

Opasraportti

FTech - Courses in English for exchange students, Field of Industrial Engineering and Management (2018 - 2019)

Courses in English for exchange students at the Faculty of Technology

This Course Catalogue lists the Industrial Engineering and Management courses taught in English that are available for exchange students on the academic year 2018-2019.

NB! Course availability: Most of the listed courses are available for all **exchange students hosted by the Faculty of Technology**, if they have the previous knowledge requirements of the course (see "Prerequisites and co-requisites" in the course's description). **Exchange students hosted by other University of Oulu faculties** have to contact the Exchange Coordinator of the Faculty of Technology (see contact info below) to ask if it is possible to participate to the courses, but also they must have the previous knowledge required for the course in question.

When planning your exchange studies to your proposed study plan and the required **Learning Agreement**, please **use the information provided under the Courses tab** in this Catalogue. Please **read carefully** the provided information for each course you wish to take (course description, language of instruction, target group, course content, timing, required preceding studies, additional information, etc.).

For more information about the courses, please contact Faculty Exchange Coordinator (see contact info below).

All incoming exchange students must submit their Exchange Application online through the University of Oulu SoleMOVE system by the given deadline, and they will **also need to include a course plan** to that application and **enclose the respective Learning Agreement** signed by them and their home university!

Further information on application process for incoming exchange students is available at <http://www oulu.fi/english/studentexchange> or at international.office@oulu.fi.

After arrival, accepted exchange students are required to **register on-line in the WebOodi system to all courses** (and later, to the possible final course **exams** too). Course registration takes place via the WebOodi system once you have arrived in Oulu and received your University of Oulu login information. When registering to a course you will be able to find detailed information on teaching and **schedules** here under the **Instruction** and **Examinations** tabs.

Course levels: Individual course codes include information on the **level of course**. There are 3 different levels of courses. The levels are marked with a **letter at the end of the course codes**, see explanations below. In WebOodi course descriptions the level is indicated in 'Type' section.

In academic year 2017-2018 there are **intermediate (A) and advanced (S) level courses available in English**. All basic (P) level courses are only available in Finnish, and therefore, are not available for exchange students.

Teaching schedules are **periodical**: Courses organized during **periods 1-2** are given on the **autumn** term (September-December), and respectively **periods 3-4** refer to courses given during the **spring** term (January-May).

Teaching periods for 2018-19

Autumn term 2018

Period 1: Sept 3 - Oct 26, 2018

Period 2: Oct 29 – Dec 21, 2018

Spring term 2019

Period 3: Jan 7 – March 8, 2019

Period 4: March 11 – May 10, 2019

For arrival and orientation dates see <http://www oulu.fi/university/studentexchange/academic-calendar>**Any questions about these courses should be addressed to:**

M.Sc. Marita Puikkonen
 Faculty International Coordinator
 for Student Exchange
 Incoming & Outgoing Mobility
 Faculty of Technology, University of Oulu, Finland
 Email: Study.Technology(at)oulu.fi fi

Further information on application process and services for incoming exchange students
www oulu.fi/university/studentexchange or at International.Office(at)oulu.fi

Tutkintorakenteisiin kuulumattomat opintokokonaisuudet ja -jaksot

555351S: Advanced Course in Product Development, 5 op
 555391S: Advanced Course in Project Management, 5 op
 900013Y: Beginners' Finnish Course 1, 3 op
 900053Y: Beginners' Finnish Course 2, 5 op
 900054Y: Conversational Skills in Finnish, 3 op
 555310S: Demola Project, 5 op
 555371S: Human Resource Management, 5 op
 900015Y: Intermediate Finnish Course 1, 5 op
 900016Y: Intermediate Finnish Course 2, 5 op
 555375S: Lab to Market, 5 op
 555313S: Management, 5 op
 555314S: Management Information Systems, 5 op
 555382S: Management of a project-based firm, 5 op
 555332S: Operations Research, 5 op
 555226A: Operations and supply chain management, 5 op
 555343S: Product Data and product life cycle management, 5 op
 555242A: Product development, 5 op
 555346S: Product portfolio management, 5 op
 555333S: Production Management, 5 op
 555350S: Research and Technology Management, 5 op
 555377S: Risk Management, 5 op
 900027Y: Special Course in Finnish: Writing Skills, 3 op
 555370S: Strategic Management, 5 op
 900017Y: Survival Finnish, 2 op
 555376S: Sustainable organisational development, 5 op

Opintojaksojen kuvaukset

Tutkintorakenteisiin kuulumattomien opintokokonaisuuksien ja -jaksojen kuvaukset

555351S: Advanced Course in Product Development, 5 op

Voimassaolo: 01.08.2015 -

Opiskelumuoto: Advanced Studies

Laji: Course

Vastuuyksikkö: Field of Industrial Engineering and Management

Arvostelu: 1 - 5, pass, fail

Opettajat: Haapasalo, Harri Jouni Olavi

Opintokohteen kielet: English

Leikkaavuudet:

555345S Advanced Course in Product Development 6.0 op

ECTS Credits:

5 ECTS credits.

Language of instruction:

English.

Timing:

Period 2.

Learning outcomes:

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

- understand the objectives of requirements engineering (RE), design for excellence (DfX) product design concept and delivery capability creation (DCC) in order to develop and ramp up sustainable products with minimum product specific investments
- understand requirements engineering process and its key activities, DfX product design concept as product design guidelines, targets and key performance indicators (KPIs)
- understand DCC process as a sub-process of new product development (NPD) process including key roles, tasks and milestone criteria
- analyse and further develop RM, DfX and DCC as a part of product development processes

Contents:

The concepts of requirements management, requirements engineering process, requirement prioritisation and valuation, Design for Excellence (DfX), delivery capability creation (DCC), different stakeholders and their requirements for product development

Mode of delivery:

The tuition will be implemented as face-to-face teaching.

Learning activities and teaching methods:

Lectures 20 h / group work and self-study 114 h.

Target group:

Industrial Engineering and Management students.

Prerequisites and co-requisites:

555242A Product development, 555350S Research and Technology management (Technology Management).

Recommended optional programme components:

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Recommended or required reading:

Will be defined at the beginning of the course.

Assessment methods and criteria:

Group work, exam.

Grading:

The course utilizes a numerical grading scale 1-5. In the numerical scale zero stands for a fail.

Person responsible:

Professor Harri Haapasalo

Working life cooperation:

The group work will be done in cooperation with case companies.

Other information:

Substitutes course 555345S Advanced Course in Product Development.

555391S: Advanced Course in Project Management, 5 op

Voimassaolo: 01.08.2015 -

Opiskelumuoto: Advanced Studies

Laji: Course

Vastuuyksikkö: Field of Industrial Engineering and Management

Arvostelu: 1 - 5, pass, fail

Opettajat: Kirsi Aaltonen

Opintokohteen kielet: English

Leikkaavuudet:

555381S Project Leadership 5.0 op

ECTS Credits:

5 ECTS credits.

Language of instruction:

English.

