SUMMER SCHOOL DENMARK 2013

Courses description

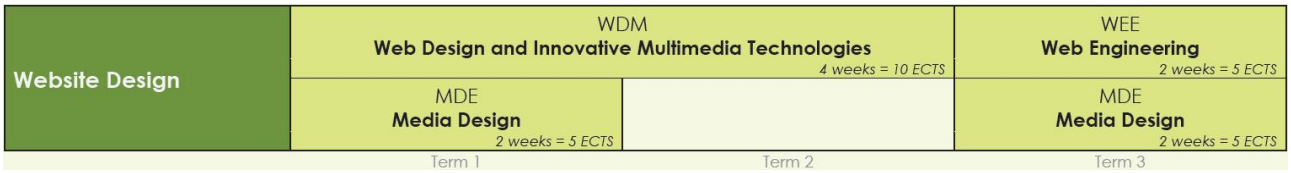
Overview

Term 1	01 July–12 July 2013
Term 2	15 July–26 July 2013
Term 3	29 July–9 August 2013

	Term 1	Term 2	Term 3
Website Design	WDM **Web Design and Innovative Multimedia Technologies** *4 weeks = 10 ECTS*		WEE **Web Engineering** *2 weeks = 5 ECTS*
	MDE **Media Design** *2 weeks = 5 ECTS*		MDE **Media Design** *2 weeks = 5 ECTS*
Website Development	WEE **Web Engineering** *2 weeks = 5 ECTS*	DES **Data Security** (with focus on web) *2 weeks = 5 ECTS*	WEE **Web Engineering** *2 weeks = 5 ECTS*
Software Programming	SDJ **Java Programming** *2 weeks = 5 ECTS*	SGA **Serious Games** *2 weeks = 5 ECTS*	MOB **Mobile Applications** *2 weeks = 5 ECTS*
	LRL **Lego Robot Lab** *2 weeks = 5 ECTS*		MSD 2 **Programming Microcontroller** *2 weeks = 5 ECTS*
	MOB **Mobile Applications** *2 weeks = 5 ECTS*		LRL **Lego Robot Lab** *2 weeks = 5 ECTS*
Entrepreneurship & Business Development	SMM **Social Media Marketing** *2 weeks = 5 ECTS*		SPS **Sustainable Electric Power System** *2 weeks = 5 ECTS*
	EBW **E-Business and Web Application** *2 weeks = 5 ECTS*	SNB **Surfing New Business Waves** *2 weeks = 5 ECTS*	SMM **Social Media Marketing** *2 weeks = 5 ECTS*
	EIR **Entrepreneurship** from Innovation to Realization *4 weeks = 10 ECTS*		EIM **Entrepreneurial Innovation Management** *2 weeks = 5 ECTS*
Electronics & Communication Technologies	CON **Computer Networks** *2 weeks = 5 ECTS*	MSD 1 **Building Microcontroller Spinning Display** *2 weeks = 5 ECTS*	WIR **Wireless Computing** *2 weeks = 5 ECTS*
	MSD 1 **Building Microcontroller Spinning Display** *2 weeks = 5 ECTS*	SPS **Sustainable Electric Power System** *2 weeks = 5 ECTS*	SMG **Smart Grids** *2 weeks = 5 ECTS*
			SPS **Sustainable Electric Power System** *2 weeks = 5 ECTS*
International Business & Communication	ICC **Intercultural Communication** *2 weeks = 5 ECTS*	ICC **Intercultural Communication** *2 weeks = 5 ECTS*	ICC **Intercultural Communication** *2 weeks = 5 ECTS*
	PER **Personal Skills** *2 weeks = 5 ECTS*	BUC **Business Communication** *2 weeks = 5 ECTS*	PER **Personal Skills** *2 weeks = 5 ECTS*
	ENG **English Language** *2 weeks = 5 ECTS*	ENG **English Language** *2 weeks = 5 ECTS*	ENG **English Language** *2 weeks = 5 ECTS*
Sustainability of buildings & urban areas	SUP **Sustainable Urban Planning** *2 weeks = 5 ECTS*		BTO **Building Tomorrow** sustainable off-grid housing *2 weeks = 5 ECTS*

Contents

Website Design



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WDM – Web Design and Innovative Multimedia Technologies

Module 1 (1 week)	Module 2 (1 week)	Module 3 (1 week)	Module 4 (1 week)
Web Programming	Picture Assembling & Graphics	Digital Animation Sound & Video	Course Project

Code: WDM IS1

Language: English

ECTS: 10 ECTS (4 weeks)

Term: 1–2

Prerequisites: General knowledge of website structure

Main Purpose:
Students will learn how to start and create a website from the beginning stage with wide understanding of its structure, purpose and process of combining different visual elements together. The course will also enable the students to improve an already existing website through usage of innovative multimedia technologies, like transferring picture, sound and animation by using modern tools.

Teaching:
Class sessions comprise a mixture of lectures, case studies and group work on exercises given by the teacher on daily basis.

Modules 1-3: 50 % of required workload is expected to be self-study, including exercises and preparation for the module assignment. Module 4: 90 % of the required workload is expected to be self-study, including group work and preparation for the Course Project.

Modules Evaluation:
To complete Modules 1-3 students have to prepare a project given by the teacher as Module Assignment, where they have to present what they have learned during the week. Presentation of the Module Assignment is expected to be oral and presented in front of the class on Monday morning the following week. Module Assignments supposed to be done individually.

To complete Module 4 students have to prepare a project which will be their Course Project. The topic of the Course Project is a free choice, however it needs to include certain elements from the previous 3 modules. Any exception of this rule has to be accepted by head of the program. Moreover, Course Project supposed to be done in groups (2-4 members) and presented in front of the class.

Everyday attendance is compulsory. In case of illness documentation from doctor is required, and only one day off could be accepted.

Course Evaluation:
Student can choose either to be graded according to the Danish grading standards or to receive the approved/failed grade.

To approve the whole course student needs to comply the following:
- all necessary modules' assignments must be approved by teacher
- the Course Project needs to be handed in before the deadline and presented in front of the class, a short written description of project needs to be prepared as well
- full attendance during all modules

To receive specific grade, besides mentioned above, student has to attend an official oral examination, where questions about theoretical aspects of the Course Project will be asked.

Grading Criteria:
Mark 12: Awarded to students who have shown excellent comprehension of the abovementioned competences. A few minor errors and shortfalls are acceptable. Mark 02: Awarded to students for a just acceptable level of comprehension of the required competences.

Module 1: Web Programming (week 1)

Purpose:

To provide wide explanation of programming language. The purpose is to introduce a set of theories, tools and practicable methods in order to create a website by using basic web pro-gramming and design principles. Additionally the course will be focused on concepts and techniques for developing User-Centered websites.

