

## **AI in Business BUS8PO805-3006 24.05.2021-20.08.2021 5 cr (PO8, ...)**

### **Learning objectives**

This course introduces the impact of AI in business and introduces students to a number of AI topics. Much of the course is taught virtually, but there will be a few contact classes at Porvoo campus. Guest lecturers/experts on AI will also provide some lectures and these will be recorded as a webinar and placed onto the course. The contact classes and guest lectures will also include a small number of assessment tasks.

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

Possible company visits and guest lecturers and workshops from different companies and organisations.

Possibility to operate with international teams and international lectures. Possible guest lecturers from international organisations and partner universities.

### **Contents**

There are five key topics covered in the course module:

Topic 1: An Introduction to Artificial Intelligence

Topic 2: Machine Learning in Business and applications-(with Python code)

Topic 3: Robotics in Business

Topic 4: Artificial Intelligence in Business and Society

Topic 5: The Future of Artificial Intelligence

### **Contact classes will run every other week.**

50% Virtual tasks

50% contact classes

### **Assessment criteria**

Assessment criteria - grade 1

The student has some understanding of AI in business used in the module. He/She is able to communicate at a minimal level with AI in business terminology and theory. The student is able to operate only when aided by other students and supervisors.

Assessment criteria - grade 3

The student is able to understand most concepts in AI in business within the module.

He/She is able to communicate at an intermediate level with AI in business terminology and theory. He/She is able to discuss and write assessment tasks with reference to some AI academic materials mostly independently.

Assessment criteria - grade 5

The student is able to understand concepts in AI in business within the module. He/She is able to communicate fully independently with AI in business terminology and theory. He/She is

able to discuss and write assessment tasks with reference to AI academic materials independently. He/She applies an entrepreneurial problem-solving approach to their project work.

### **Further information**

Course Instructor: Lecturer Darren Trofimczuk  
Darren.Trofimczuk@haaga-helia.fi

### **Teaching methods and instruction**

This course introduces the impact of AI in business and introduces students to a number of current AI topics. The course is taught virtually, but there will be option for students to also join live interactive webinars in addition to some guest lecturers and AI experts. The course will include a small number of assessment tasks based around the following teaching instruction:

- Virtual classes
- Inquiry learning
- Peer-to-peer learning
- Tutorials
- Lectures and live webinars
- Independent study and teamwork

### **Learning material and recommended literature**

The main book to use for this course is: Artificial Intelligence: 101 Things You Must Know Today About Our Future, Lasse Rouhiainen, ISBN: 1982048808 (50 page free sample will be provided for all students).

Materials will be provided in the course such as:

- Learning materials
- Books on the content topics
- E-books and online articles
- Online tutorials
- Companies' web portals
- Relevant media, news agencies, quality press, etc.
- Exercises, tests
- Instructors' own materials, materials produced by students.

### **Teachers**

Darren Trofimczuk

### **Working life connections**

Possible networking opportunities with AI experts and guest lecture workshops from different companies and organisations.

### **Campus**

Porvoo Campus

## **Exam dates and re-exam possibilities**

All assessment will be done in the course through assignments and or via Moodle quiz/exams.

- Virtual course assignments x2 (60%)
- Guest lectures and webinar tasks (40%)

## **Teaching language**

English

## **Internationality**

Possibility to operate with international teams and international lectures. Possible guest lecturers from international organisations and partner universities.

## **Timing**

24.05.2021 - 20.08.2021

## **Learning assignments**

Contents

There are five key topics covered in the course module:

Topic 1: An Introduction to Artificial Intelligence

Topic 2: Machine Learning in Business and applications

Topic 3: Robotics in Business

Topic 4: Artificial Intelligence in Business and Society

Topic 5: The Future of Artificial Intelligence

Grade 1

The student has some understanding of AI in business used in the module. He/She is able to communicate at a minimal level with AI in business terminology and theory. The student is able to operate only when aided by other students and supervisors.

Grade 3

The student is able to understand most concepts in AI in business within the module. He/She is able to communicate at an intermediate level with AI in business terminology and theory. He/She is able to discuss and write assessment tasks with reference to some AI academic materials mostly independently.

Grade 5

The student is able to understand concepts in AI in business within the module. He/She is able to communicate fully independently with AI in business terminology and theory. He/She is able to discuss and write assessment tasks with reference to AI academic materials independently. He/She applies an entrepreneurial problem-solving approach to their project work.

## **Enrollment**

14.04.2021 - 21.05.2021

## **Content scheduling**

The course will run intensively with live online Zoom support webinars over 3 week period starting 24.05 -11.06. These will be designed to support the topics, introduce the content

and provide opportunities to interact with the course instructor (webinars will be recorded for those that cannot join live).

After 11.06 students will be able to work independently on the course assessments in their own time over the summer. All support materials will be active during the summer. The course will start week 21 (24.05) and finish in officially in week 33 (20.08). All assessments will need to be returned by Friday 20th August for final grades to be released and verified by the course instructor.

### **Groups**

PO8  
VIRTUAL  
KESÄ2021

### **Alternative learning methods**

Virtual learning including virtual study with assignments, independent study, project work, interactive webinars and online exams.

### **Mode of delivery**

Distance learning

### **Seats**

15 - 60

### **Further information**

- Virtual course assignments x2 (60%)
- Guest lectures and webinar tasks (40%)

Detailed assessment can be checked from implementation plans. The self-assessment of one's own learning does not influence the module grade. The self-assessment and students' feedback to the module will be used for the module development. The feedback is collected in an electronic form.

### **Degree Programmes**

HETI Degree Programme in Business Information Technology, BITE Degree Programme in Business Information Technology, SAMPO Degree Programme in International Sales and Marketing

### **Virtual proportion**

5 cr

### **Evaluation scale**

H-5

### **Credits**

5 cr

# **AWS Academy Cloud Foundations ICT8TF050-3004**

## **07.06.2021-31.08.2021 5 cr (KESÄ2021, ...)**

### **Learning objectives**

AWS Academy Cloud Foundations is intended for students who seek an overall understanding of cloud computing concepts, independent of specific technical roles. It provides a detailed overview of cloud concepts, AWS core services, security, architecture, pricing, and support.

Upon completion of this course, students will be able to:

- Define the AWS Cloud
- Explain the AWS pricing philosophy
- Identify the global infrastructure components of AWS
- Describe the security and compliance measures of the AWS Cloud, including AWS Identity and Access Management (IAM)
- Create a virtual private cloud (VPC) by using Amazon Virtual Private Cloud (Amazon VPC)
- Demonstrate when to use Amazon Elastic Compute Cloud (Amazon EC2), AWS Lambda, and AWS Elastic Beanstalk
- Differentiate between Amazon Simple Storage Service (Amazon S3), Amazon Elastic Block Store (Amazon EBS), Amazon Elastic File System (Amazon EFS), and Amazon Simple Storage Service Glacier (Amazon S3 Glacier)
- Demonstrate when to use AWS database services, including Amazon Relational Database Service (Amazon RDS), Amazon DynamoDB, Amazon Redshift, and Amazon Aurora
- Explain the architectural principles of the AWS Cloud
- Explore key concepts related to Elastic Load Balancing, Amazon CloudWatch, and Amazon EC2 Auto Scaling

### **Teachers**

Harri Ahola

### **Campus**

Pasila Campus

### **Teaching language**

English

### **Timing**

07.06.2021 - 31.08.2021

### **Enrollment**

14.04.2021 - 21.05.2021

### **Groups**

KESÄ2021

ONLINE

**Mode of delivery**

Distance learning

**Seats**

0 - 80

**Degree Programmes**

HETI Degree Programme in Business Information Technology, BITE Degree Programme in Business Information Technology

**Virtual proportion**

5 cr

**Evaluation scale**

H-5

**Credits**

5 cr

# **Advanced AI BIG8TN002-3001 26.10.2020-18.12.2020 5 cr (AMKoodari20KD, ...)**

## **Learning objectives**

The overall learning objective of the course is to give the students insight into machine learning and natural language processing (NLP) technologies and their application in practice. Upon successful completion of the course, the student:

- knows the main concepts of machine learning and natural language processing,
- can apply a machine learning method in a business case,
- can build a simple chatbot,
- has gained basic skills in using selected machine learning and NLP tools and
- is capable of planning and implementing a project involving AI technologies

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

It is beneficial if the student has completed the course Basics of AI or elsewhere acquired the same knowledge and skills. Prior studies in e.g. statistics, business intelligence, software development and project management are useful but not mandatory.

## **Contents**

- Main concepts of machine learning and natural language processing.
- Business cases where machine learning and natural language processing methods are used.
- Tools (e.g. Python library scikit-learn) for machine learning.
- Tools (e.g. Google Dialogflow, IBM Watson Virtual Assistant) for building a simple chatbot.
- Course project involving AI technologies.

## **Assessment criteria**

Assessment criteria - grade 1

The student understands the basic concepts of machine learning and natural language processing. S/he knows some use cases where the above mentioned can be applied to create value for business. S/he can name related software tools and knows at an abstract level how they could be used in a project involving artificial intelligence technologies.

Assessment criteria - grade 3

The student has a good understanding of the basic concepts of machine learning and natural language processing. S/he has a good understanding on how the above mentioned can be applied to create value for business. S/he can use some related software tools and can apply some AI technologies in a course project.

Assessment criteria - grade 5

The student has an excellent understanding of the basic concepts of machine learning and natural language processing. S/he has a good understanding on how the above mentioned can be applied to create value for business. S/he can use relevant software tools well and is skilled at applying some AI technologies in a course project.

## **Teachers**

Lili Aunimo

**Campus**

Pasila Campus

**Teaching language**

English

**Timing**

26.10.2020 - 18.12.2020

**Enrollment**

11.09.2020 - 30.10.2020

**Content scheduling**

The course runs between 26.10. – 18.12.2020. It is completely virtual, but there will be 4 mandatory synchronous sessions and 4 optional synchronous sessions. They will be on Mondays between 13 and 15 o'clock.

**Groups**

AMKoodari20KD

AMKoodari19D

VIRTUAL

CAMPUS20S

**Mode of delivery**

Distance learning

**Seats**

15 - 40

**Degree Programmes**

HETI Degree Programme in Business Information Technology, BITE Degree Programme in Business Information Technology, AMKoodari

**Virtual proportion**

5 cr

**Evaluation scale**

H-5

**Credits**

5 cr



# **Android App Development TOO8PO036-3004 24.05.2021-20.08.2021 5 cr (PO8, ...)**

## **Learning objectives**

This coding unit uses Android mobile app creation as the main concept. In this unit students will be introduced to App Inventor 2 for creating apps and then move onto using Android Studio, with the possibility to publish any completed app projects onto the Google Play store.

YouTube welcome video: <https://youtu.be/g6gfS4ol1sQ>

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

If students have acquired the required competence in previous work tasks, recreational activities or on another course, they can show the competence with a demonstration and progress faster through their studies. More information and instructions for recognizing and validating prior learning (RPL) are available at MyNet.

## **Contents**

Introduction to app creation and Android App Studio

Creation of new Android project

Setting up Android App Studio interface environment

Basic use of Android App Studio

Testing with the Android emulator

Enabling support for different screen sizes and pixel densities for Android model and devices

Publishing the app on the Google Play store

## **Assessment criteria**

Assessment criteria - grade 1

The student has a some ability to understand the app creation process. He/She has some difficulties in using Android Studio. The student is able to operate only when the task and instructions are given and when aided by other students and the supervisors. The student displays limited cultural business awareness and is able to assess some of the product needs for the customer.

Assessment criteria - grade 3

The student is able to demonstrate understanding of the app creation process. He/She is able to use Android Studio, XML and Java languages and is able to develop some coding independently. The student is able to operate only when the task and instructions are given and when aided by other students and the supervisors. The student displays some culturally aware business-oriented approaches by assessing the product needs for the customer.

Assessment criteria - grade 5

The student demonstrates independent understanding of many parts of the app creation process. He/She is able to use Android Studio, XML and Java languages coding independently. The student applies an entrepreneurial problem solving approach to the app creation process. The student displays a culturally aware business-oriented approach by assessing the product needs for the customer.

## **Further information**

Lecturer Darren Trofimczuk  
darren.trofimczuk@haaga-helia.fi

## **Teaching methods and instruction**

This virtual Android app course is designed to give students a basic understanding in the processes required for developing an Android app. The course is designed for those who have not created an app before, but would like to learn the basic concepts to get started. The course is not suitable for those who want create an advanced app, but an previous app creation studies will be an advantage. In this course students will finish with a basic understanding to continue their Android app development further. There is no expectation for students to publish an app in the Google Play store, as that will be optional and at the expense of the student. The course is taught virtually, but there will be options for students to also join live interactive webinars. The course will include a small number of assessment tasks based around the following teaching instruction methods:

- Virtual classes
- Inquiry learning
- Peer-to-peer learning
- Tutorials
- Lectures and live webinars
- Independent study and teamwork

## **Learning material and recommended literature**

Recommended free eBook: Android Programming Cookbook: Kick-start your Android Projects  
· Author(s) Chryssa Aliferi · Publisher: Java Code Geeks · Hardcover/Paperback N/A ·  
Published March 16th 2018 - (eBook version provided in course):

Other Materials will be provided in the course such as:

- Learning materials
- Books on the content topics
- E-books and online articles
- Online tutorials
- Companies' web portals
- Relevant media, news agencies, quality press, etc.
- Exercises, tests
- Instructors' own materials, materials produced by students.

## **Teachers**

Darren Trofimczuk

## **Working life connections**

Possible networking opportunities with guest lecture workshops from different companies and organizations. Instructor will also provide opportunities for networking with app development experts/startups - including international startups/networks.

## **Campus**

Porvoo Campus

## **Exam dates and re-exam possibilities**

All assessment will be done in the course through assignments and or via Moodle quiz/exams.

- Online test (multiple choice questions + written answers) (30%)
- App Planning Checklist (10%)
- Android App Prototype (60%)

## **Teaching language**

English

## **Internationality**

Possibility to operate with international teams and international lectures. Possible guest lecturers from international organizations and partner universities. Instructor will also provide opportunities for networking with app development experts/startups - including international startups/networks.

## **Timing**

24.05.2021 - 20.08.2021

## **Learning assignments**

Course Content:

- 1) Introduction to app creation and Android App Studio
- 2) Creation of new Android project
- 3) Setting up Android App Studio interface environment
- 4) Basic use of Android App Studio
- 5) Testing with the Android emulator
- 6) Enabling support for different screen sizes and pixel densities for Android model and devices
- 7) How to publishing the app on the Google Play store

### **Grade 1**

The student has a some ability to understand the app creation process. He/She has some difficulties in using App Inventor 2, Inventor Designer and Inventor blocks. The student is able to operate only when the task and instructions are given and when aided by other students and the supervisors. The student displays limited cultural business awareness and is able to assess some of the product needs for the customer.

### **Grade 3**

The student is able to demonstrate understanding of the app creation process. He/She has understanding of using App Inventor 2, Inventor Designer and Inventor blocks and Java languages and is able to develop some coding independently. The student is able to operate only when the task and instructions are given and when aided by other students and the supervisors. The student displays some culturally aware business-oriented approaches by assessing the product needs for the customer.

### **Grade 5**

The student demonstrates independent understanding of many parts of the app creation process. He/She has can independently use App Inventor 2, Inventor Designer and Inventor blocks. He/She is able to use the Java languages and develop coding independently. The

student applies an entrepreneurial problem solving approach to the app creation process. The student displays a culturally aware business-oriented approach by assessing the product needs for the customer.

### **Enrollment**

14.04.2021 - 21.05.2021

### **Content scheduling**

The course will run intensively with live online Zoom support webinars over 3 week period starting 24.05 -11.06. These will be designed to support the topics, introduce the content and provide opportunities to interact with the course instructor (webinars will be recorded for those that cannot join live).

After 11.06 students will be able to work independently on the course assessments in their own time over the summer. All support materials will be active during the summer. The course will start week 21 (24.05) and finish in officially in week 33 (20.08). All assessments will need to be returned by Friday 20th August for final grades to be released and verified by the course instructor.

### **Groups**

PO8  
VIRTUAL  
KESÄ2021

### **Alternative learning methods**

Virtual learning including virtual study with assignments, independent study, project work, interactive webinars and online exams.

### **Mode of delivery**

Distance learning

### **Seats**

15 - 60

### **Further information**

- Online test (multiple choice questions + written answers) (30%)
- App Planning Checklist (10%)
- Android App Prototype (60%)

Detailed assessment can be checked from implementation plans. The self-assessment of one's own learning does not influence the module grade. The self-assessment and students' feedback to the module will be used for the module development. The feedback is collected in an electronic form.

### **Degree Programmes**

HETI Degree Programme in Business Information Technology, BITE Degree Programme in Business Information Technology, SAMPO Degree Programme in International Sales and Marketing, TEMPO Degree Programme in Tourism Event and Management

**Virtual proportion**

5 cr

**Evaluation scale**

H-5

**Credits**

5 cr

# **Basics of AI BIG8TN001-3005 26.10.2020-18.12.2020 5 cr (AVOINAMK, ...)**

## **Learning objectives**

Upon completion of the course, the student is able to:

- understand what is AI and how it can affect business
- recognize opportunities of AI in different domains
- is able to analyze and visualize data
- knows the basic statistical methods used in data analysis
- knows how to use software to perform data analysis
- knows how to apply some basic methods used in AI
- knows trends in AI
- can recognize ethical challenges related to applying AI in business

## **Contents**

- definition of AI and basic concepts related to it
- business cases where AI is used
- methods and software for data analysis and visualization
- basics of statistical data analysis methods
- application of AI methods in a project work
- recent trends in AI
- ethical issues in AI

## **Teachers**

Juhani Heikkinen, Lili Aunimo

## **Teaching language**

English

## **Timing**

26.10.2020 - 18.12.2020

## **Enrollment**

15.06.2020 - 30.10.2020

## **Content scheduling**

The course runs between 26.10. – 18.12.2020. It is completely virtual, but there will be both mandatory and optional synchronous sessions. They will be on Wednesdays between 10 and 12 o'clock.

## **Groups**

AVOINAMK  
AMKoodari20KD  
AMKoodari19D  
VIRTUAL

**Mode of delivery**

Distance learning

**Seats**

0 - 40

**Degree Programmes**

HETI Degree Programme in Business Information Technology, HELI Degree Programme in Business Management, BITE Degree Programme in Business Information Technology, GLOBBA Degree Programme in International Business

**Virtual proportion**

5 cr

**Evaluation scale**

H-5

**Credits**

5 cr

# **Beginners' Finnish FIN4TF010-3006 18.01.2021-21.05.2021**

## **5 cr (TF1A, ...)**

### **Learning objectives**

The student

- can introduce oneself, give basic information about oneself and ask simple questions
- can understand and use basic expressions and simple sentences in routine everyday situation
- 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/education/elp/elp-reg/Source/Global\\_scale/global\\_scale.pdf](http://www.coe.int/t/dg4/education/elp/elp-reg/Source/Global_scale/global_scale.pdf).

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

No previous knowledge of Finnish language required.

### **Contents**

The course is an introduction to Finnish language and culture, and themes handled during this course are me, my family, weather, time and everyday life. Emphasis will be given to all four language skills: listening, speaking, reading and writing.

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

### **Assessment criteria**

Assessment criteria - grade 1

The student knows some basic characteristics of Finnish language, and is able to understand some basic vocabulary in everyday situations.

The student can use familiar everyday expressions and very basic phrases. He/she can interact in a very simple way in everyday situations.

The student has limited motivation to take responsibility for his/her learning process. He/she is able to deal with some of the communicative situations handled during the course.

Assessment criteria - grade 3

The student knows most basic characters of Finnish language and understands familiar everyday expressions and very basic phrases in everyday situations well.

The student can use familiar everyday expressions and very basic phrases well. He/she can interact in a simple way in everyday situations.



The student is partly motivated to take responsibility for his/her learning process. He/she can somewhat master the communicative situations handled during the course.