Timing:

Periods 1-2.

Learning outcomes:

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

- explain and describe the most important project management areas and tools
- identify and evaluate the most applicable managerial approaches for different types of projects
- identify development needs and opportunities in project-based organisations
- to develop project management processes in an organisation

Contents:

different type of projects and industry specific approaches to project management, agile project management, managing large international projects, project governance, project risk and uncertainty management, project time and schedule management, management of innovative projects.

Mode of delivery:

The tuition will be implemented as blended teaching (web-based teaching and face-to-face teaching).

Learning activities and teaching methods:

Lectures, web-based-lectures and workshops 26h, group exercises and cases 66h, self-study 42h.

Target group:

Industrial Engineering and Management students.

Prerequisites and co-requisites:

555285A Basic course in project management.

Recommended optional programme components:

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Recommended or required reading:

Lecture materials and reading materials (articles, book chapters) related to each lecture.

Assessment methods and criteria:

This course utilises continuous assessment. The grading is based on case assignments solved in groups and discussed during the lecture, and group assignment that is presented and discussed in the workshops. Since the implementation of the cases and group work vary, the assessment methods and criteria will be defined at the beginning of the course.

Grading:

The course utilizes a numerical grading scale 1-5. In the numerical scale zero stands for a fail.

Person responsible:

Assistant professor Kirsi Aaltonen

Working life cooperation:

The course includes guest lectures from industry.

Other information:

Substitutes course 555381S Project Leadership.

900013Y: Beginners' Finnish Course 1, 3 op

Voimassaolo: 01.08.1995 -

Opiskelumuoto: Language and Communication Studies

Laji: Course

Vastuuyksikkö: Languages and Communication

Arvostelu: 1 - 5, pass, fail

Opintokohteen kielet: Finnish

Leikkaavuudet:

ay900013Y Beginners' Finnish Course 1 (OPEN UNI) 2.0 op

Proficiency level:

A1.2

Status:

The course is intended for the international students in every faculty of Oulu University.

Required proficiency level:

A1.1, Completion of the Survival Finnish course (900017Y) or the equivalent language skills.

ECTS Credits:

3 ECTS credits

Language of instruction:

As much Finnish as possible; English will be used as a help language.

Timing:

-

Learning outcomes:

By the end of the course the student can understand and use some familiar and common everyday expressions relating to her/himself and everyday situations. S/he can interact in a simple way provided the other person talks slowly and clearly and is willing to help. The student is able to read short simple texts and messages dealing with familiar topics. S/he also deepens her/his understanding of the Finnish language and communication styles.

Contents:

This is lower elementary course which aims to help students to learn communication skills in ordinary everyday situations. During the course, students broaden their vocabulary and knowledge of grammar and principles of pronunciation. They also practise to understand easy Finnish talk about everyday subjects, and reading and writing short and simple texts/messages.

The topics and communicative situations covered in the course are: talking about oneself, one's family, studies and daily routines, as well as asking about these things from other person, expressing opinions, describing people and things, talking about weather and seasons, the names of the months and colours.

The structures studied are: verb types, basics of the change of the consonants k, p and t in verbs and nouns, the genitive and partitive cases, possessive structure, some declension types for nouns (word types) and the basics of the local cases.

Mode of delivery:

Contact teaching and guided self study

Learning activities and teaching methods:

Lessons 2 times a week (26 h, including the final exam) and guided self study (55 h)

Target group:

International degree and post-graduate degree students and exchange students of the University

Prerequisites and co-requisites:

Completion of the Survival Finnish Course

Recommended optional programme components:

-

Recommended or required reading:

Gehring, S. & Heinzmann, S. Suomen mestari 1 (chapters 3 - 5)

Assessment methods and criteria:

Regular and active participation in the weekly lessons (twice a week), homework assignments and written exam at the end of the course will be observed in assessment.

Read more about [assessment criteria](#) at the University of Oulu webpage.

Grading:

Grading scale is 1-5.

Person responsible:

Anne Koskela

Working life cooperation:

-

Other information:

Sign-up in WebOodi. The course will start right after the Survival Finnish course.

900053Y: Beginners' Finnish Course 2, 5 op

Voimassaolo: 01.08.1995 -

Opiskelumuoto: Language and Communication Studies

Laji: Course

Vastuuyksikkö: Languages and Communication

Arvostelu: 1 - 5, pass, fail

Opintokohteen kielet: Finnish

Leikkaavuudet:

ay900053Y Beginners' Finnish Course 2 (OPEN UNI) 4.0 op

Proficiency level:

A1.3

Status:

The course is intended for the international students in every faculty of Oulu University.

Required proficiency level:

A1.2, completion of the Beginners' Finnish course 1 (900013Y) or the equivalent language skills.

ECTS Credits:

5 ECTS credits

Language of instruction:

As much Finnish as possible; English will be used as a help language.

Timing:

-

Learning outcomes:

By the end of the course the student can understand and use some very common everyday expressions and sentences. S/he can communicate in easy and routine tasks requiring a simple and direct exchange of information on familiar everyday matters. The student understands different kinds of short texts. S/he can for example locate important information in them. In addition, s/he has acquired more detailed knowledge of the language and culture.

Contents:

This is a post-elementary course. During the course students learn more about communication in ordinary everyday situations in Finnish. They also extend their vocabulary and knowledge of grammar. Students practise understanding simple Finnish talk and short texts.

The topics and communicative situations covered in the course are: asking for and giving directions, asking for help/favours, carrying out transactions in shops and restaurants, talking about the past, asking for and expressing opinions and feelings, accommodation, travelling, vehicles, work, professions, food, drink and parties.

The structures studied are: the local cases, nominative plural (basic form plural), imperfect (past tense of verbs), part of the imperative, more declension types for nouns (word types), more about the change of the consonants k, p and t in verbs and nouns, declension of the demonstrative pronouns and personal pronouns, more about the partitive case, basics of the object cases, postpositions and some sentence types in Finnish.

Mode of delivery:

Contact teaching and guided self study

Learning activities and teaching methods:

Lessons 2 times a week (52 h, including the tests) and guided self study (83 h)

Target group:

International degree and post-graduate degree students and exchange students of the University

Prerequisites and co-requisites:

Completion of the Beginners' Finnish Course 1

Recommended optional programme components:

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Recommended or required reading:

Gehring, S. & Heinzmann, S.: **Suomen mestari 1** (kappaleet 6-9)

Assessment methods and criteria:

Regular and active participation in the weekly lessons (twice a week), homework assignments and tests will be taken into consideration in the assessment.