Topics:

- XHTML
- CSS
- Java script
- ASP.NET
- Human computer interaction
- The user-centered development life cycle
- Rules for web layout

Having completed this course, students should have a solid knowledge about:

- human computer interaction and design rules for the web
- creating a simple websites using eXtensible Hyper Text Markup Language (XHTML)
- formatting webpage by using Cascading Style Sheets (CSS)

Module 2: Picture Assembling and Graphics (week 2)

Purpose:

To introduce students the principles of graphics and digital photo montage tools. The goal is to make students comfortable with using and exploring the usage of professional digital me-dia tools.

Topics:

- Design Principles
- Vector Graphics
- Bitmapped Images
- Color
- Introduction to Adobe Photoshop
- Text, Typography and Hypermedia

Having completed this module, students should have a solid knowledge about:

- Computer Graphics
- Design principles for multimedia
- Using digital media tools like e.g. Adobe Photoshop

Module 3: Digital Animation, Sound and Video (week 3)

Purpose:

To introduce students to the principles of video, animation and other motion digital tools. The goal is to make students comfortable with using and exploring the usage of professional digi-tal media tools.

Topics:

- Animation
- Video
- Sound
- XML and Multimedia (SVG)
- Adobe Flash for working with graphics and animations
- Design Principles

Having completed this module, students should have a solid knowledge about:

- Video, Animation and Sound
- XML and Multimedia
- Design principles for multimedia
- using digital media tools like Adobe Flash

Module 4: Course Project (week 4)

Purpose:

To enable students to improve their web and digital multimedia skills which they have gained during 3 weeks, and motivate them to continue their development by combining different techniques into one project.

An additional goal is to enhance students to work together at an international environment.

Topics:

- Design principles
- Interaction between graphics, video, and web programming
- Reason and future of using digital multimedia
- Group work supervision

Having completed this module, students should have a solid knowledge about:

- creating and designing a webpage and potential of improving an existing one
- combining different digital multimedia together
- analyzing the design and improving the usability of web or digital tool

WEE – Web Engineering

Code: WEE IS1

Language: English

ECTS: 5 ECTS (2 weeks)

Term: 3

Prerequisites: Basic knowledge of programming or completion of the WDM course

Main Purpose:
To introduce students to basic principles of the Web Engineering Process by covering web development concepts, methods, tools and techniques.

Secondary purpose:
Learn to implement smaller Web applications in ASP.NET and C#.

Topics:
- Requirements Engineering for Web Applications
- Modeling Web Applications
- Web Application Architectures
- Usability of Web Applications
- The Web Application Development Process
- Web Project Management
- Security for Web Applications
- Testing Web Applications
- Operation and Maintenance of Web Applications
- Introduction to ASP.NET with C#

Having completed this course, students should have a solid knowledge about:
- the process of developing Web applications
- creating Web applications with database connection in ASP.NET and C#

Teaching:
Class sessions comprise a mixture of lectures, case studies and group work on exercises given by the teacher on daily basis. 50 % of required workload is expected to be self-study, including exercises and preparation for the Course Project.

Course Evaluation:
Student can choose either to be graded according to the Danish grading standards or to re-ceive the approved/failed grade.

To approve the course student needs to comply the following:
- all necessary assignments must be approved by teacher
- the Course Project needs to be handed in before the deadline and presented in front of the class, a short written description of project needs to be prepared as well
- full attendance during whole course

Everyday attendance is compulsory. In case of illness documentation from doctor is required, and only one day off could be accepted. To receive specific grade, besides mentioned above, student has to attend an official oral examination, where questions about theoretical aspects of the Course Project will be asked.

Grading Criteria:
Mark 12: Awarded to students who have shown excellent comprehension of the above-mentioned competences. A few minor errors and shortfalls are acceptable. Mark 02: Awarded to students for a just acceptable level of comprehension of the required competences.

MDE – Media Design

Code: MDE IS1

Language: English

ECTS: 5 ECTS (2 weeks)

Term: 1, 3

Prerequisites: General knowledge about multimedia

Main Purpose:
To introduce students to basic principles of each media type - text, graphics, audio, animation and video - describing their digitization and progressing into issues that arises when media are combined; interaction provided by scripting and multimedia distributed over networks

Topics:
- Vector Graphics
- Bitmapped Images
- Colour
- Animation
- Video
- Sound
- Text, Typography and Hypermedia
- XML and Multimedia (SVG)
- Design Principles

Having completed this course, students should have a solid knowledge about:
- Computer Graphics
- Design Principles for multimedia
- Video, Animation and Sound
- XML and Multimedia

Teaching:
Class sessions comprise a mixture of lectures, case studies and group work on exercises given by the teacher on daily basis. 50 % of required workload is expected to be self-study, including exercises and preparation for the Course Project.

Course Evaluation:
Student can choose either to be graded according to the Danish grading standards or to receive the approved/failed grade.

To approve the course student needs to comply the following:
- all necessary assignments must be approved by teacher
- the Course Project needs to be handed in before the deadline and presented in front of the class, a short written description of project needs to be prepared as well
- full attendance during whole course

Everyday attendance is compulsory. In case of illness documentation from doctor is required, and only one day off could be accepted. To receive specific grade, besides mentioned above, student has to attend an official oral examination, where questions about theoretical aspects of the Course Project will be asked.

Grading Criteria:
Mark 12: Awarded to students who have shown excellent comprehension of the abovementioned competences. A few minor errors and shortfalls are acceptable. Mark 02: Awarded to students for a just acceptable level of comprehension of the required competences.

Website Development

	Term 1	Term 2	Term 3
Website Development	WEE **Web Engineering** *2 weeks = 5 ECTS*	DES **Data Security** (with focus on web) *2 weeks = 5 ECTS*	WEE **Web Engineering** *2 weeks = 5 ECTS*

Term 1	01 July–12 July 2013
Term 2	15 July–26 July 2013
Term 3	29 July–9 August 2013

WEE – Web Engineering

Term: 1, 3

For description see page 8.

DES – Data Security

Code: DES IS1

Language: English

ECTS: 5 ECTS (2 weeks)

Term: 2

Prerequisites: Basic math knowledge and basic programming skills

Main Purpose:
The main purpose is to qualify to identify and protect against threats against computer sys-tems and the data of computer systems.

Topics:
- Security threats
- Private key and public key encryption systems
- Digital signatures and message digests
- Access control and protection mechanisms
- Specific Web threats

Having completed this module, students should have a solid knowledge about:
- identifying various threats
- various protection mechanisms
- using and implementing various data encryption technologies
- protecting against Web specific Web threats

Teaching:
Class sessions comprise a mixture of lectures, case studies and a group work on exercises given by the teacher on daily basis. 50 % of required workload is expected to be self-study, including exercises and preparation for the Course Project.

