

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

Upon successful completion of the course, the student:

- Understand the basic structure of an SAP System
- Work in 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)

Recognition of prior learning (RPL)

The student must be able to read data from the database and produce a report using the ABAP programming language. The prior learning can be proved by passing the exam.

Teacher responsible

To be announced

Course materials

Course material in Blackboard

ABAP Programming Manual:

<http://help.sap.com/printdocu/core/Print46c/en/data/pdf/BCABA/BCABA.pdf>

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

Assessment criteria

Assignments 50 %
Final Exam 50 %

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 understand and use the basics of the XML based technologies
- is able to understand and the Web Services
- is able to describe how Web Services can be used to implement Service Oriented Architecture (SOA)
- is able to design and implement user interfaces based on the AJAX technology

Course contents

The study unit is divided into two main themes:

Theme 1: Basic XML technologies

- XML, a structured document
- XML Namespaces
- XSL Transformation
- XML Schema Definitions

Theme 2: Web technologies that are partly based on XML

- 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

Course materials

- Lecture slides, examples and demonstrations, other material and tasks given by the teacher.
- W3C recommendations from W3C Website <http://www.w3.org/>
- W3schools.com Website <http://w3schools.com/>
- Erl, Thomas. Service-Oriented Architecture: A Field Guide to Integrating XML and Web Services, Prentice Hall 2007

Assessment criteria

Exam 70 %

Activity and contribution shown during contact hours and home assignments 30 %

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 %

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 feed-back 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 %

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 %.

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

Anitta Orpana, Pasila

Markku Somerkivi, Pasila

Wallace Reynolds, Pasila

Course materials

To be announced later.

Assessment criteria

- 35% class room participation
- 35% class attendance (3 sessions out of 5 is minimum for passing grade).
- 30% in class assignments

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%

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, Managing Business Information Systems Development and Developing a Web Application 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

Ralf Rehn, 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 chaperts 6 – 10

Part 3: Design

chapter 11 Architectural Design

chapter 12 Distributed System Architecture
Addison-Wesley , 2004

Assessment criteria

- Exam 40%
- Project Contribution 60%

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 a company and in ICT
- Recognizes the security threats and vulnerabilities in a company and knows how to protect against them
- Understands the meaning of good security and risk management in a corporation
- Can map out the security risks of a company
- Knows how to make secure programs and data bases

Course contents

The course is based on CISSP (Certified Information Systems Security Professional) -program of (ISC)² - 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
- Operations Security
- Applications and Systems Development Security
- 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, Pasila Campus

Course materials

Assessment criteria

- Theory test (1/3)
- Homework (1/3)
- Applied exercise / Seminar work (1/3)

Customer Relationship Management Processes

- Code: BUS8TF008
- Extent: 4 cr (108h)
- Timing: 4th or 5th 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
- learns the customer behavior and market analysis
- understands various concepts of CRM processes and decision-making
- understands how ERP enables CRM process development
- learn basics of CRM system procurement, implementation and integration

Course contents

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. The idea is to adopt customer (business part) and CRM (system part) to organisation.

- overview of Customer Relationship Management business processes and process development
- building customer understanding
- organizational requirements and estimated capabilities for CRM
- CRM levels and influences in organization
- CRM process views
- CRM system training tasks

Teacher responsible

Tuomo Rynnänen, Pasila Campus

Course materials

Based on journals, books, related links and studies.

Teaching and learning methods

During the course students complete a small strategic research project given by lecturers. The course work based on self / group study, lesson assignments and 2 exams.

Assessment criteria

50 % exam, 50 % cases & assignments

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

The student has passed the course 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
- 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 responsible

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

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/HETI09.

Prerequisites

Good knowledge of SQL

Recommended reading Chapters 5, 6, 8, and 9 in the free e-book "Database Fundamentals" available at <http://www.db2teamblog.com/2011/01/free-book-database-fundamentals.html>

Learning objectives

Student is able to:

- Understand the concepts of the DBMS, database objects, tools and SQL implementation of IBM DB2 for Linux, Unix and Windows (LUW)
- To design and implement a small relational database
- Understand the performance and security issues in a DB2 LUW Environment

Course contents

Introduction on Monday 12 of March at 14-16 on Haaga-Helia Pasila Campus in classroom 5007M.