Read more about [assessment criteria](#) at the University of Oulu webpage.

Grading:

Grading scale is 1-5.

Person responsible:

Anne Koskela

Working life cooperation:

-

Other information:

Sign-up in WebOodi. The lessons will be held **twice a week** during a 13-week period.

900054Y: Conversational Skills in Finnish, 3 op

Voimassaolo: 01.08.1995 -

Opiskelumuoto: Language and Communication Studies

Laji: Course

Vastuuyksikkö: Languages and Communication

Arvostelu: 1 - 5, pass, fail

Opintokohteen kielet: Finnish

Proficiency level:

B1/B2 , according to the Common European Framework.

Status:

The course is intended for the international students in every faculty of University of Oulu.

Required proficiency level:

Completion of the Finnish course for advanced students (900020) or of Intermediate Finnish 2 (900016Y) at a high level or the equivalent language skills.

ECTS Credits:

3 ECTS credits

Language of instruction:

Finnish

Timing:

-

Learning outcomes:

By the end of the course the student can interact with a degree of fluency (and spontaneity) that makes regular interaction with native speakers quite possible. S/he can describe and explain (clearly and in detail) on a wide range of objects, experiences and events, dreams, hopes and ambitions. The student can bring out opinions, give reasons and explanations for them and explain a viewpoint on a topical issue giving the advantages and disadvantages of various options. S/he is also able to give a (clear) prepared presentation and answer the questions posed by the audience.

Contents:

During the course students strengthen their communication skills in formal and informal situations. The goal is to activate the student's Finnish skills and encourage him/her to use them in different situations. There will be various types of situational dialogue, conversation and listening exercises in the course. In addition, students will conduct a short survey which will also be reported to other students in the class.

Mode of delivery:

Contact teaching and guided self study

Learning activities and teaching methods:

Lessons once a week (28-30 h), group work (15 h) and guided self study (36 h)

Target group:

International degree and post-graduate degree students, exchange students and the staff members of the University

Prerequisites and co-requisites:

Completion of the Finnish course for advanced students (900020) or of Intermediate Finnish 2 (900016Y) at a high level

Recommended optional programme components:

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Recommended or required reading:

Will be provided during the course.

Assessment methods and criteria:

To pass the course, students must attend class on a regular basis and complete group work tasks and homework assignments.

Read more about [assessment criteria](#) at the University of Oulu webpage.

Grading:

Grading is on a pass/fail basis.

Person responsible:

Anne Koskela

Working life cooperation:

-

Other information:

Sign-up in WebOodi.

555310S: Demola Project, 5 op

Voimassaolo: 01.01.2017 -

Opiskelumuoto: Advanced Studies

Laji: Course

Vastuuyksikkö: Field of Industrial Engineering and Management

Arvostelu: 1 - 5, pass, fail

Opettajat: Simo-Pekka Kekäläinen

Opintokohteen kielet: Finnish

ECTS Credits:

5 ECTS cr

Language of instruction:

English

Timing:

Fall and Spring

Learning outcomes:

Upon completion of the course, the student is able to apply and use the core competencies of his/ her studies in a real life problem solving context. The student will learn skills that will allow him/ her to participate in a professional role in a project team that uses lean development methods to validate ideas and to create a demo or a prototype of a product, service, or other innovation. The course provides the student with experience in project work and improves the student's team working skills as the course assignments are carried out by a multidisciplinary and international teams comprising of students with different backgrounds and skill sets. The course will also improve student's communication and oral presentation skills as the student will need to summarize, rationalize, and present findings and ideas throughout the project.

Contents:

The entrepreneurial field project is organized within the international Demola network and the project comprises facilitated and supported real-life problem definition, data collection, problem solving, implementation and communication.

Mode of delivery:

Facilitated and supported project. Demola projects will be arranged two times per year; one season in the springtime (starting from January/February) and one in the autumn (starting from August/September). Dates can be checked from Weboodi.

Learning activities and teaching methods:

Learning takes place during the project as team learning and problem solving, with feedback from the responsible teachers and problem owning company or organization.

Target group:

Open to all. Students have to submit their application to Demola facilitators at oulu.demola.net when the season starts (either in January or August).

Prerequisites and co-requisites:

It is recommended that before starting Demola, the student has acquired some theoretical knowledge through his /her degree studies. Otherwise, there are no prerequisite knowledge requirements.

Recommended optional programme components:

The course is an independent entity and does not require additional studies carried out at the same time.

Recommended or required reading:

Materials vary according to the assignment.

Assessment methods and criteria:

Active participation in the entire process, delivery of the required documents, presentations and a demo or a prototype.

Grading:

The course utilizes verbal grading scale "pass/fail"

Person responsible:

Simo Kekäläinen

Working life cooperation:

A group of students will carry out a development project to create a solution for the company's genuine and existing challenges. The project team reports to a supervising teacher and a company representative(s).

Other information:

The number of students is restricted.

555371S: Human Resource Management, 5 op

Voimassaolo: 01.08.2015 -

Opiskelumuoto: Advanced Studies

Laji: Course

Vastuuyksikkö: Field of Industrial Engineering and Management

Arvostelu: 1 - 5, pass, fail

Opintokohteen kielet: English

Leikkaavuudet:

555360S Administration, Organization and Education in Working Life 5.0 op

900015Y: Intermediate Finnish Course 1, 5 op

Voimassaolo: 01.08.1995 -

Opiskelumuoto: Language and Communication Studies

Laji: Course

Vastuuyksikkö: Languages and Communication

Arvostelu: 1 - 5, pass, fail

Opintokohteen kielet: Finnish

Leikkaavuudet:

ay900015Y Intermediate Finnish Course 1 (OPEN UNI) 4.0 op

Proficiency level:

A2.1

Status:

The course is intended for the international students in every faculty of University of Oulu.

Required proficiency level:

A1.3, Completion of the Beginners' Finnish course 2 (900053Y) or the equivalent language skills.

ECTS Credits:

5 ECTS credits

Language of instruction:

Mainly Finnish

Timing:

-

Learning outcomes:

By the end of the course the student can communicate in ordinary everyday situations when the topics are familiar or connected with everyday matters. S/he can search for and locate key informational content in different kinds of texts. The student can also identify the topic and some details of the discussion around her/him. S/he can describe activities and personal experiences both orally and in writing and s/he also knows the difference between spoken/colloquial and written/standard language. The student knows how things can be expressed with different degrees of politeness and can apply that information in her/his own communication.

Contents:

The course is a lower intermediate course. During the course students strengthen their communication skills in ordinary everyday situations and acquire a wider vocabulary and more thorough knowledge of grammar. In addition, students practise understanding and producing Finnish talk and reading newspaper articles.