#### Assessment criteria - grade 5

The student knows basic characters of Finnish language and understands and uses familiar everyday expressions and very basic phrases very well.

The student can understand and use familiar everyday expressions and very basic phrases very well. He/she can interact in a simple way in everyday situations.

The student is fully motivated to take responsibility for his/her learning and participates actively. He/she can fully master the communicative situations handled during the course.

#### **Teaching methods and instruction**

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

The class will provide students the opportunity to practice new vocabulary and grammatical structures through in-class discussion of assigned activities and readings. To succeed in this course, you must actively participate and you will be expected to attend class regularly, prepare for class daily, and speak as much Finnish as possible.

Through the communicative approach I hope to achieve a high degree of interaction in the classroom and make your learning of Finnish language and culture interesting and fun. We strive for a learning atmosphere that challenges you your skills in a supportive way. There are no wrong answers, only good attempts.

Target level A1. Level descriptions can be found at

<http://europass.cedefop.europa.eu/en/resources/european-language-levels-cefr>

#### **Learning material and recommended literature**

Gehring, S. & Heinzmann, S. Suomen mestari 1. Finn Lectura. Helsinki. Chapters 1 - 5. (required) NB! The new, year 2020 edition of the book will be used.

Finnish-English-Finnish dictionary (recommended)

Other material provided by the teacher

#### **Teachers**

Taija Hämäläinen

#### **Working life connections**

Learning Finnish language and culture will give students skills and readiness to work in a Finnish speaking working environment.

#### **Campus**

Pasila Campus

#### **Exam dates and re-exam possibilities**

The final exam will be arranged on the last week of the course.

If a student does not come to the final exam or does not pass it, there are two possibilities to re-take the exam in autumn term 2021. Check MyNet for the general re-exam days for Finnish courses.

Enrollment for the re-examinations begins five weeks before the exam day and ends at noon on the Monday preceding the exam week.

### **Teaching language**

English

### **Internationality**

International students. Differences between Finnish and other cultures.

### **Timing**

18.01.2021 - 21.05.2021

### **Learning assignments**

The goal of this course is to introduce you to the fundamentals of the Finnish language and culture. The course will provide you with tools to function and communicate in everyday context. After successfully completing the course, you can introduce yourself, give basic information about yourself and ask simple questions can understand and use basic expressions and simple sentences in routine everyday situations are able to deal with everyday social situations and handle simple shopping situations are aware of the basic characteristics of the Finnish language, culture and habits is able to use the surrounding language environment to develop your language skills. Emphasis will be given to all four language skills: listening, speaking, reading and writing. The assignments will be given during the course. All of the daily homework assignments will be posted on the class website on Moodle after the classes.

### **Enrollment**

11.01.2021 - 15.01.2021

### **Content scheduling**

The classes will be on Mondays and Wednesdays at 12.30–13.30. NB! Because of the covid-19 situation, the course will be taught in Zoom on Mondays and in a classroom on Wednesdays for now. If the situation changes for better, there might be more classes in Pasila campus later during the spring.

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

### **Groups**

TF1A

TF1B  
EXCH

### **Alternative learning methods**

RPL 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 weeks in August or January and the oral part later in the 1st/4th period according to a separate schedule.

### **Mode of delivery**

Contact teaching

### **Seats**

15 - 40

### **Further information**

Quizzes, texts and/or other assignments 20 - 30 %

Exams 70-80 %

Active participation is crucial to your progress. Coming in time, being prepared, doing activities, answering questions and speaking Finnish as much as possible are all important.

### **Degree Programmes**

BITE Degree Programme in Business Information Technology

### **Evaluation scale**

H-5

### **Credits**

5 cr

### **Unit**

Digital Business

# **Beginners' Finnish 2 FIN4TF011-3005 18.01.2021-21.05.2021 5 cr (TF2SWD, ...)**

## **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 understand conversations on basic, everyday subjects
- knows the main difference between spoken and written Finnish
- can deal with simple situations likely to arise when travelling
- can tell about his/her home and his/her job
- can tell about his/her hobbies and free time
- can express his/her feelings.

Upon successful completion of the course, the student should be on their own way to 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/education/elp/elp-reg/Source/Global\\_scale/globa...](http://www.coe.int/t/dg4/education/elp/elp-reg/Source/Global_scale/globa...)

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

The student has successfully completed the course Beginners' Finnish FIN4TF010 or acquired this level in the entry level test in Finnish.

## **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, home and travelling, food and drinks, celebrating different holidays in Finland and elsewhere, work and free time. The grammar studied during this course:

- Consonant gradation and other changes (in the stem) of nouns and verbs
- Local cases of nouns (Where? Where from? Where to?)
- T-plural
- Pronouns
- Partitive plurals
- Ordinary numbers
- Postpositions
- Basics of the object
- Some word types

## **Assessment criteria**

Assessment criteria - grade 1

The student knows some of the basic Finnish vocabulary, and is able to understand some basics in texts and spoken Finnish in everyday situations. He/she knows a few basic differences between spoken and written Finnish.

The student can somewhat use the vocabulary and grammar handled during the course. He/she has limited capability to interact in simple everyday situations. The student has limited motivation to take responsibility for his/her learning process. He/she is able to deal with some of the communicative situations handled during the course.

#### Assessment criteria - grade 3

The student knows and understands basic Finnish vocabulary and understands basics in texts and spoken Finnish in everyday situations. He/she knows differences between spoken and written Finnish.

The student can use the vocabulary and grammar handled during the course. He/she is capable to interact in simple everyday situations.

The student is motivated to take responsibility for his/her learning process. He/she can somewhat master the communicative situations handled during the course

#### Assessment criteria - grade 5

The student knows and understands basic Finnish language well. He/she understands basic texts and spoken Finnish in everyday situations very well. He/she knows the main differences between spoken and written Finnish.

The student can very well use the vocabulary and grammar handled during the course.

He/she is fully capable and confident to interact in simple everyday situations.

The student is well-motivated to take responsibility for his/her learning and participates actively. He/she can fully master the communicative situations handled during the course.

### **Teaching methods and instruction**

Emphasis will be given to all four language skills: listening, speaking, reading and writing. The class will provide students the opportunity to practice new vocabulary and grammatical structures through in-class discussion of assigned activities and readings. To succeed in this course, you must actively participate and you will be expected to attend class regularly, prepare for class, and speak as much Finnish as possible.

Through the communicative approach I hope to achieve a high degree of interaction in the classroom and make your learning of Finnish language and culture interesting and fun. We strive for a learning atmosphere that challenges you your skills in a supportive way.

Contact hours: oral and written exercises individually and in pairs, group work, learning games.

Independent studies: homework and preparation for lessons, exams and assignments, online material.

### **Learning material and recommended literature**

Gehring, Sonja & Heinzmann, Sanni: Suomen mestari 1. Finn Lectura. Helsinki. Chapters 5/6-9. (Required)

Finnish-English-Finnish Dictionary (Recommended)

Other material provided by the teacher

### **Teachers**

Taija Hämäläinen

### **Working life connections**

Learning Finnish language and culture will give students skills and readiness to work in a Finnish speaking working environment.

## **Campus**

Pasila Campus

## **Exam dates and re-exam possibilities**

The final exam will be arranged during the last week of classes in May

If a student does not come to the final exam or does not pass it, there are two possibilities to re-take the exam during autumn term 2021. Please, check the dates in MyNet. Enrolment for the re-examinations begins five weeks before the exam day and ends at noon on the Monday preceding the exam week.

## **Teaching language**

English

## **Internationality**

International students. Differences between Finnish and other cultures.

## **Timing**

18.01.2021 - 21.05.2021

## **Learning assignments**

The assignments will be given during the course. All of the homework assignments will be posted on the class website on Moodle.

This course develops your ability to understand and use Finnish language further and activates the language skills learned earlier. You will be encouraged and be able to use Finnish in everyday situations.

Upon successful completion of the course, you

- can communicate in simple everyday situations requiring exchange of information on familiar matters
- can understand conversations on basic, everyday subjects
- know the main difference between spoken and written Finnish
- can deal with simple situations likely to arise when traveling
- can tell about your home and your job
- can express your feelings.

This course increases your knowledge of Finnish language and culture. The purpose is to achieve basic language skills that enable you to cope in everyday situations and participate in everyday communication. Themes handled during this course are everyday life, home and travelling, food and drinks, celebrating different holidays in Finland and elsewhere, work and free time.

The grammar studied during this course:

- Consonant gradation and other changes (in the stem) of nouns and verbs
- Local cases of nouns (Where? Where from? Where to?)
- T-plural
- Pronouns
- Partitive plurals
- Ordinary numbers
- Postpositions

- Basics of the object
- Some word types

Upon successful completion of the course, you should be on your own way to 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/education/elp/elp-reg/Source/Global\\_scale/global\\_scale.pdf](http://www.coe.int/t/dg4/education/elp/elp-reg/Source/Global_scale/global_scale.pdf)

### **Enrollment**

04.01.2021 - 15.01.2021

### **Groups**

TF2SWD

TF2DIG

ONLINE

### **Alternative learning methods**

RPL 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 weeks in August or January and the oral part later in the 1st/4th period according to a separate schedule.

### **Mode of delivery**

Contact teaching

### **Seats**

15 - 40

### **Further information**

Quizzes, texts and/or other assignments 20-30 %

Final exam 70-80 %

Active participation is crucial to your progress. Coming in time, being prepared, doing activities, answering questions and speaking Finnish as much as possible all help you do well in your studies.

### **Degree Programmes**

BITE Degree Programme in Business Information Technology

### **Evaluation scale**

H-5

### **Credits**

5 cr

### **Unit**

Digital Business

# **Business IT Project PRO4TF022-3005 18.01.2021-21.05.2021 10 cr (TF5DIG, ...)**

## **Learning objectives**

Upon successful completion of this course:

- the student understands the IT development process in regards to a real Business/ICT project
- has gained experience as team member and/or Team manager

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

The student must have passed the courses Orientation to Business and ICT and Business Operations, and have successfully passed at least one of the following courses Business Process Management, SAP ERP 1, SAP ERP 2. Managing CRM Processes, SCM in Business and Business Intelligence or similar courses in other degree programs.

## **Contents**

The student will participate as a team member or project leader in a project in one of the following main focus areas:

Integrated Systems and Enterprise Resource Planning  
Customer Relationship Management  
Supply Chain Management  
Financial Accounting and Controlling  
Business Intelligence and Analytics

The type and purpose of the project is generally based on a commission and could be containing:

Process development and/or testing  
Process modelling and design  
System/Version upgrade  
Data migration and/or Data management  
Reporting and Analytics  
Training and User support

## **Assessment criteria**

Assessment criteria - grade 1

Grade 1

The student has participated in the project but the individual contribution is minor and/or the quality of the project deliverables are not or barely fulfilling the target.

Assessment criteria - grade 3

Grade 3

The student has well participated in the project and the individual contribution is on a good level with timely and qualitative deliverables.

Assessment criteria - grade 5

Grade 5



The student has been a key member of the project and the individual contribution has clearly had a great impact on the project outcome. And / Or  
The project has overall been successful and reached all goals set.

### **Teaching methods and instruction**

Link to the implementation plan document here:

[https://haagahelia-my.sharepoint.com/:b:/g/personal/h00503\\_haaga-helia\\_fi/BI002/EebWwdNRegVPueVF9kTrQkoBe-iAtvVSGsaRsBXg\\_oV\\_wg](https://haagahelia-my.sharepoint.com/:b:/g/personal/h00503_haaga-helia_fi/BI002/EebWwdNRegVPueVF9kTrQkoBe-iAtvVSGsaRsBXg_oV_wg)

Link to the project Intent here;

[https://haagahelia-my.sharepoint.com/:b:/g/personal/h00503\\_haaga-helia\\_fi/BI002/Ef6Gf-X7nRhGiWz4DTsoOxYBRfphbY5OfHefjfHmzJAghA?e=PGUH2W](https://haagahelia-my.sharepoint.com/:b:/g/personal/h00503_haaga-helia_fi/BI002/Ef6Gf-X7nRhGiWz4DTsoOxYBRfphbY5OfHefjfHmzJAghA?e=PGUH2W)

### **Teachers**

Jarmo Harmonen, Ralf Rehn

### **Campus**

Pasila Campus

### **Teaching language**

English

### **Timing**

18.01.2021 - 21.05.2021

### **Enrollment**

04.01.2021 - 15.01.2021

### **Groups**

TF5DIG  
TF5SWD  
EXCH  
ONLINE

### **Mode of delivery**

Contact teaching

### **Seats**

0 - 30

### **Degree Programmes**

BITE Degree Programme in Business Information Technology

### **R&D proportion**

8 cr

### **Evaluation scale**

H-5

**Credits**

10 cr

**Unit**

Digital Business

# **Business Intelligence BIG4TF022-3005 26.10.2020-18.12.2020 5 cr (TF7WAD, ...)**

## **Learning objectives**

Upon successful completion of the course, the student

- a) understands the importance of Business Intelligence in today's competitive business environment
- b) is familiar with the basic concepts, BI architectures, methodologies and strategies as well as with tools and methods used in the business environment
- c) has basic knowledge of the ETL process
- d) has basic understanding of business driven agile BI-development
- e) has gained basic skills in two world leading BI-tools

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

It is recommended that students have more than 80 credit points registered before course start. Knowledge of ERP systems, data structures and business processes are helpful

## **Contents**

Start-up Module + 4 Modules

- Orientation to Business Intelligence
- Business Intelligence solutions and architectures
- Agile development in BI-projects
- Business Intelligence tools
- Microsoft Business Intelligence and Power BI
- Qlikview / QlikSense
- Hands on workshops with BI-tools

## **Assessment criteria**

Assessment criteria - grade 1

The student:

- a) has a basic understanding of the importance of Business Intelligence
- b) is familiar with at least some of the basic concepts, architectures, methodologies, strategies, tools or technics in BI
- c) has basic skills in using market leading BI tools for analyzing business information and data

Assessment criteria - grade 3

The student:

- a) has a good understanding of the importance of Business Intelligence
- b) is quite familiar with the basic concepts, architectures, methodologies, strategies, tools and technics in BI
- c) is aware of the steps in the planning process of BI solutions
- d) has some skills in using market leading BI tools for analyzing business information and data

Assessment criteria - grade 5

The student:

- a) has a very good understanding of the importance of Business Intelligence
- b) is very familiar with the basic concepts, architectures, methodologies, strategies, tools and technics in BI
- c) is well aware of the steps in the planning process of BI solutions
- d) has good skills in using market leading BI tools for analyzing business information and data

### **Further information**

The software tools and languages used on the course are international. The language of the course material is in English. Students from many nationalities work together in class on hands-on and/or projects.

### **Teaching methods and instruction**

Link to current updated impl plan

[https://haagahelia-my.sharepoint.com/:b:/g/personal/h00503\\_haagahelia\\_fi/BI002/EZ5pOP1O41VMiQyyegqWVR8BqaUIxAXCDNR6yd2a135s7g?e=qD6NYx](https://haagahelia-my.sharepoint.com/:b:/g/personal/h00503_haagahelia_fi/BI002/EZ5pOP1O41VMiQyyegqWVR8BqaUIxAXCDNR6yd2a135s7g?e=qD6NYx)

### **Learning material and recommended literature**

Agile Analytics – A Value-Driven Approach to Business Intelligence and Data Warehousing: Ken Collier, Addison-Wesley 2012: Ken Collier, Addison-Wesley 2012 ISBN 978-0-321-50481-4

E-book: Business Analytics for Managers : Taking Business Intelligence Beyond Reporting: Laursen Gert & Thorlund Jesper, Wiley 2010.

Business Intelligence Applied: Michael S. Gendron, John Wiley & sons 2013 ISBN 978-1-118-42308-0

Other books as available in Moodle platform

Provided articles, resources, links and other material in the E-learning environment

Microsoft Business Intelligence samples and material. Qlikview tutorials and sample material

### **Teachers**

Ralf Rehn

### **Campus**

Pasila Campus

### **Exam dates and re-exam possibilities**

No exam

### **Teaching language**

English

### **Timing**

26.10.2020 - 18.12.2020

### **Learning assignments**

1. Start-up module

- Preparation, guidelines,

- Introduction to tools used
  - Study plan, getting ready to start working
  - Start-up Quiz
  - 8 course points (cp)
2. Module 1 - Orientation and Power Pivot
- Lecture 1 and 2
  - Journals
  - Demonstration
  - Quiz
  - 22 course points (cp)
  - Running total = 30 p
3. Module 2 - Orientation and Power BI Desktop
- Lecture 3
  - Journals
  - Workshops and Task
  - preliminary 25 course points (cp)
  - Running total = 55 p
4. Module 3 - QlikView
- Lecture 4
  - Journals
  - .....
  - preliminary 25 course points (cp)
  - Running total = 80 p
5. Module 4 - Agile development
- Lecture 5
  - Journals
  - ....
  - preliminary 20 course points (cp)
  - Running total = 100 p
6. Official course feedback and feedback directly to teacher
- 2 cp
  - Running total = 102 p

### **Enrollment**

15.06.2020 - 30.10.2020

### **Groups**

TF7WAD  
 TF3SWD  
 TF3DIG  
 TF7BIT  
 VIRTUAL  
 EXCH

### **Mode of delivery**

Distance learning

### **Seats**

15 - 40

## **Further information**

### **Grade 5 (90%)**

The student has a very good understanding of the importance of Business Intelligence and is very familiar with the basic concepts, architectures, methodologies, strategies, tools and technics in BI. The student has excellent skills in using market leading BI tools for analyzing business information and data.

### **Grade 3 (70%)**

The student has a good understanding of the importance of Business Intelligence and is quite familiar with the basic concepts, architectures, methodologies, strategies, tools and technics in BI. The student has good skills in using market leading BI tools for analyzing business information and data.

### **Grade 1 (50%)**

The students has a basic understanding of the importance of Business Intelligence and is familiar with the at least some of the basic concepts, architectures, methodologies, strategies, tools or technics in BI. The student has basic skills in using market leading BI tools for analyzing business information and data.

### **Assessment procedure and setup**

The course grade is defined by the amount of course points achieved:

$\geq 90$  p = Grade 5  $\geq 80$  p = Grade 4  $\geq 70$  p = Grade 3  $\geq 60$  p = Grade 2  $\geq 50$  p = Grade 1  $\geq 40$  p = Grade 1 possible with some extra successful deliveries – contact teacher  
 $< 40$  p = Fail

## **Degree Programmes**

BITE Degree Programme in Business Information Technology

## **Virtual proportion**

5 cr

## **Evaluation scale**

H-5

## **Credits**

5 cr

## **Unit**

Digital Business

# **Business Intelligence Development Project BIG4TF023-3006 26.10.2020-19.03.2021 5 cr (TF7WAD, ...)**

## **Learning objectives**

Upon successful completion of the course, the student

- a) understands the value of business driven BI-development
- b) is knowledgeable of Microsoft SSAS Tabular and SSIS tools/architecture
- c) understands the value of supporting business processes by BI-solutions
- d) has gained experience in creating a BI-solution by using agile development and market leading tools to extract data from an ERP system
- e) has learned to document the created solution and the process

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

It is mandatory that students have passed the BIG4TF022 basic course before student can start this course.