The course is offered as an onsite/classroom course at Haaga-Helia on intensive week 19-23 of March 2012 at 9-16 in classroom 5007M. The same course is available also as free e-learning course AA001EN at <http://www.DB2University.com>, but for attending the certification test you need to enroll to the course at Haaga-Helia.

The contents include DB2 Express-C 9 tutorials with exercises of CE302A - DB2 Academic Training by IBM, including

- Relational database concepts
- Getting started with DB2 and Data Studio workbench
- Introduction to SQL and database objects
- Transactions, Concurrency and Locking
- Database security
- DB2 backup and recovery
- DB2 pureXML: XML and XQuery language in DB2
- DB2 Application Development.

Internal course exam for grades is on Friday 23 of March at 14-16.

DB2 Academic Associate Certification on-line test CE302A controlled by IBM on Friday 30 of March at 9-11 in Haaga-Helia classroom 5007M.

DB2 is a leading DBMS product in business world and its SQL implementation is very near the ISO SQL standard. DB2 Academic Associate 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 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

Course materials

DB2 self-study tutorials (see above)
DB2 Express-C 9.7 virtual computer implementation
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 23.3.2012 at 14-16.
IBM DB2 Academic Associate Certification test on Friday 30.3.2012 at 9-11 for those who have passed the exam. Passing the certification test will upgrade the course grade to 5.

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

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

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

Developing an e-business application (ITP1TF013)

Building Server Environment (DAT1TF012)

Linux Basics (DAT8TF063) (recommended)

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 approach as a member also doing tasks related to finding information and building up the development environment
- is able to build and test a development environment
- understands the big picture of development environments

Course contents

- The applicable parts selected based on the project and the environment
- Scrum approach for information acquisition
- Installing the Operating system needed
- Users and permissions
- Installation and settings
- Firewalls
- Version management system
- Build management system, Continuous integration tools
- Test automation
- Environment test plan, test, report
- Programming language tools
- Programming language
- IDE
- Technical Web or Mobile environment
- Web Server / Database server
- Persistence, Connections

Cooperation with the business community

This course might have a real 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

Contact hours about 64 h

Independent studies and work about 98 h

Big part of this 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.

Students will also do a software project from given case idea using Scrum.

Students should understand the nature of this course before the course starts. The knowledge base of this course will be built 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.

Recognition of prior learning (RPL)

Portfolio at least, possibly also exams. (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

Complying to the Scrum rules and the developed product 100 %
(More exact evaluation sheet given on the course home page)

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

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

- writing exercises; an essay, an article, an abstract
- presentations, videotaped group assignment
- the students can start compiling their Language Portfolios (ELP)

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

The course is comprised of contact teaching (about 30hrs) and independent study (about 50 hrs). Contact hours focus on practicing to produce coherent ICT-related text and on enhancing the students' spoken skills using different individual, pair and group exercises.

Independent study covers the completion of the given written tasks, which requires students to acquire information using various sources, reading articles, enhancing their vocabulary and deepening their competence regarding grammar. Furthermore, the students properly prepare themselves for the oral assignments.

Teacher responsible

Riitta Blomster, Pasila Campus

Eija Hansén, Pasila Campus

Assessment criteria

Required attendance 80%.

Written part:

- essay
- article
- abstract

Spoken part:

- class participation
- presentation
- video assignment

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

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

English Level Test

- Code: ENG1TF100-6
- Timing: 1st semester
- Language: English
- Level: Core studies
- Type: Compulsory

Teacher responsible

Eija Hansén, Pasila

Assessment criteria

The English Level Test (ENG1TF100) is compulsory for all students. The purpose of the test is to ensure that students' written skills in English are on the adequate level to succeed on the other English courses in BITE. Those who fail the level test will attend a preparatory course (English Level Course, ENG8TF003) in grammar, pronunciation and ICT vocabulary to improve their oral and written skills. The students who pass the English Level Test will receive a note in Winha with no credits.

