbs
- 3. infinitive forms of verbs
- comparison of adjectives.

## **Recognition of prior learning (RLP)**

The students who study in the BIT programme and already know some Finnish can pass the course and get the credits by attending an entry level test during the orientation week in August.

## **Teaching and learning methods**

Contact hours 32 h: oral and written exercises individually and in pairs, group work.



Independent studies 49 h: homework, assignments and preparation for lessons and exam.

### **Teachers responsible**

Tarja Paasi-May, Pasila

Taija Hämäläinen, Pasila

### **Course materials**

Material will be provided by the teacher.

### **Assessment criteria**

Active participation in lessons 20 %

Assignments 30 %

Examination(s) 50 %

last modified 26.10.2010

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## **Intercultural Awareness**

- Code: CUL1TF001
- Extent: 3 cr (81 h)
- Timing: 1st semester
- Language: English
- Level: core studies
- Type: compulsory

### **Starting level and linkage with other courses**

None

### **Learning outcomes**

After completing this course, the student will

- be familiar with cultural layers and differences
- know how culture influences on human behaviour and communication
- know the main features of the Finnish culture
- know how culture has an impact on international teamwork and negotiations

## **Course contents**

- Culture as a concept & the layers of culture
- Hofstede's, Lewis' and Trompenaars' dimensions
- Intercultural communication inc. work communication
- Main features of the Finnish culture and communication
- Multicultural teams and meetings

Having worked through the literature and the activities of the course, the student should be able to increase the awareness of his/her own efficiency in the multicultural study environment and workplace. Furthermore, the student should be able to change styles in accordance with the requirements and be able to assume accommodating or collaborating styles. The student is able to avoid or reduce conflict in intercultural communication and can be proactive in order to avoid uncertainty and business conflict.

## **Cooperation with the business community**

Cooperation classes and assignment with the English course of Finnish TIKO students.

## **Recognition of prior learning (RPL)**

If the student has worked in a multicultural company and has theoretical knowledge concerning the area of intercultural awareness he/she can show the prior learning in an interview, with work certificates and by a written report.

## **Teaching and learning methods**

26 h contact lessons

55 h self-study and assignments

## **Teacher responsible**

Tarja Paasi-May, Pasila

## **Course materials**

Eckert, Susan 2006. Intercultural communication. Thomson South-Western

Hofstede, G. 1991. Cultures and organizations. Software of the mind. McGraw-Hill.

Lewis, R. 1995. When cultures collide.

Samovar, L.A., Porter, R.E. 1997. Intercultural communication. Wadsworth Publishing Company

Schneider, Susan C., Barsoux, Jean-Louis 2003. Managing across cultures. Prentice Hall

Trompenaars, F., Hampden-Turner C. 1997. Riding the waves of culture. Understanding cultural diversity in business. London. Nicholas Brealey Publishing.

Trompenaars, F., Hampden-Turner C. 2004. Managing people across the cultures. Chichester Capstone

Newspaper articles

## **Assesment criteria**

30 % attendance

70 % self-study and assignments

last modified 30.04.2010

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## **Building a Server Environment**

- Code: DAT1TF012
- Extent: 3 cr (81h)
- Timing: 4th semester
- Language: English
- Level: core studies
- Type: compulsory

### **Starting level and linkage with other courses**

Operation and Practice of an Information Network (TIE29F) or Managing User Workstation (DAT1TF011).

### **Learning outcomes**

Upon successful completion of the course, the student

- Can install and take in use servers
- Can administer the users of the network and distribute the resources of the server to the users
- Will become familiar with the Windows environment
- Elective exercises can include tasks for students majoring in e.g. system design. This will be agreed upon at the beginning of the course.

### **Course contents**

- Installing and configuring Windows servers and server software: Web Server, Mail Server
- Server management: administering users and rights, printing and shared directories
- Management of an active directory: connecting the workstation to the domain, management of organization units and group practices
- Management of the Windows network
- Planning a Local Area Network (exercise)

### **Teaching and learning methods**

Contact hours (32 h) including the theory lessons and the presentation of the assignments and feedback sessions and an introduction to the whole study unit.

Independent exercises and studies (49 h) consist of independent laboratory work and the documentation of the work.

The student works independently during the laboratory session. The completion of the laboratory work in due time requires some examination of the assignment and the related material in advance. The student documents and returns all exercises to the advisor. The arrangements are described in detail at the beginning of the course.

### **Recognition of prior learning (RPL)**

Recognition of prior learning is a process whereby, through assessment, credit is given to learning which has already been acquired in different ways, e.g. with earlier studies or working experience. RPL gives a student an opportunity to demonstrate his/her knowledge and skills. A student displays with the competence demonstration that s/he manages the course objectives and contents mentioned in the course description. It is possible to participate in the competence demonstration only once before taking the course. A competence demonstration is assessed on the scale from 1 to 5.

### **Teacher responsible**

Olavi Korhonen, Pasila

### **Course materials**

Course web pages. Material distributed during the course.

### **Assessment criteria**

- Exam 50%
- Homework 20 %
- Laboratory exercises 30 %

last modified 30.04.2010

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## **Web Security**

- Code: SYS8TF011
- Extent: 5 cr (135 h)
- Timing: 6th- 7th semester
- Language: English
- Level: professional studies
- Type: elective

### **Starting level and linkage with other courses**

Building a Business IT Network (DAT2TF043) Operation and Practise of an Information Network (DAT2TF029), Computer Organisation (DAT1TF001). Corporate and IT Security (SYS8TF010). Compulsory studies and work placement.

## **Learning objectives**

The student understands how to protect information and information systems from unauthorized access, use, disclosure, disruption, modification and destruction.

## **Course contents**

- Theoretical work is done from an agreed subject.
- Practical work is based on theoretical work.

## **Teaching and learning methods**

The course will be carried out as a seminar.

- Theory work and report 60h
- Laboratory work and report 60 h
- Work presentations 15 h.

## **Recognition of prior learning (RPL)**

Recognition of prior learning is a proces whereby, through assessment, credit is given to learning which has already been acquired in different ways, e.g. with earlier studies or working experience. RPL gives a student an opportunity to demonstrate his/her knowledge and skills. A student displays with the competence demonstration that s/he manages the course objectives and contents mentioned in the course description. It is possible to participate in the competence demonstration only once before taking the course. A competence demonstration is assessed on the scale from 1 to 5.

## **Teacher responsible**

Olavi Korhonen, Pasila

## **Course materials**

Course material will be provided by the teacher.

## **Assessment criteria**

Theory work and report 50%  
Laboratory work and report 50%

last modified 30.04.2010

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# Financial Management and Accounting processes

- Code: BUS4TF005
- Extent: 6 ECTS ( 162 h)
- Timing: 7th semester
- Language: English
- Level: Professional studies
- Type: Compulsary

## Starting level and linkage with other courses

The student has passed course ERP Application and Business Process Development (SYS4TF070)

## Learning outcomes

Upon successful completion of the course, the student

- is familiar with the basic accounting concepts and is able to identify and model common accounting processes
- understands the importance of accounting and accounting processes in different business environments
- has a solid understanding of the accounting module of Enterprise Resource Planning (ERP) systems
- has a good knowledge of Microsoft Dynamics Nav functionality regarding the accounting processes and has the basic skills to customize the accounting processes in Microsoft Dynamics Nav

## Course contents

- The basic accounting principles in the business environment
- Accounting process identification, analysis and modelling
- Accounting and ERP systems
- Microsoft Dynamics Nav functionality (accounting, sales, purchase, inventory)

## Cooperation with the business community

Company visit or guest lecturer

## International dimension

Microsoft global training material are utilized.