The topics and communicative situations covered in the course are: requesting different kinds of requests, expressing politeness, making appointments with friends, giving directions, doing the shopping, talking about the past and talking about his/her future plans, hobbies, transactions e.g. in the doctor's and post office.

The structures studied are: more about the imperative, the verb rections, the deverbal noun (-minen), passive present tense, part of the plural declension of nouns, the third infinitive (ma-infinitive), more about sentence types, perfect tense, more about object cases.

Mode of delivery:

Contact teaching and guided self study

Learning activities and teaching methods:

Lessons 2 times a week (52 h, including the tests) and guided self study (83 h)

Target group:

International degree and post-graduate degree students, exchange students and the staff members of the University

Prerequisites and co-requisites:

Completion of the Beginners' Finnish Course 2

Recommended optional programme components:

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Recommended or required reading:

Gehring, S. & Heinzmann, S.: **Suomen mestari 2**, (chapters 1 - 5)

Assessment methods and criteria:

Regular and active participation in the weekly lessons (twice a week), homework assignments and the tests will be taken into consideration in the assessment.

Read more about [assessment criteria](#) at the University of Oulu webpage.

Grading:

Grading scale is 1-5.

Person responsible:

Anne Koskela

Working life cooperation:

-

Other information:

Sign-up in WebOodi. The lessons will be held twice a week during a 13-week period.

900016Y: Intermediate Finnish Course 2, 5 op

Voimassaolo: 01.08.1995 -

Opiskelumuoto: Language and Communication Studies

Laji: Course

Vastuuyksikkö: Languages and Communication

Arvostelu: 1 - 5, pass, fail

Opintokohteen kielet: Finnish

Proficiency level:

A2.2

Status:

The course is intended for the international students in every faculty of University of Oulu.

Required proficiency level:

A2.1, Completion of the Intermediate Finnish course 1 (900015Y) or the equivalent language skills.

ECTS Credits:

5 ECTS credits

Language of instruction:

Finnish

Timing:

-

Learning outcomes:

By the end of the course the student can communicate in various informal situations in Finnish. The student understands the main points of messages and talk around her/him. S/he can produce simple connected text on topics which are familiar or of personal interest and describe experiences and also report heard content to others.

Contents:

The course is an upper intermediate course. During the course students learn the necessary written and oral skills to be able to cope in informal situations arising during everyday life, work and study. In the course, students practise understanding more Finnish talk and newspaper articles, and finding information and talking about it to other people. In the classes the main stress is on oral exercises and group work.

The topics and communicative situations covered in the course are: transactions e.g. in clothes shops, at the doctor's and on the phone, Finnish small talk, reacting in different situations, planning a trip and booking e.g. a flight, information and facts about Finland and its history, telling about one's home country and home town, features of colloquial/spoken language.

The structures studied are: the perfect and pluperfect, revision of all the verb tenses, comparison of adjectives, conditional, more about the plural declension of nouns (particularly the plural partitive case), more about object and predicative cases, the passive imperfect.

Mode of delivery:

Contact teaching and guided self study

Learning activities and teaching methods:

Lessons once a week (52 h, including the tests) and guided self study (83 h)

Target group:

International degree and post-graduate degree students, exchange students and the staff members of the University

Prerequisites and co-requisites:

Completion of the Intermediate Finnish Course 1

Recommended optional programme components:

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Recommended or required reading:Gehring, S. & Heinzmann, S.: **Suomen mestari 2 (chapters 6 - 9)****Assessment methods and criteria:**

Regular and active participation in the weekly lessons (twice a week), homework assignments and the tests will be taken into consideration in the assessment.

Read more about [assessment criteria](#) at the University of Oulu webpage.

Grading:

Grading scale is 1-5.

Person responsible:

Anne Koskela

Working life cooperation:

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Other information:Sign-up in WebOodi. The lessons will be held **once a week** during a 13-week period.**555375S: Lab to Market, 5 op****Voimassaolo:** 01.08.2015 -**Opiskelumuoto:** Advanced Studies**Laji:** Course**Vastuuyksikkö:** Field of Industrial Engineering and Management**Arvostelu:** 1 - 5, pass, fail**Opettajat:** Jukka Majava**Opintokohteen kielet:** English**Leikkaavuudet:**

555327S Seminar in Production Management : Lab to Market 5.0 op

ECTS Credits:

5 ECTS credits.

Language of instruction:

English.

Timing:

Period 2.

Learning outcomes:

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

- analyse an industry to identify viable business ideas and opportunities
- use different frameworks including scenario planning, customer and user needs analysis, and technology evolution analysis
- apply frameworks and methods to distinguish interesting and promising ideas from viable opportunities, utilise frameworks and methods to evolve the ideas into viable products and businesses, and determine what business models are most effective
- present and defend own ideas, and critically examine and discuss the recommendations of others

Contents:

Industry analysis, scenario planning, customer and user needs analysis, technology evolution analysis, opportunity identification, business models.

Mode of delivery:

The tuition will be implemented as face-to-face teaching.

Learning activities and teaching methods:

Lectures 28 h / self-study and group work 106 h.

Target group:

Industrial Engineering and Management students.

Prerequisites and co-requisites:

B.Sc. in Industrial Engineering and Management or equivalent.

Recommended optional programme components:

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Recommended or required reading:

Lecture materials, articles and case materials that will be provided at the beginning of the course.

Assessment methods and criteria:

This course utilises continuous assessment. During the course, there are mandatory individual assignments (75 % of the grade) and a group work (25 % of the grade).

Grading:

1-5.

Person responsible:

Adjunct professor Jukka Majava

Working life cooperation:

The students will pitch their idea to a jury that includes working life representation.

Other information:

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555313S: Management, 5 op

Voimassaolo: 01.08.2015 -

Opiskelumuoto: Advanced Studies

Laji: Course

Vastuuyksikkö: Field of Industrial Engineering and Management

Arvostelu: 1 - 5, pass, fail

Opettajat: Kess, Pekka Antero

Opintokohteen kielet: Finnish

555314S: Management Information Systems, 5 op

Voimassaolo: 01.08.2015 -

Opiskelumuoto: Advanced Studies

Laji: Course

Vastuuyksikkö: Field of Industrial Engineering and Management

Arvostelu: 1 - 5, pass, fail

Opintokohteen kielet: English

ECTS Credits:

5 ECTS credits.

Language of instruction:

English.

Timing:

Periods 3 - 4.

Learning outcomes:

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

- explain the key concepts of management information systems
- understand the significance of information and information management in modern business and business process management
- define the information needs of management processes and understands how information systems can meet these needs
- recognise the current trends in management information systems technologies and practices and find out the relevant MIS information sources
- participate in enterprise information system designing, purchasing, and development tasks as a role of industrial engineer/process developer

strengthen the self-directing, reflective learning skills

Contents:

key concepts: management information systems (MIS), managerial information, different types of MIS applications, information systems in decision making and leadership, the effects of information technology in business processes and their development. Current trends in management information systems technologies and practices, business driven IT infrastructure and management, special characteristics of business development projects that contain ICT implementation.

