

Building Engineering	24
Business Administration	24
Caring Science	26
Computer Science	26
Economics	28
Electronics	29
Energy Engineering	29
English	30
Environmental Science	33
Information Design	33
Information Systems	33
Innovation Technology	33
Intercultural Communication	33
Mathematics/Applied Mathematics	34
Medicine	35
Product and Process Development	35
Science of Public Health	36
Social Work	36
Spanish	36
Swedish	37
Theatre	37

STUDY PERIODS

1A: 2010-08-30 – 2010-10-03
1B: 2010-10-04 – 2010-11-07

2A: 2010-11-08 – 2010-12-12
2B: 2010-12-13 – 2011-01-16

3A: 2011-01-24 – 2011-02-27
3B: 2011-02-28 – 2011-04-03

4A: 2011-04-04 – 2011-05-08
4B: 2011-05-09 – 2011-06-12

STUDY PERIOD 1 AND 2

FALL SEMESTER

STUDY PERIODS

1A: 2010-08-30 - 2010-10-03
1B: 2010-10-04 - 2010-11-07

2A: 2010-11-08 - 2010-12-12
2B: 2010-12-13 - 2011-01-16

3A: 2011-01-24 - 2011-02-27
3B: 2011-02-28 - 2011-04-03

4A: 2011-04-04 - 2011-05-08
4B: 2011-05-09 - 2011-06-12

BUILDING ENGINEERING

Energy Efficient Buildings

CODE: BTA400
CREDITS: 15
LECTURE HOURS: 40
LABORATORY HOURS: 0
START PERIOD: 1
STUDY PACE: Part time 50%
LEVEL OF EDUCATION: Advanced level
LOCATION: Västerås
LANGUAGE: English
EXAMINATION: Exercise, Written and/or oral examination
PREREQUISITES: Basic knowledge in building technology and building services engineering, 30 credits.
COURSE CONTENT: Energy is normally regarded as environmental aspect number one for buildings. This course is on advanced level and it aims at a sound knowledge contributing to buildings that are both energy efficient and healthy. You will learn how to perform calculations of the energy balance month by month, so that after the course you have a good basis for working with computer calculations. Three different group projects covers 1) Energy calculations, 2) Indoor climate and 3) A deeper study regarding energy. Students are authors of a part of the literature, as the reports from group project 3) made by students are included in the course literature. Lessons include lectures, supervision, seminar and presentations by students. The course is based on both knowledge and experience that you have achieved from three years of studies on basic level, and a good basic knowledge about building technology and building services engineering is important.
CONTACT PERSON: Karin Spets, karin.spets@mdh.se
SCHOOL: School of Sustainable Development of Society and Technology

BUSINESS ADMINISTRATION

Cost and Management Accounting I

CODE: EFO022
CREDITS: 7,5
LECTURE HOURS: 30
LABORATORY HOURS: 0
START PERIOD: 2
STUDY PACE: Part time 50%
LEVEL OF EDUCATION: Basic level
LOCATION: Västerås
LANGUAGE: English
EXAMINATION: Exercise, Written and/or oral examination
PREREQUISITES: 7,5 credits Financial accounting
COURSE CONTENT: The course aims at giving the student basic knowledge of theories and concepts used in Cost and Management Accounting. The course includes:
 - How costs should be accumulated for inventory valuation and profit measurement
 - Principles and methods for measuring relevant costs and revenues for decision-making (i.e. cost-volume-profit analysis and capital investment models)
 - Information for planning and control (i.e. the budgeting-process)
CONTACT PERSON: Mona Andersson, mona.andersson@mdh.se
SCHOOL: School of Sustainable Development of Society and Technology

Cost and Management Accounting II

CODE: EFO023
CREDITS: 7,5
LECTURE HOURS: 30
LABORATORY HOURS: 0
START PERIOD: 1
STUDY PACE: Part time 50%
LEVEL OF EDUCATION: Basic level
LOCATION: Västerås
LANGUAGE: English
EXAMINATION: Exercise, Written and/or oral examination
PREREQUISITES: 15 credits in Financial and management accounting.
COURSE CONTENT: The learning objectives of this course are to give an understanding about the controller function in today's organisations: i.e. in which areas should you be versed in to function as a controller in today's organisations. The learning objectives also include describing important development tendencies and current change processes in management accounting: i.e. what will be required from a controller in the future. The course should be seen as an introduction into the subject in which relevant topics in management accounting are connected to the function of management and are brought up and problemized. The course Cost and Management Accounting II you will study how the accounting manager use cost accumulation systems for inventory valuation and profit measurement. You will also study tools for pricing, capital investment decisions, cost management and standard costing systems.
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SCHOOL: School of Sustainable Development of Society and Technology

Financial Accounting I

CODE: EFO021
CREDITS: 7,5
LECTURE HOURS: 30
LABORATORY HOURS: 0
START PERIOD: 1
STUDY PACE: Part time 50%
LEVEL OF EDUCATION: Basic level
LOCATION: Västerås
LANGUAGE: English
EXAMINATION: Written and/or oral examination
PREREQUISITES: Mathematics from three years of upper secondary school or equivalent.

COURSE CONTENT: The course aims at giving the student basic knowledge of concepts and computation of different kinds of transactions (i.e. book-keeping transactions) used in Financial Accounting so he/she can identify, measure and communicate information used in both external and internal statements/reports. The course includes
 - Accounting as the language of business
 - The double entry accounting system - rules and use
 - How to work with and use financial statements in practice and related to different international general accounting principles (i.e. the income statement, the balance sheet and the statement of cash flow)
CONTACT PERSON: Mona Andersson, mona.andersson@mdh.se
SCHOOL: School of Sustainable Development of Society and Technology

Financial Accounting II

CODE: EFO024
CREDITS: 7,5
LECTURE HOURS: 30
LABORATORY HOURS: 0
START PERIOD: 2
STUDY PACE: Part time 50%
LEVEL OF EDUCATION: Basic level
LOCATION: Västerås
LANGUAGE: English
EXAMINATION: Project, Written and/or oral examination
PREREQUISITES: 15 credits in Financial and Management Accounting.
COURSE CONTENT: This course is not based on any specific national regulatory framework; rather it is based on International Financial Reporting Standards (IFRS) from a European perspective but the content can also be useful in many non-European setting that use IFRs. The course aims at enhanced understanding and knowledge of the practices of financial reporting according to the international standard. The purpose of the course is that students should be enabled to acquire skills and ability to use, interpret and analyze financial reports in international business environment with special focus on the European context. The content of the course covers central concepts, models and practices in financial accounting. The course also comprise of practical examples and cases in a European business context highlighting approaches to and logics of financial reporting and as an integral part of decision making and corporate governance.
CONTACT PERSON: Mona Andersson, mona.andersson@mdh.se
SCHOOL: School of Sustainable Development of Society and Technology

Global and Local Marketing Strategies

CODE: EFO216
CREDITS: 7,5
LECTURE HOURS: 40
LABORATORY HOURS: 0
START PERIOD: 2
STUDY PACE: Part time 50%
LEVEL OF EDUCATION: Advanced level
LOCATION: Västerås
LANGUAGE: English
EXAMINATION: Written and/or oral examination
PREREQUISITES: A Bachelor's degree from an institution of higher education of three years or more, equivalent to at least 180 credits in Business Administration, Social Science or Technology; or at least 90 credits in Business Administration of which at least 30 credits on Basic level third year.
COURSE CONTENT: The purpose of this course is to give the student a global and local view on marketing strategies and how: companies implement marketing in a global strategy; companies manage global and local marketing strategy; companies organise international operations; marketing a multinational company is carried out, and; companies use strategy to compete on the global and local market. During the course we cover:
 - A broad view of the international company and its domestic and foreign environment.
 - Marketing in a global strategy.
 - Managing global and local marketing strategies.
 - Organizing international operations.
 - Marketing of a multinational company.
 - Competition and strategy on the local market.
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SCHOOL: School of Sustainable Development of Society and Technology

International Finance

CODE: EFO012
CREDITS: 15
LECTURE HOURS: 40
LABORATORY HOURS: 0
START PERIOD: 1
STUDY PACE: Full time
LEVEL OF EDUCATION: Advanced level
LOCATION: Västerås
LANGUAGE: English
EXAMINATION: Seminars, Exercise
PREREQUISITES: A Bachelor's degree from an institution of higher education of three years or more, equivalent to at least 180 credits in Business Administration, Social Science or Technology; or at least 90 credits in Business Administration of which at least 30 credits on Basic level third year.
COURSE CONTENT: The course aims to prepare the students for a career in international financial management and executive positions in a multinational enterprise context. The globalisation of product design, production and marketing affects business enterprises in all countries with increasingly complex financial implications. The contents cover both the theory and practice of international finance, with an emphasis on applications of concepts and techniques for improved decision making

STUDY PERIODS

1A: 2010-08-30 - 2010-10-03
 1B: 2010-10-04 - 2010-11-07

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 2B: 2010-12-13 - 2011-01-16

3A: 2011-01-24 - 2011-02-27
 3B: 2011-02-28 - 2011-04-03

4A: 2011-04-04 - 2011-05-08
 4B: 2011-05-09 - 2011-06-12

and effective management in a multinational context. The first part of the course takes a macro-level perspective and covers the theoretical aspects of the global financial environment, including foreign exchange theory, theory and strategies related to foreign direct investment and the international monetary system. The second part examines financial strategies at the level of the firm, including accounting aspects, capital sourcing, foreign direct investment decisions, the assessment and management of political risk, multinational taxation and cross-border acquisitions and mergers. Examples of multinational management and international trade are analysed and discussed.

CONTACT PERSON: Mona Andersson, mona.andersson@mdh.se

SCHOOL: School of Sustainable Development of Society and Technology

International Marketing

CODE: EFO253

CREDITS: 15

LABORATORY HOURS: 0

STUDY PACE: Full time

LOCATION: Västerås

EXAMINATION: Project, Assignment, Seminar activity

PREREQUISITES: Business administration 60 credits (at least 45 credits finished when the course starts). At least 20 credits in Business Administration have to be on Basic Level second year.

COURSE CONTENT: The course gives an international and a cultural perspective on management and marketing where we discuss and analyze the political, economical, cultural and technological environment. We also take into consideration who the state and surrounding business life have an effect on a company. One part of the course is to create models to solve marketing problems in an international environment. The course is also about critically applying the collected information from different learning activities that relates to the practical skills you need as a marketer in different international contexts. The tasks will be based on case studies where different companies marketing strategies are explored and analyzed thoroughly. One important part is to provide skills in analyzing scientific articles and also to increase the ability to perform presentations in oral and writing. One important element is the practice of communicative abilities and letting the student develop the ability to connect theories and models with practical tasks for his/her future working career.

CONTACT PERSON: Madeleine Lundberg, madeleine.lundberg@mdh.se

SCHOOL: School of Sustainable Development of Society and Technology

Introduction to Management and Research Methods

CODE: EFO249

CREDITS: 15

LABORATORY HOURS: 0

STUDY PACE: Full time

LOCATION: Västerås

EXAMINATION: Group project, Group task, Exercise, Written and/or oral examination

PREREQUISITES: A Bachelor's degree from an institution of higher education of three years or more, equivalent to at least 180 credits in Business Administration, Social Science or Technology; or at least 90 credits in Business Administration of which at least 30 credits on Basic level third year.

COURSE CONTENT: The purpose of this course is to provide the student with an overview of management issues facing companies and organizations, as well as tools and skills for conducting research in an academic or business setting. During the course we will:

- give an introduction to management theory;
- study management as a tool to handle the organisation and the environment;
- give an overview of available and relevant research methods;
- use research models to support decision making in organizations.

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SCHOOL: School of Sustainable Development of Society and Technology

Marketing Basics

CODE: EFO252

CREDITS: 7,5

LABORATORY HOURS: 0

STUDY PACE: Part time 50%

LOCATION: Västerås

EXAMINATION: Exercise, Written and/or oral examination

PREREQUISITES: Mathematics from three years of upper secondary school or equivalent.

COURSE CONTENT: The course will provide knowledge about theories, models and concepts within Marketing. We will also try to give insights in essential concepts in marketing such as: Marketing mix, promotion mix, segmentation, customer satisfaction, differentiation, positioning, value, strategies in different stages in the product life cycle, strategies for products and brands, characteristics of services, industrial products, pricing, distribution, promotional activities etc. The course will introduce the students into understanding and solving marketing problems and situations.

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SCHOOL: School of Sustainable Development of Society and Technology

Marketing Issues in an International Context

CODE: EFO215

CREDITS: 7,5

LABORATORY HOURS: 0

STUDY PACE: Part time 50%

LOCATION: Västerås

EXAMINATION: Written and/or oral examination

PREREQUISITES: A Bachelor's degree from an institution of higher education of three years or more, equivalent to at least 180 credits in Business Administration, Social Science or Technology; or at least 90 credits in Business Administration of which at least 30 credits on Basic level third year.

COURSE CONTENT: The purpose of this course is to give the student an overview of the international environment(s) a company operates in and provide tools for handling marketing issues a company might face in an international context. Topics covered are:

- An international and cultural perspective on management and marketing.
- Discuss and analyse the legal and political international environment; the economic environment; the cultural and technological environment, and; government and business.
- Means of internationalisation.
- Building models to solve marketing problems in an international context.

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SCHOOL: School of Sustainable Development of Society and Technology

Nordic Perspectives on Marketing and Management

CODE: EFO209

CREDITS: 15

LABORATORY HOURS: 0

STUDY PACE: Full time

LOCATION: Västerås

EXAMINATION: Case Analyses, Written and/or oral examination

PREREQUISITES: Business administration 60 credits (at least 45 credits finished when the course starts). At least 20 credits in Business Administration have to be on Basic Level second year.