## **Contents**

- Microsoft SSAS Tabular and SSIS
- Tableau introduction , as a possible architecture for the project
- understanding data structures (ERP) and related business processes (O2C and P2P)
- planning, developing and testing a complete BI
- solution based on selected user stories
- documenting and presenting the BI development process and solution

## **Assessment criteria**

Assessment criteria - grade 1

The student:

- a) has a basic understanding of the agile BI development process
- b) is familiar with data structures and related business processes
- c) has gained some understanding in planning and developing a BI-solution
- d) is able to utilize market leading tools to create a BI-solution

More precise Assessment criteria:

To achieve the grade 1 it would be expected that the student:

- has worked independently
- has followed instructions
- has planned the project and presented the project planning
- has planned and fulfilled a basic solution
- has created a final solution
- has utilized tools/architecture
- has reported and presented the solution

Assessment criteria - grade 3

The student:

- a) has a good understanding of the agile BI development process
- b) is knowledgeable of data structures and related business processes
- c) has good insights in regards to planning and developing a BI-solution
- d) is confident in utilizing market leading tools to create a BI-solution

More precise Assessment criteria:

To achieve the grade 3 it would be expected that the student:

- has worked independently
- has followed instructions and deadlines
- has planned the project and presented the project planning reasonably well
- has planned and fulfilled a basic solution, the created and presented solution is pretty ordinary
- has created a final solution that corresponds to the plan or there are explanations and reasons why not
- has utilized good capabilities of the selected tools/architecture
- has used at least to some extent a systematic agile approach with iterations
- has reported and presented the solution
- is able in all communications to discuss using BI and ICT terminology
- has done all required prior modules and reported them ok

Assessment criteria - grade 5

The student:

- a) has a very good understanding of the agile BI development process
- b) is very knowledgeable of data structures and related business processes
- c) has excellent skills in regards to planning and developing a BI-solution
- d) is mastering market leading tools to create a BI-solution

More precise Assessment criteria:

To achieve the highest grade it would be expected that the student:

- has worked independently
- has followed instructions and main deadlines without exceptions
- has well planned the project and presented the project planning well
- has planned and fulfilled more than just a basic solution, the created and presented solution has some specialty, some finding or includes an interesting/innovative approach
- has created a final solution that corresponds well to the plan or there are clear explanations and reasons why not
- has utilized good capabilities of the selected tools/architecture
- has clearly used a systematic agile approach with iterations
- has well reported and presented the solution
- is able in all communications to discuss using good BI and ICT terminology
- has done all required prior modules and reported them ok

### **Teaching methods and instruction**

Business Intelligence Development Project – BIG4TF023-3001, 5 credit points, Professional studies, Optional

Prerequisites

For this pilot implementation it is mandatory that students have passed the BIG4TF023 basic course before student can start this course.

Learning objectives

Upon successful completion of the course, the student

- a) understands the value of business driven BI-development
- b) is knowledgeable of Microsoft SSAS Tabular and SSIS tools/architecture
- c) understands the value of supporting business processes by BI-solutions



d) has gained experience in creating a BI-solution by using agile development and market leading tools to extract data from an ERP system

e) has learned to document the created solution and the process

Course content

- Microsoft SSAS Tabular and SSIS
- Tableau introduction , as a possible architecture for the project
- understanding data structures (ERP) and related business processes (O2C and P2P)
- planning, developing and testing a complete BI-solution based on selected user stories
- documenting and presenting the BI development process and solution

Transition to Non-stop e-learning course

This course will be implemented as follows:

- The course starts on the first week of the second period with an optional introductory, presentation and planning session. Information in Moodle
- This pilot implementation accepts no enrolments after the start session and is open only to students who has passed the basic business intelligence course BIG4TF022.
- The course is setup as an e-learning course. Teacher might assign a time when he will be available in class – if so information will be given in Moodle.
- This is a 8 week course with the possibility to finish the course in no more than 14 weeks (included also holidays) . This means that all deliverables need to be submitted latest by January 18th 2019 4 pm.
- NOTE! There will be a deadline for when the different modules need to be done and marked as complete. Please check out Moodle for details.

Course setup

The BI Development Project course consists of the following parts:

1. Start-up module

- Presentation and course overview
- Nav 2015 ERP understanding and use with client tool
- Nav 2015 ERP processes – O2C and P2P
- Data input to the ERP system – O2C and P2P
- Module report – pass/fail

2. Module 1A – SSAS Tabular and SSIS

- Microsoft SSAS Tabular with Data from Nav ERP
- Microsoft SSIS with Data from Nav ERP
- Module report – pass/fail

3. Module 1B – Optional Tableau Introduction

- Tableau for Teaching - Student License
- Self-guided learning
- Using Tableau Desktop in HH and with Nav ERP
- Module report – omitted/pass/fail

4. Module 2 - Initiation of Development Project

- Project definition and Frame
- User stories and goals for project
- Relevant Nav ERP data structures
- Testing and preparations for project
- Selection of Architecture and Tools
- Presentation of project – report and (video)

5. Module 3 and 4 – Creating, testing and presenting solution

- Iterations, testing and creating solutions
- Possible interim submissions - for discussions and support

- Final submission of solutions
  - Presentation of results – (report) and video
6. Official course feedback and feedback directly to teacher
- In Moodle and Quality system
  - Mandatory if grade and credits wanted

#### Assessment Criteria

##### Grade 5 (90%)

The student:

- a) has a very good understanding of the agile BI development process
- b) is very knowledgeable of data structures and related business processes
- c) has excellent skills in regards to planning and developing a BI-solution
- d) is mastering market leading tools to create a BI-solution

##### Grade 3 (70%)

The student:

- a) has a good understanding of the agile BI development process
- b) is knowledgeable of data structures and related business processes
- c) has good insights in regards to planning and developing a BI-solution
- d) is confident in utilizing market leading tools to create a BI-solution

##### Grade 1 (50%)

The student:

- a) has a basic understanding of the agile BI development process
- b) is familiar with data structures and related business processes
- c) has gained some understanding in planning and developing a BI-solution
- d) is able to utilize market leading tools to create a BI-solution

#### Assessment procedure and setup

To pass this course the student need to

- pass Start-up Module in accordance with the schedule setup for the implementation
- pass Module 1A or Module 1B in accordance with the schedule setup for the implementation
- define, execute and report a developing project individually or as part of a team. (max 3 students)

Requirements linked to grading is discussed in the project definition document.

Re-exams N/A

Course material

Moodlöö materials and reference articles, documents and sites.

Cooperation with the business and other organisations

World leading international tools used in companies.

Teacher

Ralf Rehn, Pasila

Contact hours: Please contact by e-mail using your myy.haaga-helia account

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.

You need to contact the teacher latest on the starting date/session of the course if there is a need for an individual approach.

**Learning material and recommended literature**

Material, links and videos in Moodle.

**Teachers**

Ralf Rehn

**Exam dates and re-exam possibilities**

No exam

**Teaching language**

English

**Internationality**

English tools and material

**Timing**

26.10.2020 - 19.03.2021

**Enrollment**

15.06.2020 - 05.11.2020

**Content scheduling**

This e-learning course starts with an optional start-up session on the week starting 22nd of October and all deliverables need to be submitted latest by 18th of January.

**Groups**

TF7WAD

TF3SWD

TF3DIG

TF7BIT

VIRTUAL

EXCH

**Alternative learning methods**

Not available for this course.

**Mode of delivery**

Distance learning

**Seats**

15 - 30

**Further information**

Evaluation of created BI-solution including reporting and presentation.

**Degree Programmes**

BITE Degree Programme in Business Information Technology

**R&D proportion**

1 cr

**Virtual proportion**

5 cr

**Evaluation scale**

H-5

**Credits**

5 cr

**Unit**

Digital Business

# **Business Mathematics MAT1TF010-3006 24.08.2020-18.12.2020 5 cr (TF3SWD, ...)**

## **Learning objectives**

Upon successful completion of the course, the students

knows statistical basic concepts and can apply them in business

manages most often repeated calculations in business

is able to price products and services

is able to compose calculations of profitability

can calculate impact of general price changes

can present time series by Excel

manages simple interest and compound interest calculations

is able to choose correct calculation method for every day problem

can compare profitability of different investment options

is fluent with Excel in business calculations

Learning outcomes will be reached mostly by completing assignments.

## **Contents**

statistical basic concepts (presenting data, measure scales, variables, grouping, most common parameters, correlation and regression)

percent calculations for business applications, value added tax

profitability calculations

index numbers

time series with Excel

simple interest and compound interest

periodic payments

investments

Excel tools

## **Assessment criteria**

Assessment criteria - grade 1

Moderate understanding of course items and partial ability to apply them in business situations. Can define most common concepts and is able to use them in wider contents.

Assessment criteria - grade 3

Reasonable understanding of course items and sufficient ability to apply them in business situations.

Can define and apply concepts in wider contents. In business problem situations is able to choose a correct calculation methods and interpret result to accurate decision.

Assessment criteria - grade 5

Good understanding of course items and good ability to apply them in business situations. Is able to define and apply all necessary concepts in wider contents. Has no problem in choosing correct calculation methods for most common business problems and deeply knows how to interpret calculation results to business decisions.

**Teachers**

Kalevi Keinänen

**Campus**

Pasila Campus

**Teaching language**

English

**Timing**

24.08.2020 - 18.12.2020

**Enrollment**

15.06.2020 - 28.08.2020

**Groups**

TF3SWD

TF3DIG

**Mode of delivery**

Contact teaching

**Seats**

15 - 45

**Degree Programmes**

BITE Degree Programme in Business Information Technology

**Evaluation scale**

H-5

**Credits**

5 cr

**Unit**

Digital Business

# **Business Operations BUS1TF011-3008 29.03.2021-21.05.2021 5 cr**

## **Learning objectives**

Upon successful completion of this course, the student gets 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.

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

No prerequisites

## **Contents**

Topics to be covered in the course include the following:

### **Company foundation and key principles**

Business environments and boundaries of business organisation

Value adding, business functions and operations and related analysis methods

Entrepreneurship and company growth

Financial perspective on managing companies

Case company and industry analysis

### **Assessment criteria**

Assessment criteria - grade 1

Has a basic knowledge of the principles of business environments and running business companies. Is interested in identifying and analysing market and competition, company structures, business operations and financial performance of companies. Possesses a rudimentary understanding of the business analysis methods and knows how to apply the methods and concepts learned during the course in practice. Is passable in presenting the company analysis reports as well as in explaining the business concepts. Has a basic knowledge of the business processes.

Assessment criteria - grade 3

Has a good knowledge of the principles of business environments and running business companies. Is motivated in identifying and analysing market and competition, company structures, business operations and financial performance of companies. Possesses an eligible understanding of the business analysis methods and is enough skilful in applying the methods and concepts learned during the course in practice. Is fluent in presenting the company analysis reports as well as in explaining the business concepts. Has a basic knowledge of the business processes.

Assessment criteria - grade 5

Has a very good knowledge of the principles of business environments and running business companies. Is highly motivated in identifying and analysing market and competition, company structures, business operations and financial performance of companies. Possesses a solid understanding of the business analysis methods and is very skilful in applying the methods and concepts learned during the course in practice. Is highly fluent in presenting the company analysis reports as well as in explaining the business concepts. Has a good knowledge of the business processes.

**Further information**

Grade of the course based on exam, assignments and active participation on course

**Teachers**

Seppo Karisto

**Teaching language**

English

**Timing**

29.03.2021 - 21.05.2021

**Enrollment**

01.11.2020 - 01.11.2020

**Mode of delivery**

Distance learning

**Seats**

0 - 1

**Degree Programmes**

BITE Degree Programme in Business Information Technology

**Virtual proportion**

5 cr

**Evaluation scale**

H-5

**Credits**

5 cr



# **Business Process Management BIG4TF003-3010 24.08.2020-18.12.2020 5 cr (TF2SWD, ...)**

## **Learning objectives**

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

- Explain and comprehend the role of BPM in business development
- Describe and discuss general principles of business process development
- Identify, present, analyze and design basic business processes
- Use standard modelling techniques to describe, present and discuss business processes

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

No prerequisites.

## **Contents**

The topics of this course are as follows:

- The basic principles in and objectives of BPM
- Process orientation
- Process modeling (BPMN) and process execution (BPMS)
- Process maturity and process development methods
- Performance measures & KPIs
- Analysis, discussion and presentation of a case company's processes or other task

## **Assessment criteria**

Assessment criteria - grade 1

The evaluation scale for an accepted course contains grades 1 to 5.

The student

- Has participated in some course activities, but activity could clearly be better
- Has a passable understanding of the course contents, core concepts and terminology
- Has some knowledge and skills in modelling, describing and analyzing process
- Has some difficulties in using the course material to support own learning

Assessment criteria - grade 3

The student

- Has shown reasonable activity on the course
- Has a good understanding of the course contents, core concepts and terminology
- Has basic skills in modelling, describing and analyzing process
- Can use the course material in an effective way to support own learning

Assessment criteria - grade 5

The student

- Has shown excellent activity and punctuality on the course
- Masters in an excellent way the course contents, core concepts and terminology
- Has good skills in modelling, describing and analyzing process
- Uses the course materials and independently found sources fluently to support own learning.

**Teaching methods and instruction**

link to preliminary impl plan 12.8.2020

[https://haagahelia-my.sharepoint.com/:b:/g/personal/h00503\\_haaga-helia\\_fi/BI002/EeI\\_qnjFgPRHISPy-YAmI14BLQvXjN3c9LBZiyQjKKt85w?e=e5Pnon](https://haagahelia-my.sharepoint.com/:b:/g/personal/h00503_haaga-helia_fi/BI002/EeI_qnjFgPRHISPy-YAmI14BLQvXjN3c9LBZiyQjKKt85w?e=e5Pnon)

**Teachers**

Ralf Rehn, Lauri Tapola

**Campus**

Pasila Campus

**Teaching language**

English

**Timing**

24.08.2020 - 18.12.2020

**Enrollment**

15.06.2020 - 28.08.2020

**Groups**

TF2SWD

TF2DIG

EXCH

**Mode of delivery**

Contact teaching

**Seats**

15 - 40

**Degree Programmes**

BITE Degree Programme in Business Information Technology

**R&D proportion**

2 cr

**Evaluation scale**

H-5

**Credits**

5 cr

**Unit**

Digital Business

# **Cloud Service Technologies ICT4TF024-3005 24.08.2020-18.12.2020 5 cr (TF4SWD, ...)**

## **Learning objectives**

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

- understand the cloud service implementation technologies and principles
- knows the services contract practices
- evaluate and choose the company's cloud service solutions
- knows how to use and manage Cloud Services

## **Contents**

Topic areas covering the course project work:

- Cloud Services Technologies, IaaS, PaaS, SaaS
- implementation architectures and technologies
- service offering and terms of use
- server virtualization and application virtualization
- server Technologies and storage technologies
- deployment and Management of Cloud Services

## **Assessment criteria**

Assessment criteria - grade 1

Grade 1 (40%) the student,

- is able to perceive the Cloud Technologies key elements of services of the use and management in the point of view.
- is familiar with the concepts of Cloud Services.

Assessment criteria - grade 3

Grade 3 (70%), the student

- knows the service concepts well
- is familiar with service agreements (SLA)
- knows the use of technology and management requirements.

Assessment criteria - grade 5

Grade 5 (90%), the student

- knows the service concepts and service technologies very well.
- knows very well how to deploy, use and manage Cloud Service Technologies.

## **Teaching methods and instruction**

Project work and lectures, OR Working life project or any other project participation

## **Learning material and recommended literature**

The course web pages, Online material

## **Teachers**

Olavi Korhonen

## **Working life connections**

Possible guest lecturers from international companies.

**Campus**

Pasila Campus

**Teaching language**

English

**Internationality**

Possible guest lecturers from international companies.

**Timing**

24.08.2020 - 18.12.2020

**Enrollment**

15.06.2020 - 28.08.2020

**Content scheduling**

In Moodle

**Groups**

TF4SWD

TF4DIG

EXCH

**Alternative learning methods**

Accreditation of prior learning (APL) is observed on the course according to separate instructions

**Mode of delivery**

Contact teaching

**Seats**

15 - 30

**Further information**

Accepted course is evaluated with grades 1 to 5

**Degree Programmes**

BITE Degree Programme in Business Information Technology

**R&D proportion**

1 cr

**Evaluation scale**

H-5

**Credits**

5 cr

**Unit**

Digital Business

# **Communication in Multicultural Environments COM1TF012-3005 18.01.2021-21.05.2021 5 cr (TF3SWD, ...)**

## **Learning objectives**

Upon successful completion of this course, the students will be able to increase their cross-cultural communications skills in global and culturally diverse work environments. This will be accomplished through comparing and contrasting key dimensions in global cultures. One of the main goals is appreciating how reaching multicultural synergy benefits individuals and companies. A key learning point is positioning your own culture in universal systems.

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

No special requirements or prior studies.

## **Contents**

Topics to be covered on the course include the following:

- The nature of multicultural communication; concept of culture
- Universal systems, contrasting cultural values and cultural clashes
- Verbal and nonverbal communication
- Business and social customs; global etiquette
- Intercultural negotiations and virtual meetings

Assignments and course agenda:

- Introduction and dividing the students into teams. Discussing the concept of culture. (Culture can be global, local, geographical or demographical and there can be subcultures and subgroupings.)
- Individual oral or written assignment: My cultural conflict. (Explaining personal experiences of culture shock, understanding the dynamics of an acculturation process, as well as concepts of ethnocentrism and stereotypes.)
- Team assignment: Watching a videoed lecture by a specialist. Analyzing that lecture within your team. Comparing and contrasting Finnish culture with some other culture and its values.
- Team assignment: Creating an educational video that describes the communications or work culture in one country to an audience of expatriate employees.
- Team assignment: Writing a comparative cultural report on two countries according to HH guidelines.
- Team assignment: Recording a video or giving an oral presentation based on your comparative cultural report.
- Individual assignment: 1-2 peer evaluations; assessing the shared work effort in your team and/or evaluating some of the course material according to Lewis and Hofstede models

## **Assessment criteria**

Assessment criteria - grade 1

The student can present values, communication and cultural features pertaining to a country and understands the importance of cultural sensitivity and global awareness. The quality of work and participation is uneven.

### Assessment criteria - grade 3

The student celebrates diversity and understands the possible negative effects of cultural miscommunication. The student can compare and contrast values, communication and cultural features in two countries constructively and understands how selected cultures can be positioned in universal systems. Even contribution in group work, active participation and good quality of work.

### Assessment criteria - grade 5

The student understands the personal and corporate benefits of cultural synergy and knows how to improve intercultural communication and behavior in conflict situations. Universal cultural systems have been internalized and the person understands how to apply these theories into new situations. Impressive contribution in the team's work effort, active attendance and participation, as well as excellent quality of work.

Preparing in advance, timely execution in all assignments and active participation during sessions is required and does have an impact in evaluation.

### **Further information**

Working life connections:

Current international trends in the field of ICT/business are closely monitored.

International characteristics of the course:

Timetables allowing, the implementations are comprised of students from both the Finnish and international degree programs, including exchange students. Presentations of international ICT professionals are included, when applicable.

### **Teachers**

Eija Hansén, Tarja Paasi-May

### **Campus**

Pasila Campus

### **Teaching language**

English

### **Timing**

18.01.2021 - 21.05.2021

### **Enrollment**

04.01.2021 - 15.01.2021

### **Groups**

TF3SWD

TF3DIG

### **Mode of delivery**

Contact teaching

### **Seats**

15 - 45

**Degree Programmes**

BITE Degree Programme in Business Information Technology

**Evaluation scale**

H-5

**Credits**

5 cr

**Unit**

Digital Business

# **Data Management and Databases SWD4TF003-3006**

## **24.08.2020-18.12.2020 5 cr (TF2SWD)**

### **Learning objectives**

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

- explain the basic concepts and terminology of data management and databases
- explain the principles, structure, and terminology of the relational database
- explain the DBMS services and their importance and value in software development
- explain what database transaction is and why it has a crucial role in reliable software systems
- explain the database design methodology
- use data-oriented ER diagrams and database diagrams written in UML
- create a small and simple database in SQL Server and MariaDB
- write intermediate-level SQL queries to retrieve and manipulate the database's data.

Passed courses are assessed on a scale of 1 to 5.

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

The student has completed the course Orientation to Software Engineering (SWD1TF001), or can demonstrate equivalent skills and knowledge. In addition, the course Orientation to ICT Infrastructures (ICT1TF010) is recommended to be completed before taking the Data Management and Databases course.