The exam contains multiple-choice questions and you can study in advance by going through the requirements for any A-level test in English as a second language (ESL). Please notice that either passing the level test (ENG1TF100) or completing the level course (ENG8TF003) successfully is considered a prerequisite for taking part in English 1, which starts in the beginning of the second semester. In order to acquire an objective assessment of each student's starting level, all students, including native speakers, are required to participate in the English Level Test

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 and SAP ERP systems

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 and SAP ERP systems: Sales & Marketing, Purchase, Financial Management, Human Resources

Teaching and learning methods

lectures, ERP system exercises (Microsoft Dynamics Nav & SAP ERP)

Teacher responsible

Jarmo Harmonen, Pasila

Course materials

- Introduction to Microsoft Dynamics Nav 5.0
- ERP and Business Processes, Hans van der Hoeven 2009
- Concepts in Enterprise Resource Planning, Ellen Monk 2009

Assessment Criteria

50% exam

50 % exercises

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

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

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.coe.int/T/DG4/Portfolio/?L=E&M=/main_pages/levels.html

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

Accreditation of prior learning (APL)

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 Campus

Course materials

Provided by the teacher

Assessment

Attendance, active participation in lessons 20 %

Assignments 15 %

Examinations 65 %

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.coe.int/T/DG4/Portfolio/?L=E&M=/main_pages/levels.html

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

Accreditation of prior learning (APL)

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 Campus

Course materials

Provided by the teacher

Assessment criteria

Attendance, active participation in lessons 20 %

Assignments 15 %

Examinations 65 %

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.coe.int/T/DG4/Portfolio/?L=E&M=/main_pages/levels.html

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.

Accreditation of prior learning (APL)

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 Campus

Tarja Paasi-May, Pasila Campus

Course materials

Material will be provided by the teacher.

Assessment criteria

Attendance, active participation in lessons 20 %

Assignments 30 %

Examination(s) 50 %

Tehdyt toimenpiteet

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.coe.int/T/DG4/Portfolio/?L=E&M=/main_pages/levels.html

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.

Accreditation of prior learning (APL)

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 Campus

Taija Hämäläinen, Pasila Campus

Course materials

Material will be provided by the teacher.

Assessment criteria

Active participation in lessons 20 %

Assignments 30 %

Examination(s) 50 %

Finnish and Communication 1

- Code: COM4TF001
- Extent: 3 cr (81 h)
- Timing: 1st semester
- Language: Finnish
- Level: Core studies
- Type: Compulsory *

* Required only of native Finnish speakers in the BIT programme.

Starting level and linkage with other courses

No prerequisites

Learning outcomes

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

Accreditation of prior learning (APL)

A student can demonstrate his or her equivalent language/communication skills relating to the course objectives and content. This must be agreed upon with the teacher before the course begins. Each student may attempt this only once in the period prior to the giving of the course. Evaluation is on a scale of 1 - 5.

Teacher responsible

Taija Hämäläinen, Pasila Campus

Course materials

Course material will be provided by the teacher.

The students are advised to use HAAGA-HELIA's Guidelines for preparing written assignments and Writing reports at HAAGA-HELIA: preparing the layout and citing sources and different language guides of their own choice.

Assessment criteria

Regular attendance and active participation in class (80% attendance required) 20%

Assignments 80%

Finnish and Communication 2

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

* Required only of native Finnish speakers in the BIT programme.

Starting level and linkage with other courses

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 education 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

Accreditation of prior learning (APL)

A student can demonstrate his or her equivalent language/communication skills relating to the course objectives and content. This must be agreed upon with the teacher before the course begins. Each student may attempt this only once in the period prior to the giving of the course. Evaluation is on a scale of 1 - 5.

Teacher responsible

Taija Hämäläinen, Pasila Campus

Course materials

Course material provided by the teacher. The students are advised to use HAAGA-HELIA's Guidelines for preparing written assignments and Writing reports at HAAGA-HELIA: preparing the layout and citing sources.

Assessment criteria

Exercises 80 %

Regular attendance and active participation in class (80% attendance required) 20 %

Finnish for Business Purposes 1

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

Finnish for Business Purposes 1 is elective for non-native speakers of Finnish.

Finnish for Business Purposes 1 is organized in co-operation with Aalto University 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 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 Aalto differs from Haaga-Helia's academic year (courses might begin earlier or later, no lessons during their examinations week, there are no intensive weeks etc.), and students participating in Aalto 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) 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

Kirsi Leppänen (Aalto University School of Economics)

For more information at HAAGA-HELIA, please contact Taija Hämäläinen at [taija.hamalainen\(a\)haaga-helia.fi](mailto:taija.hamalainen(a)haaga-helia.fi).

Course materials

Course materials provided by the lecturer.

Assessment criteria

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

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.