## Teaching and learning methods

- Lectures and workshops 84 h
- Team assignments, individual assignments and self study 63 h
- Exam 4 h

### **Teacher responsible**

Ralf Rehn, Pasila

### **Course material**

Monk & Wagner 2008, Concepts in Enterprise Resource Planning  
 Horngren Edition 8 or newer. Introduction to Financial Accounting  
 Microsoft 2009. Introduction to Application Setup in Microsoft Dynamics NAV 5.0  
 Microsoft 2009. Finance in Microsoft Dynamics NAV 5.0

Other material given by the teacher and material available in Blackboard.

### **Assesment Criteria**

- 10% participation and individual contribution
- 50% assignments
- 40% exam

last modified 30.04.2010

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# **Managing Business Information Systems Development**

- Code: SYS1TF010
- Extent: 5 cr (135h)
- Timing: 2nd semester
- Language: English
- Level: Core studies
- Type: Compulsory

### **Starting level and linkage with other courses**

Introduction to Business and Business Processes (BUS1TF001).

### **Learning outcomes**

Students get an understanding of the business environment and reasons for initiating the development of business information systems. The students get broader view of the content of IT

management and methods used to manage the development of business information systems.

## **Course contents**

- Business Environment and IT
- Business Information Systems
- Development Lifecycle
- Managing the Development

## **Teaching and learning methods**

56 h contact hours (4 h /week)

73 h independent studies (4-5 h /week)

4 h exam

Compulsory attendance at least 80 % of the contact hours.

## **Teacher responsible**

Ulla Vanhanen, Pasila

## **Course materials**

Paul Bocij, Dave Chaffey, Andrew Greasley & Simon Hickie 2006. Business Information Systems. Technology, Development & Management for the E-Business. Third edition. Pearson Education Limited.

## **Assessment criteria**

40 % Individual and team assignments

60 % Exam

last modified 30.04.2010

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# **Introduction to Business and Business Processes**

- Code: BUS1TF001
- Extent: 5 cr (135 h)
- Timig: 1st semester
- Language: English
- Level: Core studies
- Type: Compulsory



## **Starting level and linkage with other courses**

No prerequisites.

## **Learning outcomes**

Students get a solid understanding of different kind of businesses and their functions, structures and ways of operations. Students also learn to analyze, present and report the business of a selected case company.

## **Course contents**

- Business environments
- Business organisations
- Business functions and operations
- Case company and industry analysis

## **Cooperation with the business community**

Visiting lecturer(s) and company visits possible.

## **Teaching and learning methods**

Theory lecturing, team based analysis and presentations.

- Contact hours 32 h
- Self-study and team-assignments 100 h
- Exam 3 h.

## **Recognition of prior learning (RPL)**

To get a passing (P) grade and exemption from the course, student must display and demonstrate the competence by certificates from earlier studies or work experience covering the course objectives and contents. It is possible to participate in the competence demonstration only once before taking the course.

## **Teacher responsible**

Markku Tarkki, Pasila

## **Course materials**

- Course book: Business Functions: An Active Learning Approach by Jim Pearce et al., Blackwell Publishing.
- Additional material: Other Business Books, Corporate Annual Reports and reviews, Business newspapers, Internet Business Findings.

## **Assessment criteria**

- Participation and individual contribution 10 %
- Team assignment and presentation 40 %
- Exam 50%

last modified 30.04.2010

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# Business Process Design and Modelling

- Code: BUS1TF002
- Extent: 5 cr (135 h)
- Timing: 3rd semester
- Language: English
- Level: Core studies
- Type: Compulsory

## Starting level and linkage with other courses

Student has passed 1-2 semester compulsory courses Introduction to Business and Business Processes (BUS1TF001), Managing Business Information Systems Development (SYS1TF010) and Developing a Web Application (ITP1TF012) or has the equivalent knowledge and skills.

## Learning outcomes

Student knows the content and the method of business based system level requirements analysis, and is able to participate in a system requirements engineering project as a system analyst.

## Course contents

The scope of the course is on the system level requirements analysis and the system architectural design, when results of feasibility studies are known.

### Project management content

- project planning
- project control
- project working

### Requirements engineering areas

- stakeholders Requirements Definition
- system Requirements Analysis
- system Architectural Design
- requirements management and validation

Methods and techniques applied

- business process modelling
- entity structure modelling
- business class modelling
- life cycle analysis
- safety and security requirements analysis

## **Cooperation with the business community**

Visiting lecturer(s).

## **International dimension**

Methods, examples and ways of working apply approved and widely used international standards and disciplines of the global ICT and business community.

## **Teaching and learning methods**

Theory lecturing supported Project based learning -method is used. This requires mandatory participation both to theory class sessions and project work. The deviation is:

- Contact hours 35 h
- Project working 100 h

## **Recognition of prior learning (RPL)**

To get a passing (P) grade and exemption from the course, student must display and demonstrate the competence by certificates from earlier studies or work experience covering the course objectives and contents. It is possible to participate in the competence demonstration only once before taking the course.

## **Teacher responsible**

Markku Tarkki, Pasila

## **Course materials**

- Handsouts in web-pages of the course
- Kotoya Gerald and Sommerville Ian. Requirements Engineering Processes and Techniques. John Wiley & Sons, 2002.
- Sommerville Ian & Sawyer Pete. Requirements Engineering. A good practice guide. John Wiley & Sons, 2000.
- Sommerville Ian. Software Engineering 7, seventh edition

Part 2: Requirements

all chapters 6 – 10

## Part 3: Design

chapter 11 Architectural Design

chapter 12 Distributed System Architecture Addison-Wesley , 2004

### Assessment criteria

- Exam 40%
- Project Contribution 60 %

last modified 30.04.2010

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# Information System Development Project

- Code: SYS1TF080
- Extent: 12 cr (324 h)
- Timing: 4th semester
- Language: English
- Level: Core studies
- Type: Compulsory

### Starting level and linkage with other courses

Student has passed all 1 - 3 semester compulsory courses or can display and prove equivalent knowledge and skills.

### Learning outcomes

Upon successful completion of the course, the student:

- learn to act in a business oriented information system development project practicing disciplined and professional project method: according to the project plan, monitoring and estimating the project process, progress and quality
- gain the knowledge and understanding of a business oriented system development process lifecycle
- learn analysis, design and prototyping methods and techniques
- learn the use of a CASE-tool in a system development process.

### Course contents

Course focuses on a well-disciplined project of a model driven software development process of a business information system. The study project is based on a pre-defined business case and functional requirements analysis and covers definition, design and prototyping. Quality assurance – reviews, test planning and prototype based testing – is included into the project. UML and CASE-

tool will be used in modeling, SQL Server Management Studio in design and implement of the database, and Visual Studio in application prototype development. It is essential that students have previously learned skills and knowledge of analysis and design methods, techniques, and implementation tools. The use of CASE-tool will be advised during the course.

#### Business driven systems development process and business case analysis

- Development programmes and projects
- Development process lifecycle
- Functional requirements of business case system

#### Project management

- Project administration
- Project implementation, management and steering

#### Software Requirements Analysis

- Transition from business requirements to system analysis
- Object Oriented Analysis
- Process, tasks, and deliverables
- Quality control: reviews and testing
- Usability
- UML and CASE-tool in OOA

#### Software Design

- Transition from analysis to design
- Process, tasks, and deliverables
- Quality control: reviews and testing
- Software test-planning
- Database design and implementation
- User interface design
- Business layer design

#### Prototyping and testing

- Transition from design to prototyping
- Process, tasks, and deliverables
- Implementing the prototype
- Testing the system with prototype

#### **International dimension**

Methods, examples and ways of working apply approved and widely used international standards and disciplines of the global ICT and business community.

#### **Teaching and learning methods**

During the course students complete a small system project. Learning is based on class tuition; guided project based learning and individual project assignments. The complete amount of work is 20 hours per student per week.

## **Recognition of prior learning (RPL)**

To get a passing (P) grade and exemption from the course, student must display and demonstrate the competence by certificates from earlier studies or work experience covering the course objectives and contents. It is possible to participate in the competence demonstration only once before taking the course.

