

# Inspiration catalogue

- for potential DCAC-Courses



# What is DCAC

The Consortium represents the whole range of more than 150 different VET-programs and ongoing education for VET lecturers and VET managers. Our VET courses lead to both highly practical and very technical jobs.

Changing the world can mean many things at DCAC: You can change your own world by educating yourself and thereby gaining the job that will give you the life you want. Through your education you can also develop and influence the sector you work in and thereby change the world of food experiences, construction techniques etc.

We always combine craftsmanship with innovation and development, so our students have the capability to do the best job possible and at the same time challenge the traditional way of doing things, so they remain the best in the field.

Therefore, DCAC strives to get our students prepared to change the world by educating the workforce of tomorrow.

At DCAC we have 5 strategic aims that all have this in mind:

- DCAC partners are appointed by the Danish Ministry of Education to be Knowledge center for Food, Healthcare, and Technology, Knowledge center for Automation and Robot and Knowledge center for green Buildings and Technology.
- Work with changing learning environments, where we challenge habits and traditions by exploring new ways of teaching and developing our colleges in both physical and pedagogical ways.
- A strong focus on quality.
- Our colleges are close to the labor market, and we work closely with all relevant stakeholders in order to provide the best education and supply the workforce with the expertise and skills they need.
- We believe in having a solid supply of courses and therefore strive to have local colleges.



Michael Kaas-Andersen  
President, ZBC



Jens Gamauf  
President, IBC



Morten Emborg  
President, TEC



Finn Karlsen  
President, EUC-SYD

# The Danish Educational System

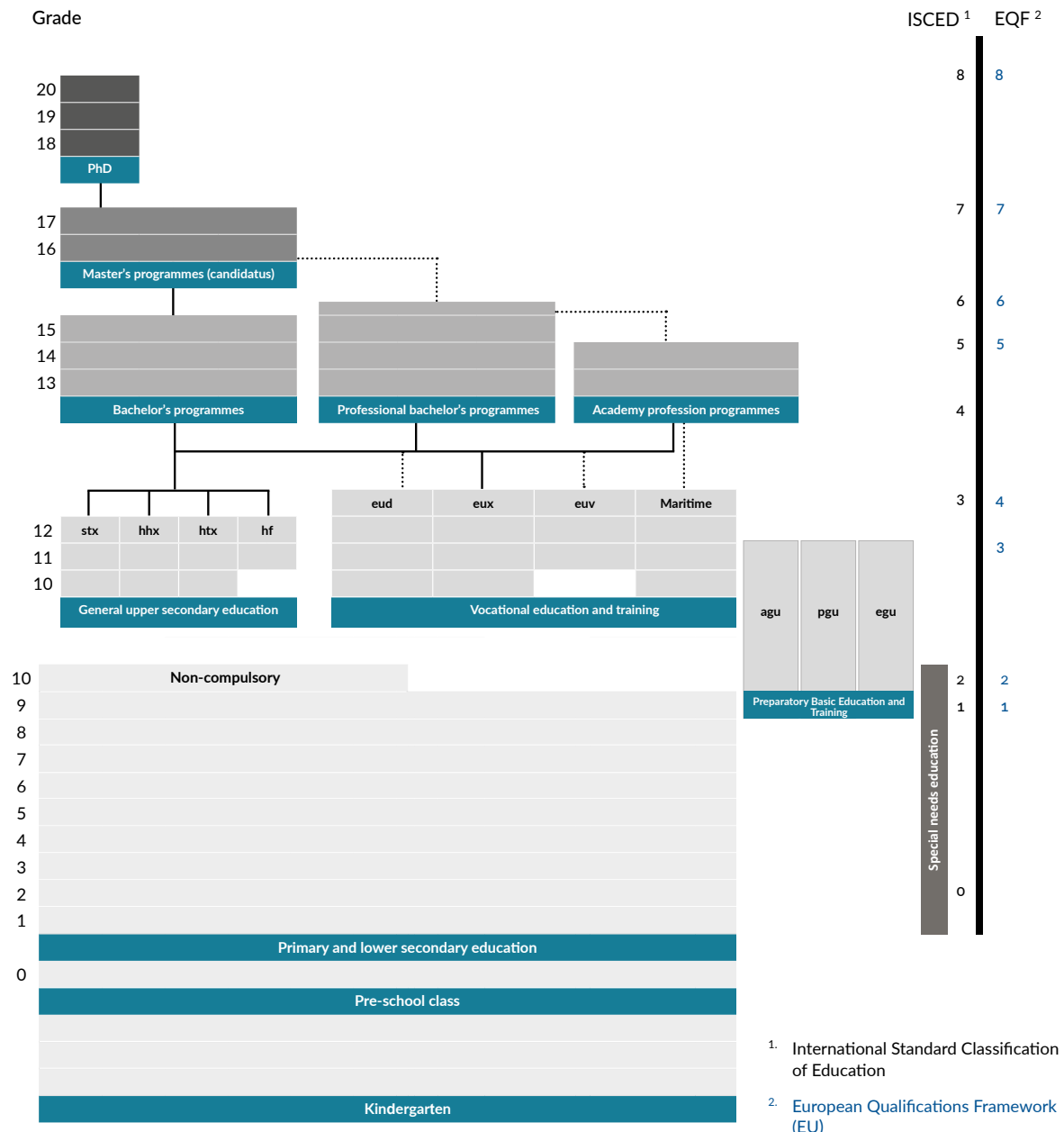
Our experience, which goes back more than 100 years, tells us that long-term relationship between company, school and student provides the best benefit.