Mode of delivery:

The tuition will be implemented as face-to-face teaching. If active participation for the course is not possible, independent learning method is offered including a case study in a student's own work organisation (independent learning method is available only for IEM students).

Learning activities and teaching methods:

Lectures 14 h / learning diary 27 hours / self-study and group work 93 h. The implementation methods of the self-study and group work vary.

Target group:

Industrial Engineering and Management students.

Prerequisites and co-requisites:

B.Sc. in Industrial Engineering and Management or equivalent, 555313S Management.

Recommended optional programme components:

Basic understanding of some business process areas helps learning (e.g. production management, supply chain management, sales and marketing management).

Recommended or required reading:

Lecture materials. Other materials will be defined at the beginning of the course.

Assessment methods and criteria:

This course utilises continuous assessment (e.g. a reflective learning diary returned on a weekly basis) and conducting the learning tasks. Since the implementation of self-study and group work vary, the assessment methods and criteria will be defined at the beginning of the course.

Grading:

The course utilizes a numerical grading scale 1-5. In the numerical scale zero stands for a fail.

Person responsible:

M.Sc. Teemu Lappi

Working life cooperation:

The course includes the guest lectures of industry to offer various and topical views to MIS in practice.

Other information:

Substitutes the course 555344S Management Information Systems.

555382S: Management of a project-based firm, 5 op

Opiskelumuoto: Advanced Studies

Laji: Course

Vastuuyksikkö: Field of Industrial Engineering and Management

Arvostelu: 1 - 5, pass, fail

Opettajat: Jaakko Kujala

Opintokohteen kielet: Finnish

Voidaan suorittaa useasti: Kyllä

ECTS Credits:

5 ECTS credits.

Language of instruction:

English.

Timing:

Period 4.

Learning outcomes:

Upon completion of the course student will be able to:

- describe the core areas of the management of the project-based firm
- explain how different internal and external contextual factors affect the business of a project-based firm, and how they should be taken account in the design of a business model
- understand the role of services in the business of a project-based firm
- apply systematic approach to project negotiation
- evaluate the significance of a single project for the business of a project based-firm

Contents:

Contextual factors in project business, business model of a project-based firm, integration of services to the business of a project-based firm, project sales and marketing, contracting, project negotiations (negotiation analytic approach) and organising support functions in project-based firm.

Mode of delivery:

The tuition will be implemented as face-to-face teaching.

Learning activities and teaching methods:

Lectures 24h / self-study 56h / group exercise 54h

Target group:

Industrial Engineering and Management students.

Prerequisites and co-requisites:

B.Sc. in Industrial Engineering and Management or equivalent.

Recommended optional programme components:

-

Recommended or required reading:

Lecture materials. Other materials will be defined at the beginning of the course.

Assessment methods and criteria:

The course utilises continuous assessment. During the course, the students must write a learning diary for each lecture and participate actively in the lectures. 40% of the grade is based on the group work.

Grading:

The course utilizes a numerical grading scale 1-5. In the numerical scale zero stands for a fail.

Person responsible:

Professor Jaakko Kujala

Working life cooperation:

Group work will be done for a project-based firm or public sector organisation.

Other information:

Previous course name was 'Management of a Project-based Firm'.

555332S: Operations Research, 5 op

Voimassaolo: 01.08.2015 -

Opiskelumuoto: Advanced Studies

Laji: Course

Vastuuyksikkö: Field of Industrial Engineering and Management

Arvostelu: 1 - 5, pass, fail

Opettajat: Osmo Kauppila

Opintokohteen kielet: Finnish

Leikkaavuudet:

555342S Operations Research 5.0 op

ECTS Credits:

5 ECTS credits.

Language of instruction:

English

Timing:

Period 4.

Learning outcomes:

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

- understand the basic concepts of operations research and its applications in operations and production activities and decision-making in companies
- apply quantitative methods typical to the field of operations research in practical problem solving

Contents:

What is operations research, linear and dynamic programming, network and transportation algorithms, decision analysis, inventory models, queueing systems, simulation modeling.

Mode of delivery:

The tuition will be implemented as face-to-face teaching (lectures, classroom exercises and group work).

Learning activities and teaching methods:

Lectures 20 h / classroom exercises 20 h / independent study and group work 96 h.

Target group:

Industrial engineering and management students.

Prerequisites and co-requisites:

Bachelor in industrial engineering and management or equivalent.

Recommended optional programme components:

-

Recommended or required reading:

Taha, H. A. (2011) Operations Research: An Introduction, 9/E. Prentice Hall. Foreman, J. (2014) Data smart: using data science to transform information into insight. Wiley & Sons: Indianapolis. Other material handed out during the course.

Assessment methods and criteria:

To pass the course, the student must complete the required coursework consisting of the exercises handed out during the classroom study (50%) and a compilation of analytics exercises that can be done in groups (50 %).

Grading:

The course utilizes a numerical grading scale 1-5. In the numerical scale zero stands for a fail.

Person responsible:

University lecturer Osmo Kauppila

Working life cooperation:

No.

Other information:

Substitutes course 555342S Operations Research.

555226A: Operations and supply chain management, 5 op

Voimassaolo: 01.08.2015 -

Opiskelumuoto: Intermediate Studies

Laji: Course

Vastuuyksikkö: Field of Industrial Engineering and Management

Arvostelu: 1 - 5, pass, fail

Opettajat: Jukka Majava

Opintokohteen kielet: English

Leikkaavuudet:

555222A Demonstration in Industrial Engineering and Management 2.0 op

555223A Introduction to Production Control 3.0 op

ECTS Credits:

5 ECTS credits

Language of instruction:

English.

Timing:

Periods 1-2.

Learning outcomes:

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

- describe different production types
- apply different forecasting methods, plan needed production capacity, and apply location and transportation decisions related methods
- master common inventory management methods and aggregated and short-term scheduling
- create a sales and operations plan for a company

Contents:

Production types, forecasting methods, capacity planning and queuing models, location and transportation decisions, inventory management systems, aggregate scheduling, MRP & ERP, short-term scheduling, linear programming.

Mode of delivery:

The tuition will be implemented as blended teaching (web-based teaching and face-to-face teaching).

Learning activities and teaching methods:

Lectures 20 h / self-study (web-based exercises) 60 h / group work 54 h.

Target group:

Industrial Engineering and Management students.

Prerequisites and co-requisites:

555225P Basics of industrial engineering and management or similar knowledge.