Course Evaluation:
Student can choose either to be graded according to the Danish grading standards or to re-ceive the approved/failed grade.

To approve the course student needs to comply the following:
- all necessary assignments must be approved by the teacher
- the Course Project needs to be handed in before the deadline and presented in front of the class, a short written description of the project needs to be prepared as well
- full attendance during all modules

Everyday attendance is compulsory. In case of illness documentation from a doctor is re-quired, and only one day off could be accepted. To receive a specific grade, besides mentioned above, student has to attend an official oral examination, where questions about theoretical aspects of the Course Project will be asked.

Grading Criteria:
Mark 12: Awarded to students who have shown excellent comprehension of the above-mentioned competences. A few minor errors and shortfalls are acceptable. Mark 02: Awarded to students for a just acceptable level of comprehension of the required competences.

Software Programming

	Term 1	Term 2	Term 3
Software Programming	SDJ **Java Programming** *2 weeks = 5 ECTS*	SGA **Serious Games** *2 weeks = 5 ECTS*	MOB **Mobile Applications** *2 weeks = 5 ECTS*
	LRL **Lego Robot Lab** *2 weeks = 5 ECTS*		MSD 2 **Programming Microcontroller** *2 weeks = 5 ECTS*
	MOB **Mobile Applications** *2 weeks = 5 ECTS*		LRL **Lego Robot Lab** *2 weeks = 5 ECTS*

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SDJ – Java Programming

Code: SDJ IS1

Language: English

ECTS: 5 ECTS (2 weeks)

Term: 1

Prerequisites: General admittance requirements

Main Purpose:
To provide students with the qualifications needed to understand the core concepts and techniques of programming.

Topics:
- Basics of Java
- Classes and Objects
- Inheritance
- Collections
- Exceptions
- Databases
- GUI programming

Having completed this course, students should have a solid knowledge about:
- Demonstrate the knowledge of documentation of analysis and design
- Implement smaller programs in Java with persistence
- implement smaller programs in Java including simple GUIs
- Use best practices for writing and documenting Java source code

Teaching:
Class sessions comprise a mixture of lectures, case studies and group work on exercises given by the teacher on daily basis. 50 % of required workload is expected to be self-study, including exercises and preparation for the Course Project.

Course Evaluation:
Student can choose either to be graded according to the Danish grading standards or to receive the approved/failed grade.

To approve the course student needs to comply the following:
- all necessary assignments must be approved by teacher
- the Course Project needs to be handed in before the deadline and presented in front of the class, a short written description of project needs to be prepared as well
- full attendance during whole course

Everyday attendance is compulsory. In case of illness documentation from doctor is required, and only one day off could be accepted. To receive specific grade, besides mentioned above, student has to attend an official oral examination, where questions about theoretical aspects of the Course Project will be asked.

Grading Criteria:
Mark 12: Awarded to students who have shown excellent comprehension of the abovementioned competences. A few minor errors and shortfalls are acceptable. Mark 02: Awarded to students for a just acceptable level of comprehension of the required competences.

LRL – Lego Robot Lab

Code: LRL IS1

Language: English

ECTS: 5 ECTS (2 weeks)

Term: 1, 3

Prerequisites: General admittance requirements

Main Purpose:
During this course the student will learn to program an embedded system: the LEGO Mind-storms NXT robot in the high level language JAVA. We will look at issues relating to pro-gramming embedded systems and digital control systems.

Topics:
- Real world interaction
- Sensor input and responds to stimuli: light, pressure, ultrasound, sound, sampling, accuracy
- Output: motor control, sound, LCD display
- How to control a system with real world interaction
- Using the high level language JAVA for programming embedded systems.

Teaching:
Class sessions comprise a mixture of lectures, case studies and group work on exercises given by the teacher on daily basis. The students will build a robot and complete a programming project towards the end of the course. 50 % of required workload is expected to be self-study, including exercises and preparation for the Course Project.

Course Evaluation:
Student can choose either to be graded according to the Danish grading standards or to re-ceive the approved/failed grade.

To approve the course student needs to comply the following:
- all necessary assignments must be approved by teacher
- the Course Project needs to be handed in before the deadline and presented in front of the class, a short written description of project needs to be prepared as well
- full attendance during whole course

Everyday attendance is compulsory. In case of illness documentation from doctor is required, and only one day off could be accepted. To receive specific grade, besides mentioned above, student has to attend an official oral examination, where questions about theoretical aspects of the Course Project will be asked.

Grading Criteria:
Mark 12: Awarded to students who have shown excellent comprehension of the above-mentioned competences. A few minor errors and shortfalls are acceptable. Mark 02: Awarded to students for a just acceptable level of comprehension of the required competences.

SGA – Serious Games

Term: 2

Description is coming soon.

MOB – Mobile Applications

Code: MOB IS1

Language: English

ECTS: 5 ECTS (2 weeks)

Term: 1, 3

Prerequisites:
Knowledge of programming, client server and computer network or completion of the SDJ /eventually LRL course.

Main Purpose:
- To give the student knowledge about the technical details of the Android platform, the tool chain and Android Virtual Device Manager (AVD).
- To gain knowledge of the common sensors on Android devices.
- To design, implement and test Android Applications (apps).
- To gain knowledge about designing and implementing user interfaces.

Topics:
- Architecture of the Android platform
- Overview of the Android API
- User interface design. XML introduction
- Introduction to the Android development tool chain
- Design, implementation and testing of Android Applications (apps)
- Interfacing to sensors.

Having completed this course, students should have a solid knowledge about:
- understanding the architecture of the Android platform
- designing, implementing and testing small applications by using sensors on an Android device

Teaching:
Class sessions comprise a mixture of lectures, case studies and group work on exercises given by the teacher on daily basis. 50 % of required workload is expected to be self-study, including exercises and preparation for the Course Project.

Course Evaluation:
Student can choose either to be graded according to the Danish grading standards or to receive the approved/failed grade.

To approve the course student needs to comply the following:
- all necessary assignments must be approved by teacher
- the Course Project needs to be handed in before the deadline and presented in front of the class, a short written description of project needs to be prepared as well
- full attendance during whole course

Everyday attendance is compulsory. In case of illness documentation from doctor is required, and only one day off could be accepted. To receive specific grade, besides mentioned above, student has to attend an official oral examination, where questions about theoretical aspects of the Course Project will be asked.

Grading Criteria:
Mark 12: Awarded to students who have shown excellent comprehension of the abovementioned competences. A few minor errors and shortfalls are acceptable. Mark 02: Awarded to students for a just acceptable level of comprehension of the required competences.