### **Contents**

Basic concepts and terminology of data management and databases

Principles, structure, and terminology of the relational database

DBMS services and their importance and value in software development

Database transactions

Database design methodology

Data-oriented ER diagrams and database diagrams written in UML

Creating create a small and simple database in SQL Server and MariaDB

Writing intermediate-level SQL queries to retrieve and manipulate the database's data.

### **Assessment criteria**

Assessment criteria - grade 1

The student

- shows passable activity and punctuality on the course
- has passable understanding of the course contents, core concepts and terminology
- has passable knowledge and skills in writing database queries in SQL
- has passable knowledge and skills in using data-oriented diagrams
- has some difficulties in using the course materials to support own learning.

Assessment criteria - grade 3

The student

- shows good activity and punctuality on the course
- has good understanding of the course contents, core concepts and terminology
- has good knowledge and skills in writing database queries in SQL
- has good knowledge and skills in using data-oriented diagrams



- has sufficient knowledge and skills in creating a small and simple database
- can use the course materials in an effective way to support own learning.

Assessment criteria - grade 5

The student

- shows excellent activity and punctuality on the course
- has excellent understanding of the course contents, core concepts and terminology
- has excellent knowledge and skills in writing database queries in SQL
- has excellent knowledge and skills in using data-oriented diagrams
- has good knowledge and skills in creating a small and simple database
- uses the course materials and independently found sources fluently to support own learning.

### **Teachers**

Kari Silpiö

### **Campus**

Pasila Campus

### **Teaching language**

English

### **Timing**

24.08.2020 - 18.12.2020

### **Enrollment**

15.06.2020 - 28.08.2020

### **Groups**

TF2SWD

### **Mode of delivery**

Contact teaching

### **Seats**

15 - 40

### **Degree Programmes**

BITE Degree Programme in Business Information Technology

### **Evaluation scale**

H-5

### **Credits**

5 cr

### **Unit**

Digital Business

# **Data Security ICT4TF022-3005 24.08.2020-18.12.2020 5 cr (TF3SWD, ...)**

## **Learning objectives**

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

- understand the needs of enterprise information security and the importance of risk management
- be familiar with the laws and regulations related to information security
- identify company's security risks
- know the company's security policies
- protect against security risks

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

Student has completed courses Orientation to ICT Infrastructures, ICT1TF010 and Server Technologies, ICT4TF021

## **Contents**

Topics to be covered in the course include the following:

- Security and Risk Management
- Protection of information assets
- Security Engineering
- Communications and Network Security
- Identity and Access Management
- Security Assessment and Testing
- Security Operations
- Security in the Software Development
- OWASP

## **Assessment criteria**

Assessment criteria - grade 1

Grade 1 (40%)

- Knows the basic concepts of network security.
- Understands the importance of information security to the corporation.
- Knows the basics of information security practices.
- Manages the basics of using information security tools.

Assessment criteria - grade 3

Grade 3 (70%)

- Knows the information security concepts well
- Able to perceive how the various information security areas are related to the company's operations.
- Manages security practices well
- Able to use information security tools independently

Assessment criteria - grade 5

Grade 5 (90%)

- Knows the information security concepts in depth.

- Able to define and analyze the security requirements resulting from the activities of the company.
- Able to develop security practices.
- Knows how to use information security tools excellently.

### **Teaching methods and instruction**

Teaching 48 h

Independent study 87 h

The assessment of one's own learning 1 h

Studying includes lectures and exercises

### **Learning material and recommended literature**

The course web pages

Online material

Mark Ciampa: CompTIA Security+ SY0-401 in Depth, Cengage Learning PTR, 2014. (Safari Books Online)

Adam Gordon: Official (ISC)2 Guide to the CISSP CBK, CRC Press, 2015. (Safari Books Online)

### **Teachers**

Olavi Korhonen

### **Working life connections**

Guest lectures are organized if feasible.

### **Campus**

Pasila Campus

### **Exam dates and re-exam possibilities**

See in Moodle

### **Teaching language**

English

### **Internationality**

Possible guest lecturers from international companies.

### **Timing**

24.08.2020 - 18.12.2020

### **Learning assignments**

In Moodle

### **Enrollment**

15.06.2020 - 28.08.2020

### **Content scheduling**

In Moodle

**Groups**

TF3SWD

TF3DIG

EXCH

**Mode of delivery**

Contact teaching

**Seats**

15 - 25

**Further information**

Accepted course is evaluated with grades 1 to 5.

**Degree Programmes**

BITE Degree Programme in Business Information Technology

**R&D proportion**

1 cr

**Evaluation scale**

H-5

**Credits**

5 cr

**Unit**

Digital Business

# **Database Developer SWD8TF040-3005 24.08.2020-18.12.2020 5 cr (TF5SWD, ...)**

## **Learning objectives**

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

- explain the basic concepts and terminology related to physical database design and implementation
- use the basic database administration tools to create and manage a database in the target environment
- apply declarative and procedural integrity enforcement in the database implementation
- explain basic database performance problems and ways to improve database performance
- explain the basic concurrency mechanisms and concurrency conflicts
- use SQL transactions efficiently to ensure database performance and consistency
- explain transaction logging and database recovery
- perform database backup and restore operations.

Passed courses are assessed on a scale of 1 to 5.

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

The student has completed the course Data Management and Databases (SWD4TF003) or equivalent.

## **Contents**

The course focuses on physical database design and implementation in the relational database environment. The main themes on the course are database integrity, database performance, database security, and database recoverability. The course includes hands-on work on the following:

- data integrity enforcement
- database performance, database indexes
- concurrency control and transaction management in the multi-user environment
- transaction logging and database recovery, backup and restore
- database security.

## **Assessment criteria**

Assessment criteria - grade 1

The student

- shows passable activity in class and individual studying
- has passable understanding of the concepts and terminology discussed in the course
- has passable understanding of the basic ways to improve database performance
- has passable understanding of the main problems in concurrent database access
- often needs some assistance in solving basic problems
- has some difficulties in using the course materials to support own learning.

Assessment criteria - grade 3

The student

- shows good activity in class and individual studying

- has good understanding of the concepts and terminology discussed in the course
- has good understanding of the basic ways to improve database performance
- has good understanding of the main problems in concurrent database access
- sometimes needs assistance in solving basic problems
- can use the course materials in an effective way to support own learning
- can find some more information from other sources.

Assessment criteria - grade 5

The student

- shows excellent activity in class and individual studying
- has excellent understanding of the concepts and terminology discussed in the course
- has excellent understanding of the basic ways to improve database performance
- has excellent understanding of the main problems in concurrent database access
- can solve problems independently
- can fluently use the course materials and other sources to support own learning
- can independently find more information from other sources
- can independently learn more details of course topics.

### **Teachers**

Kari Silpiö

### **Campus**

Pasila Campus

### **Teaching language**

English

### **Timing**

24.08.2020 - 18.12.2020

### **Enrollment**

15.06.2020 - 28.08.2020

### **Groups**

TF5SWD

EXCH

### **Mode of delivery**

Contact teaching

### **Seats**

0 - 30

### **Degree Programmes**

BITE Degree Programme in Business Information Technology

### **Evaluation scale**

H-5

**Credits**

5 cr

**Unit**

Digital Business

# **Digital Service Project PRO4TF030-3005 24.08.2020-18.12.2020 10 cr (TF5DIG, ...)**

## **Learning objectives**

Upon successful completion of this course, the student understands the digital service concept design, validation, and customer value and marketing processes through a real customer project.

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

The student must have passed the course Orientation to Digital Services, Introduction to Software Engineering and have successfully passed one of the following courses Digital Service Design, User Centred design, or usability engineering, and digital service design.

## **Contents**

Student needs to utilize the following process and approaches

UCD to come up with the proper concept

Semi-functional prototype with proved iterative design and development phases

Evaluation of end-user, customer and/or possible other stakeholder value and experience

Marketing material to justify the efficiency productivity of the proposed concept

## **Assessment criteria**

Assessment criteria - grade 1

Come up with a new concept but have not followed any digital service design and development methodology. However, semi-functional prototype is validated and shared with customer.

Assessment criteria - grade 3

Come up with a new concept and have followed digital service design and development methodology such as User Centered Design (UCD) poorly such as failed to conduct user studies, or data analysis has not done properly. However, semi-functional prototype is validated and shared with customer. Customer specifically shows satisfaction with the outcome

Assessment criteria - grade 5

Student demonstrate he/she is master with the process and come up with a new and innovative concept. Student have followed digital service design and development methodology such as User Centered Design (UCD). A semi-functional prototype designed, implemented, and validated. Customer specifically shows high satisfaction with the outcome

## **Teachers**

Ari Alamäki, Amir Dirin

## **Campus**

Pasila Campus

## **Teaching language**

English



**Timing**

24.08.2020 - 18.12.2020

**Enrollment**

15.06.2020 - 28.08.2020

**Groups**

TF5DIG

EXCH

**Mode of delivery**

Contact teaching

**Seats**

0 - 30

**Degree Programmes**

BITE Degree Programme in Business Information Technology

**R&D proportion**

8 cr

**Evaluation scale**

H-5

**Credits**

10 cr

**Unit**

Digital Business

# **Digital Service design DIG4TF021-3005 26.10.2020-18.12.2020 5 cr (TF6WAD, ...)**

## **Learning objectives**

Upon successful completion of this course, the student should be able to understand how to create better services by utilizing existing technologies and API's along with graphical design theories and principles

He/she learns how to search and use existing technologies to implement a digital service.  
He/she can use the existing graphical design theories to implement a digital service.  
He/she can search and use the latest technologies to implement the digital service.

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

The student must have passed the course Orientation to Digital Services and Orientation to Software Engineering.

It is also highly recommended to take the previous courses on the digital service path about UX and prototyping.

## **Contents**

Topics to be covered in the course include the following:

Graphical design principles

Existing technologies and APIs to develop a digital service

The latest development technologies for testing and evaluating the designs

Interface technologies

## **Assessment criteria**

Assessment criteria - grade 1

Knows partially the digital service development components

Assessment criteria - grade 3

Knows the basic design principles and is familiar with development technologies. The student is capable independently search for existing component to implement digital service.

Additionally, the student is able to merge and utilize different technologies to develop digital service. The student has competence on graphical design principle.

Assessment criteria - grade 5

Student can elaborate different technologies and design principles applicability. Student can recommend the components and technologies based on the context of use of the digital service. Student can develop a digital service and integrate the developed service with open data. Student capable of analysing and recommending appropriate design principle based on the context of use of the digital service.

## **Teachers**

Katriina Karkimo

## **Campus**

Pasila Campus

**Teaching language**

English

**Timing**

26.10.2020 - 18.12.2020

**Enrollment**

15.06.2020 - 30.10.2020

**Groups**

TF6WAD

TF7WAD

TF3DIG

EXCH

**Mode of delivery**

Contact teaching

**Seats**

15 - 35

**Degree Programmes**

BITE Degree Programme in Business Information Technology

**R&D proportion**

3 cr

**Evaluation scale**

H-5

**Credits**

5 cr

**Unit**

Digital Business

# **English Level Test ENG1TF100-3006 14.01.2021-12.03.2021 (TF1A, ...)**

## **Teachers**

Riitta Blomster

## **Campus**

Pasila Campus

## **Teaching language**

English

## **Timing**

14.01.2021 - 12.03.2021

## **Enrollment**

11.01.2021 - 15.01.2021

## **Groups**

TF1A

TF1B

## **Mode of delivery**

100% Contact teaching, 0% Distance learning

## **Seats**

15 - 40

## **Degree Programmes**

BITE Degree Programme in Business Information Technology

## **Evaluation scale**

H-5

## **Unit**

Digital Business

# **Excel in Business TOO8TF006-3005 26.10.2020-18.12.2020**

## **3 cr (TF6SWD, ...)**

### **Learning objectives**

Upon successful completion of the course, the student can learn how to use Excel in finance, analytics and management accounting. Application areas are financial reporting, business analysis and ICT development. Students can learn different kind of Excel functions. They will also get extra knowledge in development of data to information

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

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

### **Contents**

Orientation to business concepts and business reporting  
Excel Formulas mostly needed in business  
The value of data - building business knowledge with Excel  
Business analytics with Excel  
Charts & Pivots  
Stock Portfolio Management  
Financial & Investment Computing  
Macros, VBA,  
Templates  
Assignments only, no exam.

### **Assessment criteria**

Assessment criteria - grade 1

Grading is based on the quality of assignments, all of those are graded. 45% of max. points.

Assessment criteria - grade 3

Grading is based on the quality of assignments, all of those are graded. 70% of max. points.

Assessment criteria - grade 5

Grading is based on the quality of assignments, all of those are graded. 85% of max. points.

### **Teachers**

Lauri Tapola

### **Campus**

Pasila Campus

### **Teaching language**

English

### **Timing**

26.10.2020 - 18.12.2020

**Enrollment**

15.06.2020 - 30.10.2020

**Groups**

TF6SWD

TF7SWD

TF7DIG

TF6DIG

EXCH

**Mode of delivery**

Contact teaching

**Seats**

15 - 40

**Degree Programmes**

BITE Degree Programme in Business Information Technology

**Evaluation scale**

H-5

**Credits**

3 cr

**Unit**

Digital Business

# **Financial Accounting, Processes and Systems BIG8TF008-3005 26.10.2020-18.12.2020 5 cr (TF7DIG, ...)**

## **Learning objectives**

After passing this course the student

is familiar with the basic accounting concepts and can identify common accounting processes understands the importance of accounting and accounting processes in the business environment

has a solid understanding of the business process integration to accounting in an integrated systems

has a basic knowledge of Microsoft Dynamics Nav accounting functionality and knows how to customize the accounting processes in Microsoft Dynamics Nav

has gained some experience of SAP ERP accounting functionality (FI) and is familiar with the main concepts of FI and CO

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

Preferably the student is familiar with ERP and other main concepts in Business and ICT.

## **Contents**

The basic accounting principles and processes in a business environment

The sales and purchase process and the integration to accounting in a business environment Microsoft Dynamics Nav and SAP 4/Hana – sales and purchases, integration and accounting processes

## **Assessment criteria**

Assessment criteria - grade 1

Student:

Has sufficient knowledge of the basic accounting concepts and principles.

Is familiar with the main accounting processes and their role in a business environment.

Has sufficient knowledge of SAP ERP FI/CO basic concepts and of the basic accounting processes in SAP ERP.

Has some skills in customizing the accounting processes in Microsoft Dynamics Nav.

Has a general understanding of business integration in SAP ECC and Microsoft Dynamics Nav ERP-systems.

Assessment criteria - grade 3

Student in addition:

Has a good knowledge of the basic accounting concepts and principles.

Is familiar with the main accounting processes and their role in a business environment.

Has a good knowledge of SAP ERP FI/CO basic concepts and of the basic accounting processes in SAP ERP.

Has good skills in customizing the accounting processes in Microsoft Dynamics Nav.

Has a good general understanding of business integration in SAP ERP and Microsoft Dynamics Nav ERP-systems.

Assessment criteria - grade 5

Student in addition:

Has a very good knowledge of the basic accounting concepts and principles.

Is very familiar with the main accounting processes and their role in a business environment.

Has excellent knowledge of SAP ERP FI/CO basic concepts and of the basic accounting processes in SAP ERP.

Has excellent skills in customizing the accounting processes in Microsoft Dynamics Nav.

Has a very good general understanding of business integration in SAP ECC and Microsoft Dynamics Nav ERP systems.

**Teachers**

Ralf Rehn

**Campus**

Pasila Campus

**Teaching language**

English

**Timing**

26.10.2020 - 18.12.2020

**Enrollment**

15.06.2020 - 30.10.2020

**Groups**

TF7DIG

TF6BIG

TF7BIG

TF7BIT

VIRTUAL

EXCH

**Mode of delivery**

Distance learning

**Seats**

25 - 40

**Degree Programmes**

BITE Degree Programme in Business Information Technology

**Virtual proportion**

5 cr

**Evaluation scale**

H-5

**Credits**

5 cr

**Unit**

Digital Business



## **Finnish 3 FIN4TF012-3005 18.01.2021-21.05.2021 5 cr (TF3SWD, ...)**

### **Learning objectives**

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+, on their way to level B1, in most of the language skill areas - speaking, listening, reading and writing.

Level descriptions can be found at

<https://rm.coe.int/CoERMPublicCommonSearchServices/DisplayDCTMContent?documentId=090000168045b15e>

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

The student has successfully completed the courses Beginners' Finnish (FIN4TF010) AND Beginners' Finnish 2 (FIN4TF011) or acquired this level in the entry level test in Finnish.

### **Contents**

Themes handled during the course are health, traveling, nature, free time and hobbies.

The grammar which is studied during the course:

- past tense forms of verbs (simple past and perfect tenses)
- object
- imperative forms of verbs
- pluperfect forms of verbs
- 3. infinitive forms of verbs.

### **Assessment criteria**

#### **Assessment criteria - grade 1**

The student can understand many sentences and frequently used expressions related to areas of most immediate relevance (e.g. very basic personal and family information, shopping, local geography, and employment).

The student can somewhat use the vocabulary and grammar handled during the course. He/she can describe in very simple terms aspects of his/her background, immediate environment and matters in areas of immediate need.

The student has limited motivation to take responsibility for his/her learning process. He/she is able to deal with some of the communicative situations handled during the course. He/she can communicate in very simple and routine tasks requiring a simple and direct exchange of information on familiar and routine matters.

### Assessment criteria - grade 3

The student can understand most of the sentences and frequently used expressions related to areas of most immediate relevance (e.g. very basic personal and family information, shopping, local geography, and employment).

The student can use the vocabulary and grammar handled during the course. He/she can describe in simple terms aspects of his/her background, immediate environment and matters in areas of immediate need.

The student is motivated to take responsibility for his/her learning process. He/she can somewhat master the communicative situations handled during the course. He/she can communicate in simple and routine tasks requiring a simple and direct exchange of information on familiar and routine matters.

### Assessment criteria - grade 5

The student understands easily sentences and frequently used expressions related to areas of most immediate relevance (e.g. very basic personal and family information, shopping, local geography, and employment).

The student can very well use the vocabulary and grammar handled during the course. He/she can describe in simple terms aspects of his/her background, immediate environment and matters in areas of immediate need.

The student is well-motivated to take responsibility for his/her learning and participates actively. He/she can fully master the communicative situations handled during the course. He/she can communicate fluently in simple and routine tasks requiring a simple and direct exchange of information on familiar and routine matters.

### **Teaching methods and instruction**

Emphasis will be given to all four language skills: listening, speaking, reading and writing.

The class will provide students the opportunity to practice new vocabulary and grammatical structures through in-class discussion of assigned activities and readings. To succeed in this course, you must actively participate and you will be expected to attend class regularly, prepare for class, and speak as much Finnish as possible.

Through the communicative approach I hope to achieve a high degree of interaction in the classroom and make your learning of Finnish language and culture interesting and fun. We strive for a learning atmosphere that challenges you your skills in a supportive way. There are no wrong answers, only good attempts.

Contact hours: oral and written exercises individually and in pairs, group work, learning games.

Independent studies: homework and preparation for lessons, exams and assignments, online material.

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.

### **Learning material and recommended literature**

Gehring, Sonja & Heinzmann, Sanni: Suomen mestari 2. Finn Lectura. Helsinki. Chapters 1 - 4. (Required)

Finnish-English-Finnish Dictionary (Recommended)

Other material provided by the teacher

## **Teachers**

Taija Hämäläinen

## **Working life connections**

Learning Finnish language and culture will give students skills and readiness to work in a Finnish speaking working environment.

## **Campus**

Pasila Campus

## **Exam dates and re-exam possibilities**

The final exam will be arranged during week the last week of classes in May.

If a student does not come to the final exam or does not pass it, there are two possibilities to re-take the exam during autumn2021. Please, check the dates in MyNet. Enrolment for the re-examinations begins five weeks before the exam day and ends at noon on the Monday preceding the exam week.

## **Teaching language**

English

## **Internationality**

International students. Differences between Finnish and other cultures.