## **Teachers responsible**

Project management: Markku Tarkki, Pasila

OOA: Ulla Vanhanen, Pasila

OOD: Juha Pispala and Seija Wolfer, Pasila

CASE-tool and prototyping: Juha Pispala, Pasila

## **Course materials**

- Booch, G., Rumbaugh, J. & Jacobson, I. 1998. The Unified Modelling Language User Guide.
- ISO / IEC 12207. Information Technology Software Lifecycle Processes.
- Jacobson, I., Booch, G. & Rumbaugh, J. 1999. The Unified Software Development Process.
- Perry, W. 1995. Effective Methods for Software Testing.
- Rumbaugh, J., Jacobson, I. & Booch, G. 1999 Unified Modelling Language Reference Manual.
- Quatrani, T. 1999. visual Modelling with Rational Rose and UML.
- Handouts and course Web pages.
- Krug, Steve (2006) Don't make me think, Second edition, New Riders Publishing
- Rubin, Jeffrey & Chisnell, Dana (2008) Handbook of Usability Testing, Second Edition, Wiley Publishing, Inc.
- Patton, Ron (2006) Software Testing, Second Edition, Sams Publishing

## **Assessment criteria**

The assessment is based on project contribution team results.

last modified 30.04.2010

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# Project and Programme Management

- Code: BUS8TF006
- Extent: 6 cr (162 h)
- Timing: 6th semester
- Language: English
- Level: Professional studies
- Type: Elective

## Starting level and linkage with other courses

Student has passed all 1- 4 semester compulsory courses and has done the work placement thus having the knowledge and experience of project work and the development process of business information systems.

## Learning outcomes

Student enhances the ability to act as project manager in business information systems development projects. The course familiarizes students to understand corporate IT development programs and their implementation as disciplined and well managed projects. Learning is based on the dialogue between classroom teaching, team work and individual analysis and presentations.

## Course contents

The scope of the course is on managing the corporate ICT development process. The focused areas are:

- IT development programs and projects
- Project Portfolio Management
- Managing Projects
- Initiation and planning
- Risk and quality management
- Project organization and HR management
- Monitoring and steering
- Critical success factors of an IT project management.

## Cooperation with the business community

Visiting lecturer(s).

## International dimension

Methods, examples and ways of working apply approved and widely used international program and project management standards and disciplines. Also the cross national and intercultural aspects global projects are focused.

## Teaching and learning methods

Theory lecturing and class discussions, individual and team work are used.

- Contact hours 30 h
- Individual study and assignments 130 h
- Exams 2 h.

### **Teacher responsible**

Markku Tarkki, Pasila

### **Course materials**

- Information Technology Project Management, by Jack T. Marchewka (2002)
- IT Project Portfolio Management, by Stephen S. Bonham (2005)

Assessment criteria

- MidTerm Exam 20%
- Final Exam 30%
- Assignments and participation 50%

last modified 30.04.2010

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## **Mobile Linux Development with QT**

- Code: ITP8TF500
- Extent: 3 cr (81 h)
- Timing: Intensive course w21 to w22
- Language: English
- Level: professional studies
- Type: elective

Course is arranged as co-operation of Haaga-Helia and Symbio.

### **Starting level and linkage with other courses**

- Linux Basics or similar skills: should be able to use Linux on the desktop and with command line interface
- Should be able to program and read code in some language, such as C, Java, C++ or C#
- Understand object oriented programming (OOP)
- Prerequisites are tested with a pre-exam.

### **Learning outcomes**



Upon successful completion of the course, the student

- Can design and develop simple QT-based applications
- Knows the state of mobile Linux
- Is able to do testing and localization in QT

## Course contents

- QT overview and development environment
- Basics of C++ and "Hello QT world"
- Graphical user interfaces with QT
- Localization and unit testing in QT
- Student project and project presentation

## Cooperation with the business community

Lecturers from Symbio develop with these tools as their daily work. Symbio is also looking forward to hire course students skilled in QT development.

## Teaching and learning methods

First week is taught in computer lab, combining theoretical teaching and practical exercise. Second week is individual work on student project. Finally, students present their projects at the end of the second week.

## Teacher responsible

Tero Karvinen, Pasila [www.iki.fi/karvinen](http://www.iki.fi/karvinen)

## Course materials

Material distributed during the course, including links.

## Assessment criteria

Project 100%. Mandatory attendance.

last modified 20.05.2010

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# SAP ERP Basics

- Code: SYS8TF100
- Extent: 7 cr (189 h)
- Timing: 6th or 7th semester

- Language: English
- Level: professional studies
- Type: optional

## **Learning outcomes**

Upon successful completion of the course, the student :

- understands why ERP (Enterprise Resource Planning) systems are used in daily business
- understands how ERP systems support business processes
- is familiar with use of SAP ERP system

## **Course contents**

- overview of business processes
- concept of ERP (Enterprise Resource Planning) and ERP information systems
- ERP supporting daily business
- processes in SAP ERP system: Sales & Distribution, Material Management, Production Planning

## **Teaching and learning methods**

lectures, SAP ERP system exercises

## **Teacher responsible**

Jarmo Harmonen, Pasila

## **Course materials**

- Materials provided by the teacher
- Concepts in Enterprise Resource Planning, Monk, Ellen 2008

## **Assessment**

30% exam

70 % exercises

last modified 31.08.2010

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# **ERP Application and Business Process Development**

- Code: SYS4TF070
- Extent: 6 cr (156 h)
- Timing: 4th semester
- Language: English
- Level: professional studies

## **Learning outcomes**

Upon successful completion of the course, the student :

- understands why ERP (Enterprise Resource Planning) systems are used in daily business
- understands how ERP systems support business processes
- is familiar with use of Microsoft Dynamics Nav ERP system

## **Course contents**

- overview of business processes
- concept of ERP (Enterprise Resource Planning) and ERP information systems
- ERP supporting daily business
- processes in Microsoft Dynamics Nav ERP system: Sales & Marketing, Purchase, Financial Management, Human Resources

## **Teaching and learning methods**

lectures, Microsoft Dynamics Nav ERP system exercises

## **Teacher responsible**

Jarmo Harmonen, Pasila

## **Course materials**

- Introduction to Microsoft Dynamics Nav 5.0
- ERP and Business Processes, Hans van der Hoeven 2009

## **Assessment criteria**

50% exam

50 % exercises

last modified 30.04.2010

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# Supply Chain Management Processes

- Code: BUS4TF004
- Extent: 6 (156h)
- Timing: 6th semester
- Language: English
- Level: professional studies
- Type: Optional

## Starting level and linkage with other courses

Prerequisite : ERP application and business process development (SYS4TF070)

## Learning outcomes

After this course, students will have good level of knowledge with following subjects:

- business view of supply chain management
- how ERP systems support supply chain management and process development
- Microsoft Dynamics NAV ERP system 5.0 logistics functionality

## Course contents

- supply chain management / logistics processes generally
- SCM/ logistics processes in Microsoft Dynamics Nav ERP system

## Teaching and learning methods

lectures, Microsoft Dynamics NAV ERP system exercises

## Teacher responsible

Jarmo Harmonen, Pasila

## Course material

- Cecil Bozarth, Robert B. Handfield : Introduction to operations and supply chain management
- Microsoft Dynamics NAV 5.0 : Trade

## Assessment criteria

50 % exam, 50 % exercises

last modified 30.04.2010

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# Developing an e-Business Application

- Code: ITP1TF013
- Extent: 12 ECTS (324 h)
- Timing: 3rd semester
- Language: English
- Level: Professional studies
- Type: Compulsory

## Starting level and linkage with other courses

Managing Business Information Systems Development (SYS1TF010)

Introduction to Business and Business Processes (BUS1TF001)

Developing a Web Application (ITP1TF012)

## Learning outcomes

Upon successful completion of the course, the student

- is able to create the software requirements analysis for an e-business application
- is able to design the database and implement it with stored procedures and necessary transactions
- is able to design and implement the application with usable user interface and error handling

## Course contents

The study unit is divided into three main themes:

Theme I: Software requirements analysis

Theme II: Data management

Theme III: Software design, implementation and testing

Theme 1: Software requirements analysis

- Software requirements analysis process
- Object oriented analysis (OOA)
- Object oriented modelling using UML-notation

Theme 2: Data management

- Database design with Conceptual Modelling, Logical Modelling and Physical Modelling
- Database alterations, views and privileges

- Transaction management and locking mechanism

Theme 3: Software design, implementation and testing

- Architecture design
- Interface design
- Database design
- Program design
- Program implementation
- Testing

## **Teaching and learning methods**

Contact hours 192 h

Independent studies 132 h

## **Recognition of prior learning (RPL)**

Portfolio and an exam.