MSD 2 – Programming Microcontroller

Code: MSD IS2

Language: English

ECTS: 5 ECTS (2 weeks)

Term: 3

Prerequisites:
Basic knowledge of programming (Computer Architecture and C-Programming)or completion of the MSD 1 course

Main Purpose:
To provide students with the qualifications needed to understand central concepts and char-acteristics about real-time programming. And to give students the knowledge about electron-ics used to interface micro-controllers to a number of sensors and actuators.

Topics:
Real-time Programming:
- C-Programming
- Introduction to MicroC/OS-II Real-time OS
- Introduction to AVR 8-bit RISC micro controllers
- Real-time concepts
    - Tasks
    - Scheduling
    - Memory management
    - Resource sharing
    - Synchronisation
    - Priority – static, dynamic
    - Priority Inversion
    - Timers
    - Clocks
    - Semaphores

Interfacing and Electronics:
- Introduction to understand datasheets for electronics components
- Passive components
- Relay drivers
- Digital components
- H-Bridge
- Analogue to digital and visa versa converters
- Printed Circuit board design – schematics and PCB

Test:
- Unit test in C
- Simple integration test

Having completed this module, students should be able to:
- use simple real-time operating systems
- understand timers and clocks, and how they are used in real-time programming
- understand synchronisation avoiding dead-locks
- understand memory management, resource sharing and control
- write simple programs in C
- design and construct real-time systems using MicroC/OS-II and C-programming
- design simple electronic hardware interfaces to sensors and actuators
- have knowledge to read datasheets for electronics components

Resources:
- Paul Scherz, "Practical Electronics for Inventors", 2nd edition McGraw-Hill, 2007, ISBN: 0-07-145281-8
- Jean J. Labrosse, "MicroC/OS-II The Real-time Kernel", 2nd edition Elsevier, 2002, ISBN: 1-57820-103-9
- Additional notes and on-line books

Teaching:
Class sessions comprise a mixture of lectures, case studies and the group work on exercises given by the teacher on daily basis. 50 % of required workload is expected to be self-study, including exercises and preparation for the Course Project.

Course Evaluation:
Student can choose either to be graded according to the Danish grading standards or to receive the approved/failed grade.

To approve the course student needs to comply the following:
- all necessary assignments must be approved by the teacher
- the Course Project needs to be handed in before the deadline and presented in front of the class, a short written description of the project needs to be prepared as well
- full attendance during all modules

Everyday attendance is compulsory. In case of illness documentation from a doctor is re-quired, and only one day off could be accepted. To receive a specific grade, besides mentioned above, student has to attend an official oral examination, where questions about theoretical aspects of the Course Project will be asked.

Grading Criteria:
Mark 12: Awarded to students who have shown excellent comprehension of the above-mentioned competences. A few minor errors and shortfalls are acceptable. Mark 02: Awarded to students for a just acceptable level of comprehension of the required competences.

Entrepreneurship & Business Development

	Term 1	Term 2	Term 3
Entrepreneurship & Business Development	SMM **Social Media Marketing** *2 weeks = 5 ECTS*		SPS **Sustainable Electric Power System** *2 weeks = 5 ECTS*
	EBW **E-Business and Web Application** *2 weeks = 5 ECTS*	SNB **Surfing New Business Waves** *2 weeks = 5 ECTS*	SMM **Social Media Marketing** *2 weeks = 5 ECTS*
	EIR **Entrepreneurship** from Innovation to Realization *4 weeks = 10 ECTS*		EIM **Entrepreneurial Innovation Management** *2 weeks = 5 ECTS*

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Term 3 29 July–9 August 2013

SMM – Social Media Marketing

Code: SMM IS1

Language: English

ECTS: 5 ECTS (2 weeks)

Term: 1, 3

Prerequisites: General knowledge

Main Purpose:
Students will learn how to effectively use social media in their future professional life: fromprofessional social networking to developing a company's social media marketing strategy.

Topics:
- Social media trends
- Social media marketing
- Professional and business uses of social media
- Content strategy
- Management & monitoring
- Social media metrics/ROI
- SEO
- Blogging
- Reputation management
- Geolocation marketing
- Social media policies and guidelines

Having completed this course, students should have a solid knowledge about:
- an improved understanding of social media and it's different uses
- identifying and analyzing the key social media platforms for specific target groups and business goals
- the processes involved in managing and monitoring social media efforts
- identifying and using metrics and monitoring tools and optimize effectiveness/ROI
- designing a social media marketing or communication strategy for a company or organization
- developing a social media policy

Teaching:
Class sessions comprise a mixture of lectures, interactive discussions, case studies, case presentations, problem solving, and a group project. 50 % of required workload is expected to be self-study, including exercises and preparation for the Course Project.

Course Evaluation:
Student can choose either to be graded according to the Danish grading standards or to receive the approved/failed grade.

To approve the course student needs to comply the following:
- all necessary assignments must be approved by teacher
- the Course Project needs to be handed in before the deadline and presented in front of the class, a short written description of project needs to be prepared as well

Everyday attendance is compulsory. In case of illness documentation from doctor is required, and only one day off could be accepted. To receive specific grade, besides mentioned above, student has to attend an official oral examination, where questions about theoretical aspects of the Course Project will be asked.

Grading Criteria:
Mark 12: Awarded to students who have shown excellent comprehension of the abovementioned competences. A few minor errors and shortfalls are acceptable. Mark 02: Awarded to students for a just acceptable level of comprehension of the required competences.

EBW – E-Business & Web Application

Code: EBW IS1

Language: English

ECTS: 5 ECTS (2 weeks)

Term: 1

Prerequisites: Basic knowledge in economic or information technology

Main Purpose:
This course introduces electronic commerce; also known as E-business, or the process of electronically buying and selling goods, services, and information through computer networks, including the internet. The course examines how E-commerce is being conducted and man-aged as well as assessing its major opportunities, limitation, issues, and risks.

Having completed this course, students should have a solid knowledge about:
· defining electronic commerce and the major types of transactions, as well as describes the benefits and limitations of E-commerce
· examining the types of E-marketplaces, including issues in E-markets such as competition, liquidity, quality, and success factors, and impacts of E-markets on business process and organisation
· security issues involved in conducting business transactions on the internet and develop dynamic and interactive e-business applications
· the objectives of Web advertising, including major advertising methods and online promo-tions
· infrastructure and standards requirements for B2B commerce. Including serves, software, security, telecommunications networks and protocols, EDI, Extranets, and XML

Teaching:
Class sessions comprise a mixture of lectures, interactive discussions, case studies, case presentations, problem solving, and a group project. 50 % of required workload is expected to be self-study, including exercises and preparation for the Course Project.