Recommended optional programme components:

Industrial Engineering and Management students will complete 902143Y Company presentations course simultaneously.

Recommended or required reading:

Lecture and exercise materials. Krajewski, L.J. et al. (2012) Operations management: processes and supply chains, 10th ed. Pearson. In addition, recommended material includes chapter 13 in Heizer, J. & Render, B. (2014) Operations management: sustainability and supply chain management, 11th ed. Pearson.

Assessment methods and criteria:

This course utilises continuous assessment. During the course, there are mandatory weekly assignments. At least half of the assignments must be passed. 40 % of the grade is based on the group work.

Grading:

The course utilizes a numerical grading scale 1-5. In the numerical scale zero stands for a fail.

Person responsible:

Adjunct professor Jukka Majava

Working life cooperation:

The group work will be done for a real company by using public information sources.

Other information:

Substitutes course 555222A Demonstration in Industrial Engineering and Management 2 ECTS cr and 555223A Introduction to Production Control 3 ECTS cr.

Previous course name was 'Operations and Production'.

555343S: Product Data and product life cycle management, 5 op

Opiskelumuoto: Advanced Studies

Laji: Course

Vastuuyksikkö: Field of Industrial Engineering and Management

Arvostelu: 1 - 5, pass, fail

Opettajat: Janne Härkönen

Opintokohteen kielet: English

Voidaan suorittaa useasti: Kyllä

Status:

5 ECTS credits.

ECTS Credits:

English.

Language of instruction:

Period 3-4.

Timing:

The course familiarises students with the broad concepts of product data management (PDM) and product life cycle management (PLM). Upon completion of the course, the student will be able to:

- understand the basic terminology related to product, productisation, PDM and PLM
- analyse the current status of the productisation, product data structures, product life cycle management, commercial and technical product portfolios and related applications in case companies
- create strategic PDM and PLM concept based on the critical building blocks for one product data, product master data and product related business data
- model the company's HW, SW and Service product related commercial and technical product portfolios according to productisation concept
- understand the PDM and PLM processes including key roles as concept owners, education and support roles, data owners, data users including product data quality concept
- create and implement the governance model for PDM and PLM process and IT development as a part of company's business process development including PDM/PLM related information technology (IT) architecture for product master data and product related business data

Learning outcomes:

PDM and PPM strategic targets, productisation concept, commercial and technical product portfolios, PDM and PLM processes and tools, governance model and related IT applications and architecture

Contents:

The tuition will be implemented as face-to-face teaching.

Mode of delivery:

The tuition will be implemented as face-to-face teaching, course readings and by a practical assignment which is a common with a course 555346S Product portfolio management.

Learning activities and teaching methods:

Lectures 20 h, practical assignment (group work) and self-study 114 h.

Target group:

Industrial Engineering and Management students.

Prerequisites and co-requisites:

555242 Product development, 555346S Product portfolio management.

Recommended optional programme components:

555351S Advanced course in product development, 555350S Research and technology management

Recommended or required reading:

Lecture materials and selected articles.

Assessment methods and criteria:

Group work report (50 % of the grade) and exam (50 % of the grade).

Grading:

The course utilizes a numerical grading scale 1-5. In the numerical scale zero stands for a fail.

Person responsible:

Dr Janne Härkönen

Working life cooperation:

The group work will be done in cooperation with case companies.

Other information:

Previous course name was 'Product Data Management'.

555242A: Product development, 5 op

Voimassaolo: 01.01.2014 -

Opiskelumuoto: Intermediate Studies

Laji: Course

Vastuuyksikkö: Field of Industrial Engineering and Management

Arvostelu: 1 - 5, pass, fail

Opettajat: Haapasalo, Harri Jouni Olavi

Opintokohteen kielet: English

Leikkaavuudet:

ay555242A Product development (OPEN UNI) 5.0 op

555240A Basic Course in Product Development 3.0 op

Ei opintojaksokuvauksia.

555346S: Product portfolio management, 5 op

Opiskelumuoto: Advanced Studies

Laji: Course

Vastuuyksikkö: Field of Industrial Engineering and Management

Arvostelu: 1 - 5, pass, fail

Opettajat: Janne Härkönen

Opintokohteen kielet: English

Voidaan suorittaa useasti: Kyllä

Required proficiency level:

ECTS Credits:

5 ECTS credits.

Language of instruction:

English.

Timing:

Periods 3-4.

Learning outcomes:

The course familiarizes students with the broad concepts of product management. After finishing the course, the student understands central principles and contents of product management and product portfolio management. Student knows the basic steps of the product portfolio management development and understands the ways to analyse and manage products and product portfolios. A student learns to see product and product portfolio management as strategic targets, performance indicators, governance models, process and product information management over horizontal and technical portfolios over product life cycle phases and product structure levels. The student can apply the learned things and methods in different industries in order to develop systematic product and product portfolio management processes.

Contents:

Basic issues in product and product portfolio management performance management, governance models, horizontal and vertical portfolios, processes, tools and product information.

Mode of delivery:

The tuition will be implemented as face-to-face learning and practical assignments.

Learning activities and teaching methods:

Will be defined at the beginning of the course.

Target group:

Industrial Engineering and Management and Master's Programme in Product Management students.

Prerequisites and co-requisites:

555242A Product development, 555350S Technology management.

Recommended optional programme components:

-

Recommended or required reading:

Will be defined at the beginning of the course.

Assessment methods and criteria:

Will be defined at the beginning of the course.

Grading:

The course utilizes a numerical grading scale 1-5. In the numerical scale zero stands for a fail.

Person responsible:

Dr Janne Härkönen

Working life cooperation:

No.

Other information:

Previous course name was 'Product Management'

555333S: Production Management, 5 op

Voimassaolo: 01.08.2015 -

Opiskelumuoto: Advanced Studies

Laji: Course

Vastuuyksikkö: Field of Industrial Engineering and Management

Arvostelu: 1 - 5, pass, fail

Opettajat: Kess, Pekka Antero

Opintokohteen kielet: English

Leikkaavuudet:

555322S Production Management 3.0 op

ECTS Credits:

5 ECTS credits.

Language of instruction:

English

Timing:

Period 2.

Learning outcomes:

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

- understand the key concepts of operations and production management
- know the essential production strategies
- understand the principles of the supply chain management, and should be able to apply JIT, Lean and TOC methods in analysing and constructing development plans for production organisations
- apply the management methods also in service systems
- understand the principles of the sustainable development in production

Contents:

Production strategies, sustainable development, Supply Chain Management, Just-In-Time (JIT), Theory of Constraints (TOC), Lean, Toyota Production System (TPS), management of the production of services.

Mode of delivery:

The tuition will be implemented as blended teaching (face-to-face teaching and a supervised group work).

