

HSE



INFORMATION
TECHNOLOGY
PROGRAM
2006





Dear *prospective applicant,*



Professor Jyrki Wallenius
*Academic Director, ITP
Helsinki School of
Economics*

Thank you for your interest in the Information Technology Program (ITP) organized by the Helsinki School of Economics.

Since 1995 the Helsinki School of Economics has arranged a summer program in Information Technologies for selected university students and corporate partners. ITP is known as a dynamic and up-to-date program that prepares talented individuals for the demanding challenges of the Information Society.

Excellent relationships between the program and collaborating companies ensure that ITP stays on the cutting edge and the students and the alumni of the program enjoy outstanding networking opportunities. ITP combines an academic program

with a practical company perspective in a unique way. As earlier, all ITP students will participate in a company project, which will give them an opportunity to apply the knowledge learned in ITP courses in practice.

Participation in the program requires a strong full-time commitment during the summer. However, I sincerely believe that this investment will pay off. The knowledge and skills in information and communication technologies learned in ITP are a necessity in today's business environment. Therefore, I can highly recommend the Information Technology Program for you!



What is ITP?

THE PURPOSE OF ITP is to provide students with a strong applied understanding of Information and Communication Technologies (ICT). The program provides the necessary tools, concepts and approaches that enable students with diverse backgrounds to operate effectively in the global business environment.

The program consists of two simultaneous subprograms with different areas of concentration. Students can participate in only one of the subprograms during the same summer. The subprograms of ITP in 2006 are: Business & Technologies and Content & Media. Both subprograms are worth 24 ECTS credits and are recognized as a minor subject in the M.Sc. program at HSE. ITP studies can be extended to 30 ECTS with extra work (i.e. keeping a learning diary) and are thus recognized as a minor subject in the BSc program at HSE.

Structure of the Studies

THE SUBPROGRAMS OF ITP consist of three courses and a Business Project. The three courses are intensive three-week modules. Each course normally includes 42 contact hours, excluding group work and individual assignments. The courses are held on 4 days per week, from 9 a.m. to 12.30 p.m. The fourth module in both subprograms is the Business Project, which is carried out during the entire summer in groups of approximately five students. All students participating in ITP are required to complete all four courses, including the Business Project.



To Whom?

THE PROGRAM IS TARGETED at HSE's basic degree students, MBA students and exchange students from HSE's partner universities (a list of HSE's partner universities can be found from www.hkkk.fi/intrelat). Students from other Finnish universities can also apply, and if selected, participate according to the rules of the JOO agreement. **Applicants must have at least 60 ECTS of the BSc degree completed when applying to the program.**

Corporate partners can take part in ITP according to the rules of the agreement between their respective companies and ITP.



Good to know

NEITHER OF THE SUBPROGRAMS requires previous experience or studies in the field, although both are naturally helpful. However, it is essential that students are fluent in both written and spoken English. This is because all communication in ITP as well as readings, cases, and other assignments are in English.

Attendance is mandatory in all classes and course-related events arranged by ITP. Students should be aware that according to ITP rules, students who do not attend at least 80% of scheduled class meetings in a specific course will fail the course. All students have to purchase books and other study materials for the courses.

You are welcome to have a look and find out more about ITP at www.hkkk.fi/itp.

» SUBPROGRAM | 24 ECTS

May 15 – August 25, 2006

business & technologies

0.

BUSINESS PROJECT KICK-OFF WEEK

May 15 – May 19

» Brief Description

The objective of the Business Project Kick-off Week is to provide the participants with the necessary background for participation in ITP business projects. During this week, business project groups will have their first meetings with the client company. There will also be training for project work and participants will learn more about working in intercultural teams.

*ITP staff and Project
Coordinators*

The Business & Technologies subprogram in ITP aims at providing students with an understanding of e-business infrastructure technologies, the new business opportunities these technologies create, and their effects on the business environments and societies in which they are used.

Month	MAY			JUNE				JULY				AUGUST			
Week	20	21	22	23	24	25	26	27	28	29	30	31	32	33	34
	15/5–19/5		22/5–9/6		12/6–23/6			26/6–21/7		24/7–28/7	31/7–4/8		7/8–18/8		21/8–25/8
	Business Project Kick-off Week		Course		Business Project Weeks I & II			Course(s)		Break	Business Project Week III		Course		Business Project Week IV

1.

INFORMATION TECHNOLOGY AND E-BUSINESS FUNDAMENTALS

May 22 – June 9

» Brief description

This course is designed to provide an overview in the hardware, software, protocols, and technologies that are utilized today in telecommunications, networking, and electronic business (e-Commerce). This course is designed to be more technical than managerial, giving the students the technical background needed to make managerial decisions necessary for the proper management of technology in the 21st century global market.