COURSE CONTENT: The aim of this course is to:

- to provide knowledge about marketing and management from a cross culture perspective.
- to provide understanding and awareness about business culture in general and how it affects communication between people from different countries and backgrounds.
- to increase the understanding of the concept service quality by explaining different aspects of service management and marketing seen from the customers, the employers and the employees points of view.
- to provide knowledge of differences between marketing of services and goods.
- to provide knowledge of how to handle and evaluate stability, changes and relationships in industrial networks.
- to provide knowledge about decision processes in industrial marketing from a network point of view.
- to provide insights into relationships analyses as regards to various production technologies and products.

The course consists of three parts with separate examinations:

Part 1 International Business Culture & Service Management and Marketing, 6 ECTS-points

Part 2 Industrial Marketing in a Network Perspective, 6 ECTS-points

Part 3 Case-work, Industrial Marketing in a Network Perspective, 3 ECTS-points

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SCHOOL: School of Sustainable Development of Society and Technology

Organization Basics

CODE: EFO523

CREDITS: 7,5

LABORATORY HOURS: 0

STUDY PACE: Part time 50%

LOCATION: Västerås

EXAMINATION: Case work, Written and/or oral examination

PREREQUISITES: Mathematics from three years of upper secondary school or equivalent.

COURSE CONTENT: The course will provide knowledge about different companies' business activities from the perspective of Organizational Theory. We will also look at essential concepts within Organizational Theory such as: structure, design, culture, change, the environment and its effects on strategy and structure, technology, organizational life cycle processes, decisions, change processes etc. The course also contains general principles in case writing and how case works in Business Administration can be structured.

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SCHOOL: School of Sustainable Development of Society and Technology

STUDY PERIODS

1A: 2010-08-30 - 2010-10-03

1B: 2010-10-04 - 2010-11-07

2A: 2010-11-08 - 2010-12-12

2B: 2010-12-13 - 2011-01-16

3A: 2011-01-24 - 2011-02-27

3B: 2011-02-28 - 2011-04-03

4A: 2011-04-04 - 2011-05-08

4B: 2011-05-09 - 2011-06-12

CARING SCIENCE

Caring from a Cultural Perspective- clinical studies

CODE: OVA045

CREDITS: 7,5

LABORATORY HOURS: 0

STUDY PACE: Full time

LOCATION: Västerås

EXAMINATION: Exercise

PREREQUISITES: Caring Sciences 30 credits from Basic level first year and 30 credits from Basic level second year or equivalent.

COURSE CONTENT: The course is designed for you being an international/Swedish student at School of Health Care and Social Welfare. You will have possibility to go deeper in your knowledge with focus on caring/welfare, human being, health, suffering and environment from a cultural perspective. Specific observations and reflections will be accomplished. This will be an effort to increase cultural awareness and self-knowledge. The course is available in the Nursing Program.

CONTACT PERSON: Lillemor Fernqvist, lillemor.fernqvist@mdh.se

SCHOOL: School of Health, Care and Social Welfare

LECTURE HOURS: 50

START PERIOD: 1

LEVEL OF EDUCATION: Basic level

LANGUAGE: English

Health, Care and Social Welfare from a Swedish Perspective

CODE: VÅE019

CREDITS: 5

LABORATORY HOURS: 0

STUDY PACE: Part time 50%

LOCATION: Västerås

EXAMINATION: Written and/or oral examinations

PREREQUISITES: Completed three years of upper secondary school or equivalent

COURSE CONTENT: The course is designed for you who are an international student at the School of Health, Care and Social Welfare. You will get an overview of basic principles in Swedish practices of protecting and promoting health, from individual as well as from population perspectives, from hospital and health care centers to general health policy. The main topics of this course are within Social Work and Social Care, Nursing Care, Public Health and Physiotherapy. The design of your examination will then lead you into the main field of your studies at this School.

CONTACT PERSON: Lillemor Fernqvist, lillemor.fernqvist@mdh.se

SCHOOL: School of Health, Care and Social Welfare

LECTURE HOURS: 50

START PERIOD: 1

LEVEL OF EDUCATION: Basic level

LANGUAGE: English

COMPUTER SCIENCE

Advanced Software Engineering

CODE: CDT413

CREDITS: 7,5

LABORATORY HOURS: 0

STUDY PACE: Part time 50%

LOCATION: Västerås

EXAMINATION: Group exercise, Written assignments, Lab assignments, Seminars

PREREQUISITES: At least 120 credits of higher education where at least 60 credits are in the area of computer science and at least 15 credits are about foundations in Software Engineering.

COURSE CONTENT: Software development methods:

- iterative software development
- agile software development
- formal methods
- software process models, standards, and certification
- Software engineering research
- empirical investigations and validity
- experiments and surveys
- case studies

CONTACT PERSON: Annika Björklund, annika.bjorklund@mdh.se

SCHOOL: School of Innovation, Design and Engineering

LECTURE HOURS: 10

START PERIOD: 1

LEVEL OF EDUCATION: Advanced level

LANGUAGE: English

Artificial Intelligence

CODE: CDT312

CREDITS: 7,5

LABORATORY HOURS: 0

STUDY PACE: Part time 50%

LOCATION: Västerås

EXAMINATION: Written and/or oral examination, Exercise, Laboratory work

PREREQUISITES: Mathematics from three years of upper secondary school with science profile. Practical and theoretical competences in:

* Datastructures and algorithms

* Object oriented programming (like C, C++ or java)

* At least one additional course with a programming project that has "data structures and algorithms" as a prerequisite. Examples to such courses are "Operating systems" and "Functional programming".

LECTURE HOURS: 10

START PERIOD: 1

LEVEL OF EDUCATION: Basic level

LANGUAGE: English

COURSE CONTENT:

- Representation of information using trees, logics, STRIPS, etc.
- Search algorithms: breath-first, depth-first, iterative deepening, informed search. Reasoning using logics. Planning. Introduction to learning.

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SCHOOL: School of Innovation, Design and Engineering

Computers and Philosophy

CODE: CDT415

CREDITS: 7,5

LABORATORY HOURS: 0

STUDY PACE: Part time 50%

LOCATION: Västerås

EXAMINATION: Written and/or oral examination

PREREQUISITES: At least 150 credits from an institution of higher education.

COURSE CONTENT: Information; Philosophical foundations of Computing, Computer Science Philosophy, AI; Mind including selected topics from Cognitive Science; Real and Virtual; Modeling and Simulation; Computers and Art and Ethics.

The course objective is to give the advanced undergraduates and graduate students in different disciplines insights into the broad philosophical significance of computing and information as tools of production and communication of information and knowledge. We study the question of the nature and philosophical grounds of information and of computing as information processing, address the basic questions of scientific foundations of the research area, its research methodology, applications and the value system - within the framework of the emerging research field of Philosophy of Computing and Information. The course is designed as a combination of a series of seminars based on the lectures by eminent guest lecturers and distance study. It presents an international collaboration between several European and American universities. The course international settings will give the participants a unique opportunity to communicate with our lecturers who are leading experts in their fields as well as to exchange ideas with colleagues from other universities in several countries. Lectures are combined with on-line and off-line discussions. The time between meetings is used for self study and writing.

CONTACT PERSON: Annika Björklund, annika.bjorklund@mdh.se

SCHOOL: School of Innovation, Design and Engineering

LECTURE HOURS: 10

START PERIOD: 2

LEVEL OF EDUCATION: Advanced level

LANGUAGE: English

Distributed Software Development

CODE: CDT402

CREDITS: 7,5

LABORATORY HOURS: 0

STUDY PACE: Part time 25%

LOCATION: Västerås

EXAMINATION: Project

PREREQUISITES: At least 120 credits of higher education where at least 90 credits are in the area of computer science, where at least 7,5 credits is about Java, C++ or another object-oriented language.

COURSE CONTENT: The course contains of lectures (standard and invited) and project. The lectures include the following topics:

- Introduction to distributed software development
- Distributed development projects
- Designing distributed applications

The project assignments are given to distributed group of students. Different projects are defined. They are related to distributed, web-based development.

CONTACT PERSON: Annika Björklund, annika.bjorklund@mdh.se

SCHOOL: School of Innovation, Design and Engineering

LECTURE HOURS: 10

START PERIOD: 1

LEVEL OF EDUCATION: Advanced level

LANGUAGE: English

Embedded systems I

CODE: DVA316

CREDITS: 7,5

LABORATORY HOURS: 0

STUDY PACE: Part time 50%

LOCATION: Västerås

EXAMINATION: Written and/or oral examination

PREREQUISITES: At least 90 credits in computer science or electronics. Documented solid programming skills. Documented basic operating systems knowledge.

COURSE CONTENT: The main objective for this course is to introduce the students to Embedded Systems (ES) and what differs this type of systems from traditional computer systems found in e.g., desktop computers. Issues such as concerns to an environment, safety, scarce resources, real-time computing, predictability and robustness will be introduced. The course will be focused on hands-on practical issues through laborations where the student will get acquaintance with an actual physical hardware platform that introduces concepts such as cross compilation, loading and starting an application. Furthermore the students will learn how to use existing tool support, e.g., real-time operating systems, debuggers and IDEs, to develop, test and run an application on that platform.

CONTACT PERSON: Annika Björklund, annika.bjorklund@mdh.se

SCHOOL: School of Innovation, Design and Engineering

LECTURE HOURS: 10

START PERIOD: 1

LEVEL OF EDUCATION: Basic level

LANGUAGE: English

STUDY PERIODS

1A: 2010-08-30 - 2010-10-03

2 A: 2010-11-08 - 2010-12-12

3 A: 2011-01-24 - 2011-02-27

4 A: 2011-04-04 - 2011-05-08

1B: 2010-10-04 - 2010-11-07

2 B: 2010-12-13 - 2011-01-16

3 B: 2011-02-28 - 2011-04-03

4 B: 2011-05-09 - 2011-06-12

Embedded systems II

CODE: DVA404
CREDITS: 7,5
LECTURE HOURS: 10
LABORATORY HOURS: 0
START PERIOD: 2
STUDY PACE: Part time 50%
LEVEL OF EDUCATION: Advanced level
LOCATION: Västerås
LANGUAGE: English
EXAMINATION: Written and/or oral examination.
PREREQUISITES: Students at Mälardalen University: courses "Embedded systems I or corresponding courses" or "Real-Time Systems I". Other students: corresponding courses.
COURSE CONTENT: This course extends the Embedded Systems I course, which focuses on state-of-the-practice (SOTP), with a deeper theoretical knowledge, i.e., state-of-the-art (SOTA) methodology, for developing embedded systems. It starts by introducing the problems and the limitations of SOTP used today in industrial systems, and presents available theory and tool support to address those problems. Some of the advanced methods covered in this course are developed and mostly used in the academic domain, but they are expected to be used in industrial systems in a near future. The course contents include, but it is not limited to, advanced theory for distributed real-time systems, formal methods for functional and temporal verification, such as schedulability analysis, hazard analysis, fault tolerance, as well as advanced tool support for development of complex embedded systems.
CONTACT PERSON: Annika Björklund, annika.bjorklund@mdh.se
SCHOOL: School of Innovation, Design and Engineering

Formal Languages, Automata and Theory of Computation

CODE: CDT314
CREDITS: 7,5
LECTURE HOURS: 10
LABORATORY HOURS: 0
START PERIOD: 2
STUDY PACE: Part time 50%
LEVEL OF EDUCATION: Basic level
LOCATION: Västerås
LANGUAGE: English
EXAMINATION: Exercise, Laboratory work, Written and/or oral examination
PREREQUISITES: Mathematics from three years of upper secondary school with science profile. Theoretical knowledge and practical competence in:
 - a high level programming language (for instance C, C++ or java)
 - Fundamentals of Discrete Mathematics
COURSE CONTENT: xxxx
CONTACT PERSON: Annika Björklund, annika.bjorklund@mdh.se
SCHOOL: School of Innovation, Design and Engineering

Industrial System Development

CODE: CDT417
CREDITS: 7,5
LECTURE HOURS: 10
LABORATORY HOURS: 0
START PERIOD: 1b
STUDY PACE: Part time 50%
LEVEL OF EDUCATION: Advanced level
LOCATION: Västerås
LANGUAGE: English
EXAMINATION: Participation, Project, Seminar
PREREQUISITES: At least 60 credits in computer science, the knowledge obtained in Foundations of Software Engineering course CDT310 and Game Development - project course CDT311 or corresponding.
COURSE CONTENT: The aim of the course is to give an overview of different domains of industrial systems and their development strategies and tools. In addition to this, an in-depth study is performed on one particular system. This includes practice in handling the system, writing and verifying a piece of software using real industrial environments.
CONTACT PERSON: Annika Björklund, annika.bjorklund@mdh.se
SCHOOL: School of Innovation, Design and Engineering

Learning systems

CODE: CDT407
CREDITS: 7,5
LECTURE HOURS: 10
LABORATORY HOURS: 0
START PERIOD: 1
STUDY PACE: Part time 50%
LEVEL OF EDUCATION: Advanced level
LOCATION: Västerås
LANGUAGE: English
EXAMINATION: Exercise, Laboratory work, Written and/or oral examination
PREREQUISITES: At least 120 credits where theoretical and practical competences in datastructures and algorithms and an object-oriented language like C, C++ or Java are included.
COURSE CONTENT: Artificial neural nets; evolutionary algorithms; reinforcement learning; Bayesian nets; case-based reasoning; clustering and fuzzy systems.
CONTACT PERSON: Annika Björklund, annika.bjorklund@mdh.se
SCHOOL: School of Innovation, Design and Engineering