In Denmark, VET education is dual training in cooperation between companies and schools and that leads to high employability.

The Danish educational system emphasizes independent thinking, each student taking responsibility for his or her own career, project- and group work and creativity. Our VET students can choose to combine high school education with vocational school so that they can continue their studies at university.

We are all individuals, have individual needs, and are motivated individually. Moreover, the needs are different in different companies. Therefore, DCAC specializes in designing and implementing customized solutions tailored to your needs.

The best knowledge leads to jobs. Therefore, we prioritize “employability”. The solution can be many; bring Danish lecturers abroad. Or bring students to Denmark. A combination. Everything is possible and we are ready for any dialogue. Everything is possible and we are ready for any dialogue.



1. International Standard Classification of Education  
2. European Qualifications Framework (EU)

# How we teach

Danish education features innovative teaching methods in a hands-on environment designed to promote employability and problem solving

The Danish vocational education and training (VET) builds on the dual principle, where apprentices switch between school and apprenticeship in a company. The model is the key to ensure a flexible and skilled workforce that can adapt to changes within the labor market. We teach our students and apprentices the skills they need to become a part of the workforce of tomorrow, preparing them for employability.

Our expert lecturers unfold the potential of each student in order for them to succeed and get direct access to the Danish workforce. Lecturers' methods have a great impact on the students' learning outcome and competences. All our lecturers are trained to use different methods and design their teaching, so it matches the prerequisites of students and trainers.

## **Work based learning (WBL)**

The DCAC training is based on an educational strategy that combines practice and theory with a strong focus on meeting the needs

of the workplace. The curriculum is always adjusted in collaboration with the industry, and the teaching aims at combining theory and practice.

## **Problem based learning (PBL)**

Many DCAC Programs are based on methods inspired by problem-based learning, where students and apprentices gain new knowledge while they focus on solving specific problems or challenges. The role of the lecturer is the one as facilitator in order to support and guide the learning process rather than to be the expert, who teaches a subject from A to Z. Often this kind of teaching takes place in groups, where the apprentices work and perform together as a team, while being trained to work innovatively.

## **Communication and constructive Feedback**

DCAC Lecturers establish good contact to the apprentices and students and give them constructive and formative feedback with a clear indication of how to improve. The lecturers assist our apprentices and students to progress by showing interest and pointing at the right way to do things – instead of only pointing towards errors and “what is wrong”.

## **Clear learning goals – and clear outcome**

Students and apprentices are motivated, when they know exactly what they are expected to learn from a given program or a lesson. Our lecturers therefore communicate clearly about the learning goals, which are

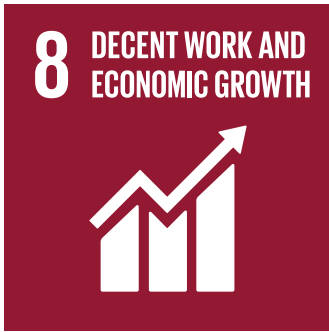
connected to a specific program or course. Besides, from focusing on learning goals, our lecturers also give clear instructions and criteria for success.

# DCAC and SDG – Sustainable Development Goals

All United Nations Member States adopted the Sustainable Development Goals (SDGs), also known as the Global Goals, in 2015 as a universal call to action to end poverty, protect the planet and ensure that all people enjoy peace and prosperity by 2030.

DCAC VET colleges are constantly working on incorporating SDG visions and ambitions into our programs. By this, we wish to raise the awareness amongst our students and give those skills, competences and knowledge, so when entering the labor market they can match the needs on the sustainable development agenda.

SDG is embedded in our educational programs and day-to-day learning at the colleges and high on the agenda on how we run our colleges and participate in projects and cooperation.