Course Evaluation:
Student can choose either to be graded according to the Danish grading standards or to receive the approved/failed grade.

To approve the course student needs to comply the following:
· all necessary assignments must be approved by teacher
· the Course Project needs to be handed in before the deadline and presented in front of the class, a short written description of project needs to be prepared as well
· full attendance during whole course

Everyday attendance is compulsory. In case of illness documentation from doctor is required, and only one day off could be accepted. To receive specific grade, besides mentioned above, student has to attend an official oral examination, where questions about theoretical aspects of the Course Project will be asked.

Grading Criteria:
Mark 12: Awarded to students who have shown excellent comprehension of the abovementioned competences. A few minor errors and shortfalls are acceptable. Mark 02: Awarded to students for a just acceptable level of comprehension of the required competences.

SNB – Surfing New Business Waves

Code: SNB IS1

Language: English

ECTS: 5 ECTS (2 weeks)

Term: 2

Prerequisites: General knowledge

Main Purpose:
To identify some of the most relevant macrotrends for business and to understand what they mean on a more personal microlevel. The course focuses on training creative understanding of trends and on developing new busi-ness models for established industries and developing the business models for new industries.

Topics:
- Macrotrends
- New thinkers, trendsetters and lead users
- Consumer trends
- Research vs. instinct
- Thinking out of the box
- The business model
- Identifying and analyzing current business models
- New business models (e.g. Collaborative Consumption, Multisided Platforms, Long Tail Businesses, Global Business Models)

Having completed this course, students should have a solid knowledge about:
- identifying and analyzing trends on consumer and business markets
- the new trends in business models and understand their background
- the concept of business models and develop innovative and game changing business models
- analyzing and identifying industry traditions and dogmas – in order to be able to challenge them
- methods to think out of the box in business development
- tools to present a convincing business case

Teaching:
Class sessions comprise a mixture of lectures, interactive discussions, case studies, case presentations, problem solving, and a group project. 50 % of required workload is expected to be self-study, including exercises and preparation for the Course Project.

Course Evaluation:
Student can choose either to be graded according to the Danish grading standards or to re-ceive the approved/failed grade.

To approve the course student needs to comply the following:
- all necessary assignments must be approved by teacher
- the Course Project needs to be handed in before the deadline and presented in front of the class, a short written description of project needs to be prepared as well
- full attendance during the course

Everyday attendance is compulsory. In case of illness documentation from doctor is required, and only one day off could be accepted. To receive specific grade, besides mentioned above, student has to attend an official oral examination, where questions about theoretical aspects of the Course Project will be asked.

EIR – Entrepreneurship from Innovation to Realization

Code: EIR IS1

Language: English

ECTS: 10 ECTS (4 weeks)

Term: 1–2

Main Purposes:

- to learn through theory, experience and reflection
- to discover and exploit your strengths
- to learn how to cope with your weaknesses
- to identify and exploit real-life opportunities
- to write a business plan

Prerequisites:

The course is based on the group work. The individual student's benefit from the course will depend on the involvement of all members enrolled in the class. Therefore in order to partici-pate in the course besides Application Form, a written Motivation Letter must be provided and approved.

The Motivation Letter cannot be longer than 10 lines (Verdena, 12) and should provide explanation to the following question: Why you are motivated to join Entrepreneurship course? Submit your Motivation Letter together with filled Application Form.

Literature

- Osterwalder, A. & Peigner, Y. (2010) "Business Model Generation"
- Bessant, J. & Tidd, J (2007) "Innovation & entrepreneurship"
- Plus relevant academic articles

Having completed this module, students should have a solid knowledge about:
Identifying and creating entrepreneurial opportunities and the exploitation of these.

Teaching:
Class sessions comprise a mixture of lectures, workshops and group work. 50 % of required workload is expected to be self-study, including exercises and preparation for the Course Project.

Course Evaluation:
Student can choose either to be graded according to the Danish grading standards or to receive the approved/failed grade.

To approve the course student needs to comply the following:
- all necessary assignments and presentations must be approved by teacher
- Using relevant theory the all students must write a course project, in which they reflect on what they have learned and experienced throughout the course, including a business plan. The project needs to be handed in before the deadline and approved.
- full attendance during all modules

Everyday attendance is compulsory. In case of illness documentation from doctor is required, and only one day off could be accepted.

Grading Criteria:
Mark 12: Awarded to students who have shown excellent comprehension of the abovementioned competences. A few minor errors and shortfalls are acceptable. Mark 02: Awarded to students for a just acceptable level of comprehension of the required competences.

EIM – Entrepreneurial Innovation Management – for young & mature enterprises

Introduction

The objective is to give students an understanding of why and how innovation is business critical in both startups and established companies. Examples from real life businesses will be used to exemplify the theoretical material.

Furthermore the course strives to enable students to gain skills in relation to planning, participation and evaluation of the innovation processes, both through theoretical analysis and through practical application where innovation management tools such as Gantt Charts and the 3rd. generation stage-gate model, are used.

Code: EIM IS1

Language: English

ECTS: 5 ECTS (2 weeks)

Term: 3

Prerequisites: None

Literature

The course will mainly be based on academic articles and extracts, like e.g.:

- Managing Innovation: integrating technological, market and organizational change 4th edi-tion, Af Joe Tidd og John Bessant
- Resolving the capability-Rigidity Paradox in New Product innovation af Kwaku Atuahene-Gima, Publiseret i Journal of Marketing Vol. 69 Iss 4 pp. 61-83
- "Innovation & entrepreneurship" af Bessant & Tidd: www.iande.info, Business Model Generation af Osterwalder. Og Effectual Entrepreneurship af Read, Sarasvathy, Dew, Wiltbank og Ohlson.

Teaching:

Class sessions comprise a mixture of lectures, workshops and group work.

Course Evaluation:

Student can choose either to be graded according to the Danish grading standards or to re-ceive the approved/failed grade.

To approve the course student needs to comply the following:

- all necessary assignments and presentations must be approved by teacher
- Using relevant theory the all students must write a course project, in which they reflect on what they have learned and experienced throughout the course, including a business plan. The project needs to be handed in before the deadline and approved.
- full attendance during all modules

Everyday attendance is compulsory. In case of illness documentation from doctor is required, and only one day off could be accepted.

Grading Criteria:

Mark 12: Awarded to students who have shown excellent comprehension of the above-mentioned competences. A few minor errors and shortfalls are acceptable. Mark 02: Awarded to students for a just acceptable level of comprehension of the required competences.