Finnish for Business Purposes 2 is organized in co-operation with Aalto University 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 Aalto differs from Haaga-Helia's academic year (courses might begin earlier or later, no lessons during their examinations week, there are no intensive weeks etc.), and students participating in Aalto 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 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

Kirsi Seppänen (Aalto University 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 %.

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 %

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.

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 %

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 compulsory courses on semesters 1-3 or can show and prove equivalent knowledge and skills.

Learning outcomes

Upon successful completion of the course, the student:

- is able 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
- has gained the knowledge and understanding of a business oriented system development process lifecycle
- is able to do analysis and design and to use prototyping methods and techniques
- has basic knowledge of 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 programs and projects
- Development process lifecycle
- Functional requirements of business case system

Project management

- Project planning
- Project communication & reporting
- 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 a 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

Tuomo Rynänen, Pasila

Juha Pispä, Pasila

Pekka Kamaja, Pasila

Ralf Rehn, 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
- Shoemaker, Martin L., 2004, UML Applied, a .NET Perspective.

Assessment criteria

The assessment is based on the contribution to the project team and the team's performance.

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)

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

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

Basic courses of business or information technology. 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

Online learning, project work for a real organization, tutoring and evaluation in net, meetings in videoconference

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 %

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

Ralf Rehn, 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%

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

Starting level and linkage with other courses

Minimum amount of credit units is 100 and the student has passed all mandatory first two years studies

Learning outcomes

Upon successful completion of the course, 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 IT-strategy implementation process
- 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 off shoring
- Overview of well known IT-strategies
- 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)

Cooperation with the business community

Guest lectures

Teachers responsible

Jarmo Peltoniemi, Pasila Campus

Tuomo Rynänen, Pasila Campus

Course materials

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

other articles delivered during the contact hours

Assesment Criteria

50% participation and individual contribution

50% assignments

Introduction to Programming

- Code: ITP1TF011
- Extent: 5 ECTS (135 h)
- Timing: 1st semester
- Language: English
- Level: Core studies
- Type: Compulsory

Starting level and linkage with other courses

Introduction to Web Site Development (ITP1TF001) has to be started at the same time. This Introduction to Programming course uses same group division and timetables as Intro to Web Site Development.

This course is slightly 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, shared with the other related course)

Independent studies 88 h (9 h/week, shared with the other related course)

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. Re-evaluations are offered only limited times (1-2 re-evaluations) and no extra evaluations are offered for absent students.

Recognition of prior learning (RPL)

Portfolio and an exam.

Teachers responsible

Amir Dirin, Pasila

Anne Benson , Pasila

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

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 language required.

Learning outcomes

- Upon successful completion of the course, the student
- can introduce oneself, give basic information about oneself and ask simple question
- can understand and use basic expressions and simple sentences in routine everyday situations
- is able to deal with everyday social situations and handle simple shopping situations
- is aware of the basic characteristics of the Finnish language, culture and habits
- is able to use the surrounding language environment to develop one's language skills.

Target level A1. Level descriptions can be found at

http://www.coe.int/T/DG4/Portfolio/?L=E&M=/main_pages/levels.html

Course contents

The course is an introduction to Finnish language and culture, and themes handled during this course are me and my everyday life.

- Pronunciation
- Greetings, basic small talk phrases
- Introducing oneself and telling about oneself
- Numbers, prices
- Weather, seasons, months, telling the time
- Asking questions and giving basic information in routine everyday situations
- Conjugation of some basic verbs
- Vocabulary and key phrases for everyday needs
- Describing people and objects in a simple way

Accreditation of prior learning (APL)

The students who start their studies in Bite programme and already know some Finnish, can pass the course and gain the credit points by attending a level test. Written part of the test is organized during the orientation week in August and the oral part later in the 4th period according to a separate schedule.

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 Campus

Course materials

Gehring, S. & Heinzmann, S. 2010. Suomen mestari 1. Finn Lectura. Helsinki.

Other material provided by the teacher

Assessment criteria

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

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.coe.int/T/DG4/Portfolio/?L=E&M=/main_pages/levels.html

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

Accreditation of prior learning (APL)

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 %

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.