# THE GLOBAL GOALS

For Sustainable Development



# Excellence In VET

## Drivers in Danish VET

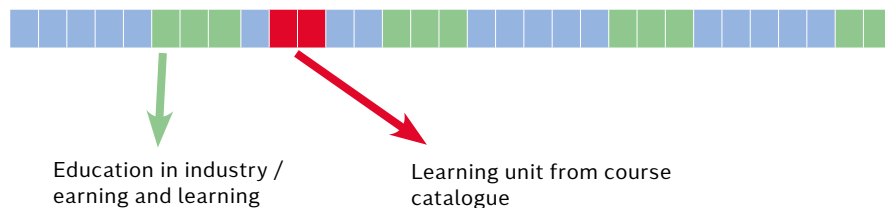
For the Danish VET programs, the objectives are that all young people should

- Acquire a high professional level of competence;
- Be able to continue in further or higher education after completion of a VET program
- Develop their citizen skills in order to become active citizens in a democratic society.

Measuring the quality of VET programs on these parameters is important, and the main indicators are employment, completion and further education/career pathways.

DCAC would like to present the pedagogical approach and aspects for VET education in Denmark

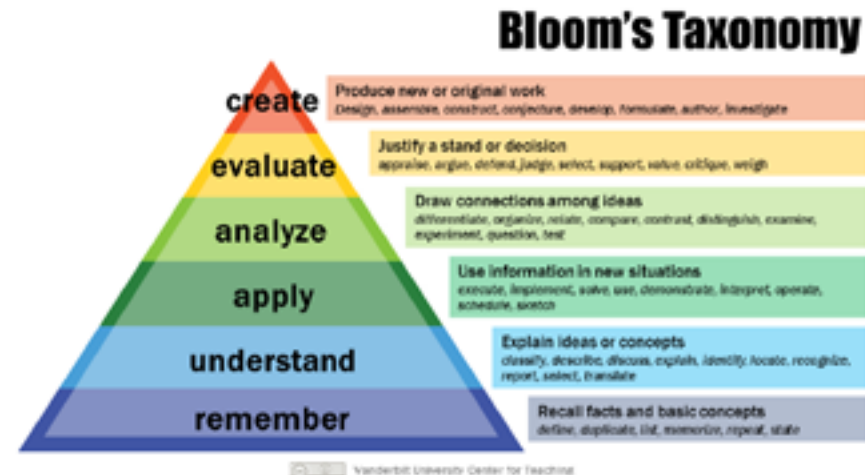
In this Inspiration Catalogue, you will find examples on training modules from Danish VET. These examples have to be seen as a smaller unit of the overall and complete VET program and will serve you as inspiration and an initial platform for project development of Training of Trainers (ToT), here presented as courses.



DCAC pedagogical DNA is based on Bloom's taxonomy.

Developing education and training with Bloom as a backbone will enhance the students with competences to be able to more flexibility in their skilled work situations and therefore not vulnerable to rapid changes at labor market. DCAC perform 90% employability for students coming from VET into the labor market.

Journeyman's test - the final test will reflect and validate all the above taxonomies and is done in cooperation with the industries and stakeholders in VET.



The Danish VET-system contains these teaching values:

- Holistic education
- Application oriented education
- Differentiation
- Collaborative learning
- Practice-based, practice-near and practice-related teaching
- Problem solving and problem based learning
- Interdisciplinary teaching



Those values are the core of our long experience with developing strong educational programs in Denmark. In our cooperation with partners, those values will be reflected and an integrated part and method in all we do.

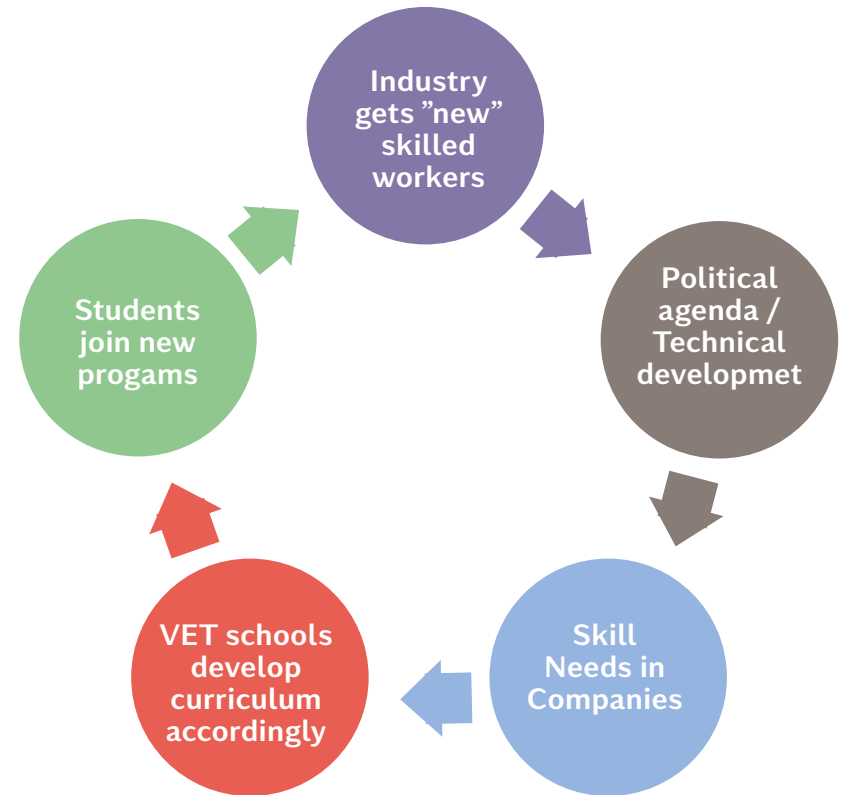
In all DCAC colleges, we have a unique model for developing curriculum and content in VET in close cooperation with the industry to match their needs.