SPS - Sustainable Electric Power System

Code: SPS IS1

Language: English

ECTS: 5 ECTS (2 weeks)

Term: 3

Prerequisites: General knowledge of economics, mechanics and electrical grids

Main Purpose:
The course is intended to give the student a basic understanding and design skills of sustain-able electric energy system with emphasis on smart grids and renewable energy sources, like wind turbines or solar panels etc.

Topics:
- Architectural Design of system and official regulations
- Understanding the function of renewable energy sources (wind turbines and solar panels, hydro plants etc)
- Calculating annual power production from power plant
- Understanding how mechanical energy is being converted into electricity based on dams and hydro power plants
- Understanding how electricity is distributed and transported in smart grids
- National habits and impact on energy consumptions
- Sustainable energy
- Analyze of world's samples of smart grid solutions
- Advantages and disadvantages of different load balancing technologies (batteries, boreholes, water tanks, hydrogen fuel cells)
- Centralized vs. decentralized smart grids

Having completed this course, students should have a solid knowledge about:
- calculating and design the smart grid system
- calculate voltage installations with a specific capacity
- be able to communicate with electric grid specialists
- calculating the cost benefit of different architectures
- determining the best load balancing strategies for given geographical areas
- understanding financial benefits of sustainable electric power systems

Resources:
- Smart Grid, Fundamentals of Design and Analysis, James Momoh, Wiley 2012.
- Smart Grid, Integrating renewable, Distributed & Efficient Energy, Fereidoon P. Sioshansi, Elsevier2012
- Articles about usage of smart grids

Teaching:
Class sessions comprise a mixture of lectures and laboratory workshops, including interactive discussions, case studies, case presentations, problem solving, and a group project. 40 % of required workload is expected to be self-study, including exercises and preparation for the Course Project.

Course Evaluation:
Student can choose either to be graded according to the Danish grading standards or to receive the approved/failed grade.

To approve the course student needs to comply the following:
- all necessary assignments must be approved by the teacher
- the Course Project needs to be handed in before the deadline and presented in front of the class, a short written description of the project needs to be prepared as well
- full attendance during whole course

Everyday attendance is compulsory. In case of illness documentation from a doctor is required, and only one day off could be accepted. To receive a specific grade, besides mentioned above, student has to attend an official oral examination, where questions about theoretical aspects of the Course Project will be asked.

Grading Criteria:
Mark 12: Awarded to students who have shown excellent comprehension of the above-mentioned competences. A few minor errors and shortfalls are acceptable. Mark 02: Awarded to students for a just acceptable level of comprehension of the required competences.

Electronics & Communication Technologies

	Term 1	Term 2	Term 3
Electronics & Communication Technologies	CON **Computer Networks** *2 weeks = 5 ECTS*	MSD 1 **Building Microcontroller Spinning Display** *2 weeks = 5 ECTS*	WIR **Wireless Computing** *2 weeks = 5 ECTS*
	MSD 1 **Building Microcontroller Spinning Display** *2 weeks = 5 ECTS*	SPS **Sustainable Electric Power System** *2 weeks = 5 ECTS*	SMG **Smart Grids** *2 weeks = 5 ECTS*
			SPS **Sustainable Electric Power System** *2 weeks = 5 ECTS*

Term 1 01 July–12 July 2013

Term 2 15 July–26 July 2013

Term 3 29 July–9 August 2013

CON – Computer Networks

Code: CON IS1

Language: English

ECTS: 5 ECTS (2 weeks)

Term: 1

Prerequisites:
Students have followed the course in object oriented software development or similar course at their home institution.

Main Purpose:
To gain a basic understanding of computer networks and the protocols used in the Internet.

Topics:
- The TCP/IP network model
- Application level protocols (SMTP, POP3, HTTP etc)
- TCP/UDP
- IP, routing
- Ethernet

Having completed this course, students should have a solid knowledge about:
- networks at various levels

Teaching:
Class sessions comprise a mixture of lectures, interactive discussions, case studies, case presentations, problem solving, and a group project. 70 % of required workload is expected to be self-study, including exercises and preparation for the Course Project.

Course Evaluation:
Student can choose either to be graded according to the Danish grading standards or to receive the approved/failed grade.

To approve the course student needs to comply the following:
- all necessary assignments must be approved by the teacher
- the Course Project needs to be handed in before the deadline and presented in front of the class, a short written description of the project needs to be prepared as well
- full attendance during the course

Everyday attendance is compulsory. In case of illness documentation from a doctor is required, and only one day off could be accepted. To receive a specific grade, besides mentioned above, student has to attend an official oral examination, where questions about theoretical aspects of the Course Project will be asked.

Grading Criteria:
Mark 12: Awarded to students who have shown excellent comprehension of the abovementioned competences. A few minor errors and shortfalls are acceptable. Mark 02: Awarded to students for a just acceptable level of comprehension of the required competences.

MSD 1 – Building Microcontroller Spinning Display

Code: MSD IS1

Language: English

ECTS: 5 ECTS (2 weeks)

Term: 1, 2

Prerequisites:
Basic knowledge of electronics and programming or completion of the SDJ / LRL course

Main Purpose:
This course is a practical course where the student will build a spinning display from scratch including building the electronics and programming the micro controller controlling the spinning motor and the display.

Topics:
ELECTRONIC PART:
- Drawing schematics using CAD software
- Drawing Printed Circuit Board (PCB) using CAD software
- Making a PCB
- Soldering components onto the PCB
- Sensors/Actuators

PROGRAMMING PART:
- C-Programming
- Timing of events
- Interrupt handling
- Led drivers
- Serial communication

Having completed this course, students should have a solid knowledge about:
- basic micro controlled systems and how to interface micro controllers to different sensors and actuators
- constructing and building the electro-mechanical systems
- programming microcontrollers in C

Teaching:
Class sessions comprise a mixture of lectures, case studies and a group work on exercises given by the teacher on daily basis. 50 % of required workload is expected to be self-study, including exercises and preparation for the Course Project.

Course Evaluation:
Student can choose either to be graded according to the Danish grading standards or to receive the approved/failed grade.

To approve the course student needs to comply the following:
- all necessary assignments must be approved by the teacher
- the Course Project needs to be handed in before the deadline and presented in front of the class, a short written description of the project needs to be prepared as well
- full attendance during whole course

Everyday attendance is compulsory. In case of illness documentation from a doctor is required,and only one day off could be accepted. To receive a specific grade, besides mentioned above, student has to attend an official oral examination, where questions about theoretical aspects of the Course Project will be asked.

Grading Criteria:
Mark 12: Awarded to students who have shown excellent comprehension of the abovementioned competences. A few minor errors and shortfalls are acceptable. Mark 02: Awarded to students for a just acceptable level of comprehension of the required competences.