## **Timing**

18.01.2021 - 21.05.2021

## **Learning assignments**

The assignments will be given during the course. All of the homework assignments will be posted on the class website on Moodle.

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/education/elp/elp-reg/Source/Global\\_scale/globalscale.pdf](http://www.coe.int/t/dg4/education/elp/elp-reg/Source/Global_scale/globalscale.pdf)

## **Enrollment**

04.01.2021 - 15.01.2021

## **Content scheduling**

Themes handled during the course are health, travelling, presentations and Finnish working life.

The grammar which is studied during the course:

past tense forms of verbs (simple past and perfect tenses)

object

imperative forms of verbs

pluperfect forms of verbs

3. infinitive forms of verbs.

The classes will be on Tuesdays at 10.00 - 11.30 and on Wednesdays at 9.00 - 10.30.

**Groups**

TF3SWD  
TF3DIG  
ONLINE

**Alternative learning methods**

RPL 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 weeks in August or January and the oral part later in the 1st/4th period according to a separate schedule.

**Mode of delivery**

Contact teaching

**Seats**

15 - 40

**Further information**

Active participation is crucial to your progress. Coming in time, being prepared, doing activities, answering questions and speaking Finnish as much as possible help you do well in your studies.

Quizzes and/or other assignments 20-30 %

Final exam 70-80 %

**Degree Programmes**

BITE Degree Programme in Business Information Technology

**Evaluation scale**

H-5

**Credits**

5 cr

**Unit**

Digital Business

# Front End Development SWD4TF022-3006 24.08.2020-18.12.2020 5 cr (TF3SWD, ...)

## Learning objectives

Upon completion of the course, the student is able to

- understand and describe the role of front-end development in modern web applications
- act like a professional front-end developer. Able to analyze problems, seek for needed information, apply a solution, verify it
- see the alternative ways for creating a front-end
- able to discuss and take into use more front-end technologies

## Starting level and linkage with other courses

Student has completed the second semester studies in programming and databases.

## Contents

- The set of needed tools and their relevance
- Mastering HTML, CSS, JavaScript, browser developer tools, e.g. JavaScript debugger and JavaScript console
- Verification and error-tracking
- Document Object Model, Browser Object Model and their relationship and linkages with JS,
- Request-Response model. Understanding http request methods. Understanding how the browser communicates with the web server.
- Understanding how to connect to the back-end. Understanding how to specify and use back-end services in the front-end.
- Creating different kind of front-ends that use the given ready-made back-end services
- JSON as response format
- React.js

## Assessment criteria

Assessment criteria - grade 1

- Knows the basic concepts of front end development.
- Shows passable activity in class and individual studying
- Has skills in creating an application using the technologies taught on the course

Assessment criteria - grade 3

- Knows the front end development concepts well
- Shows good activity in class and individual studying
- Has good knowledge and skills in creating an application using the technologies taught on the course
- Can use the course materials in an effective way to support own learning

Assessment criteria - grade 5

- Knows the front end development concepts in depth.
- Has excellent knowledge and skills in creating an application using the skills technologies on the course.
- Can fluently use the course materials and other sources to support own learning

- Can independently solve problems

**Teachers**

Juha Hinkula

**Campus**

Pasila Campus

**Teaching language**

English

**Timing**

24.08.2020 - 18.12.2020

**Enrollment**

15.06.2020 - 28.08.2020

**Groups**

TF3SWD

EXCH

**Mode of delivery**

Contact teaching

**Seats**

15 - 35

**Degree Programmes**

BITE Degree Programme in Business Information Technology

**Evaluation scale**

H-5

**Credits**

5 cr

**Unit**

Digital Business

# **ICT Infrastructure project PRO4TF023-3006 18.01.2021-21.05.2021 10 cr (TF5DIG, ...)**

## **Learning objectives**

Upon successful completion of this course, the student understands the ICT processes in regards to a real Business/ICT projects. The student is able to work in customer contact and solve challenges and problems in co-operation with various parties. The student is able to take responsibility in the project team in his/her own role.

Student is able to work, familiarize his/herself with the topic and apply his/her learning independently.

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

The student must have passed the courses Orientation to ICT Infrastructures and Server Technologies, and have successfully passed at least one of the following courses Data Security or Cloud Service Technologies or similar courses in other degree programs.

## **Contents**

The student will participate as a team member or project leader in a project in one of the following main focus areas:

- Computer networking and technologies
- Server platforms and operating systems
- Cloud Services
- Software Development technologies in Cloud Platforms
- Information Security
- Internet of Things

The type and purpose of the project is generally based on a commission and could be containing:

- Network services deployment / testing
- Operating system and server design / testing / implementation
- Management of information services
- Cloud Platform design, implementation and testing
- Software Development in Cloud Platforms, design, implementation and testing
- Implementation, management and development of information security
- Penetration testing

## **Assessment criteria**

Assessment criteria - grade 1

Grade 1

The student has participated in the project but the individual contribution is minor and/or the quality of the deliverables is not or barely fulfilling the target.

Assessment criteria - grade 3

Grade 3

The student has well participated in the project and the individual contribution is on a good level with timely and qualitative deliverables.

Assessment criteria - grade 5

Grade 5

The student has been a key member of the project and the individual contribution has clearly had a great impact on the project outcome.

**Teachers**

Harto Holmström, Tero Karvinen

**Campus**

Pasila Campus

**Teaching language**

English

**Timing**

18.01.2021 - 21.05.2021

**Enrollment**

04.01.2021 - 15.01.2021

**Groups**

TF5DIG

TF5SWD

**Mode of delivery**

Contact teaching

**Seats**

5 - 40

**Degree Programmes**

BITE Degree Programme in Business Information Technology

**Evaluation scale**

H-5

**Credits**

10 cr



# **ICT and Business English ENG1TF010-3006 18.01.2021-21.05.2021 5 cr (TF2SWD, ...)**

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

English Level Test

## **Contents**

- producing coherent ICT/Business-related texts and a longer Media Survey Report
- enhancing students' overall oral competence acquiring information on the latest concepts in ICT/Business using various literal and online sources

## **Assessment criteria**

Assessment criteria - grade 1

Grade 1 (A2.2-B1.2)

The student has a limited knowledge of basic English vocabulary used in ICT contexts and is able to produce written documents at a passable level.. The student performs oral tasks at a basic level with clear difficulties at conveying the intended message due to e.g.a very strong accent, grammatical mistakes and lack of words.

Assessment criteria - grade 3

Grade 3 (B2.1-B2.2)

The student has an intermediate knowledge of ICT vocabulary. He/she is able to explain the meaning of ICT concepts using standard vocabulary. He/she is able to complete the written course assignments following, for the most part, the correct formats and academic traditions. As for the student's oral skills, there is still some hesitation, but that only occasionally impedes communication.

Assessment criteria - grade 5

Grade 5 (C1-C2)

The student's ICT vocabulary is at an advanced level. He/she demonstrates knowledge of idiomatic ICT and business English, and is able to carry out discussions and debates successfully. .. The student produces high-quality ICT texts that follow the correct formats and academic traditions. The student is able to give fluent presentations in an engaging manner.

## **Further information**

Working life connections:

Current trends in the field of ICT/Business are closely monitored. An ICT professional's presentation.

## **Internationality:**

The course is inherently international.

## **Teachers**

Karl Robbins

## **Campus**

Pasila Campus

**Teaching language**

English

**Timing**

18.01.2021 - 21.05.2021

**Enrollment**

04.01.2021 - 15.01.2021

**Groups**

TF2SWD

TF2DIG

ONLINE

**Mode of delivery**

Contact teaching

**Seats**

15 - 40

**Degree Programmes**

BITE Degree Programme in Business Information Technology

**Evaluation scale**

H-5

**Credits**

5 cr

**Unit**

Digital Business

# **Innovation and Project Work A PRO1TF001A-3009**

## **18.01.2021-21.05.2021 4 cr (TF2SWD, ...)**

### **Learning objectives**

After completing the course, the student is able to act responsibly and pro-actively in group work. Students are able to apply the methods of brainstorming creative innovation development activities, as well as customer- and solution-oriented. Students are able to introduce an innovative product, using visual aids. Students can perform and build solutions according to given concepts and carry out implementation phase of the project.

### **Contents**

- Innovation: concepts, steps and requirements, brainstorming and analysis methods for user-centered approach including aids for structuring ideas
- Conceptualization: definition of the concept and describing, presenting and testing and the releasing

### **Teachers**

Jari Haggren

### **Campus**

Pasila Campus

### **Teaching language**

English

### **Timing**

18.01.2021 - 21.05.2021

### **Enrollment**

04.01.2021 - 15.01.2021

### **Groups**

TF2SWD TF2DIG

### **Mode of delivery**

Contact teaching

### **Seats**

15 - 40

### **Degree Programmes**

BITE Degree Programme in Business Information Technology

### **Evaluation scale**

H-5

### **Credits**

4 cr

# **Innovation and Project Work B PRO1TF001B-3009**

## **18.01.2021-21.05.2021 3 cr (TF2SWD, ...)**

### **Learning objectives**

Students are familiar with project management practices and they are able to prioritize project goals and project related tasks. They can manage tasks of project organizations for preparing the project. The course learning objectives will be achieved mainly through exercises and group work.

### **Contents**

- Project stakeholders and the organization's responsibilities, evaluation and definition of the scope of the project, project risks and their anticipation
- Project management: preparation of the project, design, control and finalizing the project. The project management templates and project management tools

### **Teachers**

Jari Haggren

### **Campus**

Pasila Campus

### **Teaching language**

English

### **Timing**

18.01.2021 - 21.05.2021

### **Enrollment**

04.01.2021 - 15.01.2021

### **Groups**

TF2SWD

TF2DIG

### **Mode of delivery**

Contact teaching

### **Seats**

15 - 40

### **Degree Programmes**

BITE Degree Programme in Business Information Technology

### **Evaluation scale**

H-5

### **Credits**

3 cr

# **Innovation and Project Work C PRO1TF001C-3009**

## **18.01.2021-21.05.2021 3 cr (TF2SWD, ...)**

### **Learning objectives**

Students will be able to understand and apply knowledge of human communication processes as they occur across various contexts: interpersonal, intrapersonal, small group, organizational, media, intercultural communication. Students will apply knowledge of technologically mediated communication.

Students will develop knowledge and skills that facilitate their ability to work collaboratively with others. Such skills could include communication competencies such as managing conflict, understanding small group processes, active listening and giving feedback.

### **Contents**

Communication as a process and team work. Communication in projects and meetings; giving feedback. Conducting a survey; interviewing. How to contact your audience; planning presentation. Planning and conducting a pitching/elevator speech and video. Designing a poster. Project reporting and documentation.

### **Assessment criteria**

Assessment criteria - grade 1

Student can communicate in various contexts. She/he is able to give feedback. Student can use the technologically mediated communication tools.

Assessment criteria - grade 3

Student can communicate in various contexts: interpersonal and small groups. She/he is able to give presentations and constructive feedback. Students can use the technologically mediated communication tools.

Assessment criteria - grade 5

Student can communicate in various contexts: interpersonal, intrapersonal, small group, organizational, media and intercultural communication. She/he is able to give well-planned presentation and constructive feedback. Students can use the technologically mediated communication tools competently and purposefully.

### **Further information**

Contact lessons, group works, individual assignments and tasks.

### **Teachers**

Raisa Koivusalo

### **Campus**

Pasila Campus

### **Teaching language**

English

### **Timing**

18.01.2021 - 21.05.2021

**Enrollment**

04.01.2021 - 15.01.2021

**Groups**

TF2SWD

TF2DIG

**Mode of delivery**

Contact teaching

**Seats**

15 - 40

**Degree Programmes**

BITE Degree Programme in Business Information Technology

**Evaluation scale**

H-5

**Credits**

3 cr

# **Introduction to Digital Spaces DIG8TF001-3003 19.08.2020-14.10.2020 2 cr**

## **Learning objectives**

The aim of the introduction is to open doors for you to the digital study environments at Haaga-Helia UAS before the start of the studies. The digital environments and facilities are used alongside the teaching and counseling provided by our teachers and other personnel. Starting level and linkage with other courses  
No prerequisites

## **Contents**

Digital Study Skills and Personal Computer, Data Network, Data Protection and Remote Access, My Net (Students' Intranet), e-mail and Calendar, Office 365/OneDrive, Moodle Learning Platform, AdobeConnect and Skype, Library and Information Services

## **Teachers**

Outi Valkki

## **Teaching language**

English

## **Timing**

19.08.2020 - 14.10.2020

## **Enrollment**

01.04.2020 - 02.04.2020

## **Mode of delivery**

Distance learning

## **Seats**

0 - 10

## **Degree Programmes**

BITE Degree Programme in Business Information Technology

## **Virtual proportion**

2 cr

## **Evaluation scale**

H-5

## **Credits**

2 cr

# **IoT Experimental Project ICT8TF001-3003 26.10.2020-18.12.2020 5 cr**

## **Learning objectives**

Upon successful completion of the course, the student is able to ideate, research, design, and implement an IoT device that complies with the design requirements set by the client.  
Starting level and linkage with other courses  
Innovation and Project Work

## **Contents**

- Introduction to IoT
- Non-connected System on a Chip (SoC) devices such as Arduinos
- Basic sensors and Arduino shields
- Basic circuitry
- Basic sensors and actuators (ultrasound, light, sound, touch, servos, DC motors)
- Bluetooth capable SoC devices
- Network-aware devices such as ESP32, LORAWan etc.
- IoT devices built out of the basic parts
- Sending and receiving data via the Internet
- Ideation, idea research, implementation cycle
- Building the device
- Testing and maintaining

## **Assessment criteria**

Assessment criteria - grade 1

Knowledge - The student has limited understanding of IoT. He/she is able to describe how a basic IoT device can be made

Skills - The student has good skills in using available parts in IoT design and can come up with a simple device.

Competence - The student shows satisfactory activity and initiative in learning process.

Assessment criteria - grade 3

Knowledge - The student is able to ideate and describe how to produce an IoT device as part of the team.

Skills - The student has good skills in using available parts in IoT design and can come up with a simple device.

Competence - The student shows activity and initiative in learning process. He/she is willing to develop his/her IoT skills further.

Assessment criteria - grade 5

Knowledge - The student has a good understanding of the IoT world and able to ideate various credible approaches towards a given IoT device

Skills - The student has excellent skills in designing innovative approaches towards the IoT device and delivering a competent, working device.

Competence - The student shows excellent activity and initiative in the learning process. He/she is independently taking his/her skills further using other online tutorials than those in the course.



**Teachers**

Heikki Hietala

**Campus**

Pasila Campus

**Teaching language**

Finnish

**Timing**

26.10.2020 - 18.12.2020

**Enrollment**

15.06.2020 - 30.10.2020

**Mode of delivery**

Contact teaching

**Seats**

5 - 20

**Degree Programmes**

BITE Degree Programme in Business Information Technology, HETI Degree Programme in Business Information Technology

**R&D proportion**

5 cr

**Evaluation scale**

H-5

**Credits**

5 cr

# **Managing CRM Processes BIG4TF004-3005 24.08.2020-18.12.2020 5 cr (TF5DIG, ...)**

## **Learning objectives**

Upon successful completion of the course, the student will learn what the term CRM means  
will understand the value of data for CRM use purposes  
can evaluate business requirements for CRM  
gain practical experiences how to use CRM information system (Salesforce)

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

No prerequisites

## **Contents**

Theoretical part of CRM

- marketing, customer relationship management
- operational CRM
- analytical CRM
- collaborational CRM
- digital footprint
- how web pages are collecting customer data
- Salesforce practical excersizes/ Salesforce trails

CRM as a business concept

Introduction to marketing models: Mass marketing vs. Relationship marketing

Self study part based on literal research

Web as a CRM and mass surveillance platform:

How customer data can be collected in the

How users on the web can protect their privacy (hands on guidance included)

CRM and business requirements

Feasibility study

Hands on method how to integrate feasibility study requirements into CRM processes

Hands on exercises on cloud based CRM system

Final report

The final report presents how to integrate business requirements

Identify what are the technical, service and business needs before CRM can be utilized in business

## **Assessment criteria**

Assessment criteria - grade 1

Good knowledge of the course subject. Collected more than 45% of the total course points.

Assessment criteria - grade 3

Good knowledge of the course subject. Collected more than 65% of the total course points.

Assessment criteria - grade 5

Excellent knowledge of the course subject. Collected 85% of maximum amount of the course points.

**Further information**

- possibility to get Salesforce badges (useful in CV)

**Teachers**

Seppo Karisto

**Campus**

Pasila Campus

**Teaching language**

English

**Timing**

24.08.2020 - 18.12.2020

**Enrollment**

15.06.2020 - 28.08.2020

**Groups**

TF5DIG

EXCH

**Mode of delivery**

Contact teaching

**Seats**

15 - 40

**Degree Programmes**

BITE Degree Programme in Business Information Technology

**R&D proportion**

2 cr

**Evaluation scale**

H-5

**Credits**

5 cr

**Unit**

Digital Business

# **Mobile Programming SWD4TF020-3005 18.01.2021-21.05.2021 5 cr (TF4SWD, ...)**

## **Learning objectives**

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

- understands the mobile development characteristics
- develop professional mobile applications on 1-2 platforms
- further develop his/her development skills.
- knows the limitations of his or her skills

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

Student has completed the second semester studies in programming and databases.

## **Contents**

Topics to be covered in the course include the following:

- Mobile development characteristics
- Android platform basics
- Selected mobile development technologies

## **Assessment criteria**

Assessment criteria - grade 1

Knows the basic concepts of mobile development.

Shows passable activity in class and individual studying

Has skills in creating an application using the technologies taught on the course

Assessment criteria - grade 3

Knows the mobile development concepts well

Shows good activity in class and individual studying

Has good knowledge and skills in creating an application using the technologies taught on the course

Can use the course materials in an effective way to support own learning

Assessment criteria - grade 5

Knows the mobile development concepts in depth.

Has excellent knowledge and skills in creating an application using the skills technologies on the course Able to develop security practices.

Can fluently use the course materials and other sources to support own learning

Can independently solve problems

## **Teachers**

Juha Hinkula

## **Campus**

Pasila Campus

## **Teaching language**

English

**Timing**

18.01.2021 - 21.05.2021

**Enrollment**

04.01.2021 - 15.01.2021

**Groups**

TF4SWD

EXCH

ONLINE

**Mode of delivery**

Contact teaching

**Seats**

15 - 30

**Degree Programmes**

BITE Degree Programme in Business Information Technology

**Evaluation scale**

H-5

**Credits**

5 cr

**Unit**

Digital Business

# **Multidisciplinary Software Project PRO4TF024-3005**

## **18.01.2021-21.05.2021 15 cr (TF5SWD, ...)**

### **Learning objectives**

Student is able to use most of the software engineering skills needed in solving the real customer problem. She/he is able to understand and document customer's needs and to propose appropriate software solutions. Student is able to independently acquire unknown technology knowledge and skills. She/he learns to evaluate and choose between technologies and methods. She/he is able to take personal responsibility over a certain part of the commonly created solution. Student is able to share acquired knowledge to other members of the team or course.

Student can, as a member of the team, implement a valid and ready-to-use solution to the customer's problem.

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

Before attending this course, students must have completed the courses Server Programming, Data Management and Databases, and Software Project. Or student has obtained corresponding skills. Front End Development and Mobile Development course skills are also needed.

Note: This course is meant only for software development oriented students. Furthermore, students cannot take this course and other big 5. semester project course (Digital Service, Business, Infra) at the same semester as the course schedules for all these are put on the same times on purpose, and attendance is mandatory.

### **Contents**

This course will be implemented as a project, with project management methods. Student will sign a project contract with Haaga-Helia at the start of the course. Students will be assigned to certain teams based on prior knowledge, available projects, required and mastered language (Finnish and/or English) and needs of each project.

Students will implement and demonstrate ready-to-use solutions to the customer. Students will learn the needs of the customer, specify and plan the solution and agree with the customer upon the used technologies, that are the best-suited ones for this problem, considering also the team's initial skill level and learning goals.

