


Ota suunta Lahden ammattikorkeakouluun!



Lahden ammattikorkeakoulu, Liiketalouden laitos
Lahti University of Applied Sciences, Faculty of Business Studies

Degree Programme in
Business Information Technology

Opinto-opas 2006 - 2007
Study Guide 2006 - 2007

DEGREE PROGRAMME IN BUSINESS INFORMATION TECHNOLOGY

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Degree Programme in Business Information Technology

Degree

Tradenomi, Bachelor of Business Administration (BBA)

Duration

210 ects, 3.5 years

Objectives

The programme aims at providing the students with the knowledge and skills needed in the modern Intranet and Internet technologies in business. The programme provides qualifications to design, implement and manage information systems. In the development of information systems, the focus is on systems management and design by using modern application development methods and tools. The programme places a high priority on meeting the needs of software development and management in a networked business environment. Special focus is placed on graphical software and user interface design and also on the use of object and component technologies.

The programme provides an excellent opportunity to work as an information systems analyst for the software industry in Finland and abroad. In addition to the theoretical studies of information science, the programme also includes practical training in business. After two years of classroom studies the students work for five months as trainees in industry. The students also complete a software design and implementation project for a local organisation.

DEGREE PROGRAMME IN BUSINESS INFORMATION TECHNOLOGY

Studies	Year				
	1	2	3	4	Σ
BASIC STUDIES					64
Common Basic Studies					14
01PSUO Suomen kieli ja viestintä, 1) Basics of Finnish	4				4
01PRUO Ruotsin kieli (Swedish) 1) Basics of Finnish	3				3
01PENG English	3				3
01PENT Entrepreneurship		4			4
Programme Basic Studies					50
04BUS601 Learning Process	1				1
Business Process					26
04BUS602/1 Innovations, Teamwork and Projects	4				
04BUS602/2 Human Resources			4		
04BUS602/3 Financial Management	4				
04BUS602/4 Customer Relations and Marketing	4				
04BUS602/5 Logistics			4		
04BUS602/6 Operational Business Environments/ Basics of Economics	3				
04BUS602/7 Operational Business Environments/ Legal Environment		3			
Operational Tools					10
04BUS603/1 Texts, spreadsheets and presentation graphics	6				
04BUS603/2 Business and Financial Mathematics	4				
Communication					13
04LII604/1 Yritysviestintä (Finnish), 2) Finnish for Foreigners		4			
04ENG04 IT English	3				
04ENG12 Advanced Communication Skills		3			
04ENG02 Business Contacts (English)		3			
PROFESSIONAL STUDIES					86
Common Professional Studies					56
04IT601/1E Introduction to Programming	5				
04IT601/2E Object-oriented Analysis		4			
04IT602/1E Systems Analysis and Design	5				
04IT602/2E User Interface Design	4				
04IT603/1E WWW-Document Preparation	3				
04IT603/2E Multimedia	3				
04IT603/3E Introduction to XML	3				
04IT604/1E Introduction to Databases	3				
04IT605/1E IT Mathematics	3				
04IT606/1E Information Security	3				
04TUT601E Orientation to Research					10
04IT607/1E Project					10
Advanced Professional Options; 2 x 30 ects to be chosen					30
04IT610E Systems Analysis and Design					
04IT611E Application Implementation					
04IT612E Information Systems Management					
04IT613E eBusiness					
ELECTIVE STUDIES					15
PRACTICAL TRAINING					30
THESIS				15	15
TOTAL	210 ECTS				

COMMON BASIC STUDIES 14 ECTS

The polytechnic common basic studies form a basis on which all professional and optional studies are constructed. They aim at offering the students a common ground in their studies and at preparing them for working life and self-development.

The polytechnic common basic studies orientate the students towards other studies which concentrate on specialised professional skills. Common basic studies, 14 ects, consist of courses which are compulsory to all native Finnish students. Any course within the common basic studies can be compensated by an equivalent course with entirely or partially same content taken in another polytechnic or in a university. Before compensation a proof for taking the course elsewhere must be submitted.

01PSUO SUOMEN KIELI JA VIESTINTÄ 4 OP

01PRUO RUOTSIN KIELI 3 OP

01PENG BASICS 3 ECTS

01PENT INTRODUCTION TO ENTREPRENEURSHIP 4 ECTS

PROGRAMME BASIC STUDIES 50 ECTS

04BUS601 LEARNING PROCESS 1 ECTS

Learning objectives

The student gets acquainted with different learning methods, which are to be used in different implementations during the studies.