Parallell Systems

CODE: DVA314
CREDITS: 7,5
LECTURE HOURS: 10
LABORATORY HOURS: 0
START PERIOD: 2
STUDY PACE: Part time 50%
LEVEL OF EDUCATION: Basic level
LOCATION: Västerås
LANGUAGE: English

EXAMINATION: Written and/or oral examination
PREREQUISITES: Programming in C#, Data Structures, Algorithms and Program Development, Functional Programming with F#, Advanced C/C++, and Computer architecture.
COURSE CONTENT: Multicore processors are rapidly becoming standard, and in the future all computers will have cores executing in parallel. Programming such computers is very different from conventional programming. This course will give the basics required to write correct and efficient software for parallel/multicore computers: parallel algorithms, parallel computer architecture, and different parallel programming paradigms.
CONTACT PERSON: Annika Björklund, annika.bjorklund@mdh.se
SCHOOL: School of Innovation, Design and Engineering

Professional Ethics

CODE: CDT409
CREDITS: 7,5
LECTURE HOURS: 10
LABORATORY HOURS: 0
START PERIOD: 2
STUDY PACE: Part time 50%
LEVEL OF EDUCATION: Advanced level
LOCATION: Västerås
LANGUAGE: English
EXAMINATION: Exercise, Seminar
PREREQUISITES: At least 150 credits from an institution of higher education.
COURSE CONTENT: Topics covered will include philosophical foundations of Ethics, critical thinking with analysis of case-studies relevant for a given profession, and exercises in communication skills through written and spoken ethical arguments. Through roll play participants will test different ethical perspectives and even exchange pro- and contra outlooks in the argument. Invited guest lectures
CONTACT PERSON: Annika Björklund, annika.bjorklund@mdh.se
SCHOOL: School of Innovation, Design and Engineering

Project in Embedded Systems

CODE: DVA408
CREDITS: 7,5
LECTURE HOURS: 10
LABORATORY HOURS: 0
START PERIOD: 2
STUDY PACE: Full time
LEVEL OF EDUCATION: Advanced level
LOCATION: Västerås
LANGUAGE: English
EXAMINATION: Written and/or oral examination
PREREQUISITES: Project Methodology, Embedded Systems I or corresponding courses.
COURSE CONTENT: This course has the objective to apply professional project methodology on a project relevant to the field, and hence provide a deeper knowledge of embedded systems development. The work includes specification and analysis of the problem, searching for similar and related works in practices and research, providing a solution on a modeling and implementation level, and presenting the obtained results both in speech and writing. The course is performed in a project form, with a smaller group of students per project. The larger part of the course is an independent group work, guided by a supervisor appointed to each group. All projects are guaranteed to be within the field of embedded systems, but the exact contents of the projects is subject to change for each year, and it will be presented to the students at the beginning of the course.
CONTACT PERSON: Annika Björklund, annika.bjorklund@mdh.se
SCHOOL: School of Innovation, Design and Engineering

Project Methodology

CODE: DVA317
CREDITS: 7,5
LECTURE HOURS: 10
LABORATORY HOURS: 0
START PERIOD: 1
STUDY PACE: Part time 50%
LEVEL OF EDUCATION: Basic level
LOCATION: Västerås
LANGUAGE: English
EXAMINATION: Oral and/or written examination
PREREQUISITES: At least 90 credits in computer science or electronics. Documented solid programming skills.
COURSE CONTENT: This course addresses challenges related to project management and group work in multi-disciplinary engineering projects. The course covers fundamental theory as well as practical issues with respect to a project. Several well known topics, such as resource management, group dynamics, etc will be discussed.
CONTACT PERSON: Annika Björklund, annika.bjorklund@mdh.se
SCHOOL: School of Innovation, Design and Engineering.

Research Methods in the Natural Sciences and Engineering

CODE: CDT403
CREDITS: 7,5
LECTURE HOURS: 10
LABORATORY HOURS: 0
START PERIOD: 1
STUDY PACE: Part time 50%
LEVEL OF EDUCATION: Advanced level
LOCATION: Västerås
LANGUAGE: English
EXAMINATION: Exercise, Participation, Seminar
PREREQUISITES: At least 150 credits in the technical or natural sciences areas.
COURSE CONTENT:
 - Science theory (continuation).
 - History of science.

STUDY PERIODS

1A: 2010-08-30 - 2010-10-03
 1B: 2010-10-04 - 2010-11-07

2 A: 2010-11-08 - 2010-12-12
 2 B: 2010-12-13 - 2011-01-16

3 A: 2011-01-24 - 2011-02-27
 3 B: 2011-02-28 - 2011-04-03

4 A: 2011-04-04 - 2011-05-08
 4 B: 2011-05-09 - 2011-06-12

- Basic research methodology within natural sciences and technology.
- Research methodology for computer science and engineering.
- Research education, the research society and research policy.
- Searching for scientific papers.
- Writing and presentation of a scientific paper.
- Review and opposition of scientific papers.

CONTACT PERSON: Annika Björklund, annika.bjorklund@mdh.se
SCHOOL: School of Innovation, Design and Engineering

Robotics - project course

CODE: CDT508
CREDITS: 30
LECTURE HOURS: 10
LABORATORY HOURS: 0
START PERIOD: 1
STUDY PACE: Full time
LEVEL OF EDUCATION: Advanced level
LOCATION: Västerås
LANGUAGE: English
EXAMINATION: Project
PREREQUISITES: At least 150 credits in the technical or natural sciences areas where at least 22,5 credits in courses at advanced level in either Computer Science, Electronics or Product and Process Development are included.
COURSE CONTENT: The course starts with a requirement specification and results from previous years project. Since the project in itself is so large, it is natural that the tasks are divided into several sub projects, and they are adapted to the actual participating students. Each sub project has very good knowledge about its problems and solutions, and all are informed about other sub projects progress and possible obstacles.
CONTACT PERSON: Annika Björklund, annika.bjorklund@mdh.se
SCHOOL: School of Innovation, Design and Engineering

Software Engineering 1: Basic Course

CODE: DVA312
CREDITS: 7,5
LECTURE HOURS: 10
LABORATORY HOURS: 0
START PERIOD: 1
STUDY PACE: Part time 50%
LEVEL OF EDUCATION: Basic level
LOCATION: Västerås
LANGUAGE: English
EXAMINATION: Written and/or oral examination
PREREQUISITES: Mathematics from three years of upper secondary school with science profile. Also programming skills in an object-oriented language plus further experience in programming and simple software design are required. Basic skills of solving non-trivial, open problems in pairs and small groups are also required. The programming and design skills, if acquired through university courses, corresponds to courses in programming of 15 credits (typically languages like C, C++, Java) and data structures and algorithms plus other computer science courses at progression on Basic level second year or higher of 15 credits.
COURSE CONTENT: The aim of the course is to equip the students with theoretical knowledge needed to work as a software engineer, and explains development models and project management, requirements engineering, and what software quality means. The course also covers software architecture, design and implementation, and includes practical exercises in important graphical and textual notations, and report writing.
CONTACT PERSON: Annika Björklund, annika.bjorklund@mdh.se
SCHOOL: School of Innovation, Design and Engineering

Software Engineering 2: project teamwork

CODE: DVA313
CREDITS: 7,5
LECTURE HOURS: 10
LABORATORY HOURS: 0
START PERIOD: 2
STUDY PACE: Part time 50%
LEVEL OF EDUCATION: Basic level
LOCATION: Västerås
LANGUAGE: English
EXAMINATION: Written and/or oral examination
PREREQUISITES: Mathematics from three years of upper secondary school with science profile. Also programming skills in an object-oriented language plus further experience in programming and simple software design are required. Basic skills of solving non-trivial, open problems in pairs and small groups are also required. The programming and design skills, if acquired through university courses, corresponds to courses in programming of 15 credits (typically languages like C, C++, Java) and data structures and algorithms plus other computer science courses at progression on Basic level second year or higher of 15 credits and basic theoretical knowledge in Software Engineering.
COURSE CONTENT: In this course, the students will work in project teams to go through a whole software engineering project, and includes meeting the customer, and planning and managing the project. You will select tools and programming languages based on the project requirements. You will architect and design the system, implement and finally verify it. To succeed, you will need to divide the work within the project group and be communicative. The course also gives practical experience in documenting all these activities.
CONTACT PERSON: Annika Björklund, annika.bjorklund@mdh.se
SCHOOL: School of Innovation, Design and Engineering

Software Verification and Validation

CODE: CDT414
CREDITS: 7,5
LECTURE HOURS: 10
LABORATORY HOURS: 0
START PERIOD: 2
STUDY PACE: Part time 50%
LEVEL OF EDUCATION: Advanced level
LOCATION: Västerås
LANGUAGE: English
EXAMINATION: Exercise, Seminar
PREREQUISITES: At least 120 credits or corresponding, out of which at least 60 should be from computer science, computer engineering or corresponding subjects. A course in software engineering basics or equivalent is required.
COURSE CONTENT: The focus of this course will be on software testing. A variety of test techniques will be covered along with applicability aspects as well as the bindings on software reliability modeling. The course includes:
 - Introduction to Software Verification and Validation
 - Software Testing overview and classifications
 - Functional (black box) testing
 - Structural (white box) testing
 - Integration testing
 - Mutation testing
 - Model-based testing and Test case generation
 - Software reliability modeling together with bindings on testing
 - Overview of testing process, testing tools and test automation
 The contents will reflect the latest research topics as well as industrial practices. Guest lectures by industrial experts will be the highlight of this course.
CONTACT PERSON: Annika Björklund, annika.bjorklund@mdh.se
SCHOOL: School of Innovation, Design and Engineering

ECONOMICS

Corporate Finance

CODE: NAA201
CREDITS: 7,5
LECTURE HOURS: 35
LABORATORY HOURS: 0
START PERIOD: 1
STUDY PACE: Part time 50%
LEVEL OF EDUCATION: Basic level
LOCATION: Västerås
LANGUAGE: English
EXAMINATION: Written and/or oral examination
PREREQUISITES: Economics 30 credits; or Business Administration 30 credits, of which at least 7,5 credits in financial or management accounting. At least 15 credits in Economics must be finished when the course starts.
COURSE CONTENT: The course starts with the basic ideas on time value of money, and compares Net Present Value and other Investment criteria, usually applied to select various projects. It continues with the classical investment rules under no risk and applies the time value of money to find optimal prices for both bonds and stocks. It then progresses to modern theory of investment by exploring the risk/return relationship, mainly through the Capital Assets Pricing Model. It continues with the Cost of capital and the firms optimal capital structure, the effects of financial leverage and dividends under various taxes. It covers the basics of options, and how to use them to hedge various risks. Finally it discusses international investments.
CONTACT PERSON: Mona Andersson, mona.andersson@mdh.se
SCHOOL: School of Sustainable Development of Society and Technology

Intermediate Microeconomics

CODE: NAA200
CREDITS: 7,5
LECTURE HOURS: 35
LABORATORY HOURS: 0
START PERIOD: 1
STUDY PACE: Part time 50%
LEVEL OF EDUCATION: Basic level
LOCATION: Västerås
LANGUAGE: English
EXAMINATION: Written and/or oral examination
PREREQUISITES: 30 credits in Economics.
COURSE CONTENT: The aim of this course is to provide students with tools and methods for microeconomic analysis. Students learn how to use mathematical methods to solve constrained and unconstrained optimization problems, and to apply these methods to households utility maximization, deriving household demand, and to firms profit maximization and cost minimization, deriving firms supply and cost functions. They also learn how to aggregate household and firm behavior into market demand and supply, and to calculate prices and quantities in competitive market equilibrium as well as in other market forms such as monopoly and oligopoly. Consumer preferences, utility, consumer choice, consumer and market demand, firm behavior, profits, costs, firm and market supply, determination of prices and quantities in market equilibrium, factor markets, and general equilibrium. Compared to the introductory Microeconomics course, these topics are explored in a more formal way, using mathematical analysis. In addition, a selection of other relevant topics such as inter-temporal choice, choice under uncertainty and risk, game theory, monopoly, oligopoly, welfare, and externalities will be covered.
CONTACT PERSON: Mona Andersson, mona.andersson@mdh.se
SCHOOL: School of Sustainable Development of Society and Technology

STUDY PERIODS

1A: 2010-08-30 - 2010-10-03
 1B: 2010-10-04 - 2010-11-07

2A: 2010-11-08 - 2010-12-12
 2B: 2010-12-13 - 2011-01-16

3A: 2011-01-24 - 2011-02-27
 3B: 2011-02-28 - 2011-04-03

4A: 2011-04-04 - 2011-05-08
 4B: 2011-05-09 - 2011-06-12

Investment Theory

CODE: NAA202
CREDITS: 7,5
LECTURE HOURS: 35
LABORATORY HOURS: 0
START PERIOD: 2
STUDY PACE: Part time 50%
LEVEL OF EDUCATION: Basic level
LOCATION: Västerås
LANGUAGE: English
EXAMINATION: Written and/or oral examination
PREREQUISITES: Economics 30 credits; or Business Administration 30 credits, of which at least 7,5 credits in financial or management accounting. At least 15 credits in Economics must be finished when the course starts.
COURSE CONTENT: The aim of this course is to provide a general introduction to investment in primary security markets function and in derivative securities as well. The course covers extensively the Modern Portfolio Theory, using both the Capital Asset Pricing Model (CAPM) and the Arbitrage Pricing Theory (APT). It also covers some topics on bonds, like the yield curve, duration, convexity, active and passive bond-management strategies and the valuation of stocks for normal and super-growth firms. With respect to the financial derivatives, the course covers the pricing of forwards, futures, swaps and options and how to use them as well in order to hedge various risks. Finally, it covers the performance indices and the style analysis in portfolios.
CONTACT PERSON: Mona Andersson, mona.andersson@mdh.se
SCHOOL: School of Sustainable Development of Society and Technology