WIR – Wireless Computing

Code: WIR IS1

Language: English

ECTS: 5 ECTS (2 weeks)

Term: 3

Prerequisites:
Students have followed the courses SDJ, WDD, or similar courses at your home institution, that are about basic programming and skills and knowledge about network.

Main Purpose:
- to give the student knowledge about wireless communications, networks and program-ming
- to qualify the student to make qualified choices of technology when using wireless com-munications and networks
- to qualify the student to implement software for different types of wireless devices

Topics:
- Wireless communication technology
- Antennas
- Wireless transmission
- Medium access control
- Wireless network technology
- Cellular wireless networks
- Wireless LANs
- Wireless communication systems
- GSM , GPRS, etc.
- Wireless LAN
- IEEE 802.11
- Bluetooth
- RFID
- IEEE 802.15.4/ZigBee
- Wireless devices
- Mobile phone
- Wireless modem
- RFID reader and tags
- Wireless sensor
- Wireless programmering
- WML
- J2MEs Mobile Information Device Profile MIDP
- Server side programming with servlets
- AT commands and SMS for wireless modem
- RFID programming
- Wireless sensor programming

Teaching:
Class sessions comprise a mixture of lectures, interactive discussions, case studies, case presentations, problem solving, and a group project. 70 % of required workload is expected to be self-study, including exercises and preparation for the Course Project.

Course Evaluation:
Student can choose either to be graded according to the Danish grading standards or to receive the approved/failed grade.

To approve the course student needs to comply the following:
- all necessary assignments must be approved by teacher
- the Course Project needs to be handed in before the deadline and presented in front of the class, a short written description of project needs to be prepared as well
- full attendance during the course

Everyday attendance is compulsory. In case of illness documentation from doctor is required, and only one day off could be accepted. To receive specific grade, besides mentioned above, student has to attend an official oral examination, where questions about theoretical aspects of the Course Project will be asked.

Grading Criteria:
Mark 12: Awarded to students who have shown excellent comprehension of the abovementioned competences. A few minor errors and shortfalls are acceptable. Mark 02: Awarded to students for a just acceptable level of comprehension of the required competences.

SPS – Sustainable Electric Power System

Terms: 2, 3

For description see page 27.

SMG – Smart Grids

Code: SMG IS1

Language: English

ECTS: 5 ECTS (2 weeks)

Term: 3

Prerequisites: Math and Programming

Main Purpose:
To give students an understanding of the fundamental concepts of smart grids from engineering or qualitative perspective. The course will enable the student to assess the possible bene-fits of smart grids, analyze the architectural features and understand the common problems found in the proposed solutions. Exercises will enable students to propose their own solutions and reflect upon interdisciplinary problems.

Topics:
- Architectural designs
- Government Regulations
- Energy source: conventional and renewable
- Monitoring: smart meters, WMAS, PMU
- Performance analysis: load and congestion algorithms
- Stability Analysis (load balancing of grid)
- Computational tools: optimization methods, heuristics, evolutionary (e.g. Simplex, Newton's Method)
- Interoperability and Security
- Case Studies: microgrid, Power System Units Commitment, ADP

Having completed this course, students should be able to:
- configure a Smart Grid for a house
- calculate the energy balancing (algorithm) for a house
- Know when to buy and when to sell electricity for a house

Teaching:
Class sessions comprise a mixture of lectures, interactive discussions, case studies, case presentations, problem solving, and a group project. 50 % of required workload is expected to be self-study, including exercises and preparation for the Course Project.

Course Evaluation:
In order to get approval student should provide the following:
- written report based on assignment given
- make an algorithm including household parameters
- Labview simulation programming of Micro Grid (house) using National Instru-ments myDAQ + mySmart

Student can choose either to be graded according to the Danish grading standards or to receive the approved/failed grade.

To approve the course student needs to comply the following:
- all necessary assignments must be approved by the teacher
- the Course Project needs to be handed in before the deadline and presented in front of the class, a short written description of the project needs to be prepared as well
- full attendance during the course

Everyday attendance is compulsory. In case of illness documentation from a doctor is re-quired, and only one day off could be accepted. To receive a specific grade, besides mentioned above, student has to attend an official oral examination, where questions about theoretical aspects of the Course Project will be asked.

International Business & Communication

	Term 1	Term 2	Term 3
International Business & Communication	ICC **Intercultural Communication** *2 weeks = 5 ECTS*	ICC **Intercultural Communication** *2 weeks = 5 ECTS*	ICC **Intercultural Communication** *2 weeks = 5 ECTS*
	PER **Personal Skills** *2 weeks = 5 ECTS*	BUC **Business Communication** *2 weeks = 5 ECTS*	PER **Personal Skills** *2 weeks = 5 ECTS*
	ENG **English Language** *2 weeks = 5 ECTS*	ENG **English Language** *2 weeks = 5 ECTS*	ENG **English Language** *2 weeks = 5 ECTS*

Term 1 01 July–12 July 2013

Term 2 15 July–26 July 2013

Term 3 29 July–9 August 2013

ICC – Intercultural Communication

Code: ICC IS1

Language: English

ECTS: 5 ECTS (2 weeks)

Term: 1, 2, 3

Prerequisites: Basic knowledge

Main Purpose:
To enable students to interact successfully with people from different cultures in their future professional lives.

Topics:
- Understanding culture
- Globalization and the challenges of intercultural communication
- Contrasting cultural values
- Culture shock
- High and low context language
- Oral and nonverbal communication patterns
- Global etiquette
- Business and social customs

Having completed this course, students should have a solid knowledge how:
- to understand to what extent and your reactions, behaviors, and practices are culturally conditioned.
- to identify, accept and adjust to cultural differences
- to identify and solve potential problems in intercultural communication
- to apply communication ideas and concepts to effective practices in intercultural commu-nication
- to understand the choices made in selecting messages and the consequences of such choices
- to adjust to culturally based differences in communication style and differences in percep-tion
- to apply and evaluate literature on cultural practices in a country or region.

Teaching:
Class sessions comprise a mixture of lectures, interactive discussions, case studies, case presentations, problem solving, and a group project. 50 % of required workload is expected to be self-study, including exercises and preparation for the Course Project.

Course Evaluation:
Student can choose either to be graded according to the Danish grading standards or to receive the approved/failed grade.

To approve the course student needs to comply the following:
- all necessary assignments must be approved by teacher
- the Course Project needs to be handed in before the deadline and presented in front of the class, a short written description of project needs to be prepared as well
- full attendance during the course

Everyday attendance is compulsory. In case of illness documentation from doctor is required, and only one day off could be accepted. To receive specific grade, besides mentioned above, student has to attend an official oral examination, where questions about theoretical aspects of the Course Project will be asked.