Contents

Learning styles, assessment of own learning, getting acquainted with different problem centered learning methods, project learning, case method, Problem Based Learning

Assessment

Contact lessons, learning assignments

Materials

Materials to be given and announced during the lessons

Business Process 26 ects

04BUS602/1 INNOVATIONS, TEAMWORK AND PROJECTS 4 ECTS

Learning objectives

The student

- learns to work in teams. The student knows how to operate as a team member or as a team leader
- obtains the basic skills to work within a project team and also to manage a project.
- knows the basic methods of innovative thinking and knows how to apply them
- understands how to create innovative working culture within organizations

Contents

- Theory and practice of team work
- Participation into a project and project management
- Innovative thinking and acting
- Encouraging innovations

Assessment

Participation to contact lessons and learning assignments

Materials

Materials to be given and announced during the lessons

04BUS602/2 HUMAN RESOURCES 4 ECTS

Learning objectives

The aim of the course is to provide the participants with necessary skills for managing and maintaining a performance based human resources in contemporary multicultural and multinational organizations.

Contents

Main attention will be paid onto the following issues: Strategic HR planning, recruitment, selection, orientation, training & development, career planning, job design, motivation, wage administration, rewards & benefits, employee relationship, collective bargaining, dispute resolution, disciplinary measures, building performance based HR, international issues in HRM

Assessment

Active participation to the course, course paper and test

Materials

De Cenzo & Robbins 2002. Human Resource Management. John Wiley & Sons, Inc, New York.

04BUS602/3 FINANCIAL MANAGEMEN 4 ECTS**Learning objectives**

The student

- understands financial information and financial management as part of corporate operations
- gets to know the different areas of accounting
- is able to examine the profitability of companies using marginal costing–technique
- learns how to set prices to products and produce budgets
- acquires the skills to use calculations in decision making

Contents

- financial management as part of corporate operations
- cost concepts
- break-even analysis
- financial ratios
- marginal costing
- pricing decisions
- budgeting

Assessment

Individual assignment, written exam

Materials

Learning package

04BUS602/4 CUSTOMER RELATIONS AND MARKETING 4 ECTS**Learning objectives**

The student understands the value of customer oriented thinking in corporations, knows the basic concepts and tools of marketing and is able to pursue them in a business context.

Contents

Customer oriented approach in business
 Marketing environments
 Customer relationship marketing
 Consumer behaviour and purchasing process
 Marketing mix: product, price, place, promotion.

Assessment

Contact lectures, exam, course work

Materials

Kotler, P, Armstrong, G. 2004. Principles of Marketing.

04BUS602/5 LOGISTICS 4 ECTS**Learning objectives**

The student

- knows the role of the logistics operations in a company
- understands the importance and opportunities of logistics from the point of view of a company's operational and financial returns
- knows how to use the most common tools of logistics planning and management: forecasting, inventory turn-over, ABC-analysis, optimising the size of delivery
- knows the stages of a purchasing process
- understands the terms of delivery as an important part of the purchasing contract

Contents

- logistics activities
- methods of planning and controlling
- purchasing process
- terms of delivery

Assessment

- lessons, course work, open book test

Materials

- learning package

04BUS602/6 OPERATIONAL BUSINESS ENVIRONMENTS/ BASICS OF ECONOMICS 3 ECTS**Learning objectives**

Student

- understands that “ everything depends on everything “ in the economy
- is familiar with the basic concepts of consumer and producer theory
- understands how the market mechanism functions
- understands the basic nature of economic fluctuations
- knows the basic reasons and consequences of unemployment and inflation
- understands the basic idea of economic policy

Contents

Basic concepts (of micro and macro economics)

Different competitionmodels

Circulationmodel

Unemployment and inflation

Economic fluctuations in Finland

Basic ideas of fiscal – monetary policy

Assessment

Lectures, learning diary, exam

Materials

Slooman, J. 2004, Essentials of Economics.Pearson Education.England

04BUS602/7 OPERATIONAL BUSINESS ENVIRONMENTS/ LEGAL ENVIRONMENT 3 ECTS**Learning objectives**

The student learns

- how the Finnish legal order operates and what does it consist
- to see, how the law of business operations works with regard drafting, interpreting and supplementing contracts.
- the breaches of contract and available remedies
- how to act on contractual issues and how to solve interpretational and other cases
- the way to be an active company representative who acts correctly in practical contract law situations.

Contents

The contents of the course are the basics of the Finnish legal order, basics of legal proceedings and the Finnish contract law.

Assessment

Lectures, group tasks, cases, exam

Course grading will be based on the exam. Receiving 50% of the exam points will be the minimum for passing the course. Excellent questions/case session activity will affect exam grading positively. Excellent activity means doing all the questions/cases in advance and being active when the questions/cases are being processed together with the entire class.