Labour Economics

CODE: NAA203
CREDITS: 7,5
LECTURE HOURS: 35
LABORATORY HOURS: 0
START PERIOD: 2
STUDY PACE: Part time 50%
LEVEL OF EDUCATION: Basic level
LOCATION: Västerås
LANGUAGE: English
EXAMINATION: Written and/or oral examination
PREREQUISITES: 30 credits in Economics (at least 15 credits finished when the course starts).
COURSE CONTENT: The course aims to present modern economic theory of labor markets with applications to labor market policy. Labor economics is the study of the labor market from an economic perspective. Students learn to analyze how the interactions of the labor market agents, such as individuals, firms, organizations, and government, determines labor market participation, employment and unemployment, as well as wages and other aspects of labor contracts. Labor supply and demand is studied, with applications to labor market participation, employment and working hours. A flow perspective of the labor market is applied to the analysis of job creation and destruction, job search and the matching of workers with vacant jobs. Various theories of wage determination are studied, e.g. compensating differences, human capital, and individual and centralized wage bargaining. The determinants of unemployment are treated from the perspectives of labor market friction, as in the theory of search and matching, and of wage formation, as in the theories of unions and efficiency wages. These theories are applied to questions of labor market policy.
CONTACT PERSON: Mona Andersson, mona.andersson@mdh.se
SCHOOL: School of Sustainable Development of Society and Technology

ELECTRONICS

Project Course in Electronics

CODE: CEL307
CREDITS: 15
LECTURE HOURS: 20
LABORATORY HOURS: 0
START PERIOD: 1, 2
STUDY PACE: Full time
LEVEL OF EDUCATION: Basic level
LOCATION: Västerås
LANGUAGE: English
EXAMINATION: Project work
PREREQUISITES: 90 credits where at least 40 credits are within one of the below mentioned subject in electronics.
COURSE CONTENT: We can offer projects with the areas of biomedical engineering, robotics, wireless communication, sensor techniques, measurement techniques and embedded systems. The student should propose an area of interest and a supervisor will be selected. The supervisor will together with the student specify the details of the project.
CONTACT PERSON: Annika Björklund, annika.bjorklund@mdh.se
SCHOOL: School of Innovation, Design and Engineering

Project Course in Electronics

CODE: ELA001
CREDITS: 7,5
LECTURE HOURS: 10
LABORATORY HOURS: 0
START PERIOD: 1, 2
STUDY PACE: Part time 50%
LEVEL OF EDUCATION: Basic level
LOCATION: Västerås
LANGUAGE: English
EXAMINATION: Project

PREREQUISITES: 90 credits where at least 40 credits are within one of the below mentioned subject in electronics.
COURSE CONTENT: We can offer projects with the areas of biomedical engineering, robotics, wireless communication, sensor techniques, measurement techniques and embedded systems. The student should propose an area of interest and a supervisor will be selected. The supervisor will together with the student specify the details of the project.
CONTACT PERSON: Annika Björklund, annika.bjorklund@mdh.se
SCHOOL: School of Innovation, Design and Engineering

Project in Electronics

CODE: CEL406
CREDITS: 7,5
LECTURE HOURS: 10
LABORATORY HOURS: 0
START PERIOD: 1, 2
STUDY PACE: Part time 50%
LEVEL OF EDUCATION: Advanced level
LOCATION: Västerås
LANGUAGE: English
EXAMINATION: Seminar
PREREQUISITES: At least 150 credits from an institution of higher education with at least 90 credits in one of the below mentioned subject in electronics.
COURSE CONTENT: We can offer projects with the areas of biomedical engineering, robotics, wireless communication, sensor techniques, measurement techniques and embedded systems. The student should propose an area of interest and a supervisor will be selected. The supervisor will together with the student specify the details of the project.
CONTACT PERSON: Annika Björklund, annika.bjorklund@mdh.se
SCHOOL: School of Innovation, Design and Engineering

Project in Electronics

CODE: CEL405
CREDITS: 15
LECTURE HOURS: 20
LABORATORY HOURS: 0
START PERIOD: 1, 2
STUDY PACE: Full time
LEVEL OF EDUCATION: Advanced level
LOCATION: Västerås
LANGUAGE: English
EXAMINATION: Seminar
PREREQUISITES: At least 150 credits from an institution of higher education with at least 90 credits in one of the below mentioned subject in electronics.
COURSE CONTENT: We can offer projects with the areas of biomedical engineering, robotics, wireless communication, sensor techniques, measurement techniques and embedded systems. The student should propose an area of interest and a supervisor will be selected. The supervisor will together with the student specify the details of the project.
CONTACT PERSON: Annika Björklund, annika.bjorklund@mdh.se
SCHOOL: School of Innovation, Design and Engineering

ENERGY ENGINEERING

Heat and Power Technology, basic course

CODE: WER009
CREDITS: 15
LECTURE HOURS: 40
LABORATORY HOURS: 0
START PERIOD: 1
STUDY PACE: Part time 50%
LEVEL OF EDUCATION: Basic level
LOCATION: Västerås
LANGUAGE: English
EXAMINATION: Exercise, Laboratory work, Written and/or oral examination
PREREQUISITES: At least 60 credits from completed courses which must include knowledge of basic courses in Thermodynamics, Mechanics of fluids and Heat transfer or equivalent are required.
COURSE CONTENT: In this course the theory of different methods of producing heat and power are discussed. Cogeneration or combined production of heat for a district heating system and electricity is a Scandinavian speciality and is given great attention in the course. We talk about steam power plants and gas turbines and the important components which these consist of. We make calculations of the efficiency and the power output. Also calculations on different heat exchangers in a boiler are performed as well as a more detailed study of the velocities and the power transmission in a turbomachine (turbine or compressor). A part of the course treats the economical aspects when choosing a suitable power plant. A part of the course pays attention to nuclear power technology. Physical theory and construction of different types of nuclear reactors is included.
CONTACT PERSON: Benny Ekman, benny.ekman@mdh.se
SCHOOL: School of Sustainable Development of Society and Technology

Simulation and Modelling

CODE: WER043
CREDITS: 7,5
LECTURE HOURS: 35
LABORATORY HOURS: 0
START PERIOD: 1
STUDY PACE: Part time 50%
LEVEL OF EDUCATION: Advanced level
LOCATION: Eskilstuna
LANGUAGE: English
EXAMINATION: Project report, Project presentation

STUDY PERIODS

1A: 2010-08-30 – 2010-10-03
 1B: 2010-10-04 – 2010-11-07

2 A: 2010-11-08 – 2010-12-12
 2 B: 2010-12-13 – 2011-01-16

3 A: 2011-01-24 – 2011-02-27
 3 B: 2011-02-28 – 2011-04-03

4 A: 2011-04-04 – 2011-05-08
 4 B: 2011-05-09 – 2011-06-12

PREREQUISITES: 60 credits in energy, environmental or building engineering including at least 15 credits on Basic level third year and mathematics including algebra and calculus or 30 credits in product and process development at level 1 of 3 at advanced level and mathematics including algebra and calculus.

COURSE CONTENT: The overall aim of the course is to provide an understanding of methods, techniques and tools for modelling, simulation and performance analysis of manufacturing processes, energy engineering, environmental engineering and civil engineering. The course will discuss CFD computation, process simulation, process modelling as well as logistic simulation. The major topics covered:

- Overview of simulation paradigms (e.c. CFD, process simulation etc)
- How to define the modelling procedure (solver)
- Pre and post processor
- Validation of simulation models
- Input data modelling
- Output data analysis

CONTACT PERSON: Benny Ekman, benny.ekman@mdh.se

SCHOOL: School of Sustainable Development of Society and Technology

Solar Cells and Solar Collectors

CODE: WER036

CREDITS: 7,5

LABORATORY HOURS: 0

STUDY PACE: Part time 50%

LOCATION: Västerås

EXAMINATION: Project works, Written and/or oral examination

PREREQUISITES: At least 100 credits from an engineering program where Heat and Mass Transfer 7,5 credits and Mathematics at University level 15 credits are included.

COURSE CONTENT: The course will give basic knowledge in construction and operation of different solar cell- and solar collector systems and also the current situation and level of development for these. Topics covered are:

- Heat transfer such as conduction, convection and radiation.
- Fluid mechanics including incompressible flow, the continuity equation and Bernoulli's equation with the loss term.
- Pump systems and pump characteristics.
- Radiation physics.
- Different types of solar collectors and accumulators.
- Theory about the working principle of solar cells.
- Different semiconductor materials with advantages and disadvantages.
- Solar cell- och solar collector systems.

CONTACT PERSON: Benny Ekman, benny.ekman@mdh.se

SCHOOL: School of Sustainable Development of Society and Technology

Windpower and Hydropower

CODE: WER034

CREDITS: 7,5

LABORATORY HOURS: 0

STUDY PACE: Part time 50%

LOCATION: Västerås

EXAMINATION: Project, Written and/or oral examination

PREREQUISITES: At least 100 credits from an engineering program where Mechanics of Fluids 7,5 credits and Mathematics at University level 15 credits are included.

COURSE CONTENT: The course will give deeper knowledge about design of wind power stations and hydro power stations, including economics and environmental issues. Topics covered are:

- Design and construction of wind power plant.
- Aerodynamics around the wind turbine.
- Statistical analysis of wind data.
- Different steps in a wind power plant project including economics, legislation and environmental impacts.
- Design and construction of hydro power plants, conditions for expansions and the environmental consequences.

CONTACT PERSON: Benny Ekman, benny.ekman@mdh.se

SCHOOL: School of Sustainable Development of Society and Technology

ENGLISH

English 1

CODE: HEN100

CREDITS: 30

LABORATORY HOURS: 0

STUDY PACE: Full time

LOCATION: Västerås, Eskilstuna

EXAMINATION: Spoken and written assignments, Pronunciation, Final examination, Assessment of optional course component

PREREQUISITES: TOEFL test result, minimum score 550 with a TWE score of at least 4 (PBT) or 79 with a TWE score of at least 17 (iBT) or an IELTS test result with an overall band score of minimum 6.0 and no band score below 5.0 or equivalent.

LECTURE HOURS: 120

START PERIOD: 1

LEVEL OF EDUCATION: Basic level

LANGUAGE: English

COURSE CONTENT: This course offers an introduction to English Studies. If you plan to continue in the subject, English 1 will give you the foundation for your future studies. If you want to include a single term of English in your degree, this course will give you a good overview of the subject, as well as the chance to improve your English language skills.

CONTACT PERSON: Christina Kääriä, christina.kaaria@mdh.se

SCHOOL: School of Education, Culture and Communication

English 1, Language in Context 1

CODE: HEN103

CREDITS: 15

LABORATORY HOURS: 0

STUDY PACE: Part time 50%

LOCATION: Västerås, Eskilstuna

EXAMINATION: Spoken and written assignments, Pronunciation, Final examination of optional course component

PREREQUISITES: TOEFL test result, minimum score 550 with a TWE score of at least 4 (PBT) or 79 with a TWE score of at least 17 (iBT) or an IELTS test result with an overall band score of minimum 6.0 and no band score below 5.0 or equivalent.

COURSE CONTENT: In this course you will get an opportunity to improve your English by using English to communicate within a context. You will practice communication skills such as public speaking, debating and essay writing, and at the same time learn more about key features of contemporary British and American society. Assessment is by way of spoken and written assignments and a final exam.

CONTACT PERSON: Christina Kääriä, christina.kaaria@mdh.se

SCHOOL: School of Education, Culture and Communication

English 1, Linguistics 1

CODE: HEN102

CREDITS: 7,5

LABORATORY HOURS: 0

STUDY PACE: Part time 25%

LOCATION: Västerås, Eskilstuna

EXAMINATION: Written and spoken assignments, Written examination

PREREQUISITES: TOEFL test result, minimum score 550 with a TWE score of at least 4 (PBT) or 79 with a TWE score of at least 17 (iBT) or an IELTS test result with an overall band score of minimum 6.0 and no band score below 5.0 or equivalent.

COURSE CONTENT: Linguistics 1 provides an introduction to three fundamental areas of English linguistics: grammar, phonetics and lexical semantics. Teaching is in the form of lectures and discussion groups. Assessment is by means of activities in and out of class, and a final written examination.

CONTACT PERSON: Christina Kääriä, christina.kaaria@mdh.se

SCHOOL: School of Education, Culture and Communication

English 1, Literature 1

CODE: HEN101

CREDITS: 7,5

LABORATORY HOURS: 0

STUDY PACE: Part time 25%

LOCATION: Västerås, Eskilstuna

EXAMINATION: Written and spoken assignments, Final examination

PREREQUISITES: TOEFL test result, minimum score 550 with a TWE score of at least 4 (PBT) or 79 with a TWE score of at least 17 (iBT) or an IELTS test result with an overall band score of minimum 6.0 and no band score below 5.0 or equivalent.

COURSE CONTENT: This course will give you an introduction to contemporary Global English literature, and to the use of literary terminology and some techniques for literary study. The reading list consists of contemporary and important novels, short stories and plays from the English speaking world and reflects the course's focus on post-colonial literature. Assessment is by way of spoken and written assignments and a final exam.