DCAC has an expertise working with:

- Advisory boards for every trade
- Quality assurance systems
- Involvement of all stakeholders and social partners
- Benchmarking

### Examples

In the following we have some ideas and suggestions for courses as inspiration and ready for the next dialogue. Remember, we like to tailor our courses to your needs.







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A photograph of two women in an office environment. The woman on the left has her hair in a bun and is wearing glasses and a patterned scarf. The woman on the right has long blonde hair and is wearing glasses. They are both looking at a laptop screen. The background shows office windows and desks.

# Course inspiration within Business, Retail and Innovation

Certificate Management

Certificate Leadership

Certificate International Freight Forwarding

Certificate Retail Management and Visual Merchandising

Certificate Project Management

Certificate Digital Marketing Management

Certificate Design thinking and business innovation - advanced

Certificate Vocational Innovation

Certificate Danish Design

# Certificated Management - basic

It is the aim that the student, through reflection on basic theory and practice, develops his understanding of the day-to-day management complexity. The student must be able to exercise personal management in the day-to-day practice, and on that basis assess which of the subject's theories and methods are relevant to apply in concrete management situations.



## Training duration

Training duration: 10 days - hours: 60 hours

Classroom hours: 30 hours - Practical hours: 30 hours

Assessment hours: ½ hours

**Credit levels; 4 credits | EQF compliancy; 4**

## Learning outcome

- Basic international management theory
- Personal management style and development
- Basic learning and development processes

## Learning objectives

The students will...

### Competences

- be able to handle managerial functions in practice at their own level.
- be able to identify development areas for own managerial learning.
- be able to participate in development-oriented situations within the basic management area and adjacent academic areas.

### Skills

- be able to use basic methods and tools related to employment within the managerial area.
- be able to evaluate practice-related issues and make adjustments in workflows and work processes.
- be able to communicate practice-related issues and solution options to business partners and employees.
- be able to use basic management communication as part of own management practice.

### Knowledge

- have basic knowledge of the management area's practice and key theories, methods and academic contexts.
- basic understanding in practice management within own profession in a reflected way.

### Assessment

The exam is an oral group exam. Duration 40 minutes.

# Certificated Leadership - basic

It is the aim that the student, through reflection on basic theory and practice, develops his understanding of the strategic leadership processes, conditions and perspectives in international content. The student must be able to identify basic strategic issues in a practical context and through the use of the subject's theories and methods be able to take an active part in the preparation of solution proposals.



## Training duration

Training duration: 10 days - hours: 60 hours  
Classroom hours: 30 hours - Practical hours: 30 hours  
Assessment hours: ½ hours

**Credit levels; 4 credits | EQF compliancy; 4**

## Learning outcome

- Basic strategic theories and models in an International content
- Strategic analysis, development and implementation
- Basic change processes and change management
- Personal, analyzed and authentic leadership

## Learning objectives

The students will...

### Competences

- be able to identify issues at the strategic management level in a practical context.
- be able to participate actively in realizing the organization's goals by contributing input to the strategy and being able to implement strategy-supporting changes.

### Skills

- be able to use basic methods and theories that relating to the strategy-related part of the manager's tasks at the current management level.
- describe, analyze and assess the strategic intent, situation and development needs of a given organization through practice-related issues.
- be able to communicate practice-related issues and solution options while observing the organization's value set, the department's area of competence and relations with stakeholders.

### Knowledge

- have the basic knowledge of the subject area's application of theory and method within strategy analysis, strategy development and strategy implementation.
- have basic knowledge and understanding of the effect of leadership on the strategic force of action.
- understand the effects of concrete leadership practices in connection with strategic initiatives and development processes both at the organizational level and at the personal level.

### Assessment

The exam is an oral group exam. Duration 40 minutes.

# International Freight Forwarding

Getting goods from one end of the world to the other at the lowest rate is a valuable competence for many companies. Freight forwarders are specialized at finding the lowest freight rate, handling customs and making sure the goods arrive at the right place at the right time.