Materials

Lectures and assignments form the main study Materials. As supporting Materials: Surakka, Aapo: Access to Finnish Law, latest edition, pages 1-72.

Operational Tools 10 ects**04BUS603/1 TEXTS, SPREADSHEETS, PRESENTATION GRAPHICS 6 ECTS****Learning objectives**

The student

- knows how to use business applications software in common business situations.

Contents

The course deals with the basic techniques of word-processing programmes and document production, pc's databases and spreadsheet calculation and how to use them in most common business situations.

Assessment

Participation in contact teaching, exercises and exam

04BUS603/2 BUSINESS AND FINANCIAL MATHEMATICS 4 ECTS**Learning objectives**

The student

- knows how to use the most common tools of business mathematics in business life
- understand the importance of the financial mathematics

Contents

The course deals with percentage and interest calculations with their applications, index numbers, foreign currencies, compound interest, periodic payments, credits and loans, pricing and securities. The examples and exercises are linked to business life.

Assessment

Participation in contact teaching, exercises and exam.

Materials

Pulkkinen, P., Holopainen M. & Keinänen K. 2001. Business Mathematics. 2.edition. CS Care & Share

Communication 13 ects**04LII604/1 YRITYSVIESTINTÄ 4 OP****Osaamistavoitteet**

Opiskelija

- ymmärtää viestinnän merkityksen liiketoiminnassa tuloksenteon välineenä sekä viestinnän ja organisaatorakenteen yhteyden

- osaa toteuttaa yrityksen sisäistä viestintää ja valita viestintään tarkoituksenmukaiset keinot ja kanavat

- pystyy kirjoittamaan yrityksen kaupalliset viestit ja tiedotteet ja rakentamaan teksteillään myönteistä yrityskuvaa

- hahmottaa rekrytointiprosessin työnantajan näkökulmasta ja osaa markkinoida itseään rekrytointitilanteessa

- harjoittaa työelämän keskeisiä esiintymistaitoja

- mieltää kielen hallitsemisen työnteon välineenä ja onnistuneen viestinnän edellytyksenä

Sisältö

Yritysviestinnän periaatteet ja tehtävät, yritysviestintä maineenhallinnan osana, sisäisen viestinnän merkitys, keinot ja kanavat, kaupankäynnin tekstit ja tiedotteet sekä yrityksen rekrytointiin liittyvä viestintä.

Edeltävät opinnot

01PSUO Suomen kieli ja viestintä 4 op

Suoritustapa ja arviointi

Henkilökohtainen portfolio ja ryhmätehtävät, tentti

Opiskelumateriaali

Kortetjärvi-Nurmi, S., Kuronen, M.-L. & Ollikainen, M. 2002. Yrityksen viestintä. 3., uud.p. Edita, Helsinki.

Kurssilla annettava materiaali.

Foreign languages; see the file Language Studies at Faculty of Business Studies 2006-07

PROFESSIONAL STUDIES 86 ECTS**Common Professional Studies 56 ects****04IT601/1E INTRODUCTION TO PROGRAMMING 5 ETCS****Learning objectives**

The student has basic skills in commercial programming. The software tool used is a high level programming language or macro language. The main emphasis is on the logical analysis of programs.

Contents

- basics of program

- variables and constants

- program flow and structure

- basics of object oriented programming

- functions and subroutines

- processing files

- processing arrays

- basic algorithms

- programming language syntax

- coding and testing

Assessment

Course work, individual assignments and exam

Materials

Learning package, a textbook indicated by the lecturer.

04IT601/2E OBJECT-ORIENTED ANALYSIS 4 ECTS**Learning objectives**

The student will learn an object-oriented approach to systems analysis and software development. The students will learn to use the Unified Modeling Language (UML) to design and documenting software intensive systems.

Contents

- modelling concepts
- static modelling
- class modelling
- generalization
- association
- aggregates
- abstract class
- dynamic modelling
- events
- event-state models
- interaction models
- use case models
- analysis and design

Prerequisites

Introduction to Programming, Information Systems Analysis and Design

Assessment

Distance tasks, exam

Materials

James R Rumbaugh, Michael R Blaha: Object-Oriented Modeling and Design with UML ,
Prentice Hall, Hardcover, 2nd edition, Published November 2004, 477 pages, ISBN 0130159204

04IT602/1E SYSTEMS ANALYSIS AND DESIGN 5 ECTS**Learning objectives**

The student is familiarised with the importance of information systems in a company's business operations and knows the phasing of building information systems. He/She learns the analysis and design of an information system and knows about database design.