CONTACT PERSON: Christina Kääriä, christina.kaaria@mdh.se

SCHOOL: School of Education, Culture and Communication

English 2

CODE: HEN200

CREDITS: 30

LABORATORY HOURS: 0

STUDY PACE: Full time

LOCATION: Västerås

EXAMINATION: Written and spoken assignments, Final Examination

PREREQUISITES: At least 30 credits in English as a major subject or equivalent.

COURSE CONTENT: In English 2 you'll build on the knowledge and skills you gained in the first term to complete your foundation studies in English from a historical perspective. Like English 1, the course consists of three components: in Language in Context 2 you'll get an overview of important historical episodes in the English-speaking world, and you'll further develop your ability to understand and produce English, particularly in academic contexts. Literature 2 surveys the development of

LECTURE HOURS: 120

START PERIOD: 1

LEVEL OF EDUCATION: Basic level

LANGUAGE: English

STUDY PERIODS

1A: 2010-08-30 - 2010-10-03

2A: 2010-11-08 - 2010-12-12

3A: 2011-01-24 - 2011-02-27

4A: 2011-04-04 - 2011-05-08

1B: 2010-10-04 - 2010-11-07

2B: 2010-12-13 - 2011-01-16

3B: 2011-02-28 - 2011-04-03

4B: 2011-05-09 - 2011-06-12

English-language literature, and in Linguistics 2 you'll sample a range of sub-disciplines in English linguistics, including the history of the English language.

CONTACT PERSON: Christina Kääriä, christina.kaaria@mdh.se

SCHOOL: School of Education, Culture and Communication

English 2, Language in Context 2

CODE: HEN201

CREDITS: 15

LABORATORY HOURS: 0

STUDY PACE: Full time

LOCATION: Västerås

EXAMINATION: Written and spoken assignments, British and American history and writing skills

PREREQUISITES: At least 30 credits in English as a major subject or equivalent.

COURSE CONTENT: Language in Context 2 has two objectives: to give an overview of important historical trends and episodes in the English-speaking world, and to create opportunities for students to improve their English language skills. Learning activities in Language in Context 2 include lectures, seminar discussions and individual writing conferences. Assessment activities consist of written assignments, participation in, and preparation for, class activities, and a final exam.

CONTACT PERSON: Christina Kääriä, christina.kaaria@mdh.se

SCHOOL: School of Education, Culture and Communication

English 2, Linguistics 2

CODE: HEN202

CREDITS: 7,5

LABORATORY HOURS: 0

STUDY PACE: Part time 50%

LOCATION: Västerås

EXAMINATION: Written and spoken assignments, Final examination

PREREQUISITES: At least 30 credits English as a major subject including at least 7,5 credits in linguistics.

COURSE CONTENT: Linguistics 2 provides a survey of key areas in English linguistics, including:

- the development of human language
- the historical development of the English language
- phonology
- pragmatics
- sociolinguistics
- discourse analysis

CONTACT PERSON: Christina Kääriä, christina.kaaria@mdh.se

SCHOOL: School of Education, Culture and Communication

English 2, Literature 2

CODE: HEN203

CREDITS: 7,5

LABORATORY HOURS: 0

STUDY PACE: Part time 50%

LOCATION: Västerås

EXAMINATION: Written and spoken assignments

PREREQUISITES: At least 30 credits English as a major subject including at least 7,5 credits in literature.

COURSE CONTENT: Literature 2 builds on your previous studies in English and offers an historical review of English literature.

CONTACT PERSON: Christina Kääriä, christina.kaaria@mdh.se

SCHOOL: School of Education, Culture and Communication

English 3, American Literature

CODE: HEN306

CREDITS: 7,5

LABORATORY HOURS: 0

STUDY PACE: Part time 50%

LOCATION: Västerås

EXAMINATION: Written assignment, Oral examination in individual seminars with the instructor

PREREQUISITES: At least 60 credits English as a major subject including at least 15 credits in literature.

COURSE CONTENT: This is an American literature course for anyone who enjoys reading good literature on his/her own. The reading list includes classics by Twain, Hawthorne, and Hurston, as well as contemporary works by Tyler, Erdrich and Euge-nides. The examination is oral, except for a short essay.

CONTACT PERSON: Christina Kääriä, christina.kaaria@mdh.se

SCHOOL: School of Education, Culture and Communication

English 3, Corpus Linguistics

CODE: HEN302

CREDITS: 7,5

LECTURE HOURS: 30

LABORATORY HOURS: 0

STUDY PACE: Part time 50%

LOCATION: Västerås

EXAMINATION: Spoken and written assignments, Preparation for and participation in course activities, Final examination

PREREQUISITES: At least 60 credits in English as a major subject including at least 15 credits in linguistics.

COURSE CONTENT: This course provides an introduction to the field of Corpus Linguistics, including its historical development and current concerns. We'll acquaint ourselves with the core issues (What is a corpus? How can it be used? How does corpus linguistics differ from other forms of doing linguistics?) and try our hands at corpus-based studies of lexical and grammatical features of English.

CONTACT PERSON: Christina Kääriä, christina.kaaria@mdh.se

SCHOOL: School of Education, Culture and Communication

English 3, Discourse Analysis

CODE: HEN303

CREDITS: 7,5

LABORATORY HOURS: 0

STUDY PACE: Part time 50%

LOCATION: Västerås

EXAMINATION: Spoken and written assignments, Preparation for and participation in course activities, Final examination

PREREQUISITES: At least 60 credits in English as a major subject including at least 15 credits in linguistics.

COURSE CONTENT: Doing discourse analysis means looking closely at language in use to see how it is used and what effects it has, and in this course you'll do a great deal of hands-on analysis of spoken and written texts. We'll begin with an overview of the area of discourse analysis and then move on to look more closely at two specific areas: for example, forensic linguistics (or the applications of linguistics to the legal system and the processes of the law); English for academic purposes; critical discourse analysis; political discourse; etc.

CONTACT PERSON: Christina Kääriä, christina.kaaria@mdh.se

SCHOOL: School of Education, Culture and Communication

English 3, Essay in English Studies

CODE: HEN301

CREDITS: 15

LABORATORY HOURS: 0

STUDY PACE: Part time 50%

LOCATION: Västerås

EXAMINATION: Essay and ventilation seminar

PREREQUISITES: At least 60 credits English as a major subject.

COURSE CONTENT: The essay in English studies on the 300 level and the advanced essay on the 400 level are independent research projects. During the course of the term you'll plan, carry out, and write up, a research project, under the supervision of a member of the English studies staff.

CONTACT PERSON: Christina Kääriä, christina.kaaria@mdh.se

SCHOOL: School of Education, Culture and Communication

English 4, Advanced Essay in English Studies

CODE: HEN401

CREDITS: 15

LABORATORY HOURS: 0

STUDY PACE: Part time 50%

LOCATION: Västerås

EXAMINATION: Essay and ventilation seminar

PREREQUISITES: At least two years of studies on the basic level or at least 120 credits, of which 90 credits are in English.

COURSE CONTENT: The essay in English studies on the 300 level and the advanced essay on the 400 level are independent research projects. During the course of the term you'll plan, carry out, and write up, a research project, under the supervision of a member of the English studies staff.

CONTACT PERSON: Christina Kääriä, christina.kaaria@mdh.se

SCHOOL: School of Education, Culture and Communication

English 4, American Literature

CODE: HEN406

CREDITS: 7,5

LABORATORY HOURS: 0

STUDY PACE: Part time 50%

LOCATION: Västerås

EXAMINATION: Exercise, Seminar

PREREQUISITES: At least two years of studies on the basic level or at least 120 credits, of which 90 credits are in English, including at least 22,5 credits in literature.

COURSE CONTENT: This is an American literature course for anyone who enjoys reading good literature on his/her own. The reading list includes classics by Twain,

STUDY PERIODS

1A: 2010-08-30 - 2010-10-03

2 A: 2010-11-08 - 2010-12-12

3 A: 2011-01-24 - 2011-02-27

4 A: 2011-04-04 - 2011-05-08

1B: 2010-10-04 - 2010-11-07

2 B: 2010-12-13 - 2011-01-16

3 B: 2011-02-28 - 2011-04-03

4 B: 2011-05-09 - 2011-06-12

Hawthorne, and Hurston, as well as contemporary works by Tyler, Erdrich and Eugenides. The examination is oral, except for a short essay.

CONTACT PERSON: Christina Kääriä, christina.kaaria@mdh.se

SCHOOL: School of Education, Culture and Communication

English 4, Corpus Linguistics

CODE: HEN404

CREDITS: 7,5

LABORATORY HOURS: 0

STUDY PACE: Part time 50%

LOCATION: Västerås

EXAMINATION: Spoken and written assignments, Preparation for and participation in course activities, Final examination

PREREQUISITES: At least two years of studies on the basic level or at least 120 credits, of which 90 credits are in English.

COURSE CONTENT: This course provides an introduction to the field of Corpus Linguistics, including its historical development and current concerns. We'll acquaint ourselves with the core issues (What is a corpus? How can it be used? How does corpus linguistics differ from other forms of doing linguistics?) and try our hands at corpus-based studies of lexical and grammatical features of English. The demands on 4th-term students will be somewhat higher than on 3rd-term students as regards, for example, their scientific attitude and approach, as well as oral and written presentation skills.

CONTACT PERSON: Christina Kääriä, christina.kaaria@mdh.se

SCHOOL: School of Education, Culture and Communication

English 4, Discourse Analysis

CODE: HEN402

CREDITS: 7,5

LABORATORY HOURS: 0

STUDY PACE: Part time 50%

LOCATION: Västerås

EXAMINATION: Spoken and written assignments, Preparation for and participation in course activities, Final examination.

PREREQUISITES: At least two years of studies on the basic level or at least 120 credits, of which 90 credits are in English.

COURSE CONTENT: Doing discourse analysis means looking closely at language in use to see how it is used and what effects it has, and in this course you'll do a great deal of hands-on analysis of spoken and written texts. We'll begin with an overview of the area of discourse analysis and then move on to look more closely at two specific areas: for example, forensic linguistics (or the applications of linguistics to the legal system and the processes of the law); English for academic purposes; critical discourse analysis; political discourse; etc.

CONTACT PERSON: Christina Kääriä, christina.kaaria@mdh.se

SCHOOL: School of Education, Culture and Communication

Culture and Society in Great Britain

CODE: HEN130

CREDITS: 7,5

LABORATORY HOURS: 0

STUDY PACE: Part time 25%

LOCATION: Västerås

EXAMINATION: Home examination, Preparation for and active participation in scheduled activities, Written assignment and ventilation

PREREQUISITES: TOEFL test result, minimum score 550 with a TWE score of at least 4 (PBT) or 79 with a TWE score of at least 17 (iBT) or an IELTS test result with an overall band score of minimum 6.0 and no band score below 5.0 or equivalent.

COURSE CONTENT: This course explores significant social and cultural topics in contemporary Britain. The language of instruction is English, offering opportunities for participants to develop their spoken and written competence in English.

CONTACT PERSON: Christina Kääriä, christina.kaaria@mdh.se

SCHOOL: School of Education, Culture and Communication

English for Academic Purposes 1

CODE: HEN002

CREDITS: 7,5

LABORATORY HOURS: 0

STUDY PACE: Part time 50%

LOCATION: Västerås

EXAMINATION: Written and spoken assignments, Preparation for and participation in scheduled activities, Grammar and vocabulary examination

PREREQUISITES: Completed three years of upper secondary school or equivalent.

COURSE CONTENT: English for Academic Purposes 1 aims at developing oral and written proficiency in English at the upper intermediate level. The course comprises lectures, seminars and individual and group exercises.

CONTACT PERSON: Christina Kääriä, christina.kaaria@mdh.se

SCHOOL: School of Education, Culture and Communication

English for Academic Purposes 2

CODE: HEN104

CREDITS: 7,5

LABORATORY HOURS: 0

STUDY PACE: Part time 50%

LOCATION: Västerås

EXAMINATION: Written and spoken assignments, Seminar, Written examination

PREREQUISITES: TOEFL test result, minimum score 550 with a TWE score of at least 4 (PBT) or 79 with a TWE score of at least 17 (iBT) or an IELTS test result with an overall band score of minimum 6.0 and no band score below 5.0 or equivalent.

COURSE CONTENT: English for Academic Purposes 2 aims at developing advanced proficiency in spoken and written English. The course consists of lectures, seminars and individual and group exercises.

CONTACT PERSON: Christina Kääriä, christina.kaaria@mdh.se

SCHOOL: School of Education, Culture and Communication

English for Business Purposes

CODE: HEN107

CREDITS: 7,5

LABORATORY HOURS: 0

STUDY PACE: Part time 50%

LOCATION: Västerås

EXAMINATION: Written and spoken assignments, Preparation for and active participation in campus meetings, Written examination

PREREQUISITES: TOEFL test result, minimum score 550 with a TWE score of at least 4 (PBT) or 79 with a TWE score of at least 17 (iBT) or an IELTS test result with an overall band score of minimum 6.0 and no band score below 5.0 or equivalent.

COURSE CONTENT: The course is designed to improve oral and written techniques in business contexts. Features of style and the language of different types of business correspondence are practised: how to say what mean can make or break a business deal. Other business-related matters such as banking, insurance, personnel, social correspondence, interview skills and intercultural communication are also dealt with.