## **Teachers responsible**

Markku Kuitunen, Pasila

Juha Pispä, Pasila

Kari Silpiö, Pasila

Juhani Välimäki, Pasila

Seija Wolfer, Pasila

## **Course materials**

Lecture slides, examples and demonstrations

Alan Dennis, Barbara Haley Wixom, and Roberta M. Roth, Systems Analysis and Design, John Wiley & Sons 2006

Connolly, T. & Begg, C. Database Systems: A Practical Approach to Design, Implementation, and Management, 4th or more recent edition, Addison Wesley, 2005-2009

OR

Connolly, T. & Begg, C. Database Solutions: A step-by-step guide to building databases, second edition, Addison Wesley, 2004

Microsoft MSDN library <http://msdn2.microsoft.com/en-us/library/default.aspx>

Standard ECMA-334: C# Language Specification 4 th edition (June 2006)

<http://www.ecma-international.org/publications/standards/Ecma-334.htm>

Other material given by the teacher.

### **Assessment criteria**

Software Requirements Analysis 25 %  
Data Management 25 %  
Software design, implementation and testing 50 %

Activity and Contribution to the learning of other students is taken into account in those grades above.

All areas have to be passed during one semester

last modified 30.04.2010

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## **Basics of Computers**

- Code: DAT1TF010
- Extent: 4 cr (108 h)
- Timing: 2nd semester
- Language: English
- Level: core studies
- Type: compulsory

### **Learning outcomes**

Upon successful completion of the course, the student:

- Understands the main parts of IT and their relations in a company. The student also understands the basics of a computer system: the architecture and the functioning
- Will know how the computer is organised, how a program executes in a computer and what is the role of the operating system in the program execution
- Will know what the computer system components are and how they execute a given program.

### **Course contents**

- IT in a company
- The architecture of a PC
- The components of a computer and their function
- Operating system and its role
- Notations, computer logic
- Data representation

- Creating and executing programs in the system
- Ergonomics

The studies contain lectures and exercises (distance learning). To pass the course a student has to get at least half of the points of the tests. Lectures are not mandatory, but exercise-points may be achieved only by participating lectures/exercises.

## **Recognition of Prior Knowledge**

Entry Level Test on the second study week.

## **Teaching and learning methods**

Contact hours 72 h

Homework 36 h

## **Teachers responsible**

Juhani Ahlgren, Pasila

Markku Somerkivi, Pasila

## **Course materials**

Handouts

Morley & Parker: Understanding Computers, 10th edition.

THOMSON Course Technology

## **Assessment criteria**

Attendance mandatory.

Homework 30 %

Test 70 %

last modified 30.04.2010

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# **Business IT Report**

- Code: INS2TF010
- Extent: 6 cr (162h)
- Timing: 4th semester
- Language: English



- Level: Professional Studies
- Type: compulsory

## **Learning outcomes**

The purpose of the course is to acquaint students with different research methods and scientific writing. Besides contact teaching, the course involves plenty of independent work. Every student will plan and carry out an independent IT-related research project: choose a topic, plan a timetable, apply the chosen research method, and present the results in a written academic report and an oral presentation. Students are also required to sum up the developments of their research project in a follow-up report. In the course of the Writing Business Report, oral presentation skills and the genre of academic writing will be briefly recapitulated. Students are to revise their written documents during the course, if necessary, after the lecturers in charge of the course have reviewed them with comments.

## **Course contents**

- Research methods
- Research process
- Research reporting
- Recap of academic writing and presentation skills

## **Seminar documents: written assignments**

- Research topic
  - Topic proposal for research
- Research plan
  - A short description of the chosen topic and preliminary sources
  - Planning a timetable for the research
- Seminar paper: a 15 20-page-long document in the format of an academic research report
  - Introduction
  - Defining the Concepts
  - Empirical part
  - Conclusions
- Research report: A follow-up report of the research process

## **Teaching and learning methods**

Contact hours 40 h

Independent work 80 h

## **Teachers responsible**

Juha Pispä, Pasila

Markku Somerkivi, Pasila

Karl Robbins, Pasila

## **Course materials**

To be announced later.

## **Assessment criteria**

The seminar documents, presenting skills and use of English language are evaluated.

last modified 30.04.2010

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# **Corporate and IT Security**

- Code: SYS8TF010
- Extent: 5 cr (135 h)
- Timing: 6th -7th semester
- Language: English
- Level: professional studies
- Type: elective

## **Starting level and linkage with other courses**

Building a Server Environment (DAT1TF012), Managing User Workstation (DAT1TF011), Basics of Computers (DAT1TF010).  
Compulsory studies.

## **Learning outcomes**

Upon successful completion of the course, the student

- Has a general overview of the security in companies and ICT
- Knows the terminology and basics of information risk management
- Understands the meaning of good risk management in a corporation.
- Recognizes the risks in information technology and information management.
- Knows how to protect against risks.
- Can map out the security risks of a company.

## **Course contents**

The course is based on CISSP (Certified Information Systems Security Professional) -program of (ISC)<sup>2</sup> -organization (International Information Systems Security Certification Consortium) and it contains the following domains:

- Security Management Concepts and Practices
- Access Control Systems

- Telecommunications and Network Security
- Cryptography
- Security Architecture and Models
- Operations Security
- Applications and Systems Development
- Business Continuity Planning and Disaster Recovery Planning
- Law, Investigation and Ethics
- Physical Security

## Teaching and learning methods

The course will be carried out as a seminar. An active participation of every member is an important prerequisite for the learning results. Contact hours 32 h  
Distance learning 39 h and Seminar work 64 h.

## Teacher responsible

Markku Somerkivi

## Course materials

Ronald L. Krutz, Russell Dean Vines: The CISSP and CAP Prep Guide Platinum Edition  
Handouts and Internet sources

## Assessment criteria

- Theory test (1/3)
- Active participation in group-work during contact hours (1/3)
- Applied exercise / Seminar work (1/3)

last modified 30.04.2010

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# Innovative Techniques In Group Work

- Code: LEA8TF054
- Extent: 3 cr (81 h)
- Timing: 4th semester
- Language: English
- Level: professional studies
- Type: elective

This course follows the curriculum of 2005.

## **Starting level and linkage with other courses**

There are no formal prerequisites e.g. in data processing but advanced students with a certain amount of self-control or working experience benefit most from this course.

## **Learning outcomes**

- A general overview of the problem-solving process and its phases,
- Learn how to get use of one's creativeness, more skilful ways of working, techniques and methods especially at group level
- Develop one's routines and learning to apply new techniques demand long-term practice and experiments
- How to use Creative Problem Solving methods and tools in practice

## **Course Contents**

- Creative problem solving process
- Designing and implementing a group process
- Innovative techniques: brainstorming, scenario planning, various business opportunity analyzing tools, team building and assessment methods

## **Cooperation with the business community and other organizations**

Guest lectures

## **International dimension**

Internationally known and used methods and tools.