1. Project assigned by the commissioner (customer company or organization)
2. Project work management, change management and contract principles
3. Project goal related development tools, environment and documentation practices provided by the commissioner.
4. Software development process models and methods
5. Interaction, tutoring and presentation skills

Assessment criteria

Assessment criteria - grade 5

Accepted grades 1-5

Assessment will be based on student's skills and efforts in the above-mentioned course contents. The emphasis of the grade will be the following:

- Researching new technology and tutoring others 15%
  - Student will take responsibility of studying one or more technologies needed in the project and teaching it/them to the others e.g. in a workshop.
- Project management and project final essay 35 %
  - Student has many role- or competence-based tasks and responsibilities in the project. Students devise and maintain appropriate project management and progress monitoring documentation and take care of project trackability and traceability both from internal and external controls' points-of-view. Student reflects his/her as well as the team's actions in the final essay.
- Appropriate documentation of the results and the technical solution that fulfills customer's needs 50 %
  - Often most of the costs of an information system come from maintenance and changes. Also, the future developers of the system are different from the original developers. Thus, we put a big emphasis on the quality of the documentation, source etc. code, and automated testing and continuous integration – the professional development pipeline.
  - Quality of the documentation does not mean lengthy or all-covering documentation, but that needed and most valuable information is available and only that. Also, high-quality code is often self-explanatory.

Examples of results and tasks that will be evaluated per project team

- Software requirements: defined, audited, and accepted by the customer
- Technical requirements: defined, well-argued, and accepted by the customer
- Source etc. code: in common version control system
- Testing: testing planned, plan accepted by the customer, corresponding tests run, and test report published
- Project and work management: appropriate project management (external control) and agreed practice (internal control) documentation, following the agreed timelines, and sound communication.

The Commissioner gives evaluation of each of these parts or results

Examples of results and tasks that will be evaluated per each student

- Integrity and trustworthiness. Taking responsibility for oneself and of the team.
- Research and tutoring: The technology that was the responsibility of the student has been taken into use in the team appropriately. Technology was taught to others based on the need. Student has been able to reflect his/her own responsibility area.
- Development tasks: The student's completion of the responsibilities in planned timeframe (implementation days, sprint, ...) and the quality awareness and assurance (e.g. definition of done).
- Project final essay.

Grade-wise criteria

Discussed in the beginning of the course. Each grade adds more requirements in both quantity and quality.

**Further information**

Working life connections:

The software projects on this course will be commissioned by a customer company or organization.

Internationality:

Teams consist of both Finnish and multinational students. All used materials, technologies and methods are international.

**Teachers**

Juha Hinkula, Ohto Rainio, Jukka Juslin, Teemu Havulinna

**Campus**

Pasila Campus

**Teaching language**

English

**Timing**

18.01.2021 - 21.05.2021

**Enrollment**

04.01.2021 - 15.01.2021

**Groups**

TF5SWD

EXCH

ONLINE

**Mode of delivery**

Contact teaching

**Seats**

5 - 30

**Degree Programmes**

BITE Degree Programme in Business Information Technology

**R&D proportion**

13 cr

**Evaluation scale**

H-5

**Credits**

15 cr

**Unit**

Digital Business



# **Office Tools in Sales and Services SAL1TF001-3013**

## **24.08.2020-18.12.2020 5 cr (TF1A)**

### **Learning objectives**

After the course, the student

- can use Office Tools effectively both in work and studies. understands the concept of modern sales and knows the role of an IT specialist in sales
- can turn features of IT solutions into customer benefits
- can explain customer-oriented thinking understands the concept of customer experience
- can use Office Tools effectively to support the sales process, for instance
  - produce marketing material
  - produce presentations for customer meetings

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

Not any requirements or prior studies.

Not any pre-exam.

### **Contents**

Sales and Services (2 ECTS):

What is modern sales

Sales meeting and sales process

IT-specialist in customer interface

Customer insight

Customer experience

Value creation process

Features – benefit – advantages

Sales presentations

- presentation skills, presentation
- sales documents

Office Tools (3 ECTS):

Word processing:

- own template and styles
- different headers and footers
- forms (fields)
- sales documents
- mailing documents
- reports (section break, table of content)

Basics of spread sheet calculation:

- formulas, functions
- charts
- tables, data bases, Pivot tables

Presentation graphics:

- producing a sales presentation
- producing an own template

- using animations

Producing the selected sales material by using Office Tools.

Summarising the sales and service promise by producing such sales material.

### **Assessment criteria**

Assessment criteria - grade 1

The assessment of one's own learning does not influence the grade. The assignment is the same for all courses/modules and the answers will also be used for course/module development. It is possible to pass the course by different assignments and contact lessons.

Level 1-2 (pass)

Student

- can partly describe the sales process and the role of IT-specialist in sales
- can partly take into account the customer view in providing services
- can differentiate solutions' features and benefits
- knows all central terms concerning the theme
- knows the principles of the central tools
- can use tools according to the instructions of the teacher

Assessment criteria - grade 3

Level 3-4 (good)

Student

- can describe the sales process and the role of IT specialist in sales
- can take into account the customer in providing Services
- knows the terms of providing value
- can explain customer benefits of IT-solutions
- can use all central tools effectively and in a flexible way
- is active and interested

Assessment criteria - grade 5

Level 5 (excellent)

Student

- can describe the sales process and the role of an IT specialist in sales very well
- can actively suggest solutions for customer needs based on customer understanding and value creation
- can explain IT-solutions' customer advantages in an excellent way
- knows all the tasks of the field in an excellent way
- can use professionally and independently all the central tools
- wants to find more information and try to develop his/her own professionalism during the studies

### **Further information**

Working life and co-operation with companies:

These examples and home assignments are like they normally are in real companies and customer situations.

### **Teachers**

Hanna Mäenpää

**Campus**

Pasila Campus

**Teaching language**

English

**Timing**

24.08.2020 - 18.12.2020

**Enrollment**

17.08.2020 - 28.08.2020

**Groups**

TF1A

**Mode of delivery**

Contact teaching

**Seats**

15 - 25

**Degree Programmes**

BITE Degree Programme in Business Information Technology

**Evaluation scale**

H-5

**Credits**

5 cr

**Unit**

Digital Business

# **Orientation to Business and ICT BIG1TF001-3013**

## **24.08.2020-18.12.2020 5 cr (TF1B)**

### **Learning objectives**

The student is familiar with a variety of corporate ICT systems and tools. He/she knows the main resources and structure of common systems. Business centered approach is introduced and advocated. The goal is that the student:

Realizes the importance and the role of data and data transformations in the business environment

Recognizes the most common systems and their role in business

Understands the role of IT systems in support and development of business activities

Is familiar with the System Development Life Cycle, understands the role of different development stages, use of UML and embraces business and agile oriented development principles

Student can use leading BI-tools for presenting information

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

This course is an introductory course to the ICT and Business profile. No prerequisites.

### **Contents**

System resources

Practical introduction to ERP systems in the business environment

Business driven system development and projects

Learning to use leading BI-tools

Important key ICT/Business concepts

The System Development Life Cycle

UML and Use cases

### **Assessment criteria**

Assessment criteria - grade 1

Student:

Recognizes the most common integrated systems in companies

Understands the company main functions

Understands the role of ICT in the company

Understands the coupling between Business and ICT

Is familiar with branch terminology

Assessment criteria - grade 3

Student in addition:

Realizes the importance of data in the business environment

Understands the main purpose of integrated systems

Recognizes the role of ICT in enablement and development of the business

Can act responsibly in a team

Understands the role of ICT and ICT management

Understands the connection between ICT system development and business development

Assessment criteria - grade 5

Student in addition:

Can describe data as a business enabler

Understands the connection between the most common integrated systems and business steering and development

Understands the coupling between ICT management and different IT frameworks

### **Teaching methods and instruction**

Link to current implementation plan will be opened in August 2020

First assignments in week 24.-28.8. Lectures starts Tue 1st of September 8.00 am in 5001

Link to Moodle

<https://hhmoodle.haaga-helia.fi/course/view.php?id=26863>

### **Teachers**

Juhani Heikkinen

### **Campus**

Pasila Campus

### **Teaching language**

English

### **Timing**

24.08.2020 - 18.12.2020

### **Enrollment**

17.08.2020 - 28.08.2020

### **Groups**

TF1B

### **Mode of delivery**

Contact teaching

### **Seats**

15 - 40

### **Degree Programmes**

BITE Degree Programme in Business Information Technology

### **Evaluation scale**

H-5

### **Credits**

5 cr

### **Unit**

Digital Business

# **Orientation to Digital Services DIG1TF001-3012 24.08.2020-18.12.2020 5 cr (TF1B)**

## **Learning objectives**

After passing this course, the student

- Recognizes the potential of digital services.
- Understands the significance of the user experience and usability.
- Is able to design a user interface.
- Is able to code a user interface.
- Is able to analyze a digital service.

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

None.

## **Contents**

- Introduction to digital services
- The concepts of usability and user experience
- Design of a responsive user interface
- Coding of a responsive user interface
- Analysing and designing a digital service

## **Assessment criteria**

Assessment criteria - grade 1

The student recognizes a digital service, knows the basics of user experience and usability and also is able to design and develop a user interface under guidance. The student understands the significance of digital service analysis.

Assessment criteria - grade 3

The student recognizes the potential of a digital service, understands the significance of user experience and usability and is also able to independently design and develop a user interface. The student is able to analyze a digital service.

Assessment criteria - grade 5

The student is able to utilize effectively the potential of a digital service, utilizes user experience and usability in an effective way and is also able to independently design and develop a high-quality user interface. The student is able to analyze a digital service in a professional manner.

## **Further information**

Small projects may be completed during the course.

## **Teachers**

Kasper Valtakari

## **Campus**

Pasila Campus

**Teaching language**

English

**Timing**

24.08.2020 - 18.12.2020

**Enrollment**

17.08.2020 - 28.08.2020

**Groups**

TF1B

**Mode of delivery**

Contact teaching

**Seats**

15 - 25

**Degree Programmes**

BITE Degree Programme in Business Information Technology

**Evaluation scale**

H-5

**Credits**

5 cr

**Unit**

Digital Business

# **Orientation to ICT Infrastructures ICT1TF010-3012**

## **24.08.2020-18.12.2020 5 cr (TF1B)**

### **Learning objectives**

Learning outcomes

Upon successful completion of the course, the student can:

- Recognize the computer structure and functions.
- Start to use operating system.
- Identify the ICT infrastructure structures and functionalities.
- Recognize information networks and networked services operating principles.
- Identify security threats.
- Operate in network- and system environments taking into account information security.

### **Contents**

Course contents

- Hardware configurations and interfaces
- Operating Systems: Windows and Linux
- Workstations and servers
- Information security, anti-virus programs, malware, network security
- Data network structure and functions.
- TCP / IP protocols, networking devices.

### **Assessment criteria**

Assessment criteria - grade 1

Level 1-2 (passed)

Student

- Shows sufficient activity in studying.
- Can explain the issues discussed in the course.
- Can use the course basic content.
- Needs often assistance in problem situations, and in the interpretation of the course material

Assessment criteria - grade 3

Level 3-4 (Good)

Student

- Shows good activity in studying.
- Can explain well the issues discussed in the course.
- Can use the course content in a versatile way
- Needs sometimes assistance in problem situations, and in the interpretation of the course material

Assessment criteria - grade 5

Level 5 (excellent)



## Student

- Shows excellent activity in studying.
- Can explain excellently the issues discussed in the course.
- Can apply the course content in a versatile way.
- Can independently examine and solve problems and retrieve information from different sources.

## Teachers

Jaana Lunkka-Salonen

## Campus

Pasila Campus

## Teaching language

English

## Timing

24.08.2020 - 18.12.2020

## Enrollment

17.08.2020 - 28.08.2020

## Groups

TF1B

## Mode of delivery

Contact teaching

## Seats

15 - 25

## Degree Programmes

BITE Degree Programme in Business Information Technology

## Evaluation scale

H-5

## Credits

5 cr

## Unit

Digital Business

# **Orientation to Software Engineering SWD1TF001-3019**

## **24.08.2020-18.12.2020 5 cr**

### **Learning objectives**

Upon successful completion of the course the student is able to

- explain the software engineering profile and the rough contents of its courses
- communicate the components and phases of software engineering (software development)
- create simple program logic and write the code in JavaScript
- create web pages that contain simple functionality implemented with browser programming
- use the needed development tools and publish the pages on a web server.
- use technical documentation while needing information or help.

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

No prerequisites.

### **Contents**

The course gives a broad view on Software Engineering and software development, and the brief basics of programming:

- software engineering; goals, main concepts, and challenges
- main phases/disciplines in software engineering processes
- few methods and models visualizing the software development work in practice
- main principles for creating technically sound web pages (with HTML5 and CSS)
- development environment and publishing the web site on a web server
- all linkages between the web page and the JavaScript program
- designing and implementing simple programming logic (with JavaScript, i.e. ECMAScript)
- using following features of the programming language: selection and repetition structures, arrays and functions
- the technical documentation needed in basic web development and the ways to utilize it

### **Assessment criteria**

Assessment criteria - grade 1

Student shows passable activity in class and individual studying. Has passable understanding of the course contents, core concepts and terminology. Has passable knowledge and skills in creating an application using the skills taught on the course. Often needs some assistance in solving basic problems. Has some difficulties in using the course materials to support own learning.

Assessment criteria - grade 3

Student shows good activity in class and individual studying. Has good understanding of the course contents, basic concepts and terminology. Has good knowledge and skills in creating an application using the skills taught on the course. Sometimes needs assistance in solving basic problems. Can use the course materials in an effective way to support own learning. Can find some more information from other sources.

### Assessment criteria - grade 5

Student shows excellent activity in class and individual studying. Has excellent understanding of the course contents, basic concepts and terminology. Has excellent knowledge and skills in creating an application using the skills taught on the course. Can independently solve problems. Can fluently use the course materials and other sources to support own learning. Can independently find more information from other sources. Can independently learn more details of course topics. (Though knowing the given material is enough for the best grade)

### Teachers

Kasper Valtakari

### Teaching language

English

### Timing

24.08.2020 - 18.12.2020

### Enrollment

01.04.2020 - 02.04.2020

### Mode of delivery

Distance learning

### Seats

0 - 10

### Degree Programmes

BITE Degree Programme in Business Information Technology

### Virtual proportion

5 cr

### Evaluation scale

H-5

### Credits

5 cr

# **Programming 1 SWD4TF032-3003 24.08.2020-16.10.2020 5 cr (TF2SWD)**

## **Learning objectives**

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

- Explain basic concepts and terminology of the Java programming language and object-oriented programming
- Design and write small and simple Java programs in the object-oriented way
- Use an IDE for writing and debugging Java programs

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

The student has completed the course Orientation to Software Engineering (SWD1TF001) with exam grade 3 or higher, or can demonstrate equivalent skills and knowledge in the basics of programming.

## **Contents**

The Java Language, Java API, JDK, JRE, and IDE

- Creating, running, and debugging small stand-alone Java programs in a modern IDE
- Java program structure and life cycle

Elementary programming techniques in Java

- Console input and output
- Data types, variables, and type conversions
- Statements, expressions, and operators
- Control structures
- Sub-programs (methods)

Exception handling

String handling and regular expressions in Java

Manipulating aggregate data structures

- Arrays and lists

Object-oriented thinking

- Object-oriented programming with classes and objects

## **Assessment criteria**

Assessment criteria - grade 1

The student

- shows passable activity and punctuality on the course
- has passable understanding of the course contents, core concepts and terminology
- has passable knowledge and skills in writing simple Java programs in the object-oriented way
- needs often assistance in problem situations, and in the interpretation of the course material.

Assessment criteria - grade 3

The student

- shows good activity and punctuality on the course
- has good understanding of the course contents, core concepts and terminology
- has good knowledge and skills in writing simple Java programs in the object-oriented way

- uses the course materials and other sources in an effective way to support own learning
- needs sometimes assistance in problem situations.

Assessment criteria - grade 5

The student

- shows excellent activity and punctuality on the course
- has excellent understanding of the course contents, core concepts and terminology
- has excellent knowledge and skills in writing simple Java programs in the object-oriented way
- uses the course materials and independently found sources fluently to support own learning
- can independently examine and solve almost all problem situations
- shows that he/she can acquire more knowledge and skills independently and apply them creatively.

### **Teachers**

Kari Silpiö

### **Campus**

Pasila Campus

### **Teaching language**

English

### **Timing**

24.08.2020 - 16.10.2020

### **Enrollment**

15.06.2020 - 28.06.2020

### **Groups**

TF2SWD

### **Mode of delivery**

Contact teaching

### **Degree Programmes**

BITE Degree Programme in Business Information Technology

### **Evaluation scale**

H-5

### **Credits**

5 cr

# **Programming 2 SWD4TF033-3003 26.10.2020-18.12.2020 5 cr (TF2SWD)**

## **Learning objectives**

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

- explain basic web application concepts and terminology
- use a web server for developing and testing a web application
- create small and simple web applications where the back-end is written in Java
- access databases programmatically to retrieve data and modify data in the database

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

The student has completed the course Programming 1 (SWD4TF032), or can demonstrate equivalent skills and knowledge.

In addition, the student should take the course Data Management and Databases (SWD4TF003) alongside the Programming 2 course if he/she already doesn't have equivalent skills in basics of databases and SQL.

## **Contents**

Introduction to web application development

- Web application architecture
- Using a development web server
- HTTP communication with requests and responses
- Creating a small and simple back-end in Java
- Programmatic database access in Java
- Creating a small and simple front-end

Basics of unit testing

Basics of version management

## **Assessment criteria**

Assessment criteria - grade 1

The student

- shows passable activity and punctuality on the course
- has passable understanding of the course contents, core concepts and terminology
- has passable knowledge and skills in writing small and simple web applications
- needs often assistance in problem situations, and in the interpretation of the course material.

Assessment criteria - grade 3

The student

- shows good activity and punctuality on the course
- has good understanding of the course contents, core concepts and terminology
- has good knowledge and skills in writing small and simple web applications
- uses the course materials and other sources in an effective way to support own learning
- needs sometimes assistance in problem situations.

## Assessment criteria - grade 5

### The student

- shows excellent activity and punctuality on the course
- has excellent understanding of the course contents, core concepts and terminology
- has excellent knowledge and skills in writing small and simple web applications
- uses the course materials and independently found sources fluently to support own learning
- can independently examine and solve almost all problem situations
- shows that he/she can acquire more knowledge and skills independently and apply them creatively.

### **Teachers**

Kari Silpiö

### **Campus**

Pasila Campus

### **Teaching language**

English

### **Timing**

26.10.2020 - 18.12.2020

### **Enrollment**

15.06.2020 - 30.10.2020

### **Groups**

TF2SWD

### **Mode of delivery**

Contact teaching

### **Degree Programmes**

BITE Degree Programme in Business Information Technology

### **Evaluation scale**

H-5

### **Credits**

5 cr

# **Project Management BUS1TF107-3005 18.01.2021-21.05.2021 5 cr (TF4SWD, ...)**

## **Learning objectives**

Students get an understanding of corporate IT projects and their implementation as disciplined and well managed projects. Practically, the course enhances students' abilities to work in business information systems investment projects and enables them to gradually take more responsibility in managing projects.

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

Student has passed all 1-2 semester compulsory courses. The course Innovation and Project Work must be passed.

In addition, having completed work placement helps participation in the course, due to having some of the knowledge and experience of project work and development process of business information systems.

Students are recommended to participate in the Project Championship competition which is credited as an own course or by letting free to do some of the duties on the course (test and/or groupwork). However, crediting depends on the level the student (in team) reaches in PMC contest run in two rounds.

## **Contents**

The course is accomplished during the periods 1-2 / 4-5 structured by means of five modules+ study project. Moreover, the course is run in terms of three extents of the course, which are small (four modules, restricted number of assignments), medium (five modules, less assignments compared to large one) and standard (large, five+ study project). This solution is due to varying motivation levels by students. The size is correlating the grade which are: 0-2 in small, 0-3 in medium and 0-5 in large option of the course.