» Key topics

- Telecommunications policy in Europe and North America
- Open Systems Interconnect (OSI) model for networking
- Local area network function, installation, and management
- TCP/IP
- Wide Area Network function, installation, and management
- Application development and scaling
- Disruptive technologies and e-business
- Wireless networking
- Mobile commerce technologies
- Information security

Dr. Andrew Urbaczewski,
University of Michigan-
Dearborn

2.

ACHIEVING STRATEGIC ADVANTAGE THROUGH DISTRIBUTED TECHNOLOGIES

July 3 – July 21

» Brief description

This course explores the implementation of business models, strategies and tactics made possible by modern information technology. Ubiquitous, inexpensive network connectivity, improved development technologies, better packaged software and outsourcing have dramatically expanded the range of strategic options for managers. This course provides students with frameworks and tools to develop, implement and manage business models effectively and efficiently in a rapidly evolving environment.

» Key topics

- Types of business models
- Budgeting and return on IT investment
- Can IT still be strategic?
- Managing an organization's infrastructure
- The buy vs. build decision
- Selecting and managing vendors
- Security policy
- Managing and assessing software development
- Content and knowledge management

Dr. William T. Schiano,
Bentley College

3.

DIGITAL ECONOMY AND INFORMATION INDUSTRIES

June 26 – June 30

Aug 7 – Aug 18

» Brief description

The rapid development and widespread application of information and communication technologies (ICTs) has had a profound impact on individual firms, industries, and societies. This course offers an in-depth review of these contextual changes and helps the participants understand how to operate effectively and efficiently in the current dynamic, rapidly changing business environment. The course will also provide an overview of the industries that enable the digital economy.

» Key topics

- Digital Economy – Smoke and Mirrors or the Real Thing?
- Core Characteristics of Information Products and Services
- Information Industries: Structure and Main Players
- Convergence: Technological Success, Business Model Failure?
- Leadership Challenges in the Digital Economy
- Creation, Management, and Protection of Intellectual Property Assets
- Ethical Dilemmas of Information Society
- Regulation and Government Policies in Digital Economy

Dr. Heikki Topi,
Bentley College

4.

BUSINESS PROJECT

» Brief description

The objective of the Business Project is to apply the theory learned during the conceptual courses in practice. The projects completed during the summer will be based on real-life needs of collaborating companies. The project weeks are dedicated to the project and events related to it. The participants will also be working on the project during the courses, especially on the lecture-free project days.

» Key Contents

- Integration of the skills and knowledge acquired during prerequisite courses
- Business Project workshops
- Planning and conducting of business projects throughout the summer
- Development of personal team-working skills and abilities

ITP Project Coordinators

*“The
biggest
gain for
me was*

*that ITP enabled to deepen my understanding
of ICT business models and compare the
knowledge learned in the courses against my
prior practical experience.”*

KATJA VUOKILA
SALES MANAGER,
VISMA SOFTWARE
ITP 2004

» **SUBPROGRAM** | 24 ECTS

May 15 – August 25, 2006

content & *media*

The Content & Media subprogram in ITP aims at providing students with an understanding of basic methods, techniques and tools for producing and designing digital media products. This concentration area focuses on hands-on-work and on learning to use a variety of digital media software.

0.

BUSINESS PROJECT KICK-OFF WEEK

May 15–May 19

» **Brief Description**

The objective of the Business Project Kick-off Week is to provide the participants with the necessary background for participation in ITP business projects. During this week, business project groups will have their first meetings with the client company. There will also be training for project work and participants will learn more about working in intercultural teams.

ITP staff and Project Coordinators

Month	MAY				JUNE				JULY				AUGUST			
Week	20	21	22	23	24	25	26	27	28	29	30	31	32	33	34	
	15/5–19/5	22/5–9/6				12/6–16/6	19/6–14/7				17/7–21/7	24/7–28/7	31/7–11/8		14/8–25/8	
	Business Project Kick-off Week	Course(s)				Business Project Week I	Course(s)				Business Project Week II	Break	Course		Business Project Weeks III and IV	

1.

INTRODUCTION TO DIGITAL MEDIA*May 22–June 2 & July 3–7*» **Brief description**

The objective of the opening course is to introduce the course participants to three essential aspects of digital media: Most relevant tools for creating digital media solutions; key design principles and guidelines; and project management and other business aspects that govern digital media. Any future producer, project manager, designer or programmer will benefit greatly from comprehending these three aspects, even if the person is not using all of them directly in their own work. Project plans, schedules and all pivotal design plans for each project are created in teams during this course.