## **Teaching and learning methods**

Theoretical facts will be covered during the first lessons but mainly they will be self-studied and examined during the first three study weeks. During contact hours main concern is put on student-centered and self-regulatory group-work, experimentation, reflection and sharing of results. An active participation of every member is an important prerequisite for the learning results. Contact hours 49 h

Distance learning (individual or group work ) 32 h

## **Teacher responsible**

Markku Somerkivi, Pasila

## **Course materials**

Handouts and Internet sources

Material developed during the course by the groups

## Assessment criteria

- Theory exam 30%
- Active participation in group-work during contact hours 70% (group and individual evaluation)

last modified 30.04.2010

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## Thesis Seminar

- Code: THE7TF007
- Timing: 6th semester
- Language: English
- Level: Thesis
- Type: Compulsory

## Learning outcomes

Understand what kind of theses exist and what are their requirements and evaluation principles. Also the thesis writing process should be familiar to the student. After the seminar the student is capable for doing a thesis independently.

## Course contents

- General guidelines for doing thesis in Helia
- Research type thesis
- System work type thesis
- CASE: introducing a good thesis

The studies consist of four seminar -type lessons where the various types of theses are discussed as well as the theses process and general guidelines for thesis writing.

## Teaching and learning methods

Four seminar meetings.

## Teacher responsible

Markku Somerkivi, Pasila

## Course materials

Handouts

## Assessment criteria

Attendance

last modified 30.04.2010

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# Introduction to Programming

- Code: ITP1TF011
- Extent: 5 ECTS (135 h)
- Timing: 1st semester (Periods: 1-2, weeks 7.-16.)
- Language: English
- Level: Core studies
- Type: Compulsory

## Starting level and linkage with other courses

Introduction to Web Site Development (ITP1TF001). This Introduction to Programming course starts immediately after that course; already on the second last week of the first period (Oct 4, 2010).

This course is thus larger (168 h) than the Introduction to Web Site Development course (102h), on average they have 135 h and thus both 5 ECTS.

## Learning outcomes

Upon successful completion of the course, the student

- is able to solve simple programming problems by designing the program logic
- is able to make programs based on the design
- understands the programming concept called object
- is able to communicate design and programs using professional terminology
- understands small set of basic UML diagrams used in programming
- understands the role of programming in software engineering
- is able to use Microsoft Visual Studio IDE in writing and debugging console and GUI applications

## Course contents

- Programming as a profession and the general concept of programming
- Planning, documenting and testing the logical flow of a program
- The basic concepts of programming languages
- Basic algorithm design and testing
- The basics of the programming language (C# ) and its programming environment (Visual

Studio and .NET Framework)

## **Teaching and learning methods**

Contact hours 80 h (8 h/week)

Independent studies 88 h (9 h/week)

This course familiarizes the student with the task of programming, the general concepts of programming and limited concept of basic object oriented programming. This course gives an introduction to a modern programming language, Visual C#, in an integrated development environment (Visual Studio and Microsoft .NET Framework).

The weekly lectures give the theory basis. In the supervised laboratories students do individual and pair work. Homework consists of personal and pair programming work. Students will do multiple evaluated in-class theory tasks. Last weeks weigh more in the final grade as students start from different skill levels.

## **Recognition of prior learning (RPL)**

Portfolio and an exam.

## **Teachers responsible**

Juhani Välimäki, Pasila

Markku Kuitunen, Pasila (only weeks 7.-8. Fall 2010)

Kari Silpiö, Pasila (weeks 9.-16. Fall 2010)

## **Course materials**

- "Introduction to Programming" course web pages
- "From Flowchart to C# Program" by Kari Silpiö
- "C# Quick reference" by Kari Silpiö

Some advanced programming text books for students who want to progress quicker with the programming:

- ECMA, ECMA C# Standard (in the Internet)
- Marshall, Donis 2005, "Programming Microsoft Visual C# 2005: The Language".
- Microsoft Official Course: Introduction to C# Programming with Microsoft .NET.
- Deitel, H. M. & Deitel, P. J. 2005. "Visual C# 2005: How To Program. 6th edition".
- Richter, Jeffrey 2006, "CLR via C#", Second edition.

## **Assessment criteria**

Assignments and evaluated in-class tasks 67 %

Activity and social contribution 33%

Obligatory attendance 80% of the contact hours.

last modified 30.04.2010

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# Introduction to Web Site Development

- Code: ITP1TF001
- Extent: 5 ECTS (135 h)
- Timing: 1st semester, (Weeks 1.-6.)
- Language: English
- Level: Core studies
- Type: Compulsory

## Starting level and linkage with other courses

No prerequisites

## Learning outcomes

Upon successful completion of the course, the student

- is able to design a small Web site according to guidelines and good design principles
- is able to use XHTML to implement the Web pages
- is able to consider usability issues during the project
- is able to use Microsoft Visual Studio IDE in implementation

## Course contents

- Introduction to Web technologies
- Introduction to Web site design and implementation principles
- Introduction to Integrated development environment (IDE)
- Introduction to W3C XHTML 1.0 recommendation
- Introduction to style and W3C CSS2 recommendation
- Introduction to accessibility and W3C WCAG recommendation

## Teaching and learning methods

Contact hours 48 h (8 h/week)

Independent studies 54 h (9 h/week)

## Recognition of prior learning (RPL)

Portfolio and an exam.



## **Teachers responsible**

Markku Kuitunen, Pasila

Juhani Välimäki, Pasila

## **Course materials**

Lecture slides, examples and demonstrations

W3C recommendations from W3C website <http://www.w3.org/> (referenced 31.03.2010)

W3schools.com website <http://w3schools.com/> (referenced 31.03.2010)

Sarah Horton, Universal Usability, <http://universalusability.com/> (referenced 31.03.2010)

Other material given by the teacher.

## **Assessment criteria**

Assignments and evaluated in-class tasks 67 %

Activity and social contribution 33%

Obligatory attendance 80% of the contact hours.

last modified 30.04.2010

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# **HAAGA-HELIA Tools**

- Code: INS1TF003
- Extent: 5 cr (135h)
- Timing: 1st semester
- Language: English
- Level: Basic Studies
- Type: Compulsory

## **Description**

During the course the students will learn the basics in Windows Vista, Word Processing, Spreadsheet applications, Network skills, designing presentation graphics, information search and Haaga-Helia's technical environment.

## **Learning outcomes**

The students will learn to use a computer as an effective tool .

### **Teaching and learning methods:**

Contact hours 52 h (4 hours/week)

Independent studies 78 h (6 hours/week): homework and preparation for lessons and exams

### **Teacher responsible**

Anitta Orpana, Pasila

### **Course materials**

Material will be distributed by the teacher during the course.

### **Assessment criteria**

Word and Excel exams 80 %

Assignments 20 %

last modified 30.04.2010

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## **Advanced Web Technologies**

- Code: ITP4TF014
- Extent: 6 ECTS (162 h)
- Timing: 4th semester
- Language: English
- Level: Professional studies
- Type: Elective

### **Starting level and linkage with other courses**

Developing a Web Application (ITP1TF012)

Developing an e-Business Application (ITP1TF013)

### **Learning outcomes**

Upon successful completion of the course, the student

- is able to XML and XML based technologies
- is able to Web Services based on XML technology
- is able to describe how Web Services can be used to implement Service Oriented Architecture (SOA)

- is able to design and implement user interface based on AJAX technology

## **Course contents**

The study unit is divided into two main themes:

Theme I: Basic XML technologies

Theme II: More advanced XML technologies

Theme 1: Basic XML technologies

- XML recommendation
- XML Namespaces recommendation
- XSL Transformation recommendation
- XML Schema recommendation

Theme 2: More advanced XML technologies

- Web Services with SOAP and WSDL recommendations
- Security based on XML Encryption and XML Signature recommendation
- AJAX technology with JavaScript programming and Document Object Model (DOM)
- Basic concept of Service Oriented Architecture (SOA)

## **Teaching and learning methods**

Contact hours 64 h

Independent studies 98 h

## **Recognition of prior learning (RPL)**

Portfolio and an exam.