**EQF compliancy; 4-6**

## Learning outcome

- Road transport, Shipping and air cargo
- Customs and legal matters
- Logistics
- Sales and economy

## Learning objectives

The students will...

## Competencies

- be able to trade freight rates
- be able to plan transports and have goods transported to anywhere in the world through singular and multi modal transports
- be able to calculate the total cost of a transport and make a profit with freight forwarding

## Skills

- be able to handle transport of dangerous goods
- be able to cooperate with specialists within logistics and cargo terminals
- be able to handle customs and legal matters

## Knowledge

- Know the basics of managing a freight forwarding company

## Assessment

Oral exam based on a practical project


## Partners, example

DSV, DB Schenker, GLS



# Retail Management and Visual Merchandising

The competition in the world of retail is fierce. Not only from the stores next door and in your own city, but from e-commerce, malls and megastores as well. Retail management and visual merchandising are the key disciplines needed to be on the retail market in the 21st century.



**EQF compliancy; 4-6**

**Learning outcome**

- Developing store concepts
- Finding consumer and user needs
- Defining target groups and sales
- Doing financial management, KPIs and budgeting
- Visual merchandising

## Learning objectives

The students will...

## Competences

- be able to design a store concept based on consumer needs
- be able to design the visual appearance of a store based on current trends and consumer needs

## Skills

- be able to make a budget and plan sales accordingly
- be able to work with KPIs and the financial management of a store
- be able to design a store based on modern sales psychology

## Knowledge

- Know about supply chains and sustainability
- Know about basic legal matters within retail management

## Assessment

Oral exam based on a practical project.

## Partners, example

H&M, IKEA

# Certificated Project Management - basic

The purpose is for the student to be able to prepare, manage and complete small projects in an organisation.



## EQF compliancy; 4-6

### Learning outcome

- Organisation of traditional and agile projects
- Management of projects
- Leading people through projects
- Implementation of project outcome in the daily operation of an organisation

### Learning objectives

The students will...

### Competencies

- be able to develop own basic management practices within the project management area
- be able to collect empirical data from the project management area and relate it to own organization and own managerial conditions, challenges and initiatives in a relevant manner.

### Skills

- be able to combine and apply basic theories and methods within the project management area
- be able to put together teams with the right skills for the project
- be able to lead team members based on their different skills and personalities

### Knowledge

- have basic knowledge of the project management area's practice and central applied theories and methods.
- have basic knowledge and understanding of the organization's situation and environment.
- have an overview of different project types.

### Assessment

The exam is an oral group exam. Duration 40 minutes.

### Partners, examples

LM Windpower, DANVA (National Organisation of Danish Water and Waste Water Companies)

# Digital Marketing Management

Digital marketing management is the most sought-after marketing skill in our time.

Digital Marketing Managers can handle the entire range of digital marketing needs for a company. Either by solving the relevant tasks by themselves, or by using their professional insight to hire specialist help.



## EQF compliancy; 4-6

### Learning outcome

- Return of Marketing Investment (ROMI)
- Search Engine Optimization (SEO)
- Advertising on Social Media (Facebook, LinkedIn and Youtube)
- E-mail marketing
- Hiring specialist help

## Learning objectives

### Competences

- Be able to develop and plan the digital marketing effort of a company
- Be able to execute the digital marketing strategy of a company

### Skills

- Can work with ROMI and SEO
- Can target desired user groups and customers on social media
- Can work with usability testing and split testing
- Can optimize the conversion rate of visitors to a website
- Can write and optimise texts for online use
- Can record video for online use
- Can work with email and marketing automation
- Can work with digital marketing in combination with e-commerce

### Knowledge


- Knows the entire scope of digital marketing tools and which skills to hire when needed
- Knows about basic legal matters within the field of digital marketing

### Assessment

Oral exam based on written project

# Design thinking and business innovation – advanced

Meeting the demands and needs of the customers is the difference between failure and success in a business world. The purpose of this program is to provide the students with the tools and skills that they need to understand customer needs and to translate this understanding into viable offerings.



**EQF compliancy; 5-6**

**Learning outcome**

- Customer research methods
- Customer insight tools
- Prototyping methods
- Business modelling tools

## Learning objectives

The student...

### Competencies

- is able to solve relevant business problems by, planning, leading and completing an innovation process based on design thinking
- is able to put together a team and lead them based on each individuals core strengths and skills

### Skills

- can interview and observe customers for a better understanding of their needs
- can identify patterns and customer insights in customer data
- can translate customer insights into viable offerings through prototyping
- can develop a business model around an offering

### Knowledge

- has basic knowledge of innovation strategy
- has basic knowledge of innovation tactics


### Assessment

The exam is an oral group exam based on PBL-project

Partners, example  
youSee (telco), Nuuday (telco), Easyfood (food sector)

# Vocational Innovation

In classroom teaching with a lot of hands on exercises. In the era of Industry 4.0 innovative competences are more relevant than ever - and the need for innovative skills is growing day for day. But how do we learn to become innovative in a practical, vocational setting? How do we teach coming craftsmen like electricians, mechanics or plumbers to work systematically with innovative methods? In this module the trainer will learn how to teach craftsmen to work systematically with innovation in a technical or vocational context. The trainer (participant) obtains competences which enables him / her to teach students within different professional fields to strengthen their innovative competences.