Module 1 – Introduction: Rationale for IT-project failures; Project Lifecycles vs. Systems Development (IT) Life Cycles (incl agile approach); Project management as a platform - overall view on managing projects.

Module 2 – Initiation and early planning stage: Cost benefit analysis; Writing a Business case report, and communicating with sponsors.

Module 3 – Project schedule planning: Techniques involved in WBS; Effort analysis, Scheduling

Module 4 – Structures: Project organisations, Team working, Resource management

Module 5 – Change management. CM from individual, IT-expert, Organisation points of view.

Module 6 – Groupwork

## **Assessment criteria**

Assessment criteria - grade 1

Assessment criteria:

- Assignments
- Activity on lessons (participations, presentations, key-terms minor assignments)
- Study by free choice (just for full course students)



## Grade 1

### Knowledge

Has a basic knowledge of the principles of IT project management. Has a basic knowledge of the project management processes

### Skills

Has passable skills 1) in demonstrating the use of some of the PMtools. 2) in presenting the student presentations and the assignments done in teams as well as in explaining project management concepts.

### Competence

Possesses a rudimentary understanding of the IT-project methodology and is able to apply some of the methods and the tools learned during the course in practice.

## Assessment criteria - grade 3

### Knowledge

Has a good knowledge of the principles of IT project management. Is motivated in identifying and analyzing the context and the performance of successful IT projects. Has a passable knowledge of the project management processes.

### Skills

Is somewhat fluent in presenting the student presentations and the assignments done in teams as well as in explaining project management concepts.

### Competence

Possesses an eligible understanding of the IT-project methodology and is able to apply the methods and the tools learned during the course in practice.

## Assessment criteria - grade 5

### Knowledge

Has a very good knowledge of the principles of IT project management. Is highly motivated in identifying and analyzing the context and the performance of successful IT projects. Has a good knowledge of the project management processes.

### Skills

Is highly fluent in presenting the student presentations and the assignments done in teams as well as in explaining project management concepts.

### Competence

Possesses a solid understanding of the IT-project methodology and is very skillful in applying the methods and the tools learned during the course in practice.

## **Further information**

Cooperation with the business community:

Visiting lecturer(s), events (voluntary), project management cases, magazines, videos.

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.

**Teachers**

Pekka Kamaja

**Campus**

Pasila Campus

**Teaching language**

English

**Timing**

18.01.2021 - 21.05.2021

**Enrollment**

04.01.2021 - 15.01.2021

**Groups**

TF4SWD

TF4DIG

EXCH

**Mode of delivery**

Contact teaching

**Seats**

15 - 40

**Degree Programmes**

BITE Degree Programme in Business Information Technology

**Evaluation scale**

H-5

**Credits**

5 cr

**Unit**

Digital Business

# **Project Management Championship BUS8TF712-3002**

## **01.03.2021-11.06.2021 3 cr (ONLINE)**

### **Learning objectives**

The course description here is in English, but the course is mostly bilingual and teams willing to have this course in Finnish is possible except the multi-choice questions on qualification round are in English.

HUOM! Kurssi ja siihen kuuluva kilpailu on siis suoritettavissa pääosin myös suomeksi.

The course is organized in co-operation with Finnish Project Association, ([www.pry.fi](http://www.pry.fi)). The course as such is two-fold,

1) training and preparing for the competition (PMC) in collaboration with Haaga-Helia's teacher of this course and

2) participating on the Project Championship held by Finnish Project Association, a member of IPMA, International Project Management Association.

About the actual competition, part 2, please ask information in more detailed from the responsible teacher of this course (Pekka Kamaja).

The participating team will achieve the knowledge of managing projects comparable to the IPMA D-level certificate. Thus, the competition is good training for applying the D-certificate which is well-known and recognized document in working life.

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

Basic knowledge about project management is crucial and working experience of projects is highly recommendable.

The organizer of PMC (PRY/IPMA) has set the following conditions for the participation:

- 1) only teams of 3-4 members are accepted, not individuals;
- 2) each team member must be under 35 years of age.

### **Contents**

Content is about project management, project phases, project types and the nature (role) of business case in Projects. Yet, the responsibilities by parties in project, team formation and management and change management belong to the subjects of the course.

The competition is run in two rounds, the qualification round and finals. The qualification round is open beginning of November until the end of March each year which enables students from both the fall and spring semester to participate on this competition.

More, please see: <http://www.become.pm/projectmanagementchampionships/registration/>

### **Assessment criteria**

Assessment criteria - grade 1

41 – 50 % from the total points in qualification test

Grade 2:

51 – 60 % from the total points in qualification test

Assessment criteria - grade 3  
61 – 70 % from the total points in qualification test

Grade 4:

The score in PMC qualification round passes the criterion of acceptance to Finals (all accepted teams are not taken into Finals).

Assessment criteria - grade 5

The team is accepted to Finals in PMC.

### **Further information**

Learning on the course is training for the actual competition and it is organized in terms of team meetings where the teacher coaches the teams. The more detailed information is given on Moodle. To get there you need to enroll on Peppi (mynet) on this course, PMC.

The final is possible only for one team from Haaga-Helia. Additional work worth for 2 cr is negotiable for other teams disqualified in the qualification round.

Coaching would give preparedness to solve problems involved in the three main areas of project management: Behavioral, Technology and Content oriented tasks/questions that are the content on the main reference used on the course.

The team heading to the final shall prepare to analyse a challenging project management problem that is investigated and reported in one day session at organizer's premises Eteläranta 10, Hki. Coaching by teacher for the finals is based on reviewing the old PMC assignments.

At the end of final the team will give a PowerPoint presentation to the Jury of competition.

The winner of national competition will be the representative of Finland in the International Competition later.

### **Teachers**

Pekka Kamaja

### **Campus**

Pasila Campus

### **Teaching language**

English

### **Timing**

01.03.2021 - 11.06.2021

### **Enrollment**

04.03.2021 - 30.04.2021

### **Groups**

ONLINE

**Mode of delivery**

Contact teaching

**Degree Programmes**

BITE Degree Programme in Business Information Technology

**Evaluation scale**

H-5

**Credits**

3 cr

# **Prototyping of Digital Services DIG4TF003-3005 26.10.2020-18.12.2020 5 cr (TF2SWD, ...)**

## **Learning objectives**

Upon successful completion of this course, the student should be able to apply brainstorming techniques, is able to design a digital service visual user interface and is able to take advantage of tools for prototyping.

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

Recommended Innovation and Project Work and User Experience courses studied before.

## **Contents**

Topics to be covered in the course include the following:

- Iterative design
- User Interface visuals
- Tools for prototyping
- Implementation of the prototype

## **Assessment criteria**

Assessment criteria - grade 1

The student understands the importance of the visual image to the digital service, as well as to understand the importance of building of prototypes of tools and are able to implement their primitive prototype.

Assessment criteria - grade 3

The student is able to design the visual identity of digital services and are able to implement a prototype utilizing tools for prototyping.

Assessment criteria - grade 5

The student is able to plan an appropriate visual image of digital services and are able to implement a high-quality prototype effectively utilizing tools for prototyping.

## **Teachers**

Amir Dirin

## **Campus**

Pasila Campus

## **Teaching language**

English

## **Timing**

26.10.2020 - 18.12.2020

## **Enrollment**

15.06.2020 - 30.10.2020

**Groups**

TF2SWD

TF2DIG

EXCH

**Mode of delivery**

Contact teaching

**Seats**

15 - 30

**Degree Programmes**

BITE Degree Programme in Business Information Technology

**R&D proportion**

5 cr

**Evaluation scale**

H-5

**Credits**

5 cr

**Unit**

Digital Business

# **Requirements Analysis BIG8TF005-3005 24.08.2020-18.12.2020 5 cr (TF7SWD, ...)**

## **Learning objectives**

Upon completion of this course, the student

- is familiar with the terminology and array of concepts that are relevant to the area of processing requirements on an information system,
- is familiar with the body of relevant research material of the area and methods to get at it,
- can apply his or her knowledge of the terminology and understanding of the concepts in real-life information system development situations,
- understands the dialogue between the system being developed and the system that is developing in a general business development situation, and can apply the understanding to manage information system development efforts,
- is in process of building a social network part of which is a real-life development concept and another part of which is a usable selection of information sources, and
- has a sound curiosity towards the area of processing requirements on an information system being developed and which curiosity he or she uses to learn more.

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

This course has no formal prerequisites but students who have a grade on the courses Orientation to Business and ICT, Business Process Management, Orientation to Software Engineering and Orientation to Digital Services are in the best position to get the full gain of this course.

## **Contents**

Course contents (relevant topics):

- Defining Requirements.
- Requirements Discovery.
- Classifying Requirements.
- Techniques for Eliciting Requirements.
- Sources and Authorities.
- Managing Requirements.

## **Assessment criteria**

Assessment criteria - grade 1

The student

- can identify, list and combine the main concepts and terminology discussed in the course,
- has some understanding of the basic ways to obtain, model and manage information describing requirements for an information system,
- has some understanding of the main issues associated with the activities mentioned above, and
- often needs assistance in solving basic problems with the assistance in form of dictation and has difficulties in using theoretical materials to support his or her learning.



### Assessment criteria - grade 3

#### The student

- has good understanding of the concepts and terminology discussed in the course,
- has good understanding of the basic ways to obtain, model and manage information describing requirements for an information system,
- has good understanding of the main issues associated with the activities mentioned above,
- sometimes needs assistance in solving basic problems with the occasional assistance in form of dialogue,
- can use the theoretical materials in an effective way to support his or her learning, and
- can find more information from additional sources.

### Assessment criteria - grade 5

#### The student

- has excellent understanding of the concepts and terminology discussed in the course,
- has excellent understanding of the basic ways to obtain, model and manage information describing requirements for an information system,
- has excellent understanding of the main issues associated with the activities mentioned above,
- can solve problems independently, the eventual assistance being in form of dialogue,
- can fluently use the course materials and other sources to support his or her learning,
- can independently find more information from additional sources,
- can independently learn more details of course topics, and
- can eventually transfer and apply knowledge from other contexts.

### **Teaching methods and instruction**

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#### Note:

Due to the coronavirus situation and per Haaga-Helia's instructions for the autumn semester, the implementation in Fall 2020 will be working completely online (no contact classes in Haaga-Helia premises) making it possible to work remotely (at least) between the 24th Aug and the 16th Oct.

\*\*

This implementation is based on contact learning meaning that weekly classes provide the basis for learning the course topics by covering the relevant material. Also, some of the learning activities can only be completed in-class such as in-class activities and exams. In addition to the classes, the participants are expected to do independent work outside classes. Instruction is provided during classes, using Moodle and if necessary, via e-mail.

### **Learning material and recommended literature**

Material available on Moodle.

The course book is Ashrafi, N. and Ashrafi, H., 2008 or newer, Object-Oriented Systems Analysis and Design, Pearson Higher Ed (or Prentice Hall), ISBN-13: 9780131354791, ISBN-10: 0131354795, chapters 4, 1, 5, 6 and 2.5.

Supporting books are Bocij, P., Greasley, A. & Hickie, S. 2015 (5th ed.), Business information systems: technology, development and management for the e-business, Pearson and Robertson, S. and Robertson, J. 2013 (3rd ed.), Mastering the Requirements Process, Addison-Wesley, ISBN: 9780321815743.

**Teachers**

Raine Kauppinen

**Working life connections**

The material and topics are relevant to working life as well as the examples used. Implementation includes project work that is based on a case from working life.

**Campus**

Pasila Campus

**Exam dates and re-exam possibilities**

The implementation has two exams on the first period. It is possible to retake both exams twice on the second period.

**Teaching language**

English

**Internationality**

The material and topics are international as are some of the examples used.

**Timing**

24.08.2020 - 18.12.2020

**Learning assignments**

- In-class activities.
- Additional activities.
- Learning diaries.
- Project work.

**Enrollment**

15.06.2020 - 28.08.2020

**Content scheduling**

This is a 16 week implementation.

**Groups**

TF7SWD

TF7WAD

TF7DIG

TF7BIG

TF7BIT

EXCH

**Alternative learning methods**

For RPL etc., contact the teacher during the first week of the implementation at the latest.

**Mode of delivery**

Contact teaching

**Seats**

15 - 40

**Further information**

- Exams 40 %.
- Requirements project 40 %.
- In-class activities, additional activities and learning diaries 20 %.

**Degree Programmes**

BITE Degree Programme in Business Information Technology

**R&D proportion**

1 cr

**Evaluation scale**

H-5

**Credits**

5 cr

**Unit**

Digital Business

# **Research Process THE7TF910-3008 18.01.2021-21.05.2021 5 cr (TF6SWD, ...)**

## **Learning objectives**

The purpose of the course is to acquaint students with scientific research method 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. In the course of the Writing Business Report, oral presentation skills and the genre of academic writing will be briefly recapitulated. Students are also required to peer-review each other's assignments. Students are to revise their written documents during the course, if necessary, after the lecturers in charge of the course and a peer student have reviewed them with comments.

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

English 2 (recommended)

## **Contents**

Research methods

Research process

Research reporting

Recap of academic writing and presentation skills

## **Assessment criteria**

Assessment criteria - grade 1

Student is able to write a report with at least:

- Good source material
- References to sources (in every paragraph)
- No major errors in solving the research problem or terminology
- Logical organization
- Proper layout / structure

Assessment criteria - grade 3

Student is able to write a report with (in addition to previous ones):

- Successful scoping
- Results correspond to the topic
- Critical analysis where necessary
- Reasonable conclusions based on the research
- The research problem is reasoned
- Good abstract

Assessment criteria - grade 5

Student is able to write a report with (in addition to previous ones):

- Well organized and logical overall structure of the paper
- Discussion between the sources
- Organized and logical proceeding of the research

**Teachers**

Seppo Suominen

**Campus**

Pasila Campus

**Teaching language**

English

**Timing**

18.01.2021 - 21.05.2021

**Enrollment**

04.01.2021 - 15.01.2021

**Groups**

TF6SWD

TF5DIG

TF6DIG

TF5SWD

ONLINE

**Mode of delivery**

20% Contact teaching, 80% Distance learning

**Seats**

15 - 40

**Degree Programmes**

BITE Degree Programme in Business Information Technology

**Virtual proportion**

4 cr

**Credits**

5 cr

**Unit**

Digital Business

# **SAP ERP 1 BIG4TF002-3005 18.01.2021-21.05.2021 5 cr (TF3SWD, ...)**

## **Learning objectives**

Upon successful completion of this course, the student...  
Understands core business processes and structure of ERP systems.  
Understands the projects related to ERP systems.  
Has hands-on skills for using SAP ERP system.

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

Pre-requisite: Orientation to Business and ICT or equivalent knowledge

## **Contents**

The topics of this course are as follows:

Getting familiar with core business processes in SAP ERP system.

Structure and modules of integrated systems  
Core business processes: Order-to-Cash, Procure-to-Pay, Plan-to-Produce  
ERP-projects / system implementation

## **Assessment criteria**

Assessment criteria - grade 1

Grade 1 (40%)

Student has sufficient knowledge of ERP basic concepts and business processes. Student has weak hands-on skills in use of SAP ERP system

Assessment criteria - grade 3

Grade 3 (70%)

Student has good knowledge of ERP basic concepts and business processes. Student has good hands-on skills in use of SAP ERP system.

Assessment criteria - grade 5

Grade 5 (90%)

Student has excellent knowledge of SAP ERP basic concepts and business processes. Student has very good hands-on skills in use of SAP ERP system.

## **Teachers**

Jarmo Harmonen

## **Campus**

Pasila Campus

## **Teaching language**

English

## **Timing**

18.01.2021 - 21.05.2021

**Enrollment**

04.01.2021 - 15.01.2021

**Groups**

TF3SWD

TF3DIG

TF7BIT

EXCH

**Mode of delivery**

Contact teaching

**Seats**

15 - 40

**Degree Programmes**

BITE Degree Programme in Business Information Technology

**Evaluation scale**

H-5

**Credits**

5 cr

**Unit**

Digital Business

# **SAP ERP 2 BIG4TF021-3005 24.08.2020-18.12.2020 5 cr (TF4SWD, ...)**

## **Learning objectives**

Upon successful completion of this course, the student...

...Is able to work independently with advanced business processes in SAP ERP system.

...Have very good understanding of SAP ERP system within areas in course content.

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

pre-requisite: SAP ERP 1 or equivalent knowledge

## **Contents**

The topics of this course are as follows:

Advanced business processes and integration between following modules: Production Planning (PP), Financial Accounting (FI), Sales & Distribution (SD), Materials Management (MM)

## **Assessment criteria**

Assessment criteria - grade 1

Student has sufficient knowledge of SAP ERP system business processes within course content. Student has general understanding and sufficient hands-on-skills with SAP ERP system.

Assessment criteria - grade 3

Student has good knowledge of SAP ERP system business processes within course content. Student has good understanding and hands-on-skills with SAP ERP system.

Assessment criteria - grade 5

Student has excellent knowledge of SAP ERP system business processes within course content. Student has very good understanding and hands-on-skills with SAP ERP system.

## **Teachers**

Jarmo Harmonen

## **Campus**

Pasila Campus

## **Teaching language**

English

## **Timing**

24.08.2020 - 18.12.2020

## **Enrollment**

15.06.2020 - 28.08.2020



**Groups**

TF4SWD

TF6BIT

TF4DIG

TF7BIT

EXCH

**Mode of delivery**

Contact teaching

**Seats**

15 - 40

**Degree Programmes**

BITE Degree Programme in Business Information Technology

**Evaluation scale**

H-5

**Credits**

5 cr

**Unit**

Digital Business

# **Selling ICT solutions SAL1TF002-3006 18.01.2021-21.05.2021 5 cr (TF5DIG, ...)**

## **Learning objectives**

Student

- learns the solution sales process through theory and practice
- learns techniques and negotiation skills required at different stages of sales process
- understands the challenges in diverse areas of IT solution sales
- becomes aware about his/her own skill profile and knowing where to learn more

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

Tools in Sales and Service Business (environment), Orientation in ICT and Business, Business Operations.

## **Contents**

- Selling and sales organizations
- Customer understanding
- Customer Value creation
- Solution sales process
- Tendering
- Solution Negotiations

The course is run by doing the learning tasks, no exam.

The evaluation also based on the participation in teamwork.

1. Activity on lessons 20 %
2. Individual and group assignments 30 % (period 1 or 4)
3. Sales negotiation material, 20 % (period 2 or 5)
4. Selling negotiation process 30 % (period 2 or 5)

## **Assessment criteria**

Assessment criteria - grade 1

(min. 40 % of the target level met)

Knowledge:

The student knows in some respects the steps of the solution sales process and the techniques used in the various phases.

Skills:

The student is able to partially exercise various techniques and tools at the various stages of the solution sales process and in group negotiations.

Competence:

The student participates less actively in group working. Low level of contribution on course.

Assessment criteria - grade 3

(min. 70 % of the target level met)

**Knowledge:**

The student knows the steps of the solution sales process and the techniques used in the various phases.

**Skills:**

The student is able to exercise various techniques and tools at the various stages of the solution sales process and in group negotiations.

**Competence:**

The student is actively involved in group working. She/he can work quite independently. Active participation in team work.

**Assessment criteria - grade 5**

(min. 90 % of the target level met)

**Knowledge:**

The student knows very well the steps of solution sales processes and the techniques used in the various phases.

**Skills:**

The student is able to exercise well various techniques and tools at the various stages of the solution sales process and in group negotiations.

**Competence:**

Extremely active participation in the team's work. Good ability to act independently. Innovativeness, positive attitude and compliance with schedules.

**Further information****Working life connections:**

The sales cases on the course are based on actual biddings and sales projects and visitor lecture(s).

**International dimension:**

The course utilizes international sales and marketing material.