» **Key Topics****Tools to create and build digital media solutions:**

- Adobe Photoshop & Illustrator
- Macromedia Dreamweaver

Designing and Editing Digital Media:

- Introduction to digital imaging and typography
- Introduction to Web publishing and XHTML programming
- Principles of online and interactive design
- Development of a Web/Mobile site and navigation and structure
- User Interface design for Web sites and Mobile solutions

Digital Media Business and Project Management:

- Project plan examples and execution
- Production and scheduling
- Client relationships and team organization
- Digital marketing and advertising
- Online self-service solutions

Antti Leino,
Chief Designer,
Satama Interactive Helsinki

2.

TOOLS AND METHODS FOR CONTENT CREATION*June 5–9 &
June 19–30*» **Brief description**

The objective of this course is to give the students hands-on knowledge of advanced web authoring and an understanding of the creative design process and principles in a fast-paced real-world environment. During the course students use tools like Adobe Photoshop, Macromedia Flash, Macromedia Dreamweaver and Adobe Image Ready to produce standards-compliant & scalable web solutions. By the end of the course, students will be able to join creative teams to design advanced medium-scale and user-friendly digital media projects.

» **Key Topics****Basic Tools for creating and building web solutions continued:**

- Adobe Photoshop, Illustrator & Image Ready
- Macromedia Dreamweaver & Flash

Advanced Digital Media Design

- Visual narratives & digital storytelling, animation basics
- Advanced digital imaging & typography
- Advanced web programming with standards-compliant XHTML/CSS/DOM
- Solid, user-centered UI design & basic usability testing
- Online advertising & copywriting
- Creative problem-solving
- Best practices in information and content design and choosing the right tools for the task

Sami Niemelä,
Designer/Art Director,
Neocite Communications

3.

RICH MEDIA DESIGN*July 10–14 &
July 31–August 11*» **Brief description**

The course introduces the concept of rich media. The objective is to give the students basic skills in the online content creation using Macromedia Flash authoring software. In addition to mastering Macromedia Flash the objective is to give the students knowledge of the concepts related to rich media, such as digital animation, sound design and streaming media. By the end of the course students will be able to create and publish animations, navigational controls and basic applications.

» **Key Topics****Introduction to rich media:**

- Computer animation
- Rich media platforms
- Streaming media

Macromedia Flash:

- Rich Internet applications
- Authoring with Macromedia Flash
- Publishing rich media content

Tommi Merelin,
Chief Flash Officer,
North Coast Creative

4.

BUSINESS PROJECT» **Brief description**

The objective of the Business Project is to apply the theory learned during the conceptual courses in practice. The projects completed during the summer will be based on real-life needs of collaborating companies. The project weeks are dedicated to the project and events related to it. The participants will also be working on the project during the courses, especially on the lecture-free project days.

» **Key Contents**

- Integration of the skills and knowledge acquired during prerequisite courses
- Business Project workshops
- Planning and conducting of business projects throughout the summer
- Development of personal team-working skills and abilities

ITP Project Coordinators

“With the new set of applicable skills learned at ITP, my team was able to build a working prototype that our project company plans to use in the future.”

DANIEL GOODALL
PRODUCT MANAGER,
NOKIA
ITP 2004

How to *apply?*

APPLICATIONS SHOULD BE DELIVERED to the ITP office **by 4 p.m. on Friday, March 24, 2006**. Please note that applicants are responsible for including all required information in the application. ITP will not contact applicants regarding incomplete forms, and all applications are evaluated solely on the basis of information received by ITP.

The following application procedure and schedule applies to HSE's basic degree students, MBA students, students applying under JOO-agreement and exchange students from HSE's partner universities. Corporate representatives can participate in ITP courses according to the rules of the agreement between their respective companies and ITP (please see page 10 for more information about company collaboration).

» *Student selection criteria*

APPLICANT'S MOTIVATION AND COMMITMENT	(25%)
SELF-EVALUATION OF THE STRENGTHS AND WEAKNESSES IN TEAMWORK	(15%)
STUDIES (INCL. GRADES AND EFFICIENCY)	(40%)
WORK EXPERIENCE AND COMPUTER SKILLS	(20%)

» *Number of students accepted from each applicant group*

	BUSINESS & TECHNOLOGIES	CONTENT & MEDIA
1. HSE BASIC DEGREE STUDENTS	20	16
2. JOO-AGREEMENT STUDENTS	10	5
3. STUDENTS FROM HSE EXCHANGE SCHOOLS	10	2
4. HSE MBA STUDENTS	10	2
TOTAL	50	25

THE RESULTS OF THE SELECTION PROCESS

will be sent to the applicants via email on Friday, March 31, 2006. A list of selected students (who have given permission to

publish their name) will also be available at www.hkkk.fi/itp. Students that have been accepted for the program have to confirm their participation on April 13, 2006 at the latest. This confirmation is binding. Detailed instructions of confirmation will be sent to the accepted students.