**Training duration: 1-2 weeks**  
**Credit levels; EQF compliancy; 5**

## Learning outcome

- The participants acquire a basic understanding of how to integrate innovative knowledge and competences in learning processes.
- Get an overview of theory behind innovative processes.
- Learn how to initiate creative thinking and harvest of the best ideas and solutions in the classroom.
- Vocational Innovation. Identify ideas and challenges - and produce solutions
- The 5 supportive innovation skills: Collaboration, Action, creativity, Navigation and Communication
- Learn how to plan a structured innovation process from idea to prototype through the CIE Model (Creative room, Innovative room, Entrepreneurial room).

**Target group:** Train-the-trainer

## Learning objectives

### Competences

- be able to plan and execute Innovation Education in the classroom with students
- be able to identify and describe different types of innovation
- be able to use innovation method KIE directly basic methods and tools related to employment within the managerial area.
- be able to evaluate innovation competences and processes

### Skills

- Implementing innovative processes which support the 21st century skills in own work place or school
- Manage creative processes
- Support team work as a part of the innovative processes
- Able to teach students and develop their individual access to innovative thinking
- Business approach to using innovation as a strategy
- Reflection on evaluation methods and feedback as an evaluation method.

### Knowledge

- have basic theoretical and practical knowledge of innovation processes with specific focus on vocational training
- have knowledge of how to support the students in their learning process to become innovative competent

### Assessment

This will be decided upon



# Danish Design - Instruction to innovative design processes

The participant will get an introduction to Danish Design tradition and innovative design processes. The introduction to Danish Design Tradition is a mixture of presentations and study- and site visits to Copenhagen. The design processes will take place in workshops, where the participants are directly involved in hands on activities. We will use “design sprint” as learning methods and reflect on own teaching and how to transfer the methods to own classroom.



**Training duration: total 6 days**

**Credit levels; Will be decided upon | EQF compliancy; 5**

## Learning outcome

- The most important trends in Danish Design traditions.
- Improve in analyze design and art
- Conduct innovative design processes
- Reflection of evaluation methods and feedback

**Target group:** Trainers/ students, educational managers, who are familiar with design as creative processes. This is a standalone course in Denmark

## Learning objectives

### Competences

- be able to analyze and discuss design and art as a process and as a result

### Skills

- be able to analyze different designs as creative processes
- get acquainted with the key principle in design sprints and be able to conduct them on your own
- be able to reflect on evaluation methods and feedback as an evaluation method and regulation and safety precautions

### Knowledge

- get knowledge of the most important trends in Danish Design traditions
- get knowledge about the value of design thinking and be able to conduct innovative design processes
- get an understanding of student activating training methods in work-based learning in a dual education like the Danish vocational system

## Assessment

This will be decided upon

A photograph of two dental professionals in a clinical setting. They are wearing white surgical masks, clear safety glasses, and white gloves. They are focused on a dental model, with one professional using a dental instrument. The background shows a dental chair and various pieces of equipment.

# Course inspiration within Social- and Healthcare

**Certificate Care and ethic when working with serious ill**  
**Certificate Diseases prevention and health**  
**Certificate Dental Chairside Assistant**

# Care and ethic when working with serious ill

The aim of the course is to prepare the student for work within social-healthcare sector, taking care of and treat serious ill people or elderly. The purpose is for the student to be able to handle the caretaking when working with serious ill people through high level of theory and hands-on applied science to gain employability in the social-healthcare area.



## Training duration

Training duration: 5 days - hours: 30 hours

Classroom hours: 5 hours - Practical hours: 25 hours

Assessment hours: 1,5 hours

## Credit levels; 4 | EQF compliancy; 4

## Learning outcome

- Basic caretaking of serious ill people
- Basic knowledge about ethic of caretaking
- Preventive measures for mental work-related injuries.

**Target group:** Students or trainers

## Learning objectives

The students will...

## Competences

be able to handle basic caretaking of serious ill people.

## Skills

- use different palliative methods that will benefit the treatment of the ill person
- be able to supervise the patient about treatment offers for serious ill people and their relatives
- be able to take preventive measures for mental work-related injuries, for instance by the use of conversations with colleagues
- contribute to patient information on treatments based on basic knowledge of health

## Knowledge

- have basic knowledge of different methods when caretaking of ill people
- have knowledge about the ethic dimensions of caretaking
- have knowledge of preventive measures for mental work-related injuries

## Assessment

The exam is an individual written product based around a mind map of four questions. All materials from the course can be used. Duration is 90 minutes.