## **Teachers responsible**

Markku Kuitunen, Pasila

Juhani Välimäki, Pasila

## **Course materials**

Lecture slides, examples and demonstrations

Erl, Thomas. Service-Oriented Architecture: A Field Guide to Integrating XML and Web Services, Prentice Hall 2007

W3C recommendations from W3C Website <http://www.w3.org/>

W3schools.com Website <http://w3schools.com/>

Other material given by the teacher.

## **Assessment criteria**

Assignments 34 %

Exam 66%

last modified 30.04.2010

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# **Orientation to Studying in HAAGA-HELIA**

- Code: INS1TF001
- Extent: 2 cr (54 h)
- Timing: 1st semester, including an intensive part in the beginning of the semester
- Language: English
- Level: Core studies
- Type: Compulsory

## **Starting level and linkage with other courses**

No prerequisites

## **Learning outcomes**

Upon successful completion of the course, the student

- is familiar with HAAGA-HELIA's Pasila campus and study environment
- is familiar with student services provided by HAAGA-HELIA
- knows the structure and the content of BITE's curriculum
- is able to plan one's studies and career
- understands the meaning of the professionalism in the studies and in the working life

## **Course contents**

- HAAGA-HELIA and its student services
- HAAGA\_HELIA's student organizations and tutors
- BITE's curriculum, courses and course enrollments
- Study skills and Personal Study Plan
- Careers and professionalism

## **Cooperation with the business community**

Visiting lecture of a graduate of BITE on an IT career

## **International dimension**

A multicultural group uniting students from different countries and continents

## **Teaching and learning methods**

Contact hours during the intensive part 20 h

Contact hours during th semester 16 h

Assignments PSP (Personal Study Plan)and PSP meeting 18 h

## **Teacher responsible**

Aila Koivisto-Junni, Pasila

## **Course materials**

Given by the teacher during the course

## **Assessment criteria**

80% compulsory attendance, assignments, Personal Study Plan

Grading: Pass (H)/Fail (0)

last modified 30.04.2010

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# **Software Product Life Cycle Management**

- Code: SYS8TF055
- Extent: 6 cr (162 h)
- Timing: 7th semester
- Language: English
- Level: Professional studies
- Type: Elective

## **Starting level and linkage with other courses**

The student has passed all the compulsory studies of 1st to 4th semester and preferably completed the work placement.

## **Learning outcomes**

Students know the SW life cycle and learn method to be used at the different phases of it in order

to have a quality SW and services throughout the software's life time. Students understand the development phase's importance as a corner stone of the SW quality and maintainability and learn methods and good practices to achieve these attributes. They gain skills to productise the services and enhance, customise and localise a SW accurately.

## **Course contents**

- SW product life cycle
- Developing quality SW
- SW distribution
- Services
- Managing SW variants
- Change management
- Configuration management

## **Teaching and learning methods**

57 h lectures  
100 h self-study and assignments  
3 h exam

## **Teacher Responsible**

Ulla Vanhanen, Pasila

## **Course materials**

Alexis Leon 2005. Software Configuration Management Handbook. Artech House.  
or  
Alexis Leon 2000. Guide to Software Configuration Management . Artech House.  
Articles and other material to be published on the course's web page

## **Assessment criteria**

Exam 70 %  
Assignments 30%

last modified 30.04.2010

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# **Development Environments and Platforms**

- Code: ITP4TF015
- Extent: 6 ECTS (162 h)
- Timing: 6-7th semester

- Language: English
- Level: Professional studies
- Type: Elective

## **Starting level and linkage with other courses**

Linux Basics (DAT8TF063)

Developing an e-business application (ITP1TF013)

Building Server Environment (DAT1TF012)

During spring 2009 Linux Basics was not yet required. Spring 2009 implementation was used for building up the course and Linux skills.

## **Learning outcomes**

Upon successful completion of the course, the student

- is able to work independently, find and analyze information and knowledge about tools, installation and configuration
- is able to use the Scrum method as a member in a knowledge acquisition
- is able to build and test open source development environment
- understands the big picture of development environments

## **Course contents**

- Scrum method for information acquisition
- Linux workstation for professional software development
- Users and permissions
- Installation and settings
- Firewalls
- Version management system
- Build management system, Continuous integration tools
- Test automation
- Environment test plan, test, report
- Java environment for .NET developers
- Java for C# programmers
- Eclipse IDE for Visual Studio users
- JSP for ASP.NET programmers
- Tomcat for IIS Development server users
- MySQL for SQL Server developers
- JDBC for ADO.NET programmers
- (Evaluation of this course)

## **Cooperation with the business community**

This course might have a customer in the future (Spring 2012 or after). The customer would give

the requirements for the case and provide feedback after the case assignment is fulfilled.

## **Teaching and learning methods**

67% of the course will be spent on studying, selecting, installing, configuring, testing and understanding the tool environment, development platforms and the operating system and creating documentation for the community.

33% of the course will be spent on Java technologies and creating a web application as an example.

Students should understand the nature of this course before the course starts. The knowledge base of this course will be build incrementally by the students who create documents for the whole group. Students have 6,5 hours weekly for this. Each group continues from the work of the previous semester.

Contact hours 60 h

Independent studies 102 h

## **Recognition of prior learning (RPL)**

Has to be decided case by case.

## **Teacher responsible**

Juhani Välimäki, Pasila

## **Course materials**

The material and documentation produced and gathered together with the students. The existing material will be linked properly crediting the original writers.

## **Assessment criteria**

Material produced as home assignments for the community 33 %

Activity and project work 33 %

Written evaluated in-class tasks 34 %

last modified 30.04.2010

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# **Internet services - modelling and developing**

- Code: AMK8TF069
- Extent: 4 cr (108 h)
- Timing: 3 rd- 7th semester



- Language: English
- Level: Professional Studies
- Type: Elective

This course follows the curriculum of 2005.

### **Starting level and linkage with other courses**

There are no formal prerequisites but students with a certain amount of activity, self-regulation and group work experience benefit most from this course.

### **Learning outcomes**

Student is able to:

- Model an Internet service and understand the possibilities of implementation
- Understand the present and future trends of ICT
- Understand the possibilities of ICT in e-commerce and communication

### **Course contents**

During this course the student groups will learn to model and develop an Internet service to a real customer.

- Analysis, design and implementation of an Internet service of a real company or organization.
- Possibilities of ICT in e-commerce

### **Teaching and learning methods**

E-learning (blended learning in Internet)

### **Teacher responsible**

Eija Kalliala, Pasila

### **Course materials**

Course material is in Internet

### **Assessment criteria**

Final Exam 20 %

Project work 65 %

Activity in discussions in Internet 15 %

last modified 30.04.2010

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# Customer Relationship Management Processes

- Code: BUS8TF008
- Extent: 4 cr (108h)
- Timing: 6th or 7th semester
- Language: English
- Level: professional studies

This course follows the curriculum of 2007.

## Learning outcomes

Upon successful completion of the course, the student

- understands the business view of Customer Relationship Management
- understands how ERP systems support CRM processes and decision-making
- understands how ERP enables CRM process development
- knows Microsoft Dynamics Nav 5.0 CRM functionality

## Course contents

- overview of Customer Relationship Management business processes and process development
- ERP in supporting CRM business processes and decision-making
- ERP and sales CRM process development
- Microsoft Dynamics NAV 5.0 ERP system

To manage business requires good understanding of business processes and activities. In enterprise resource planning (ERP) the aim is to increase the efficiency of different processes and improve management and internal control by using integrated information system like Microsoft Dynamics NAV.