Introduction to Windows Phone Tools

- Code: ITP8TF222
- Extent: 3 ECTS (81 h)
- Timing: 4-7th semesters (First implementation was 17.10.2011-21.10.2011)
- Language: English
- Level: Professional studies
- Type: Free choice

Starting level and linkage with other courses

To enter the course the student has to have good knowledge and skills in object oriented programming and the tools needed (C# programming language, .NET platform, Visual Studio IDE). There might be a level test before getting to the course. First and second year students might get into the course if there are free seats and they have had good success on application development and programming courses. Up to 20 students will be taken to the course.

This course and the 5cr course, "Windows Phone Application Development" (<http://www.haaga-helia.fi/fi/courses/tf/itp8tf016.html>), will be offered periodically according to the resources and the demand.

Learning outcomes

Upon successful completion of the course, the student

- is able to further develop his/her Windows Phone Application development skills.
- understands how important it is in Mobile computing to have the full control of the screen layouts, memory usage, simple algorithms, data structures and application states to optimize the usage of a small screen, limited memory and battery life.
- knows the limitations of his or her skills

Course contents (Tentative)

- Basics of the Windows Phone device characteristics and hardware specifications
- Basics of the Windows Phone User experience
- The structure of a Windows Phone Application project
- Using XAML to define the views instead of the designer to have a full control of the limited screen size of a mobile device.
- Implementing the event handlers
- One sample solution for state management, keeping information while the application is closing, deactivated or obscured as well as keeping information while navigating from one page to another
- Limitations and good practices of mobile application development
- Debugging
- One selected project type (Standard / Pivot / Panorama Silverlight project)
- Possibly installing the applications to a HAAGA-HELIA Windows Phone

Cooperation with the business community

In the future we might have visiting lecturers from firms already developing Windows Phone applications.

Teaching and learning methods

Contact hours about 30 h

Independent studies and work during the intensive week 20 h

Finishing the pair work after the intensive week 31 h

Theory and demonstrations are given in a theory classroom and students are asked to close their laptops. Some lab rooms will have the needed tools installed. The needed tools are (as of August 2011):

Visual Studio 2010 Ultimate (From ELMS)

(Many optional add-ons to Visual Studio, like MVC 3, XNA, Feature Pack 2 ... (www.microsoft.com/downloads))

Windows Update + Search for Updates + Restart from time to time

Windows Phone Developer Tools + two updates (www.microsoft.com/downloads)

Expression Studio 4 Ultimate (From ELMS)

Visual Studio 2010 Service Pack 1 (www.microsoft.com/downloads)

Recognition of prior learning (RPL)

At least a Portfolio, possibly also exams. This will be decided case by case.

Teachers responsible

October 2011 intensive course:

Pete Stockley, Materials and teaching, Pasila

Juhani Välimäki, Co-author of the materials, Responsible for grading, Pasila

Course materials

E-books, Windows Phone labs and Tutorials. Additional theory slides and tasks are given by the teacher. In particular this e-book: Nathan, Adam 2011, "101 Windows Phone 7 Apps, Volume 1".

Assessment criteria

70% Pair project work and presentation

30% Activity during the contact hours

Obligatory attendance 90% of the contact hours

IT Swedish

- Code: SWE4TF044A&B
- 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 Swedish Level Course.

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 Campus

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 %.

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

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.

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)

3 h exam

Compulsory attendance at least 80 % of the contact hours.

Teachers responsible

Jarmo Harmonen, Pasila

Ralf Rehn, 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

30 % Individual and team assignments

70 % Exam

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%

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

Course materials

Material distributed during the course, including links.

Assessment criteria

Project 100%. Mandatory attendance.

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)

Orientation to Studying in HAAGA-HELIA 1 & 2

- Code: INS1TF100 and INS1TF200
- Extent: 2 cr (54 h)
- Timing: 1st and 2nd semesters, including the orientation days in the beginning of the 1st 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
- knows the generic and IT specific competences of a Bite graduate
- 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 Bite graduate about his/her IT career

International dimension

A multicultural group uniting students from different countries and continents

Teaching and learning methods

Contact hours during the orientation days 20 h

Contact hours during the 1st semester 16 h

Assignments, PSP (Personal Study Plan) and PSP meeting (held in the 2nd semester) 18 h

Teacher responsible

Aila Koivisto-Junni, Pasila

Course materials

Given by the teacher during the course

Assessment criteria

80% compulsory attendance during the orientation days and in the study weeks, assignments, Personal Study Plan, PSP meeting
Grading: Pass (H)/Fail (0)

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

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%

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

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 %

SAP ERP Advanced

- Code: SYS8TF200
- Extent: 5 cr (135 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 outcomes

Upon successful completion of the course, the student :

- has good knowledge of SAP ERP system
- has knowledge of business processes and integration between following modules: Production Planning (PP), Controlling (CO), Project System (PS), Human Resources (HR), Sales & Distribution (SD), Materials Management (MM)

Course contents

- business processes in SAP ERP system: Production Planning, Controlling, Project System, Human Resources, 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

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, Financial Accounting / Controlling and Human Resources.