# Disease prevention and health

The purpose is for the student to be able to provide health enhancing and disease preventing when working with social- and healthcare and be able to make properly documentation. This course increases the chance of employability within the health sector or social healthcare through theory and hands on skills.



## Training duration:

Training duration: 5 days - hours: 30 hours

Classroom hours: 5 hours - Practical hours: 25 hours

Assessment hours: 1 hour

**Credit levels; 4 credits | EQF compliancy; 4**

## Learning outcome

- Basic tools for diseases prevention and health
- Supervising of diseases prevention and health with the patient's individual needs in mind
- Health enhancing for sick and elderly

**Target group: Students or trainers**

## Learning objectives

The students will...

## Competences

- be able to work health enhancing
- be able to work disease preventing when working with social- and healthcare.

## Skills

- be able to take preventive measures of diseases and health
- be able to supervise the patient based on their individual need about health enhancing and disease preventing
- be able to concretize governmental health goals and local health programs
- document the preventive measures and how they comply with the health goals
- contribute to patient information on treatments based on basic knowledge of health

## Knowledge

- have basic knowledge of diseases and health prevention in both the primary and secondary health sector
- have basic knowledge of local health programs

## Assessment

The exam is an individual written product.

The student will describe a plan of action for disease prevention with five questions. Duration 60 minutes. The first 15 minutes the students have an option to talk with each other in groups. The last 45 minutes is individual.

# Dental Chairside Assistant - basic

The qualified dental chairside assistant performs assistance for any form of dental treatment and contributes to more specialized tasks. In addition, the qualified person can execute administrative tasks in the dental clinic, including patient administration, appointments, record-keeping, accounts, stocking and purchasing.



## Training duration:

Training duration: 10 days - hours: 60 hours

Classroom hours: 30 hours - Practical hours: 30 hours

Assessment hours: will be decided upon

## Credit levels; to be decided upon | EQF compliancy; 3

## Learning outcome

- Dental morphology
- Prevention of dental diseases
- Clinical hygiene
- Simple dental practitioner

## Learning objectives

The students will...

## Competences

- be able to perform assistance for any form of dental treatment and contributes to more specialized tasks.

## Skills

- be able to care and maintain the clinic's instruments and equipment, including sterilizing and performing tracer tests after instruction
- assist in planning, coordinating and implementing an optimal clinical hygiene procedure to minimize contagion risks to staff and users
- organize simple dental procedures independently and assist on the basis of knowledge of dental morphology and prevention of dental diseases
- communicate with the users of the dental clinic based on knowledge of communication methods and methods adapted to the recipient
- contribute to patient information on treatments based on basic knowledge of health psychology and health pedagogy

## Knowledge

- have basic knowledge of dental morphology and dental diseases
- have basic knowledge of clinical hygiene, infection risk, clothing and protection
- have basic relation to ergonomics, diet, movement and health

## Assessment

The exam will be decided upon.



A young man with short reddish hair, wearing a black long-sleeved shirt, is smiling warmly while petting a pig. The pig is white with some brown patches. The background shows a barn setting with metal railings and other pigs in the distance.

# Course inspiration within Agriculture

**Certificate Pig production and feeding**

**Certificate Sustainable farming - basic**

**Certificate Handling of nutrients and cultivation and preservation of feed**

# Pig production and feeding

The aim of the course is for the student to be able to compound an optimal feed plan for pigs in order to optimize the pig production. The course will give basic competences within pig farming and give knowledge about the proper feeding and care for optimal production.



## **Training duration:**

Training duration: 3 days - hours: 18 hours

Classroom hours: 3 hours - Practical hours: 15 hours

Assessment time: 8 minutes

**Credit levels; 4 credits | EQF compliancy; 4**

## **Learning outcome**

- Basic knowledge about pig nutrient regards the feed additives and the feed- and production system.
- Compound the optimal pig feed and care plan

**Target group:** Students or trainers

## **Learning objectives**

The students will...

## **Competences**

- be able to compound an optimal feed and care plan for pigs.

## **Skills**

- be able to compound an optimal feed plan for pigs regard the pig's nutrient needs, the feed's content and its importance for the production results.
- be able to use modern information technology for the optimal feed plan and gathering of information.

## **Knowledge**

- have basic knowledge of nutrients needs of pigs.
- have knowledge of the pig feed- and production system.
- have basic knowledge of the feed's attributes and additives.

## **Assessment**

The exam is an oral exam either individual or in groups. Duration is 5-8 minutes per student. All materials from the teaching is allowed.