CONTACT PERSON: Christina Kääriä, christina.kaaria@mdh.se

SCHOOL: School of Education, Culture and Communication

Literature 3: Imaginations

CODE: HEN311

CREDITS: 7,5

LABORATORY HOURS: 0

STUDY PACE: Part time 50%

LOCATION: Västerås

EXAMINATION: Exercise, Seminar, Written and/or oral examination

PREREQUISITES: At least 60 credits in English including at least 15 credits in literature or equivalent.

COURSE CONTENT: This course will build on and extend your knowledge of literary studies, especially of British and North American texts and of literary analysis, and will allow you to explore themes like the Uncanny and Racial Otherness in works from three centuries. It is also an introduction to literary theory and criticism. The course could help you identify a relevant essay topic and will equip you for essay research. Assessment is by way of spoken and written assignments and a final exam.

CONTACT PERSON: Christina Kääriä, christina.kaaria@mdh.se

SCHOOL: School of Education, Culture and Communication

Literature 4: Imaginations

CODE: HEN411

CREDITS: 7,5

LABORATORY HOURS: 0

STUDY PACE: Part time 50%

LOCATION: Västerås

EXAMINATION: Written exercise, Seminar

PREREQUISITES: At least two years of studies on the basic level or at least 120 credits, of which 90 credits are in English, including at least 22,5 credits in literature.

COURSE CONTENT: This course will extend and deepen your mastery of literary studies in English, particularly of British and American canonical and contemporary texts, and of literary theory and analysis. The reading list explores themes like the Uncanny, and Racial Otherness in works from three centuries, and applied literary theory and criticism. The course could help you identify a relevant topic for the Advanced essay and equip you for such research. Assessment will be by way of spoken assignments and a 7-8 page essay.

CONTACT PERSON: Christina Kääriä, christina.kaaria@mdh.se

SCHOOL: School of Education, Culture and Communication

STUDY PERIODS

1A: 2010-08-30 - 2010-10-03

1B: 2010-10-04 - 2010-11-07

2A: 2010-11-08 - 2010-12-12

2B: 2010-12-13 - 2011-01-16

3A: 2011-01-24 - 2011-02-27

3B: 2011-02-28 - 2011-04-03

4A: 2011-04-04 - 2011-05-08

4B: 2011-05-09 - 2011-06-12

ENVIRONMENTAL SCIENCE

Business Strategies for Sustainable Development

CODE: WMX042

CREDITS: 15

LABORATORY HOURS: 0

STUDY PACE: Full time

LOCATION: Västerås

EXAMINATION: Project, Oral examination, Seminar, Written examination

PREREQUISITES: Business Administration 60 credits (at least 45 credits finished when the course starts). At least 20 credits in Business Administration have to be on Basic Level second year.

COURSE CONTENT: The purpose is to enter deeply into theoretical perspectives, conceptions of the world, visions and ideologies in relation to sustainable development. The course will also contribute to knowledge from a strategically perspective regarding environmental and social issues and environmental policies in companies, public and non governmental organizations from local, regional and international levels. The course presents perspectives and a theoretical framework concerning the concepts of ecological economics and business administration. How companies strategically adapt themselves and handle demands regarding environmental issues and social responsibility from other organizations in their surrounding world is analysed with organizational institutional theories. The students will in the lectures get in contact with different actors from companies and organizations who practically work with environmental and social sustainability issues.

CONTACT PERSON: Mona Andersson, mona.andersson@mdh.se

SCHOOL: School of Sustainable Development of Society and Technology

LECTURE HOURS: 60

START PERIOD: 1

LEVEL OF EDUCATION: Basic level

LANGUAGE: English

Swedish Environmental problem solving, project

CODE: WMX048

CREDITS: 15

LABORATORY HOURS: 0

STUDY PACE: Full time

LOCATION: Västerås

EXAMINATION: Project

PREREQUISITES: At least 30 credits Environmental Science or 30 credits Environmental Engineering or equivalent knowledge.

COURSE CONTENT: The course can be chosen by students in building engineering, energy engineering, environmental science and environmental engineering. You connect your field of studies to environmental problems and focus on solutions to the specific problems. The course will provide advanced knowledge in environmental science / environmental engineering, and provide knowledge on how to work with the environmental problem in Sweden. The course will also develop the ability to define problems, evaluate data and to work independently and develop the ability to recognize knowledge and achievements in speech and writing. The greater part of the course consists of an independent work. The study may include comparative studies within the project area between Sweden and the student's home country.

CONTACT PERSON: Åke Forsberg, ake.forsberg@mdh.se

SCHOOL: School of Sustainable Development of Society and Technology

LECTURE HOURS: 40

START PERIOD: 2

LEVEL OF EDUCATION: Basic level

LANGUAGE: English

INFORMATION DESIGN

3D-Modelling - Basic Skills

CODE: KIT173

CREDITS: 7,5

LABORATORY HOURS: 0

STUDY PACE: Part time 25%

LOCATION: Eskilstuna

EXAMINATION: Exercise, Examination

PREREQUISITES: Completed three years of upper secondary school or equivalent.

COURSE CONTENT: In theory and practice this course gives an introduction to 3D computer design. It gives an overview of possibilities and tools, it discusses areas of use and design strategies and gives a first practical encounter with 3D modelling in 3ds Max. The student must have access to a computer and 3D Studio Max.

CONTACT PERSON: Annika Björklund, annika.bjorklund@mdh.se

SCHOOL: School of Innovation, Design and Engineering

LECTURE HOURS: 1

START PERIOD: 1

LEVEL OF EDUCATION: Basic level

LANGUAGE: English

INFORMATION SYSTEMS

IT and IS Management

CODE: EIK032

CREDITS: 15

LABORATORY HOURS: 0

STUDY PACE: Full time

LOCATION: Västerås

LECTURE HOURS: 40

START PERIOD: 2

LEVEL OF EDUCATION: Advanced level

LANGUAGE: English

EXAMINATION: Exercise, Written and/or oral examination

PREREQUISITES: A Bachelor's degree from an institution of higher education of three years or more, equivalent to at least 180 credits in Business Administration, Social Science or Technology; or at least 90 credits in Business Administration or Informatics of which at least 30 credits on Basic level third year.

COURSE CONTENT: The aim of the course is to examine how information technology (IT) enables organizations to conduct business in radically different and more effective ways. The commercialization of the Internet has created a radical change in the business environment. New channels of supply and distribution are emerging. New electronic marketplaces and exchanges are being created. The infrastructures of firms and the industries within which they operate have been permanently altered. IT and IS Management is a course focusing on the impact of IT on industries, markets and organizations. It also discusses issues of strategic positioning and explains how IT provides opportunities to alter market/industry structure, power, and relationships. New technology also enables new organizational capabilities as well as management/leadership principles. Furthermore, operational issues at the interface of business and technology are examined with special focus on approaches to designing and managing open-standard, networked technology infrastructures. Finally, leadership and management of IT activities, focusing on the issues that arise at the boundary as four key constituents - business executives, IT executives, users, and IT partners - work together to leverage technology to create a sustainable advantage are investigated.

CONTACT PERSON: Madeleine Lundberg, madeleine.lundberg@mdh.se

SCHOOL: School of Sustainable Development of Society and Technology

INNOVATION TECHNOLOGY

Foresight and Scenario Design

CODE: INO201

CREDITS: 7,5

LABORATORY HOURS: 0

STUDY PACE: Part time 25%

LOCATION: Eskilstuna

EXAMINATION: Group assignment with written, oral and visual reports, Individual assignment, Seminar

PREREQUISITES: Three years of upper secondary school or equivalent, and one year of completed university studies.

COURSE CONTENT: In this course we address questions like:

What is foresight respectively scenario design?

Can an organization increase its innovative capabilities through using foresights and scenarios, and if so how?

How do you construct foresights?

How do you construct scenarios?

What tools and mental models can be used while constructing foresights and scenarios?

What personal categories are affected by foresight and scenarios and what are their different roles in the constructions?

How does foresights and scenarios relate to management, leadership and strategy?

How does foresights and scenarios relate to innovation, communication, trend spotting, business environment analysis and organized intelligence?

Your own questions.

CONTACT PERSON: Annika Björklund, annika.bjorklund@mdh.se

SCHOOL: School of Innovation, Design and Engineering

LECTURE HOURS: 1

START PERIOD: 1

LEVEL OF EDUCATION: Basic level

LANGUAGE: English

INTERCULTURAL COMMUNICATION

Intercultural Teaching and Learning in Sweden

CODE: UP0006

CREDITS: 30

LABORATORY HOURS: 0

STUDY PACE: Full time

LOCATION: Västerås

EXAMINATION: Written examination. Oral presentation, Project

PREREQUISITES: Completed three years of upper secondary school or equivalent.

COURSE CONTENT: Intercultural Teaching and Learning in Sweden offers a theorised and practical approach to educational and intercultural matters. This module is open to exchange students, Swedish teacher students, and other students interested in this field. The aim of the module is to give students a basic understanding and knowledge of the Swedish educational system, as well as for students to discuss and reflect on their own cultural and educational background. The students will get the opportunity to combine theoretical knowledge and practical learning in educational work settings. Therefore, three weeks of the semester are tied to practical experiences in educational settings (primary/secondary/upper secondary). This school-based work consists of structured observation visits and during this period students will get the opportunity both to communicate their experiences from their own countries and get to know Swedish school situations.

LECTURE HOURS: 30

START PERIOD: 1

LEVEL OF EDUCATION: Basic level

LANGUAGE: English

STUDY PERIODS

1A: 2010-08-30 - 2010-10-03

1B: 2010-10-04 - 2010-11-07

2 A: 2010-11-08 - 2010-12-12

2 B: 2010-12-13 - 2011-01-16

3 A: 2011-01-24 - 2011-02-27

3 B: 2011-02-28 - 2011-04-03

4 A: 2011-04-04 - 2011-05-08

4 B: 2011-05-09 - 2011-06-12

CONTACT PERSON: Christina Kääriä, christina.kaaria@mdh.se
SCHOOL: School of Education, Culture and Communication

MATHEMATICS/APPLIED MATHEMATICS

Algebra

CODE: MMA301
CREDITS: 7,5
LECTURE HOURS: 30
LABORATORY HOURS: 0
START PERIOD: 2
STUDY PACE: Part time 50%
LEVEL OF EDUCATION: Basic level
LOCATION: Västerås
LANGUAGE: English
EXAMINATION: Continuous examination and quiz, Seminar, Written and/or oral examination
PREREQUISITES: Completed three years of upper secondary school with specialization in mathematics, or equivalent
COURSE CONTENT: Systems of linear equations occur frequently in economics as well as in other sciences where quantitative methods are used. The systems can be very large and contain thousands of variables and conditions. Different numerical methods are used to solve such systems on computers. Matrix is a key concept for these methods and the course focuses on this very important mathematical object and its properties. Vectors are introduced and studied in the three dimensional space. Methods of calculating lengths of vectors and angles between them are discussed and used to solve problems concerning lines and planes. The geometrical meaning of vectors is very helpful when one tries to understand and explain what happens during the process of determining solutions to large linear systems. The course is given in English.
CONTACT PERSON: Krystyna Szpricer Alm, krystyna.szpricer.alm@mdh.se
SCHOOL: School of Education, Culture and Communication

Analytical Finance I

CODE: MMA707
CREDITS: 7,5
LECTURE HOURS: 30
LABORATORY HOURS: 0
START PERIOD: 1
STUDY PACE: Part time 50%
LEVEL OF EDUCATION: Advanced level
LOCATION: Västerås
LANGUAGE: English
EXAMINATION: Seminar, Written examination
PREREQUISITES: At least 120 credits in the technical, natural sciences, business administration or economics areas where Probability 7,5 credits or equivalent is included.
COURSE CONTENT: On exchanges and on the OTC (Over The Counter) markets, wide ranges of financial instruments are traded. Many instruments such as options, warrants, forwards, futures, bonds, notes, bills, swaps etc. are valued by mathematical models or by simulations. In financial engineering, valuation models are developed, studied and used to create new types of instrument by combinations of other instruments. The course in Analytical Finance I provide the students with a broad knowledge of models and methods used in the financial industry. A major part of the course discusses mathematical and numerical models for various instruments. By the end of this course the students should have sufficient knowledge of quantitative finance to understand most of the derivative contracts traded in the equity and fixed income markets and to value them.
CONTACT PERSON: Jan Röman, jan.roman@mdh.se
SCHOOL: School of Education, Culture and Communication

Analytical Finance II

CODE: MMA708
CREDITS: 7,5
LECTURE HOURS: 30
LABORATORY HOURS: 0
START PERIOD: 2
STUDY PACE: Part time 50%
LEVEL OF EDUCATION: Advanced level
LOCATION: Västerås
LANGUAGE: English
EXAMINATION: Seminar, Written examination
PREREQUISITES: At least 120 credits in the technical, natural sciences, business administration or economics areas where Analytical Finance I 7,5 credits or equivalent is included.
COURSE CONTENT: This course is continuation of the course Analytical Finance I. In Analytical Finance II, the students will broaden their knowledge of models and methods used in the financial industry. The major part of the course will focus on mathematical and numerical methods. By the end of this course the students should have sufficient knowledge of the use of stochastic calculus to solve financial problems.
CONTACT PERSON: Jan Röman, jan.roman@mdh.se
SCHOOL: School of Education, Culture and Communication

Analytical Finance with MATLAB

CODE: MAA312
CREDITS: 7,5
LECTURE HOURS: 30
LABORATORY HOURS: 0
START PERIOD: 1
STUDY PACE: Part time 50%
LEVEL OF EDUCATION: Basic level