Learning activities and teaching methods:

Lectures 20 h, assignment guidance 20 h, group work 94 h.

Target group:

Industrial Engineering and Management and Master's Programme in Product Management students.

Prerequisites and co-requisites:

B.Sc. in Industrial Engineering and Management or equivalent.

Recommended optional programme components:

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Recommended or required reading:

Liker J (2004) The Toyota Way: 14 Management Principles from the World's Greatest Manufacturer. Goldratt, E. M. (2012) The Goal: A Process of Ongoing Improvement. Material delivered during the lectures.

Assessment methods and criteria:

The assessment is based on the group work.

Grading:

The course utilizes a numerical grading scale 1-5. In the numerical scale zero stands for a fail.

Person responsible:

Professor Pekka Kess

Working life cooperation:

The group work is done in cooperation with case companies.

Other information:

Substitutes course 555322S Production Management.

555350S: Research and Technology Management, 5 op

Voimassaolo: 01.08.2015 -

Opiskelumuoto: Advanced Studies

Laji: Course

Vastuuyksikkö: Field of Industrial Engineering and Management

Arvostelu: 1 - 5, pass, fail

Opettajat: Haapasalo, Harri Jouni Olavi

Opintokohteen kielet: English

Leikkaavuudet:

555340S Technology Management 4.0 op

ECTS Credits:

5 ECTS credits.

Language of instruction:

English.

Timing:

Period 2.

Learning outcomes:

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

- understand the differences between product development and technology management in a company
- piece together the development needs and cycles of technologies in an organisation
- combine technology development and technology management with strategic planning of a company

Contents:

Defining technology and its role within an enterprise and within society, the meaning of innovation in technological competition, the lifecycles of technology including development, acquirement, and transition

Mode of delivery:

The tuition will be implemented as face-to-face teaching

Learning activities and teaching methods:

Lectures 21 h / exercises, group work and self-study 114 h.

Target group:

Industrial Engineering and Management and Master's Programme in Product Management students.

Prerequisites and co-requisites:

555242A Product Development.

Recommended optional programme components:

-

Recommended or required reading:

Lecture materials and articles.

Assessment methods and criteria:

Exam and group work.

Grading:

The course utilizes a numerical grading scale 1-5. In the numerical scale zero stands for a fail.

Person responsible:

Professor Harri Haapasalo

Working life cooperation:

Visitor lecturers from the industry

Other information:

Previous course name was 'Technology Management'.

Substitutes course 555340S Technology Management.

555377S: Risk Management, 5 op

Voimassaolo: 01.08.2015 -

Opiskelumuoto: Advanced Studies

Laji: Course

Vastuuyksikkö: Field of Industrial Engineering and Management

Arvostelu: 1 - 5, pass, fail

Opettajat: Kirsi Aaltonen, Solmaz Mansoori

Opintokohteen kielet: English

Leikkaavuudet:

555321S Risk Management 3.0 op

ECTS Credits:

5 ECTS credits.

Language of instruction:

English

Timing:

Period 2.

Learning outcomes:

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

- explain the key concepts of enterprise risk management and uncertainty management
- explain the role of risk management in organisations and compare the specific features of risk management in different organisational contexts
- identify and classify risks and conduct systematic risk analyses in organisations
- make informed improvement suggestions related to enterprise risk management in organisations
- to develop enterprise risk management processes in organisations

Contents:

Definitions of risk and uncertainty, risk management standards, risk classification models, systematic risk management process, methods of risk management, psychological aspects of risk management, ERM and organising of risk management, risk management in different contexts, risk governance.

Mode of delivery:

The tuition will be implemented as blended teaching (web-based teaching and face-to-face teaching).

Learning activities and teaching methods:

Lectures 26h, self-study 42h, group assignment and cases 66h.

Target group:

Industrial Engineering and Management.

Prerequisites and co-requisites:

B.Sc. in Industrial Engineering and Management or equivalent.

Recommended optional programme components:

-

Recommended or required reading:

Lecture materials and reading materials (articles, book chapters) related to each lecture. The materials will be defined at the beginning of the course.

Assessment methods and criteria:

This course utilises continuous assessment. The grading is based on case assignments solved in groups and discussed during the lecture, and group assignment that is presented and discussed in the workshops. Since the implementation of the cases and group work vary, the assessment methods and criteria will be defined at the beginning of the course.

Grading:

The course utilizes a numerical grading scale 1-5. In the numerical scale zero stands for a fail.

Person responsible:

Assistant Professor Kirsi Aaltonen

Working life cooperation:

The course includes guest lectures from industry.

Other information:

Substitutes course 555321S Risk Management.

900027Y: Special Course in Finnish: Writing Skills, 3 op

Voimassaolo: 01.08.1995 -

Opiskelumuoto: Language and Communication Studies

Laji: Course

Vastuuyksikkö: Languages and Communication

Arvostelu: 1 - 5, pass, fail

Opintokohteen kielet: Finnish

Proficiency level:

B1/B2, according to the Common European Framework.

Status:

The course is intended for the international students in every faculty of University of Oulu.

Required proficiency level:

A2.2 Completion of the Finnish for Advanced Students (900020Y) or the equivalent language skills.

ECTS Credits:

3 ECTS credits

Language of instruction:

Finnish

Timing:

-

Learning outcomes:

By the end of the course the student can write coherent and detailed descriptions and summaries about various matters. S/he is able to summarize text and justify his/her own statements of opinions. In addition, the student knows the steps of the writing process and understands the significance of a text's function and target audience. S/he can also differentiate between formal and informal writing styles.

Contents:

During the course students develop their writing skills in Finnish and are guided in the drafting of different text types and documents needed in studies and work. In the course students learn how to write informal and formal letters, an argument-essay, a summary, a job application and a report.

Mode of delivery:

One contact lesson at the beginning of the course and guided independent studying using online

Learning activities and teaching methods:

The course will be held online using an Optima environment.

Target group:

International degree and post-graduate degree students, exchange students and the staff members of the University

Prerequisites and co-requisites:

Completion of the Intermediate Finnish Course 2

Recommended optional programme components:

-

Recommended or required reading:

Web based material.

Assessment methods and criteria:

To pass the course, the student must complete all the required writing assignments.

Read more about [assessment criteria](#) at the University of Oulu webpage.

Grading:

Grading is on a pass/fail basis.

Person responsible:

Anne Koskela

Working life cooperation:

-

Other information:

Sign-up in WebOodi or by emailing the contact teacher.

555370S: Strategic Management, 5 op

Voimassaolo: 01.08.2015 -

Opiskelumuoto: Advanced Studies

Laji: Course

Vastuuyksikkö: Field of Industrial Engineering and Management

Arvostelu: 1 - 5, pass, fail

Opettajat: Jukka Majava

Opintokohteen kielet: English

Leikkaavuudet:

555320S Strategic Management 5.0 op

ECTS Credits:

5 ECTS credits.

Language of instruction:

English.