Please note that this text is an unofficial translation of the selection criteria. In case of interpretation problems, the official Finnish text version prevails. Available at www.hkkk.fi/itp. The program is subject to change.



Applications should include:



1

A cover page specifying the subprogram you wish to enrol (i.e., Business & Technologies **or** Content & Media), your name and contact information. An example can be found in www.hkkk.fi/itp.

2

A short resume where you should include your personal and contact information as well as your student ID number. Also, you should list your education, estimated time of graduation, work experience, computer skills and acquired skills relevant to the subprogram for which you are applying.

3

An official transcript of grades either in Finnish or English from current home university.

4

Answer to the following essay questions (max 1 page/essay):

- Self-evaluation of your strengths and weaknesses in teamwork
- Why are you interested in ITP and how would you use the knowledge and skills learned in this program in your future?

5

All non-native speakers of English **applying as exchange students** (applicant group 3) have to take the TOEFL (Test of English as a Foreign Language). **Applicants must score 250 or above on the computer-based test.** In case the TOEFL results arrive later than the application deadline but before May 2006, an estimate of the final test score from the TOEFL testing center should be included with the application.

6

All non-HSE students must have written permission from their own university (either JOO-agreement permission or permission to participate as an exchange student).

Please also state,

7

Can your name be published on the program website www.hkkk.fi/itp in case you are accepted for the program? (Yes/No)

8

Do you wish to apply to the other subprogram in case you are not selected to the subprogram for which you are primarily applying? (Yes/No)

» PLEASE MAIL
YOUR COMPLETED
APPLICATION TO:

ITP / Salla Soljanlahti
Helsinki School of Economics
PO Box 1210
00101 Helsinki

You may also leave your application at the reception desk in the lobby of the main building of the Helsinki School of Economics (Runeberginkatu 14-16).

» ITP BUSINESS PROJECTS

ITP students complete 3 lectured courses and one real-life project for a company during the summer. The topic and scope of the project are always defined individually. In previous years, ITP business projects have been completed for small, medium, and large-sized companies. Project work has been of high quality and is delivered in a timely fashion, utilizing current information gathered from the field and from ITP courses.

» Project Description

- Projects are tailor made and the topic of each project is based on the actual needs of the collaborating company.
- Projects are related to the topics of the two subprograms, i.e. Business & Technologies or Content & Media.
- The project is conducted under a non-disclosure agreement (NDA).
- Project teams consist of 4 to 5 students.
- ITP project coordinators, course professors and lecturers support the projects during the summer.
- The project starts in the middle of May and will be completed by the end of August. During this time, students will also complete three courses.
- The reporting and working language is English.
- The company has full rights to the project.

» COMPANY COLLABORATION

Possibilities for your *company*

Companies can participate in ITP in a number of different ways and at varying levels of involvement. In practice the basic level of collaboration involves companies using ITP courses in their personnel training and/or ITP students carrying out business projects for collaborating companies.

» PERSONNEL TRAINING

ITP offers company representatives a unique learning environment where they have a great possibility to enhance and update their knowledge in the field of ICT. Professors in ITP belong to the top experts in their field and are able to provide corporate representatives with the latest findings on the issues covered on ITP courses.

» Course Description

- Each course lasts for three weeks.
- Classes are held on four days per week from 9 a.m. to 12.30 p.m.
- Company representatives can choose the courses they wish to take part according to their own personal needs and/or interests. They may choose individual course/s or conduct the entire program.
- Participating companies choose their representatives independently.
- There are no minimum requirements concerning the company representatives' backgrounds.
- To benefit most from the courses, fluent English skills are necessary since all the lectures, assignments and tests are in English.

» Company representatives can benefit from the courses in two ways:

- Attending lectures (auditing)
- Attending lectures and doing all the given assignments and exams

Please note that the application procedure and course requirements mentioned earlier in this brochure are for university students only. They do not apply to company representatives!

“The student teams have been very active as well as productive. The schedules have been kept exceptionally well, communication has been punctual and the outcomes have exceeded our expectations.”

– MERJA RANTA-AHO,
ELISA CORPORATION



ITP 2006

Information Technology Program (ITP)
Helsinki School of Economics
P.O. Box 1210
00101 Helsinki

Tel +358 9 4313 8726
Fax +358 9 4313 8889
itp@hse.fi
www.hkkk.fi/itp

PROGRAM MANAGER
Salla Soljanlahti
salla.soljanlahti@hse.fi
+358 40 595 2921

“ITP project was a good experience and it taught a lot about working for companies in a small team.”

“Nice program with a good pace. Interesting courses, lots of value & knowledge added.”

“The project is very challenging and time consuming. Furthermore interesting and motivating.”

– PROGRAM FEEDBACK 2005