1A: 2010-08-30 - 2010-10-03
 1B: 2010-10-04 - 2010-11-07

2A: 2010-11-08 - 2010-12-12
 2B: 2010-12-13 - 2011-01-16

LOCATION: Västerås
LANGUAGE: English
EXAMINATION: Project, Seminar
PREREQUISITES: Introduction to Financial Mathematics 7,5 credits and Numerical Methods with MATLAB 7,5 credits or equivalent.
COURSE CONTENT: In this course, we first consider typical applied problems of financial engineering, like charting financial data, analysing and computing cash flows, etc. Second, we show how to use MATLAB and its special toolboxes as both computation and visualisation tool in solving these problems. Our aim is to give you the skill to solve financial problems using modern computation and visualization tools.
CONTACT PERSON: Anatoliy Malyarenko, anatoliy.malyarenko@mdh.se
SCHOOL: School of Education, Culture and Communication

Calculus II

CODE: MMA305
CREDITS: 7,5
LECTURE HOURS: 30
LABORATORY HOURS: 0
START PERIOD: 1
STUDY PACE: Part time 50%
LEVEL OF EDUCATION: Basic level
LOCATION: Västerås
LANGUAGE: English
EXAMINATION: Project, Written and/or oral examination
PREREQUISITES: Calculus I 7,5 credits or equivalent.
COURSE CONTENT: Calculus provides tools for describing different kinds of motion, including motion in business and economics. In real life, a moving quantity often depends on more than one variable. In Calculus II, we will deal with functions of several real variables. This course is devoted to basic theory of functions of more than one variable and applications in economics and business.
CONTACT PERSON: Anatoliy Malyarenko, anatoliy.malyarenko@mdh.se
SCHOOL: School of Education, Culture and Communication

Differential Equations in Finance

CODE: MMA712
CREDITS: 7,5
LECTURE HOURS: 30
LABORATORY HOURS: 0
START PERIOD: 1
STUDY PACE: Part time 50%
LEVEL OF EDUCATION: Advanced level
LOCATION: Västerås
LANGUAGE: English
EXAMINATION: Seminar and/or tests, Written and/or oral examination,
PREREQUISITES: At least 120 credits in the technical, natural sciences, business administration or economics areas where Analytical Finance I 7,5 credits or equivalent is included.
COURSE CONTENT: Now huge volumes of financial derivative securities are traded on the market every day. This causes a big demand for experts who know how to price financial derivative securities. In most cases, the determination of the prices of financial derivative securities may be reduced to solving partial differential equation problems. In this course, we discuss how to establish the corresponding partial differential equations and find the final and necessary boundary conditions for a specific derivative product. If possible, we derive its explicit solution and describe some properties of the solution.
CONTACT PERSON: Richard Bonner, richard.bonner@mdh.se
SCHOOL: School of Education, Culture and Communication

Java in Analytical Finance

CODE: MMA710
CREDITS: 15
LECTURE HOURS: 45
LABORATORY HOURS: 0
START PERIOD: 1
STUDY PACE: Part time 50%
LEVEL OF EDUCATION: Advanced level
LOCATION: Västerås
LANGUAGE: English
EXAMINATION: Projects, Seminars
PREREQUISITES: Introduction to Financial Mathematics 7,5 credits or equivalent.
COURSE CONTENT: Talk about Java technology seems to be everywhere, but what exactly is it? Java technology is both a programming language and a platform. In this course, students learn Java programming language and write Java programs, using the Java Virtual Machine and the Java Application Programming Interface (API). Applications from Analytical Finance are essential parts throughout the course.
CONTACT PERSON: Anatoliy Malyarenko, anatoliy.malyarenko@mdh.se
SCHOOL: School of Education, Culture and Communication

Mathematics for Economics and Business

CODE: MMA300
CREDITS: 7,5
LECTURE HOURS: 30
LABORATORY HOURS: 0
START PERIOD: 1
STUDY PACE: Part time 50%
LEVEL OF EDUCATION: Basic level
LOCATION: Västerås
LANGUAGE: English
EXAMINATION: Project, Compulsory test
PREREQUISITES: Completed three years of upper secondary school with specialization in mathematics, or equivalent
COURSE CONTENT: To be prepared for studying the mathematical part of Analytical Finance you need not only technical skill but also a clear understanding of concepts. Indeed conceptual understanding and technical skill go hand in hand, each reinforcing the other; both are necessary for success, not only in mathematics, but also in subsequent economical courses. A student also needs an appreciation that mat-

3A: 2011-01-24 - 2011-02-27
 3B: 2011-02-28 - 2011-04-03

4A: 2011-04-04 - 2011-05-08
 4B: 2011-05-09 - 2011-06-12

STUDY PERIODS

hematics contains great ideas that can be used to model economical and financial situations. The course presents opportunities for students to discover this practical power of mathematics.

CONTACT PERSON: Anatoliy Malyarenko, anatoliy.malyarenko@mdh.se
SCHOOL: School of Education, Culture and Communication

Optimization in Finance

CODE: MAA703
CREDITS: 7,5
LECTURE HOURS: 30
LABORATORY HOURS: 0
START PERIOD: 2
STUDY PACE: Part time 50%
LEVEL OF EDUCATION: Advanced level
LOCATION: Västerås
LANGUAGE: English
EXAMINATION: Exercises, Written examination
PREREQUISITES: At least 120 credits in the technical, natural sciences, business administration or economics areas where Operations Research 7,5 credits and Numerical Methods with MATLAB 7,5 credits or equivalent are included.
COURSE CONTENT: The course gives basic knowledge of the theory of mathematical programming and optimization, as well as the practical application of numerical algorithms for optimization. During the course a number of applied optimization problems are studied.
Unconstrained non-linear optimization: Mathematical Theory, Line Search Algorithms, Newtonian and Quasi-Newtonian methods. Conjugate Gradient Methods. Automatic and Numerical Differentiation.
Constrained Nonlinear Optimization: Theory, Quadratic Programming, Active-Set Methods. Penalty and Barrier Methods. Duality. Lagrange Methods, especially Sequential Quadratic Programming. Interior-Point Methods, Karmakar's Method. Energy Optimization.
Parameter Estimation: Nonlinear Least Squares Approximation. Circle Approximation. Fitting of Weighted Positive Sums of Exponential Functions to Empirical Data. Practical solution of optimization problems in Matlab using our optimization environment TOMLAB, which uses the toolbox NLP LIB, the Optimization Toolbox and commercial standard software for optimization.
CONTACT PERSON: Kateryna Mishchenko, kateryna.mishchenko@mdh.se
SCHOOL: School of Education, Culture and Communication

Portfolio Theory I

CODE: MAA314
CREDITS: 7,5
LECTURE HOURS: 30
LABORATORY HOURS: 0
START PERIOD: 2
STUDY PACE: Part time 50%
LEVEL OF EDUCATION: Basic level
LOCATION: Västerås
LANGUAGE: English
EXAMINATION: Seminar, Written examination
PREREQUISITES: Methods of Statistical Inference 7,5 credits or equivalent.
COURSE CONTENT: The course will present the basic issues of finance such as Capital asset pricing model (CAPM), Arbitrage pricing theory (APT) as well as survey models and methods surrounding optimal capital allocation, design of optimal financial portfolios, and risk management. These issues play the key role in the modern finance. The new advanced methods such as dynamic portfolio theory, market timing, and style investing will be also discussed and illustrated by examples from financial practice. Methods of optimisation that create a methodological base for the portfolio theory will be presented and illustrated with the use of financial software programs.
CONTACT PERSON: Lars Pettersson, lars.pettersson@mdh.se
SCHOOL: School of Education, Culture and Communication

Probability

CODE: MMA306
CREDITS: 7,5
LECTURE HOURS: 30
LABORATORY HOURS: 0
START PERIOD: 2
STUDY PACE: Part time 50%
LEVEL OF EDUCATION: Basic level
LOCATION: Västerås
LANGUAGE: English
EXAMINATION: Continuous examination, Quiz, Seminar, Written examination
PREREQUISITES: Calculus II 7,5 credits or equivalent.
COURSE CONTENT: Probability theory deals with models for random experiments, i.e. experiments where it is not possible to predict the outcome even if one has full control of the external circumstances. Many phenomena where random variation is involved can be described in terms of probabilities. In finance, random models are used e.g. for stock prices and option prices. After having completed the course you will possess the skills of probabilistic modelling of real world situations. The content of the course is an important ingredient of the theoretical base of further courses in the Analytical Finance program such as Actuarial Mathematics, Stochastic Processes and Statistical Inference.
CONTACT PERSON: Anna Fedyszak-Koszela, anna.koszela@mdh.se
SCHOOL: School of Education, Culture and Communication

Stochastic Processes

CODE: MMA701
CREDITS: 7,5
LECTURE HOURS: 30
LABORATORY HOURS: 0
START PERIOD: 1
STUDY PACE: Part time 50%
LEVEL OF EDUCATION: Advanced level

1A: 2010-08-30 - 2010-10-03
1B: 2010-10-04 - 2010-11-07

2A: 2010-11-08 - 2010-12-12
2B: 2010-12-13 - 2011-01-16

LOCATION: Västerås
LANGUAGE: English
EXAMINATION: Continuous examination/projects, Seminars
PREREQUISITES: At least 120 credits in the technical, natural sciences, business administration or economics areas where Probability 7,5 credits or equivalent is included.
COURSE CONTENT: Stochastic processes play a key role in analytical finance and insurance, and in financial engineering. The course presents the basic models of stochastic processes such as random walks, Markov chains, Poisson processes, Brownian motions and diffusion processes, elements of stochastic calculus and stochastic differential equations as well as simulation of stochastic processes. The presentation of the theory will be illustrated by many examples representing applications in asset pricing, portfolio analysis as well as pricing of options and other derivatives.
CONTACT PERSON: Anatoliy Malyarenko, anatoliy.malyarenko@mdh.se
SCHOOL: School of Education, Culture and Communication

Time Series Analysis

CODE: MMA702
CREDITS: 7,5
LECTURE HOURS: 30
LABORATORY HOURS: 0
START PERIOD: 2
STUDY PACE: Part time 50%
LEVEL OF EDUCATION: Advanced level
LOCATION: Västerås
LANGUAGE: English
EXAMINATION: Continuous examination/projects combined with written test, Seminars
PREREQUISITES: At least 120 credits in the technical, natural sciences, business administration or economics areas where Stochastic Processes 7,5 credits or equivalent is included.
COURSE CONTENT: Time series play a key role in analytical finance and insurance, and in financial engineering. The course presents the basic models of time series such as linear time series, autoregressive type models, nonlinear time series, high-frequency models, continuous time models and multivariate time series, elements of statistical estimation as well as simulation of time series. This basic part of the course can also be interesting for students from other specialties than analytical finance and financial engineering. The examples used in the course are selected from time series applications economics, finance and insurance.
CONTACT PERSON: Anatoliy Malyarenko, anatoliy.malyarenko@mdh.se
SCHOOL: School of Education, Culture and Communication

MEDICINE

Disaster Medicine

CODE: OBM025
CREDITS: 7,5
LECTURE HOURS: 50
LABORATORY HOURS: 0
START PERIOD: 1a
STUDY PACE: Full time
LEVEL OF EDUCATION: Basic level
LOCATION: Västerås
LANGUAGE: English
EXAMINATION: Exercise
PREREQUISITES: Completed three years of upper secondary school or equivalent.
COURSE CONTENT: There are many different kind of disasters around us and it has turned into a global problem with many people involved. In the course Disaster Medicine you will achieve knowledge about risks of disasters in modern society, readiness of health care system and community in case of disaster situations. You will also achieve knowledge about measures and tasks connected to disaster and readiness in action for the special strains that is caused by disaster, including environmental impact. This course can be connected to Public Health Science, Nursing Science and also Community Science.
CONTACT PERSON: Lillemor Fernqvist, lillemor.fernqvist@mdh.se
SCHOOL: School of Health, Care and Welfare

PRODUCT AND PROCESS DEVELOPMENT

Competitive Production Systems

CODE: KPP202
CREDITS: 7,5
LECTURE HOURS: 10
LABORATORY HOURS: 0
START PERIOD: 1
STUDY PACE: Part time 50%
LEVEL OF EDUCATION: Advanced level
LOCATION: Eskilstuna
LANGUAGE: English
EXAMINATION: Exercise, Written and/or oral examination
PREREQUISITES: Innovative Production and logistics 7,5 credits or equivalent. A Bachelor's degree in the fields of technology from an institution of higher education of three years or more, equivalent to at least 180 credits with at least 22,5 credits in mathematics/applied mathematics or a Bachelor's degree in the fields of economics, business or science from an institution of higher education of three years or more, equivalent to at least 180 credits with at least 22,5 credits in mathematics/applied mathematics with one year of working experience in the industry.
COURSE CONTENT: The aim for the course is to give general understanding of the impact of competitive production and logistics in industrial operations. Participants

STUDY PERIODS

3A: 2011-01-24 - 2011-02-27
3B: 2011-02-28 - 2011-04-03

4A: 2011-04-04 - 2011-05-08
4B: 2011-05-09 - 2011-06-12

shall gain understanding of the development of production and logistics over time and the present challenge for Swedish industry and shall also make reflections over coming challenges within the subject.

CONTACT PERSON: Annika Björklund, annika.bjorklund@mdh.se

SCHOOL: School of Innovation, Design and Engineering

Industrial Excellence

CODE: KPP319

CREDITS: 7,5

LABORATORY HOURS: 0

STUDY PACE: Part time 25%

LOCATION: Eskilstuna

EXAMINATION: PM - literature studie, Project report, Seminar and exercise of simulation

PREREQUISITES: 30 credits on level 1 out of 3 at advanced level in Product and Process Development where of at least 15 credits within Production and Logistics, and courses in Algebra and Calculus, and admitted to course in Simulation and Modelling at level 2 out of 3 at advanced level and participating in that course at the latest in parallel with KPP319.