Teaching and learning methods

lectures, SAP ERP system exercises

Teacher responsible

Jarmo Harmonen, Pasila campus

Course materials

- Materials provided by the teacher
- Integrated Business Processes with ERP Systems (Magal, Word 2011)

Assessment

30% exam
70 % exercises

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

Upon successful completion of the course, the student

- knows the SW product life cycle and methods to be used at the different phases of it.
- understands the importance of design and planning as a corner stone of the SW and service quality.
- has learned methods and best practises for creating, enhancing, customising, localising and supporting a SW to achieve a quality product.
- has learned the basics for productising the services.

Course contents

- SW product life cycle
- Scoping
- Designing
- Release roadmapping
- Localising and customising
- Software configuration management
- Distribution
- Maintenance
- Support / service agreements

Teaching and learning methods

57 h lectures

100 h self-study and assignments

3 h exam

Recognition of Previous Learning

A student having working experience as a SW product manager or know-how about SW life cycle management can pass the course by

- presenting sufficient evidence of the experience
- giving two lectures (2 - 3 h each) basing on the own experience on the topics of the course; possible topics are for example
 - scoping
 - release planning – the next release and a few releases ahead
 - dimensions of local / customer specific variants and efficient variant management

tools used in different life cycle phases to support the management
contents of support / service agreements and measures used to monitor the
performance
passing the course exam

Teacher Responsible

Ulla Vanhanen, Pasila

Course materials

Articles and other material to be published on the course's web page
The text book will be informed later

Assessment criteria

Exam 70 %

Attendance and assignments 30%

Software QA and Testing

- Code: itp4tf499
- Extent: 5 cr (135h)
- Timing: 6th semester
- Language: English
- Level: Professional studies
- Type: Elective (recommended in Web Application Developer)

Starting level and linkage with other courses

- Developing a Web Application (itp1tf012) completed
- Developing and e-Business Application (itp1tf013) completed or currently on-going

Learning outcomes

Upon successful completion of the course, the student is familiar with

- software quality assurance and software testing from the supplier's point of view, and
- core methods and tools used in quality assurance and software testing.

Course contents

The course has two main topics, software quality assurance and testing. Both of these, including the definition of quality and testing as a way to show that a software product meets its requirements are discussed. In addition, quality assurance and testing processes and related core methods and tools are covered. This course is only for students who study according to BITE2007 curriculum.

Teaching and learning methods

The course comprises of lectures and individual exercises. Course topics are discussed and methods and tools are demonstrated on lectures and practiced hands-on with individual exercises.

Teacher responsible

Raine Kauppinen

Course materials

The course material is mainly based on the following books:

Graham D. et al.: Foundations of Software Testing: ISTQB Certification

Myers G.: The Art of Software Testing

Astels D.: Test-Driven Development, A Practical Guide

Enders A. and Rombach D.: A Handbook of Software and Systems Engineering

In addition, articles and other material pointed out by the teacher may be used.

Assessment criteria

Assessment is based on mid-term exam and the exercises. The relative weights of the assessment components are as follows:

- Mid-term exam 1/3 of the grade
- Exercises 2/3 of the grade

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.coe.int/T/DG4/Portfolio/?L=E&M=/main_pages/levels.html)

Learning outcomes

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 Campus

Course materials

Provided by the teacher

Assessment

Attendance and active participation 30 %

Independent assignments 50 %

Team assignments 20 %

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

Swedish Level Course

- Code: SWE8TD062
- Extent: 3 ECTS (81 h)
- Timing: 1st semester
- Language: Finnish and Swedish
- Level: core studies
- Type: free-choice

Starting level and linkage with other courses

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 outcomes

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

Course contents

Revision of the Swedish grammar and vocabulary.