Assessment

Course work and exam

Materials

Literature indicated by the lecturer

04IT602/2E USER INTERFACE DESIGN 4 ECTS**Learning objectives**

The student is able to design a user interface for a visual environment and to estimate its usability.

Assessment

Course work and exam

04IT603/1E WWW-DOCUMENT PREPARATION 3 ECTS**Learning objectives**

The student

- knows the basic structures of WWW-documents
- can use the essential commands of XHTML markup language
- knows how to style XHTML documents using CSS

Contents

XHTML markup language, CSS stylesheet language

Assessment

Assignments and exam

Materials

Indicated by the lecturer

04IT603/2E MULTIMEDIA 3 ECTS**Learning objectives**

The student

- knows the basic concepts of multimedia

- knows how to digitalize and edit voice and video data
- knows the basic concepts of animation and handles many different animation techniques

Contents

Concepts, multimedia tools and applications

Producing and editing multimedia data

Prerequisites

Basics of image editing

Assesment

Lectures, assignments, exam

Materials

Software: PowerPOint, Sound Forge, ImageReady, Director, Premiere, Flash

Other material indicated by the lecturer

04IT603/3E INTRODUCTION TO XML 3 ECTS

Learning objectives

The student

- understands the basics of using XML technology
- manages the syntax of XML markup language
- can create well-formed and valid XML documents
- is able to design and implement XML structures using DTD and XML Schema
- knows how to style XML documents using CSS
- is able to implement XSL transformations

Contents

XML syntax, DTD, XML Schema, XSLT, XPath

Prerequisites

04IT603/1 WWW-Document Preparation

Assessment

Assignments, course work and exam

Materials

Indicated by the lecturer

04IT604/1E INTRODUCTION TO DATABASES 3 ECTS

Learning objectives

The student

- understands the basic concepts of databases in general and especially relation databases
- knows the basics of SQL and can create simple queries by it
- Handles the basic administration tasks of database management system

Contents

Databases, SQL

Assessment

Lectures, assignments and exam

Materials

Indicated by the lecturer

04IT605/1E IT MATHEMATICS 3 ECTS

Learning objectives

The student

- understands the logical basics of computers' architecture and programming
- can operate with propositional calculus
- can apply propositional calculus to programming
- knows the basic set operations
- understands the relationship between relational databases and set theory
- can perform number system conversions
- knows the main methods for storing digital information.

Contents

Propositional calculus, set theory, number systems, methods for storing digital information

Assessment

Assignments and exam

Materials

Indicated by the lecturer

04IT606/1E INFORMATION SECURITY 3 ECTS

Learning objectives

The student

- knows the domains of information systems security management
- knows the basics of cryptography and its applications
- gets an overall understanding and practical knowledge of information security issues.

Contents

Domains of information systems security management, cryptography and its applications

Assessment

Assignments and exam

Materials

Krutz, R. L. & Vines, R. D. 2001. The CISSP Prep Guide: Mastering the Ten Domains of Computer Security. John Wiley & Sons, New York.

04TUT601E ORIENTATION TO RESEARCH 10 ECTS

04IT607/1E PROJECT 10 ECTS

To be completed during 3rd and 4th year

Advanced Professional Studies 30 ects

from 2nd year on

ELECTIVE STUDIES 15 ECTS

The student can select his/her elective studies from his/her own degree programme or from the other degree programmes within Lahti Polytechnic. Studies from other polytechnics and universities can also be chosen. In that case he/she must have the selected courses approved to the personal study plan in advance.

PRACTICAL TRAINING 30 ECTS

A continuous 30 ects practical training period is carried out during the studies (if the student wants to do the practical training before the polytechnic studies, he/she has to submit a separate application). The work must be development work in IT. There will be two seminars about practical training; in the first one the student introduces the place of employment, and in the second one a problem concerning the organization's information system or data processing. Practical training is supervised, and a written contract about the traineeship will be made with the organization. Practical training may take place after the first year at the earliest, but it is recommended to carry it out after two years of studies in the first two periods of the third year (from the beginning of June till the end of December). International students will get assistance in finding placements.

THESIS 15 ECTS

Objectives and contents

The aim of the thesis is to develop and demonstrate the student's abilities to use his/her knowledge and skills in research and development. The subject of the thesis must be working-life oriented and correspond to the student's field of studies. The thesis is a process that includes acquiring the knowledge and necessary skills, choosing the subject, planning and carrying out the research work, reporting and presenting the work. The work will be assessed.

Prerequisites

Orientation to Research Work 7.5 ects (Research Methods, Statistical Analysis, Research Process) Before the students can start the thesis, it is required they have accomplished most of the professional studies of the degree programme.