COURSE CONTENT:

- Competitive production systems and its ideas, methodologies and tools.
- Production process development, analysis of processes and methodology for rationalization studies.
- Methodes for and introduction of Lean production in modern production systems. - Modelling and simulation as tools with focus on discrete event controlled simulation.
- Performing of applied improvement studies of a section of an industrial production system within manufacturing industry, which are to be analyzed through modeling and simulation.

CONTACT PERSON: Annika Björklund, annika.bjorklund@mdh.se

SCHOOL: School of Innovation, Design and Engineering

Production and Logistics Planning

CODE: KPP227

CREDITS: 7,5

LABORATORY HOURS: 0

STUDY PACE: Part time 50%

LOCATION: Eskilstuna

EXAMINATION: Project, Written and/or oral examination

PREREQUISITES: Innovative production and logistics 7,5 credits or Business Administration 7,5 credits and a Bachelor's degree in the fields of technology from an institution of higher education of three years or more, equivalent to at least 180 credits with at least 22,5 credits in mathematics/applied mathematics or a Bachelor's degree in the fields of economics, business or science from an institution of higher education of three years or more, equivalent to at least 180 credits with at least 22,5 credits in mathematics/applied mathematics with one year of working experience in the industry.

COURSE CONTENT: Production planning. Logistics planning. Methods for aggregate planning. Material requirement planning and master production scheduling. Inventory management and inventory control models. Forecasting techniques. Capacity planning. Facility Location. Facilities layout. Line balancing. Scheduling and sequencing. Project management. An introduction to some quantitative techniques such as linear programming, transportation techniques, waiting line models, and simulation. An independent literature study relating to different production philosophies and/or logistics planning should be done in the form of a written project work.

CONTACT PERSON: Annika Björklund, annika.bjorklund@mdh.se

SCHOOL: School of Innovation, Design and Engineering

Project Management

CODE: KPP304

CREDITS: 15

LABORATORY HOURS: 0

STUDY PACE: Part time 50%

LOCATION: Eskilstuna

EXAMINATION: Project, Examination

PREREQUISITES: 15 credits Business Administration related courses, 15 credits engineering science, 15 credits industrial production and/or product development and a Bachelor's degree in the fields of technology from an institution of higher education of three years or more, equivalent to at least 180 credits with at least 22,5 credits in mathematics/applied mathematics or a Bachelor's degree in the fields of economics, business or science from an institution of higher education of three years or more, equivalent to at least 180 credits with at least 22,5 credits in mathematics/applied mathematics with one year of working experience in the industry.

COURSE CONTENT: Project characteristics and project environment, setting goals, the project manager, risk management, management styles, establishing project plans, planning methods including bar charting, CPM and PERT, project organization including functional, project, and matrix structures, conflict and negotiation, financing projects, project budgeting and cost estimation, expediting projects, resource loading

and resource levelling, project control, project evaluation and project termination, project management applications. An independent study relating to some aspects of project management concepts and techniques should be done in the form of a written project work. The course is active in periods 1 and 3.

CONTACT PERSON: Annika Björklund, annika.bjorklund@mdh.se

SCHOOL: School of Innovation, Design and Engineering

SCIENCE OF PUBLIC HEALTH

Child and Adolescent Public Health

CODE: FHA013

CREDITS: 7,5

LABORATORY HOURS: 0

STUDY PACE: Part time 50%

LOCATION: Västerås

EXAMINATION: Exercise, Oral/Written examinations

PREREQUISITES: Degree of Bachelor or equivalent.

COURSE CONTENT: Future population health is founded in childhood to a great deal. Consequently, most strategies for public health emphasize actions aimed for children and adolescents. Mental ill-health and obesity are examples of upcoming health threats in those ages. This course will improve your knowledge and understanding, abilities and attitudes in this public health field. The perspective is mainly Nordic/European. The course can be included in your master exam.

CONTACT PERSON: Lillemor Fernqvist, lillemor.fernqvist@mdh.se

SCHOOL: School of Health, Care and Welfare

SOCIAL WORK

Social Welfare from a Cultural Perspective

CODE: SAA001

CREDITS: 7,5

LABORATORY HOURS: 0

STUDY PACE: Full time

LOCATION: Västerås

EXAMINATION: Exercise

PREREQUISITES: Social sciences 30 credits on Basic level first year or equivalent.

COURSE CONTENT: The idea of social welfare and the ways of running social work are inspired by fundamental values in the society. The cultural context of everyday life of the individual is confirming respect and integrity. With reference to practical work and a theoretical approach the importance of cultural understanding has to be stressed to achieve quality of social work in a multicultural society. This course addresses to students within care sciences and social work from Sweden and foreign nations. In this way specific observations and reflections will be accomplished. English is the main language of this course.

CONTACT PERSON: Håkan Karp, hakan.karp@mdh.se

SCHOOL: School of Health, Care and Welfare

SPANISH

Spanish 1, Basic Cultural Studies

CODE: HSP103

CREDITS: 7,5

LABORATORY HOURS: 0

STUDY PACE: Part time 25%

LOCATION: Västerås

EXAMINATION: Continuous examinations, Group exercises, Seminars

PREREQUISITES: Spanish from three years of upper secondary school or equivalent.

COURSE CONTENT: Pure Literature and Culture, 7,5 credits: Intensive training of language proficiency on the basis of modern literature. Continual presentation of the texts under the teacher's guidance. Exercises in written work, mainly in the form of summaries and reports in connection with the presentation of the texts. Lectures on the history of ideas and art in the Spanish-speaking countries.

CONTACT PERSON: Magda Salinas, magda.salinas@mdh.se

SCHOOL: School of Education, Culture and Communication

Spanish 1, Speaking Skills

CODE: HSP102

CREDITS: 7,5

LABORATORY HOURS: 0

STUDY PACE: Part time 25%

LOCATION: Västerås

EXAMINATION: Examination, Phonetics, Pronunciation Practice, Exercise, Oral Communication.

PREREQUISITES: Spanish from three years of upper secondary school or equivalent.

STUDY PERIODS

1A: 2010-08-30 - 2010-10-03

1B: 2010-10-04 - 2010-11-07

2A: 2010-11-08 - 2010-12-12

2B: 2010-12-13 - 2011-01-16

3A: 2011-01-24 - 2011-02-27

3B: 2011-02-28 - 2011-04-03

4A: 2011-04-04 - 2011-05-08

4B: 2011-05-09 - 2011-06-12

COURSE CONTENT: The course comprises the following parts:

(3 credits) Phonetics
(1.5 credits) Pronunciation Practice
(3 credits) Oral Communication

Lectures on the main features of general and Spanish phonetics: Spanish phonemes, phonetic signs, types of intonation and phonological processes and also a little about regional deviations from standard pronunciation. Conversation exercises.

CONTACT PERSON: Magda Salinas, magda.salinas@mdh.se

SCHOOL: School of Education, Culture and Communication

SWEDISH

Scandinavian Studies 1: Language and Society

CODE: SVA003

CREDITS: 30

LABORATORY HOURS: 0

STUDY PACE: Full time

LOCATION: Västerås

EXAMINATION: Oral/Written examinations

PREREQUISITES: General entry requirements for university studies in Sweden, with the exception of upper-secondary advanced-level studies in Swedish, apply. At least 100 hours of Swedish studies (with documentation) or equivalent knowledge is required.

COURSE CONTENT: Unit 1: Oral Communication and Phonetics, 8 credits

In this unit the basic ability to express oneself orally in Swedish is practised as well as the ability to understand simple spoken Swedish.

Unit 2: Written Communication, 7 credits

In this unit the basic ability to read and write simple texts in Swedish is practised as well as the use of dictionaries and other aids.

Unit 3: Grammar, 8 credits

This unit deals with the structure and characteristic features of the Swedish language as well as giving basic knowledge for the discussion of linguistics issues.

Unit 4: Social Conditions and Culture, 3 credits

This unit comprises studies in Swedish geography, politics and social structure.

Unit 5: Project (Work), 4 credits

This unit is given across the whole semester and the skills acquired from the other units will be used to write a project.

CONTACT PERSON: Magnus Jansson, magnus.jansson@mdh.se

SCHOOL: School of Education, Culture and Communication

Scandinavian Studies 2: Language and Culture

CODE: SVA004

CREDITS: 30

LABORATORY HOURS: 0

STUDY PACE: Full time

LOCATION: Västerås

EXAMINATION: Oral/Written examinations

PREREQUISITES: General entry requirements for university studies in Sweden, with the exception of upper-secondary advanced-level studies in Swedish, apply. Previous knowledge corresponding to the course Scandinavian Studies 1: Language and Society (30 credits) is required.

COURSE CONTENT: Unit 1: Language Description, 6 credits

This unit deals with structure and characteristic features of the Swedish language as well as giving advanced knowledge for the discussion of linguistics issues.

Unit 2: Written Work, 7 credits

In this unit the ability to read and write various types of texts in Swedish is practised as well as the use of dictionaries and other aids.

Unit 3: Oral Work and Listening Comprehension, 7 credits

In this unit the ability to express oneself in Swedish is practised as well as the ability to understand spoken Swedish.

Unit 4: Swedish Literature, 3 credits

The course comprises studies in the Swedish literature.

Unit 5: Swedish History, Swedish Social Conditions and Swedish Culture, 3 credits

The course comprises studies in Swedish history, Swedish social conditions and Swedish culture.

Unit 6: Project (Work), 4 credits

This unit is given across the whole semester and the skills acquired from the other units will be used to write a project.

CONTACT PERSON: Magnus Jansson, magnus.jansson@mdh.se

SCHOOL: School of Education, Culture and Communication

Scandinavian Studies 3: Language, History and Literature

CODE: SVA102

CREDITS: 30

LABORATORY HOURS: 0

STUDY PACE: Full time

LOCATION: Västerås

EXAMINATION: Oral/Written examinations

LECTURE HOURS: 120

START PERIOD: 1

LEVEL OF EDUCATION: Basic level

LANGUAGE: Swedish

PREREQUISITES: General entry requirements for university studies in Sweden, with the exception of upper-secondary advanced-level studies in Swedish, apply. Previous knowledge corresponding to the courses Scandinavian Studies 1: Language and Society (30 credits) and Scandinavian Studies 2: Language and Culture (30 credits) is required.

COURSE CONTENT: Unit 1: Language Description, 4, 5 credits

This unit deals with descriptive and prescriptive grammar and also phonetics.

Unit 2: Oral Work, 4,5 credits

This unit deals with various speaking situations, preparation, structuring, target audience adaption, argumentation and the use of aids.

Unit 3: Written Work, 6 credits

This unit deals with various writing situations, text types, the writing process, structuring, target group adaption as well as the use of handbooks/dictionaries.

Unit 4: Nordic History and Modern Nordic Literature with a Project Work, 15 credits
The unit deals with the history of the Nordic countries politically, socially, economically and culturally.

The emphasis is placed on Sweden and Swedish conditions. It also comprises studies in Nordic literature from the modern breakthrough period up to the present with the emphasis on Swedish literature. One theme within the subject area will be covered by project work.

CONTACT PERSON: Magnus Jansson, magnus.jansson@mdh.se

SCHOOL: School of Education, Culture and Communication

THEATRE

Multicultural Improvisation

CODE: IÖÅ001

CREDITS: 7,5

LABORATORY HOURS: 0

STUDY PACE: Part time 50%

LOCATION: Västerås, Eskilstuna

EXAMINATION: Written and/or oral examination,

PREREQUISITES: Curiosity towards developing one's own multicultural awareness and social skills.

COURSE CONTENT: The course aims: - to enhance social skills that support constructive and friendly interaction in a multicultural environment - to create methods for becoming aware of and decreasing false negative attitudes, prejudices and isolation - to support the foreign students' acculturation process, i.e. adjusting to and coping with a new culture - to explore, compare and contrast customs and features of the different cultures represented in the group - to offer creative challenges that require working together in small and large groups - to give the students the chance to make friends and to support expanding their social network - to encourage the students to get more involved, committed and active in the student life and studies in the university.

CONTACT PERSON: Annika Björklund, annika.bjorklund@mdh.se

SCHOOL: School of Innovation, Design and Engineering

Rhetorical Presentation Design

CODE: IÖÅ202

CREDITS: 7,5

LABORATORY HOURS: 0

STUDY PACE: Part time 50%

LOCATION: Västerås

EXAMINATION: Exercise

PREREQUISITES: Willingness and interest to learn and to experiment with presentation forms. Academic merits in Information design, communication and media or equivalent 7,5 hp. Intermediate level of the English language.

COURSE CONTENT: The course aims at giving deepened competences in rhetoric and in multimedial presentation design. Through theoretical reasoning and analyses combined with practical applications the aim is to give insights in various types of story telling techniques while using words, pictures, photos,

CONTACT PERSON: Annika Björklund, annika.bjorklund@mdh.se

SCHOOL: School of Innovation, Design and Engineering

STUDY PERIODS

1A: 2010-08-30 - 2010-10-03

1B: 2010-10-04 - 2010-11-07

2 A: 2010-11-08 - 2010-12-12

2 B: 2010-12-13 - 2011-01-16

3 A: 2011-01-24 - 2011-02-27

3 B: 2011-02-28 - 2011-04-03

4 A: 2011-04-04 - 2011-05-08

4 B: 2011-05-09 - 2011-06-12