## Cooperation with the business community and other organisations

Guest lectures

## Teaching and learning methods

- Lectures and workshops, given once a week, support self-study and teamwork:
- 48 h lectures and workshops

- 60 h self study and teamwork.

### **Assessment criteria**

50 % exam, 50 % cases

last modified 19.08.2010

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# **End User Perspectives in Systems Development**

- Code: BUS8TF050
- Extent: 3 cr (81 hours)
- Timing: 6 or 7th semester
- Language: English
- Level: Professional studies
- Type: Elective

### **Starting level and linkage with other courses**

Introduction to Business and Business Processes (BUS1TF011) OR equivalent knowledge of business processes.

### **Learning outcomes**

On completion of this course the student should be able to:

- describe technology adoption types and other factors that impact technology acceptance by end users
- write a user's request for systems support
- critique a systems development report from the user's perspective
- develop a plan to identify and evaluate software packages
- identify the types of end user training and develop an end user training assessment tool
- create a short end-user training manual or animated presentation

### **Course contents**

The course is useful for both IT and non-IT students. In both IT development and support, there is often a gap in knowledge, perspectives and communication between the IT developers and end users. The contents and exercises of this course are intended to help bridge that gap through a better understanding of the vocabulary, motivations, jobs and needs of the other. Topics are:

- Technology Adoption Theory and Technology Acceptance Models (what attracts and deters

- people from adopting new technology)
- End user perceptions and the realities about IT workers and technology support
- Overview of the systems development process that emphasizes the end user's view and role
- Outsourcing
- Software package acquisition (locate, evaluate and select solutions)
- End user training

### **Teaching and learning methods**

- 64 h contact hours (4h /week)
- 14 h independent studies (1-2 h /week)
- 2 h exam
- Compulsory attendance at least 80 % of the contact hours

(If there is enough mix of IT and non-IT students, mixed group exercises and assignments will be used to encourage awareness of different perspectives.)

### **Teacher responsible**

Sandra Poindexter, visiting IT teacher from the United States

### **Course materials**

- Class handouts
- Assigned current readings from organization websites and journals
- Assigned pages from e-books and books put into the library

### **Assessment criteria**

- 35% Assignments
- 35% Participation in class and compulsory in-class tasks
- 30% Exam

last modified 30.04.2010

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## **Managing User Workstation**

- Code: DAT1TF011
- Extent: 5 cr (135h)
- Timing: 3rd semester
- Language: English
- Level: core studies
- Type: compulsory

## **Learning outcomes**

Upon successful completion of the course, the student

- understands the basics of information networking
- knows how to set up a workstation for networking

## **Course contents**

- Basics of local area networks
- Wide area networks
- Networks services
- Protocols
- Installation of an operating system
- Network and security settings of workstation

## **Teaching and learning methods**

- Lessons and homework
- Laboratory exercises

## **Teacher responsible**

Juhani Merilinna, Pasila

## **Course materials**

Course web pages

## **Assessment criteria**

- Exam 50%
- Homework 20%
- Laboratory exercises 30%

last modified 30.04.2010

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# **DB2 9 Fundamentals**

- Code: ITP8TF291
- Extent: 3 cr (81 h)
- Timing: Semester week of intensive courses
- Language: English
- Level: professional studies

- Type: free-choice

This course follows the curriculum of BITE2007 and TIKO05.

### **Starting level and linkage with other courses**

Good knowledge of SQL from some of the following courses:

BITE / ITP1TF012 or ITP1TF013, TIKO / ICT1TD003, ICT1TN005, ICT1TA005 or ICT2TM001

### **Learning outcomes**

Upon successful completion of the course, the student

- Understand the concepts of the DBMS, database objects, tools and SQL implementation DB2 LUW
- To design and implement a small relational database
- Understand the performance and security issues in a DB2 Environment

### **Course contents**

1. Intensive week course on 18-22 of October 2010 at 9-16 O'clock in classroom 5006M, and self-study tutorials for DB2 9 Fundamentals certification 730 by IBM:

- Part 1: Planning - Basics of DB2 products and tools
- Part 2: Security - DB2 authentication, authorization, and privileges
- Part 3: Accessing DB2 data – creating and cataloging databases, using Control Center
- Part 4: Working with DB2 data – SQL DML, procedures and functions
- Part 5: Working with DB2 objects – data types, tables, constraints, views, indexes
- Part 6: Data concurrency – transactions, isolation levels, locks
- Part 7: Introducing XQuery

2. DB2 9 Fundamentals certification on-line test 730 controlled by IBM on following week at HAAGA-HELIA (time to be defined later)

DB2 is a leading DBMS system in business world and its SQL implementation is very near the ISO SQL standard. DB2 9 Fundamentals certificate is valued internationally. This course arranged with IBM Finland as part of IBM Academic Initiative programme provides students a unique opportunity to attend the course and IBM certificate test. It is a required prerequisite for more advanced certificate tests of IBM. It may also open career paths on databases and software development in ICT industry.

### **Teaching and learning methods**

35 h workshop contact hours + 1.5 h test.  
average 45 h self-studies

### **Teacher responsible**

Martti Laiho, Pasila

## Course materials

DB2 self-study tutorials (see above)

DB2 Express-C environment on Ubuntu platform as VMware implementation in the classroom and available on Web at

[www.DBTechNet.org/download/VMware\\_Ubuntu\\_DB2Lab.zip](http://www.DBTechNet.org/download/VMware_Ubuntu_DB2Lab.zip)

DB2 online documentation at IBM DB2 Database for Linux, UNIX, and Windows Information Center

(<http://publib.boulder.ibm.com/infocenter/db2luw/v9r7/index.jsp>)

## Assessment criteria

Exam for passing with course grades 0...4 on Friday 22.10.2009 at 14-16.

IBM DB2 Fundamentals certification test for those who have passed the exam. Passing the certification test will upgrade the course grade to 5.

last modified 11.08.2010

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# Excel in Business

- Code: TOO08TF006
- Extent: 3 cr (81h)
- Timing: 5-7th semester
- Language: English
- Level: Free-Choice Studies

This course follows the curriculum of 2005.

## Starting level and linkage with other courses

Basic skills of using Excel and knowledge of business processes and financial reporting are required. The course is suitable for students of all business branches.

## Learning outcomes

The course is meant for those who want to learn how to use Excel in financial and management accounting application areas like financial reporting, business performance analysis, and resource management.

## Course contents

- Orientation to business concepts and business reporting

- Tools for Business Management
- Excel brush ups
- Stock Portfolio Management
- Financial Statements
- Investment Computing
- Weekly Assignment
- Exam

## **Teaching and learning methods**

21 h lectures  
 56 h self-study and assignments  
 3 h exam

## **Teacher responsible**

Markku Tarkki, Pasila

## **Course materials**

Handouts provided by the teacher. "

## **Assessment criteria**

50% individual assignments  
 50% exam

last modified 30.04.2010

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# **Prototyping**

- Code: SYS8TF051
- Extent: 7 cr (189h)
- Timing: 6 to 7th semester
- Language: English
- Level: Advanced Professional Studies
- Type: Elective

This course follows the curriculum of 2005.

## **Starting level and linkage with other courses**

The students have grades in the required compulsory studies and the work placement.



## **Learning outcomes**

The students can relate simulation with other means of problem-solving in information systems development.

The students can relate the prototyping approach to other approaches in an information systems development project. The students can operationalize an information system development project based on the prototyping approach so that they can realize it. The students are familiar with typical technical infrastructure connected with prototyping and RAD.