Teaching and learning methods

Contact hours 32 h
Independent studies 49 h

Teacher Responsible

Maarit Ohinen-Salvén, Pasila Campus

Course material

Lehto, T. & Portin, M. 2005. Gröna linjen. Mot högskolestudier. Helsinki: WSOY.

Assessment criteria

In order to complete the course, both the test and the distance assignments must be passed.

Evaluation: PASS/FAIL

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

Usability

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

Starting level and linkage with other course

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

Learning outcomes

Upon successful completion of the course, the student can

- 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 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

Cooperation with the business community

Guest speakers from IT-companies.

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

Recognition of prior learning (RPL)

The student can prove the usability skills by producing a non-operative user interface prototype. The navigation, home-page, layout and other usability issues must be obeyed. The student must also take part in the exam.

Teacher responsible

To be announced

Course materials

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

Assessment

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

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%

Windows Phone Application Development

- Code: ITP8TF016
- Extent: 5 ECTS (135 h)
- Timing: 4-7th semesters
- Language: English
- Level: Professional studies
- Type: Free choice

Starting level and linkage with other courses

To enter the course the student has to have good knowledge and skills in object oriented programming and the tools needed (C# programming language, .NET platform, Visual Studio IDE).

Introduction to website development (ITP1TF001), Introduction to programming (ITP1TF011) and Developing a web application (ITP1TF012), or corresponding Finnish curriculum courses have to be passed before entering to course.

There might be a level test before getting to the course. Second and third semester students will get into the course if there are free seats and if they have had good success on application development and programming courses. Up to 25 students will be taken to the course. No prior knowledge about Windows Phone is required.

This course and the 3cr intensive course, "Introduction to Windows Phone Tools" (<http://www.haaga-helia.fi/fi/courses/tf/itp8tf222.html>), will be offered periodically according to the resources and the demand.

If somebody already has the credits from the "Introduction to Windows Phone Tools" course, those students will be given additional tasks in the beginning of this bigger course.

Learning outcomes

Upon successful completion of the course, the student

- is able to read and modify advanced C# code that uses more advanced C# features than the standard courses have one to offer
- is able to develop Windows Phone Applications for several business purposes
- understands how important it is in Mobile computing to have the full control of the screen layouts, memory usage, simple algorithms, data structures and application states to optimize the usage of a small screen, limited memory and battery life.
- understands the importance of the usability and that an agile and skilled application developer can faster adopt the needed changes to the user experience
- knows the limitations of his or her skills and how to learn more

Course contents (tentative)

- Advanced C# features that are not taught in the Bit 2007 curriculum any more. This will take at least two weeks.
- Basics of the Windows Phone device characteristics and hardware specifications
- Basics of the Windows Phone User experience
- The structure of a Windows Phone Application project
- Using XAML to define the views instead of the designer to have a full control of the limited screen size of a mobile device.
- Implementing the event handlers
- State management, keeping information while closing the application, keeping information while navigating from page to another

- Limitations and good practices of mobile application development
- Sensors and device APIs
- Debugging
- Pivot project
- Possibly a simple sample XNA game application for Windows phone
- Possibly installing the applications to HAAGA-HELIA's Windows Phones

Cooperation with the business community

There might be visiting lecturers from firms already developing Windows Phone applications.

Teaching and learning methods

Contact hours about 54 h

Independent studies and work about 81 h

Theory and demonstrations are given in a theory classroom and students are asked to close their laptops. Some lab rooms will have the needed tools installed. The needed tools are:

- Visual Studio 2010 Ultimate (From ELMS)
- (Many optional add-ons to Visual Studio, like MVC 3, XNA, Feature Pack 2 ... (www.microsoft.com/downloads)
- Windows Update + Search for Updates + Restart from time to time
- Windows Phone SDK 7.1 (www.microsoft.com/downloads)
- Silverlight Toolkit for Windows Phone
- Expression Studio 4 Ultimate (From ELMS)
- Visual Studio 2010 Service Pack 1 (www.microsoft.com/downloads)

Recognition of prior learning (RPL)

Portfolio at least, possibly also exams. (Has to be decided case by case)

Teacher responsible

Juhani Välimäki, Pasila

Course materials

The material given by the teacher and Microsoft's Windows Phone Labs and Tutorials selected by the teacher.

Assessment criteria (tentative)

50 % Small exams, possibly after every contact class day

50 % Activity in the labs and the final project

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)