**Teachers**

Seppo Karisto

**Campus**

Pasila Campus

**Teaching language**

English

**Timing**

18.01.2021 - 21.05.2021

**Enrollment**

04.01.2021 - 15.01.2021

**Groups**

TF5DIG  
EXCH  
TF5SWD  
ONLINE

**Mode of delivery**

Contact teaching

**Seats**

15 - 40

**Degree Programmes**

BITE Degree Programme in Business Information Technology

**Evaluation scale**

H-5

**Credits**

5 cr

**Unit**

Digital Business

# **Server Programming SWD4TF021-3007 24.08.2020-18.12.2020 5 cr (TF3SWD, ...)**

## **Learning objectives**

Upon completion of the course, the student is able to

- Understand and describe the role of the back-end development in modern web applications
- Act like a professional back-end developer. Able to analyze problems, seek for needed information, apply a solution, verify it
- Able to discuss and take into use more back-end technologies

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

Student has completed the second semester studies in programming and databases.

## **Contents**

- Introduction to server side programming
- Introduction to security issues in server side programming
- Application programming interfaces (REST-API, JSON)
- Database programming on server side
- Software frameworks for server side
- Performance of back-end software
- Version management, build automation tools, deployment tools

## **Assessment criteria**

Assessment criteria - grade 1

- Knows the basic concepts of server programming.
- Shows passable activity in class and individual studying
- Has skills in creating an application using the technologies taught on the course

Assessment criteria - grade 3

- Knows the server programming concepts well
- Shows good activity in class and individual studying
- Has good knowledge and skills in creating an application using the technologies taught on the course
- Can use the course materials in an effective way to support own learning

Assessment criteria - grade 5

- Knows the server programming concepts in depth.
- Has excellent knowledge and skills in creating an application using the skills technologies on the course Able to develop security practices.
- Can fluently use the course materials and other sources to support own learning
- Can independently solve problems

## **Further information**

Course covers Spring Security, which solves part of backend security issues. Complete security coverage does not fit into the course.

**Teachers**

Jukka Juslin

**Campus**

Pasila Campus

**Teaching language**

English

**Timing**

24.08.2020 - 18.12.2020

**Enrollment**

15.06.2020 - 28.08.2020

**Groups**

TF3SWD

EXCH

**Mode of delivery**

Contact teaching

**Seats**

15 - 35

**Degree Programmes**

BITE Degree Programme in Business Information Technology

**Evaluation scale**

H-5

**Credits**

5 cr

**Unit**

Digital Business

# **Server Technologies ICT4TF021-3007 18.01.2021-21.05.2021 5 cr (TF3SWD, ...)**

## **Learning objectives**

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

- install the Linux/Windows Server operating system, and specify the server
- deploy a variety of server roles and features
- understand network protocols functions
- understand server platforms requirements and their suitability for different services
- deploy the most typical servers and knows the basics of the Windows / Linux server environment
- install and maintain appropriate programming platform

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

Student has completed the Orientation to ICT Infrastructures ICT1TF010

## **Contents**

- Windows / Linux server architectures
- Data networks main protocols
- Server environment installation and management
- Directory Services
- Network services and their function
- System services and service management
- Installation and maintenance of web-server
- LAMP / MEAN
- Maintenance and maintenance tools.

## **Assessment criteria**

Assessment criteria - grade 1

Grade 1

- Student shows sufficient activity in studying
- Can explain the issues discussed in the course
- Can use the course basic content. Needs often assistance in problem situations, and in the interpretation of the course material

Assessment criteria - grade 3

Grade 3

- student shows good activity in studying
- can explain well the issues discussed in the course
- can use the course content in a versatile way
- needs sometimes assistance in problem situations, and in the interpretation of the course material

Assessment criteria - grade 5

Grade 5

- student shows excellent activity in studying
- can explain excellently the issues discussed in the course
- can apply the course content in a versatile way

- can independently examine and solve problems and retrieve information from different sources

**Teachers**

Juhani Ahlgren, Olavi Korhonen

**Campus**

Pasila Campus

**Teaching language**

English

**Timing**

18.01.2021 - 21.05.2021

**Enrollment**

04.01.2021 - 15.01.2021

**Groups**

TF3SWD

TF2SWD

TF2DIG

ONLINE

**Mode of delivery**

Contact teaching

**Seats**

15 - 40

**Degree Programmes**

BITE Degree Programme in Business Information Technology

**Credits**

5 cr

**Unit**

Digital Business



# **Software Development Technologies SWD4TF023-3005**

## **24.08.2020-18.12.2020 5 cr (TF4SWD, ...)**

### **Learning objectives**

Able to use and further learn software development, version management and project management tools and techniques needed on the Software Project course.

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

Pre-requisite courses:

Data Management and Databases SWD4TF003

Server Programming SWD4TF021 Front End Development SWD4TF022

Note: This course is meant only for Software Development oriented students.

### **Contents**

Software Development, Database, Version management and team work management tools and technologies. Contents change for each semester depending on the need.

### **Assessment criteria**

Assessment criteria - grade 1

Knows about the tools

Assessment criteria - grade 3

Can use the tools independently without help

Assessment criteria - grade 5

Also understands the broader meaning of the tools and can evaluate their strengths and weaknesses and compare tools for a purpose

### **Further information**

Working life connections:

The tools on this course will be based on the project commissioned by a customer company or organization.

Internationality:

Teams consist of both Finnish and multinational students. All used materials, technologies and methods are international.

### **Teachers**

Juhani Välimäki

### **Campus**

Pasila Campus

### **Teaching language**

English

### **Timing**

24.08.2020 - 18.12.2020

**Enrollment**

15.06.2020 - 28.08.2020

**Groups**

TF4SWD

EXCH

**Mode of delivery**

Contact teaching

**Seats**

15 - 40

**Degree Programmes**

BITE Degree Programme in Business Information Technology

**Evaluation scale**

H-5

**Credits**

5 cr

**Unit**

Digital Business

# **Software Project SWD4TF024-3005 18.01.2021-21.05.2021**

## **10 cr (TF4SWD, ...)**

### **Learning objectives**

Upon successful completion of the course, the student is able to solve customer problems through his/her software development skills. The student understands and is able to define customer needs and requirements, and s/he is able to utilize proper software solutions. The student is able to develop independently his/her competence in learning and discussing new technologies. The student is able to assess and select the proper technologies and approaches to solving the problem. The student is capable of taking responsibility for implementing designated tasks. The student is able to share the developed competence with other team members. As a member of a team, the student is responsible for implementing production-level software solutions for customer needs and requirements.

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

Pre-requisites

Student has good object-oriented programming, web programming and database skills.

Student is ready for independent teamwork and information seeking.

Data Management and Databases (SWD4TF003)

Server Programming (SWD4TF021)

Front End Development (SWD4TF022)

### **Contents**

The course operates like a genuine software company, from whom a client orders software solutions for real needs.

The students

1. Study customer needs
2. Define and plan the solution
3. Determine with the customer the selected technologies that are considered an appropriate solution to the problem
4. Develop the working software solution at a near production level
5. Evaluate the results and plan the future improvements

Course evaluation is based on group work, the functionality of the final outcomes, and an individual task essay that evaluates individual and group performance.

Assessment components and their respective weights:

- Activity, Responsibility, and attitude 20-30% (including coming to work in time, focus, contribution to team efficiency). Outstanding contribution might lead into a 10% extra bonus.
- Assignments or projects, and the activity and attitude shown during making them 40%
- Examination 40% (possibly, if needed for checking all team members' knowledge. Otherwise 0% and Assignments or projects 80%)

### **Assessment criteria**

Assessment criteria - grade 1

### Knowledge

The student can identify, list and combine the main theoretical concepts related to the course contents.

### Skills

With great difficulty and under strict supervision, the student partly or poorly works as a team member in software projects using relevant tools and technology at beginner's level.

### Competence

With great difficulty and under strict supervision, the student can cooperate with the actual developers, e.g. in a testing team. S/he can poorly apply problem identification, analysis and solving to software projects.

The student participates insufficiently to the group work. In the final essay, student superficially defines his/her roles in the project. The group's outcomes do not meet the initial purpose, and cooperation with the customer is weak.

### Assessment criteria - grade 3

#### Knowledge

The student can describe the relevant concepts and apply them to new contexts.

#### Skills

The student can work as a team member in software projects developing a working system.

#### Competence

The student can cooperate with the actual developers, e.g. in an assisting role. S/he can apply problem identification, analysis and solving to software projects.

The student participates actively in the group work. S/he helps the implementation, but does not take a big responsibility for any topic in the subject area. In the final essay, the student defines his/her roles sufficiently, but has not expressed indepth comparison or shows her/his analyzing capabilities. The group's outcomes serve the purpose partially, and cooperation with the customer is moderate.

### Assessment criteria - grade 5

#### Knowledge

The student uses and combines different theories to present own models. Student is aware of other views of the knowledge. His/her use of theory and specific terminology is very accurate. S/he uses findings to compare different theories and viewpoints.

#### Skills

The student can collect, analyze and use relevant technologies to create systems.

#### Competence

The student can work very professionally with a client company in a team. S/he can fully apply problem identification, analysis and solving to software development.

The student participates actively in the group work. S/he takes the lead in one or more area in the project. S/he can recommend methods and technologies for group use. In the final essay, the student analyzes his/her own and group performances thoroughly and analytically. S/he is able to analyze what has been done well and where it could have been done better.

The group's outcomes serve the purpose very well, and cooperation with the customer was excellent.

### **Further information**

Cooperation with the business community:

Case topics from companies, at least on latter implementations of the course.

International dimension:

Only international learning materials used. All implementations have students from several continents. Possible guest lecturers from international companies.

### **Teachers**

Juhani Välimäki

### **Campus**

Pasila Campus

### **Teaching language**

English

### **Timing**

18.01.2021 - 21.05.2021

### **Enrollment**

04.01.2021 - 15.01.2021

### **Groups**

TF4SWD

ONLINE

### **Mode of delivery**

Contact teaching

### **Seats**

15 - 35

### **Degree Programmes**

BITE Degree Programme in Business Information Technology

### **R&D proportion**

10 cr

### **Evaluation scale**

H-5

### **Credits**

10 cr

### **Unit**

Digital Business

# **Spoken Finnish FIN8TF100-3005 18.01.2021-19.03.2021 3 cr (TF4SWD, ...)**

## **Learning objectives**

The course activates and enhances oral skills in Finnish as well as to gives practice in Finnish conversation by focusing on situations in different areas of everyday life.

Upon successful completion of the course, the student

- gains self-confidence to be relaxed and converse more spontaneously in Finnish
- delivers various kinds of speeches (impromptu, informative)
- demonstrates an ability to express oneself more effectively in social situations
- improves pronunciation and enhances his/her vocabulary.

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

Finnish 1–3 or A2+ (See detailed level descriptions of language competence at: [http://www.coe.int/t/dg4/education/elp/elp-reg/Source/Global\\_scale/global\\_scale.pdf](http://www.coe.int/t/dg4/education/elp/elp-reg/Source/Global_scale/global_scale.pdf))

## **Contents**

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.

## **Assessment criteria**

Assessment criteria - grade 1

The student has limited understanding of spoken everyday Finnish and ability to express himself/herself in a social situation.

The student is able to participate in the interactive class discussion. He/she can prepare and give various kinds of speeches. With his/her vocabulary it is possible to to prepare and give a basic presentations.

He/she can manage communication situations with basic competence in Finnish. The student can interact in a simple way provided the other person talks slowly and clearly and is prepared to help.

Assessment criteria - grade 3

The student understands partly spoken everyday Finnish and has ability to express himself/herself in a social situation.

The student delivers oral presentations and participates in the interactive class discussion rather well. His/her vocabulary is wide enough for preparing and giving presentations.

He/she can manage communication situations appropriately in Finnish. The student can relatively well interact in a simple way provided the other person talks quite slowly and clearly and is prepared to help.

Assessment criteria - grade 5

The student understands spoken everyday Finnish well and has a good ability to express himself/herself in a social situation.

The student delivers oral presentations and participates in the interactive class discussion without difficulty. His/her vocabulary is wide enough for preparing and giving diverse presentations.

He/she can manage communication situations well in Finnish. The student can very well interact in a simple way provided the other person talks quite slowly and clearly and is prepared to help.

### **Learning material and recommended literature**

opettajan materiaali

### **Teachers**

Laura Uusitalo

### **Campus**

Pasila Campus

### **Teaching language**

Finnish

### **Timing**

18.01.2021 - 19.03.2021

### **Enrollment**

04.01.2021 - 15.01.2021

### **Content scheduling**

- keväällä 2021 jaksossa 3 (18.1. - 19.3.2021)
- perjantaisin kello 10.15 - 12.45 Pasilan kampuksella huoneessa PA/1010

### **Groups**

TF4SWD

TF4DIG

### **Mode of delivery**

Contact teaching

### **Seats**

15 - 25

### **Degree Programmes**

BITE Degree Programme in Business Information Technology

### **Evaluation scale**

H-5

### **Credits**

3 cr

### **Unit**

Digital Business

# **Study and Working Skills 1 COM1TF010A-3012 24.08.2020-18.12.2020 3 cr (TF1A)**

## **Teaching methods and instruction**

Study And Working Skills

Code: COM1TF010A \*)

Scope: 5 ects (135 h)

Timing: PART 1,1st semester (3ects); PART 2, 3rd semester (2 ects)

Language: English

Curriculum: DIG2015

Course level: core studies

Course type: compulsory

\*) The course is divided into the two groups both them holding an own extension in course code. However, groups are kept in one and there is one implementation jointly.

Learning outcomes

Upon successful completion of the course, the students

- can use Haaga-Helia's student services and independently search for the information they need for their studies
- know the structure of their studies and the courses included in them
- can lead their own actions so that they progress in their studies according to the objectives set by the Ministry of Culture And Education i.e. completing 60 ects in an academic year and graduating within the 3,5 years' norm time
- can operate constructively in their studying community, plan their professional future, evaluate their own strengths and development needs in order to make right choices to support their study process
- can determine their interests and targets for their career development being aware of the realistic opportunities the field has to offer. The students can pitch themselves to the labor market and build their contact network in a global working environment.

Contents, PART 1 (3ects, 1st semester)

Lessons

- orientation days (compulsory attendance)
- student services at Haaga-Helia (e.g. students' affairs office, health care, HELGA, library)
- student exchange
- start-up school
- the contents of the curriculum
- creating a Personal Study Plan (PSP) with the Personal Study Advisor (PSA)
- Learning environment: systems and efficient studying
- Plagiarism
- Work ergonomomy

Assignments

Assignments on the course are centered on doing the personal study plan (HOPS), tutoring with your personal advisor and other issues informed on lessons.

Contents, PART 2 (2ects, 3rd semester)

- The Union of Professional Business Graduates in Finland (a representative)
- meeting with the Academic Advisor (curriculum update, 60 ects situation, Double Degree)
- CV/ LinkedIn updates (Timo Lampikoski)



- alumni's presentations
- 6-7th semester students' presentations
- PSP updates with the PSA

Starting level and linkage with other courses

No prerequisites.

Course material

PSP forms, MyNet, TRAL-website, Moodle.

Working life connections

The Union of Professional Business Graduates in Finland (Tradenomiliitto, TRAL), alumni, The Federation of Finnish Enterprises (Suomen Yrittäjät).

Learning methods

The learning methods of this course are the following:

- contact lessons
- independent studies
- individual discussions with the Personal Study Advisors.

Recognition of Prior Learning (RPL)

Not applicable.

International dimension

Briefings on student exchange and Double Degree.

Assessment criteria

All the individual assignments specified by the lecturer must be completed in order to pass the course. See Moodle for details. Evaluation: PASS(H) / FAIL(0).

Course teachers

Taija Hämäläinen and Seppo Karisto

### **Teachers**

Riitta Blomster, Taija Hämäläinen, Seppo Karisto

### **Campus**

Pasila Campus

### **Teaching language**

English

### **Timing**

24.08.2020 - 18.12.2020

### **Enrollment**

17.08.2020 - 28.08.2020

### **Groups**

TF1A

### **Mode of delivery**

Contact teaching

### **Seats**

15 - 25

**Degree Programmes**

BITE Degree Programme in Business Information Technology

**Evaluation scale**

H-5

**Credits**

3 cr

**Unit**

Digital Business

# **Study and Working Skills 2 COM1TF010B-3005 18.01.2021-21.05.2021 2 cr (TF3SWD, ...)**

## **Teachers**

Jari Hyrkäs, Markku Ruonavaara

## **Campus**

Pasila Campus

## **Teaching language**

English

## **Timing**

18.01.2021 - 21.05.2021

## **Enrollment**

04.01.2021 - 15.01.2021

## **Groups**

TF3SWD

TF3DIG

ONLINE

## **Mode of delivery**

Contact teaching

## **Seats**

15 - 40

## **Degree Programmes**

BITE Degree Programme in Business Information Technology

## **Evaluation scale**

H-5

## **Credits**

2 cr

## **Unit**

Digital Business

# **Thesis Seminar and Workshop THE7TF900-3005 18.01.2021-21.05.2021 (TF7SWD, ...)**

## **Learning objectives**

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

## **Contents**

General guidelines for doing thesis in HAAGA-HELIA  
Different types of thesis  
Personal discussions about topics

The studies consist of workshops and seminars. In workshops the thesis process is discussed and thesis writing will be started.

## **Teachers**

Juhani Heikkinen, Jari Hyrkäs

## **Campus**

Pasila Campus

## **Teaching language**

English

## **Timing**

18.01.2021 - 21.05.2021

## **Enrollment**

04.01.2021 - 15.01.2021

## **Groups**

TF7SWD  
TF7WAD  
TF7DIG  
TF7BIG  
TF7BIT

## **Mode of delivery**

100% Contact teaching, 0% Distance learning

## **Seats**

15 - 30

## **Degree Programmes**

BITE Degree Programme in Business Information Technology

**Evaluation scale**

H-5

**Unit**

Digital Business

# **User Experience DIG4TF002-3005 18.01.2021-19.03.2021 5 cr (TF2SWD, ...)**

## **Learning objectives**

Upon successful completion of this course, the student should be able to understand why and how to create better services by bringing the voice of the customer as part of service development

He/she understands that user experience consists of chain of actions that generate a meaningful and valuable entity from the user's perspective. This chain can contain different kinds of service moments, contact points and interactions with service providers, user interfaces and other service users

He/she can examine and develop the experience as a whole as well as its parts

He/she can use different methods for mapping the user experience and apply the methods purposefully

He/she understands the importance of making the stakeholders participate in the design process and apply different working ways and methods of participatory design

He/she can transform the problems arising from the user's experience or other relevant moments into meaningful service solutions and describe the outcome of development in a manner that is communicable to different stakeholders

He/she can validate the plan created in the process and modify it according to the validation results

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

Orientation to digital service

## **Contents**

Topics to be covered in the course include the following:

Methods for developing user experience:

for mapping the user experience

for analysing the user information

for utilizing the information in design

for testing and evaluating the designs

Starting Level and linkage with other courses

The student must have passed the course Introduction to Digital Services.

## **Assessment criteria**

Assessment criteria - grade 1

Knows partially the concepts related to user experience and understands the meaning of user experience in service development. Knows the basic principles of designing user experience.

Assessment criteria - grade 3

Knows the basic concepts related to user experience, can map the user experience and utilize the findings in designing user experience.

Assessment criteria - grade 5

Masters the entity of user experience, can map the entire user experience and skillfully applies the knowledge gained in designing user experiences.

**Teachers**

Amir Dirin

**Campus**

Pasila Campus

**Teaching language**

English

**Timing**

18.01.2021 - 19.03.2021

**Enrollment**

04.01.2021 - 15.01.2021

**Groups**

TF2SWD

TF2DIG

EXCH

**Mode of delivery**

Contact teaching

**Seats**

15 - 30

**Degree Programmes**

BITE Degree Programme in Business Information Technology

**R&D proportion**

2 cr

**Evaluation scale**

H-5

**Credits**

5 cr

**Unit**

Digital Business