## **Course contents**

- The concept of prototype: a definition and a taxonomy
- The prototype of an information system prototype, its structure and how it maps to the different classes of prototypes
- The prototyping approach in a project: the incremental information systems development model, how to control such a project
- Tools: the application generator as an example of prototyping tool. Principles.
- The prototyping approach as a simulation venture: a brief simulation theory background, what is success of an information system, modelling of time, modelling human work

Prototyping is an information systems development approach suitable for development issues where the objectives or the alternative solutions or both are ill-defined. During this course, the student will obtain a view of information system prototypes and prototyping as means to simulate different candidate information system solutions. At the same time he or she will get a view of an information system development project that is based on prototyping. How does one know when to prototype? How does the project proceed? How does one plan and control a project based on the prototyping approach? The students will implement a small prototyping project during the course. When the project is going on, it will be evaluated as a subject to project management and cost control. When the project is finished, it will be reflected upon as a modelling effort, a problem solution effort, and an effort to implement a problem solution. The course follows the curriculum of 2003.

## **Teaching and learning methods**

Approx. 20 hours regular classes and approx. 180 hours project work, 60 of which with instructor.

## **Teacher responsible**

Juha Pispa, Pasila

## **Assessment criteria**

Individual exercises covering distinctive topics approx 40 percent  
The above project 60 percent

last modified 30.04.2010

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# Business Mathematics

- Code: MAT1TF002
- Extent: 4 cr (108 h)
- Timing: 4th semester
- Language: English
- Level: core studies
- Type: compulsory

## Starting level and linkage with other courses

Satisfactory skills of High School Mathematics.

## Learning outcomes

- Student will learn how to understand and apply basics of Statistical methods.
- Student will learn the most common Mathematical methods used in Business

## Course contents

- Random samples and statistical research
- Presenting data
- Simple characteristic values of distribution such as mean, standard deviation and median
- Linear regression
- Most common discrete and continuous probability distributions
- Parameter estimating and basics of statistical testing
- Percentage calculation and index numbers
- Simple interest and applications such as short term loans
- Compound interest
- Periodic payments and applications such as target saving and long term loans
- Part payment and Leasing
- Investment calculations
- Applying Excel into solving realistic mathematical problems in Business

## Teaching and learning methods

The studies contain 56h lectures and class exercises manually and with Excel. There will be assignments (distance learning of 52h).

## Teacher responsible

Kalevi Keinänen, Pasila

## Course materials

Teacher will submit the material.

For additional reading: any Statistical and Business Mathematics –material (2nd grade and higher)

## Assessment criteria

- Two written examinations 50%
- Assignments 25%
- Excel assignments 25%

last modified 30.04.2010

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# English 1

- Code: ENG1TF058
- Extent: 3 cr (81 h)
- Timing: 2nd semester
- Language: English
- Level: core studies
- Type: compulsory

## Starting level and linkage with other courses

Level test passed or English Level Course completed.

## Learning outcomes

The objective is to enhance the students' skills in oral and written contexts.

## Course contents

The course is partly integrated with the substance courses of the same semester: the students write learning diaries related to the course Developing a Web Application (ITP1TF012); they write an in-class essay on a topic derived from the course Managing Business Information Systems Development (SYS1TF010). In addition, the students update their CVs; they write an essay applying the standard reporting guidelines and reference procedures in use at HAAGA-HELIA; and they prepare an oral presentation on an ICT topic of their own choice. The presentation is recorded and analyzed

## Cooperation with the business community

Time permitting, visiting lecturers are invited to talk about the latest trends in ICT and the

students' own company contacts are benefitted when possible.

## **Course materials**

Provided in class.

<http://europass.cedefop.europa.eu/europass/preview.action>

## **Recognition of Prior Learning (RPL)**

The course can be fully or partly completed by presenting a proper portfolio including various samples reflecting the student's skills and competences.

## **Teaching and learning methods**

Contact hours

Independent studies

## **Teacher responsible**

Riitta Blomster, Pasila

## **Assessment criteria**

- Learning Diary 1 10 points
- Final Learning Diary 10 points
- Reference Essay 20 points
- Essay in class 30 points
- Presentation 30 points

Compulsory attendance 80 %.

last modified 30.04.2010

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# **ICT-skills for Business 1**

- Code: TOO1HO002
- Extent: 3 ECTS (32 h contact learning, 49 h self-study, total 81 h)
- Timing: 4th Semester
- Language: English
- Level: core studies

## **Learning outcomes**

Upon successful completion of the course, the student will be able to

- use the basic data processing tools (inc. word processing and presentation graphics) needed for his/her studies in Haaga-Helia as well as in work life
- study in virtual learning environment
- understand the basics of computer hardware
- use library databases and search and retrieve information in the internet

## **Course description**

During the course the student will learn the basics in word-processing, designing presentation graphics, network skills and information search. Also the student will learn to utilize Haaga-Helia's IT-system. These skills are needed throughout the studies.

## **Teaching and learning methods**

Contact hours: 32 h

Independent studies: 49 h

## **Teacher responsible**

Senior lecturer Anitta Orpana, Pasila Campus

## **Course materials**

Blackboard

Handouts

## **Assessment criteria**

- Examination
- Home assignments
- Attendance

Windows 7, Word 2010, PowerPoint 2010 exam 80 %

Word, PowerPoint assignments 20 %

Typing test and Information search have to be passed.

last modified 17.08.2010

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# **ICT-skills for Business 2**

- Code: TOO1HO003
- Extent: 3 ECTS (32 h contact learning, 49 h self-study, total 81 h)

- Timing: 5th Semester
- Language: English
- Level: core studies

## **Learning outcomes**

Upon successful completion of the course, the student will be able to

- use Excel (needed for his/her studies in Haaga-Helia as well as in work life)

## **Course description**

During the course the student will learn the basics in spread sheet calculation (Excel 2010).

## **Teaching and learning methods**

Contact hours: 32 h

Independent studies: 49 h

## **Teacher responsible**

Senior lecturer Anitta Orpana

## **Course materials**

Blackboard

Handouts

## **Assessment criteria**

- Examination
- Home assignments
- Attendance

Excel exam 80 %

Excel assignments 20 %

last modified 17.08.2010

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# **Risk Management and Business Continuity**

- Code: BUS8TF099
- Extent: 3 ECTS (81h)
- Timing: 6-7th semester

- Language: English
- Level: Professional studies
- Type: Elective

## **Starting level and linkage with other courses**

No prerequisites.

## **Learning outcomes**

Upon successful completion of the course, the student

- understands what threats a company's business processes might encounter
- is able to analyse the risks and vulnerabilities of a company
- is able to do a Business Impact Analysis and create a Business Continuity Plan for a company
- is able to do a Disaster Recovery Plan for a company
- is able to set up a security program for a company and manage the risks accordingly

## **Course contents**

- Business Continuity Planning
- Disaster Recovery Planning
- Risk management
- Incident Management
- Information Security Policy

## **Teaching and learning methods**

Lectures, homework and a seminar paper.

Contact hours 32 h

Self-study 49 h

## **Teacher responsible**

Markku Somerkivi, Pasila

## **Learning materials**

Handouts

Additional reading:

CISSP Preparation Guide, Chapter 9 Business Continuity

CISM study material

## **Assessment criteria**

Exam 35 %

Assignments 30 %  
Seminar Paper 35 %

last modified 25.08.2010

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## **SAP ERP Advanced**

- Code: SYS8TF200
- Extent: 6 cr (156 h)
- Timing: 7th or 8th semester
- Language: English
- Level: professional studies
- Type: optional

### **Starting level and linkage with other courses**

- SYS8TF100 (SAP ERP Basics)

### **Learning objectives**

Upon successful completion of the course, the student :

- have good knowledge of SAP ERP system
- have good knowledge of business processes and integration between following modules: Sales & Distribution (SD), Materials Management (MM), and Production Planning (PP)

### **Course contents**

- business processes in SAP ERP system: Production Planning, Cost Center Accounting, Logistics

### **Teaching and learning methods**

- advanced SAP ERP system case studies

### **Teacher responsible**

Jarmo Harmonen, Pasila

### **Course materials**

- Materials provided by the teacher



## **Assessment criteria**

75 % SAP ERP system case studies  
25% exam

last modified 31.08.2010