Timing:

Period 3.

Learning outcomes:

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

- utilise strategic thinking, planning, and management
- analyse and plan complex global business operations
- participate in strategic planning and strategy implementation in organisations
- apply strategy analysis frameworks and analyse the implementation of the chosen strategy

Contents:

Strategic thinking, strategic planning, strategic management, strategy analysis frameworks, strategy implementation with a simulation, analysis of the strategy implementation.

Mode of delivery:

The tuition will be implemented as blended teaching (web-based teaching and face-to-face teaching).

Learning activities and teaching methods:

Lectures 6 h / exercises 6 h / group work 122 h. Alternatively independent learning method: book examination 134 h.

Target group:

Industrial Engineering and Management.

Prerequisites and co-requisites:

B.Sc. in Industrial Engineering and Management or equivalent.

Recommended optional programme components:

-

Recommended or required reading:

Isoherranen, V. (2012) Strategy analysis frameworks for strategy orientation and focus, University of Oulu, Faculty of Technology, Industrial Engineering and Management. Mintzberg, H. et al. (2009) Strategy safari: the complete guide through the wilds of strategic management, 2nd ed. Harlow, FT Prentice Hall.

Assessment methods and criteria:

This course utilises continuous assessment. The group work includes the creation of strategic plan (10 % of the grade), business simulation (30 % of the grade), and the analysis of the strategy (60 % of the grade).

Grading:

The course utilizes a numerical grading scale 1-5. In the numerical scale zero stands for a fail.

Person responsible:

Adjunct professor Jukka Majava

Working life cooperation:

-

Other information:

Substitutes course 555320S Strategic Management.

900017Y: Survival Finnish, 2 op

Voimassaolo: 01.08.1995 -

Opiskelumuoto: Language and Communication Studies

Laji: Course

Vastuuyksikkö: Languages and Communication

Arvostelu: 1 - 5, pass, fail

Opintokohteen kielet: Finnish

Leikkaavuudet:

Proficiency level:

A1.1

Status:

The course is intended for the international students in every faculty of Oulu University.

Required proficiency level:

No previous Finnish studies.

ECTS Credits:

2 ECTS credits

Language of instruction:

Finnish and English

Timing:

-

Learning outcomes:

By the end of the course the student can understand and use some very common everyday expressions and phrases, and s/he can locate informational content in simple texts and messages. The student also knows the basic characteristics of Finnish language and Finnish communication styles.

Contents:

This is an introductory course which aims to help students to cope with the most common everyday situations in Finnish. During the course, students learn some useful everyday phrases, some general features of the vocabulary and grammar, and the main principles of pronunciation.

The topics and communicative situations covered in the course are: general information about the Finnish language, some politeness phrases (how to greet people, thank and apologize), introducing oneself, giving and asking for basic personal information, numbers, some time expressions (how to tell and ask the time, days of the week, time of day), food, drink and asking about prices.

The structures studied are: personal pronouns and their possessive forms, forming affirmative, negative and interrogative sentences, the conjugation of some verbs, the basics of the partitive singular and some local cases for answering the 'where'-question.

Mode of delivery:

Multi-modal teaching (Contact teaching, on-line teaching and independent work)

Learning activities and teaching methods:

Lessons 1–2 times a week (14 h, including the final exam) and guided self study (40 h)

Target group:

International degree and post-graduate degree students and exchange students of the University

Prerequisites and co-requisites:

-

Recommended optional programme components:

-

Recommended or required reading:

Will be provided during the course.

Assessment methods and criteria:

Regular and active participation in the weekly lessons (twice a week), homework assignments and written exam at the end of the course will be observed in assessment.

Read more about [assessment criteria](#) at the University of Oulu webpage.

Grading:

Grading scale is 0-5.

Person responsible:

Anne Koskela

Working life cooperation:

-

Other information:

Sign-up in WebOodi.

555376S: Sustainable organisational development, 5 op

Voimassaolo: 01.08.2015 -

Opiskelumuoto: Advanced Studies

Laji: Course

Vastuuyksikkö: Field of Industrial Engineering and Management

Arvostelu: 1 - 5, pass, fail

Opettajat: Arto Reiman

Opintokohteen kielet: Finnish

Leikkaavuudet:

555360S Administration, Organization and Education in Working Life 5.0 op

ECTS Credits:

5 ECTS credits.

Language of instruction:

Finnish. English material is also used (the course can be completed in English as a book examination).

Timing:

Period 1.

Learning outcomes:

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

- explain the general models regarding sustainable organisational development
- adapt the most central ones to the work organisations
- choose the most suitable models for different situations and can interpret the results gained from different approaches
- explain the most important quantitative and qualitative variables that are either preconditions or results of the operation of the organisation
- identify development needs and opportunities in companies and other organisations.

Contents:

The development of organisation is examined through e.g. the following concepts: productivity, well-being at work, quality control, quality of working life, safety and security, and responsibility. Various concepts and indicators will be discussed, for example, in relation with change processes (e.g. strategy, owner, partnerships, sizes of operations and personnel), implementation, participation, intervention, action research, and learning organisation.

Mode of delivery:

The tuition will be implemented as blended teaching (face-to-face teaching and web-based teaching).

Learning activities and teaching methods:

Lectures 22 h / self-study 100 h / group work & exercises 12 h.

Target group:

Industrial Engineering and Management students.

Prerequisites and co-requisites:

555265P Occupational safety and health management, 555264P Managing well-being and quality of working life, 555371S Human resource management.

Recommended optional programme components:

555371S Human resource management, 555370S Strategic management, 555377S Risk Management. Research project in industrial engineering and management related to Organisation and knowledge management topic and Faculty of Education's Organisational psychology course can be conducted to complement this course.

Recommended or required reading:

Applicable parts of: Hatch, M. J. and Cunliffe A.N. (2013) Organization Theory, Modern, Symbolic, and Postmodern Perspectives. Third Edition, Oxford University Press. Väyrynen, S., Häkkinen, K., Niskanen, T. (Eds.) (2015). Integrated Occupational Safety and Health Management - Solutions and Industrial Cases. Springer, Production & Process Engineering. 248 p. Other literature will be informed at the beginning of the course.

Assessment methods and criteria:

This course utilises continuous assessment including exercises during the lectures (weight 20 %), seminar work (weight 30 %) and examination (weight 50 %).

Grading:

The course utilises a numerical grading scale 1-5. In the numerical scale zero stands for a fail.

Person responsible:

Dr. Arto Reiman

Working life cooperation:

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Other information:

Previous course name was Organisational Development.

Substitutes course 555360S Administration, Organization and Education in Working Life.