BUC – Business Communication

Code: BUC IS1

Language: English

ECTS: 5 ECTS (2 weeks)

Term: 2

Prerequisites: Basic knowledge

Main Purpose:
The main focus of this course is about communication in English in a business setting. Course topics will include: workplace communication (oral, written and electronic), intercultural as-pects of communication, business vocabulary, presentation techniques, business meetings, negotiation techniques, employment messages and job interviews. This is a practical course with a high amount of student participation. Role playing, group work and discussions will have a strong focus to ensure a high quantity of speaking activities and student involvement. This will assist students to develop their skills to assist them when they are ready to enter the workforce. A company study will also be included with either a company visit or a guest speaker.

Topics:
- Workplace communication (oral, written and electronic media)
- Intercultural Communication
- Business Vocabulary
- Presentation techniques
- Business meetings – Conducting and participating
- Negotiation techniques
- Employment messages and job interviews

Activities:
- Analysis and use of different media
- Group tasks
- Problem solving and case studies
- Role playing
- Discussions
- Oral Presentations
- Written activities
- Company visit and/or a guest speaker
- Final Exam – Group oral presentation

Role playing and Assignment Ideas:
- Students to conduct role plays of business meetings and/or job interviews, these could be recorded and played back for assessment and critiquing.
- Students could complete a job application that is relevant to their field.

Company Visit and/or Guest speaker
We aim to conduct a company visit and or invite guest speakers to discuss their roles in these companies and to relate directly to the course outline about business communication. We have the opportunity to visit Danish companies like: LEGO and Nissens, and have the guest lecture of the Director of 17 hundred and Superego.

Teaching:
Class sessions comprise a mixture of lectures, interactive discussions, case studies, case presentations, problem solving, and a group project. 50 % of required workload is expected to be self-study, including exercises and preparation for the Course Project.

Course Evaluation:
Student can choose either to be graded according to the Danish grading standards or to receive the approved/failed grade.

To approve the course student needs to comply the following:
- all necessary assignments must be approved by teacher
- the Course Project needs to be handed in before the deadline and presented in front of the class, a short written description of project needs to be prepared as well
- full attendance during the course

Everyday attendance is compulsory. In case of illness documentation from doctor is required, and only one day off could be accepted. To receive specific grade, besides mentioned above, student has to attend an official oral examination, where questions about theoretical aspects of the Course Project will be asked.

PER – Personal Skills

Code: PER IS1

Language: English

ECTS: 5 ECTS (2 weeks)

Term: 1, 3

Prerequisites: Basic knowledge

Main Purpose:
To discuss and use different tools to create self-development and to understand the elements of developing other employees in an organization. Secondary purpose is to understand how to manage, lead and coach other employees in an organization.

Topics:
- Vision – strategy
- Motivation and personal development theory
- Communication and presentation Theory
- Team work and team management
- Organizational Culture Theory
- Organizational Design Theory
- Management – Leadership – Coaching
- Change Management
- Performance Management
- Knowledge Management
- Value Management
- Quality Management
- Diversity Management
- Human Resource Management

Having completed this course, students should have a solid knowledge about:
- ability of using following topics in a dialog an establish his/her attitude towards the use and effects of using models related to the topics of the course.

Teaching:
Class sessions comprise a mixture of lectures, interactive discussions, case studies, case presentations, problem solving, and a group project. 50 % of required workload is expected to be self-study, including exercises and preparation for the Course Project.

Course Evaluation:
Student can choose either to be graded according to the Danish grading standards or to receive the approved/failed grade.

To approve the course student needs to comply the following:
- all necessary assignments must be approved by teacher
- the Course Project needs to be handed in before the deadline and presented in front of the class, a short written description of project needs to be prepared as well
- full attendance during the course

Everyday attendance is compulsory. In case of illness documentation from doctor is required, and only one day off could be accepted. To receive specific grade, besides mentioned above, student has to attend an official oral examination, where questions about theoretical aspects of the Course Project will be asked.

Grading Criteria:
Mark 12: Awarded to students who have shown excellent comprehension of the abovementioned competences. A few minor errors and shortfalls are acceptable. Mark 02: Awarded to students for a just acceptable level of comprehension of the required competences.

ENG – English Language

Code: ENG IS1

Language: English

ECTS: 5 ECTS (2 weeks)

Term: 1, 2, 3

Prerequisites:
Participants should already have a basic foundation and familiarity with reading and writing in English. Although this class covers some selected grammar, the main focus is on discussion of texts, group activities, debate, and presentations. Many students take this class, as it of-fers them the chance to gain confidence and verbally practice their English language skills.

Main Purpose:
To consolidate and develop communication skills in English through practical activities. To assist students to use the language effectively in various situations, to converse and to con-duct oral presentations in English. Role playing, group work and discussions will have a strong focus to ensure a high quantity of speaking activities. In addition vocabulary and grammar exercises will be included as required. This course will encourage and motivate students to communicate orally in English with confidence, using active class participation.

Topics:
· Selected topics for discussion are based on current events, global trends and social interest
Having completed this course, students should be able to:
· See a marked improvement in their: spoken English, reading and listening comprehension, vocabulary, conversation, pronunciation and grammar.
· Comprehend, summarise and discuss the main points of authentic texts about general or academic subjects.
· Converse freely and make short oral presentations in English.
· Succeed in communicating and comprehending the general message in most situations.

Teaching:
· Discussion, brainstorming and debates
· Group work and tasks
· Communication exercises
· Reading and listening comprehension
· Vocabulary and written exercises
· Role playing
· Selected grammar where required
· Conversation techniques
· Company visit and/or guest speaker
· Individual and group presentations

Course Evaluation:
Student can choose either to be graded according to the Danish grading standards or to receive the approved/failed grade.

To approve the course student needs to comply the following:
· all necessary assignments must be approved by teacher
· the Course Project needs to be handed in before the deadline and presented in front of the class, a short written description of project needs to be prepared as well
· full attendance during the course

Everyday attendance is compulsory. In case of illness documentation from doctor is required, and only one day off could be accepted. To receive specific grade, besides mentioned above, student has to attend an official oral examination, where questions about theoretical aspects of the Course Project will be asked.

Sustainability of buildings & urban areas

	Term 1	Term 2	Term 3
Sustainability of buildings & urban areas	SUP **Sustainable Urban Planning** *2 weeks = 5 ECTS*		BTO **Building Tomorrow** sustainable off-grid housing *2 weeks = 5 ECTS*

Term 1 01 July–12 July 2013

Term 2 15 July–26 July 2013

Term 3 29 July–9 August 2013

SUP – Sustainable Urban Planning

Term: 1

Description is coming soon.

BTO – Building Tomorrow (sustainable off-grid housing)

Term: 3

Description is coming soon.