# Sustainable farming - basic

The purpose is for the student to be able to manage the preparation and execution of sustainable farming. The aim of the course is to prepare the student for basic farming and give competences to grow crops in a productive and sustainable way. Sustainable farming is better for the environment, use less crop dusting, and has higher health affections and result in products of better quality.



## **Training duration:**

Training duration: 5 days - hours: 30 hours

Classroom hours: 5 hours - Practical hours: 25 hours

Assessment duration: 20 minutes

## **Credit levels; 4 credits | EQF compliancy; 4**

## **Learning outcome**

- Basic sustainable farming elements and context
- Basic sustainable farming tools and processes

**Target group:** Students or trainers

## **Learning objectives**

The students will...

## **Competences**

- be able to comply with rules and manage sustainable farming
- be able to grow relevant crops in a sustainable way

## **Skills**

- choose complying productions of sustainable farming, with the plant- and animal production interaction in mind.
- be able to make sales and distributions schemes for the sustainable products.
- be able to use optimal sustainable farming methods and IT
- be able to assess simple business economics related to production and sales of sustainable products.

## **Knowledge**

- have basic knowledge of sustainable farming and all its attributes and advantages
- have basic knowledge of rules regarding sustainable farming
- have basic knowledge of methods for production, sales and distribution of sustainable products.

## **Assessment**

The exam is an oral exam either individual or in groups. Duration is 20 minutes per student. All materials from the teaching is allowed.

# Handling of nutrients and cultivation and preservation of feed

Cultivation and preservation are an important part of farming. The farmer needs to know the right nutrition for the pigs and how cultivate and preserve the feed. The purpose of this course is for the student to be able to manage the optimal plant production regards plant nutrition and cultivation. And be able to cultivate and preserve feed.



## **Training duration:**

Training duration: 5 days - hours: 30 hours

Classroom hours: 5 hours - Practical hours: 25 hours

Assessment duration: 20 minutes

**Credit levels; 4 credits | EQF compliancy; 4**

## **Learning outcome**

- Basic plant production
- Basic cultivation and preservation of feed

**Target group:** Students or trainers

## **Learning objectives**

The students will...

## **Competences**

- be able to manage the optimal plant production and be able to cultivate and preserve feed.

## **Skills**

- be able to cultivate and preserve feed regards return, quality and the environment
- be able to manage the optimal plant production regards nutrition, composition and restrictions
- be able to compound fertilization schemes

## **Knowledge**

- have basic knowledge of plants and other subjects for feed
- have basic knowledge of cultivation and preservation methods
- have basic knowledge of simple economic aspects of cultivation and preservation
- have basic knowledge of nutrients for plants and their restrictions
- have basic knowledge of technology for cultivation and preservation

## **Assessment**

The exam is an oral exam either individual or in groups. Duration is 20 minutes per student. All materials from the teaching is allowed.



A photograph of two chefs in a kitchen. The chef on the left is a man with glasses, wearing a white chef's hat and a white shirt with a dark apron. He is holding a clear plastic container. The chef on the right is a woman, also wearing a white chef's hat and a white shirt with a dark apron. She is smiling and looking towards the camera. The background shows a kitchen with white walls and a ceiling with recessed lights.

# Course inspiration within Food, beverage and hospitality

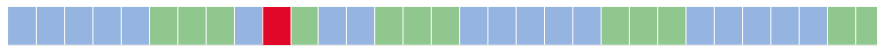
Certificate Basic classic bread and cakes

Certificate Basic international modern kitchen



# Basic classic bread and cakes

The purpose of this course is for the student to be able to make and bake basic classic bread and cakes. The students will get hands on knowledge about techniques and recipes, which will give them skills to work with basic baking in a production kitchen.



## **Training duration:**

Training duration: 4 days - hours: 24 hours

Classroom hours: 4 hours - Practical hours: 20 hours

Assessment duration: 20 minutes

**Credit levels; 3 | EQF compliancy; 3**

## **Learning outcome**

- Basic classic bread and cakes

**Target group:** Students or trainers

## **Learning objectives**

The students will...

## **Competences**

- be able to make bread and cakes on a basic level

## **Skills**

- be able to work with different doughs for breads
- be able to work with different prebaked products
- be able to plate and decorate the cakes

## **Knowledge**

- have basic knowledge of different type of doughs for breads and prebaked products
- have basic knowledge of cakes
- have basic knowledge of food safety and self-monitoring regarding bread and cakes

## **Assessment**

The exam is an individual written product. The exam consists of 15 questions of either multiple choice or elaborating questions. All materials from the teaching and the student's own notes is allowed. Duration 20 minutes.

# Basic international modern kitchen

The purpose is for the student to be able to use basic international modern kitchen techniques and knowledge about the modern kitchen, the raw material and the possibilities of further development. The student will also be able to choose and pick the most suitable raw material for the menu and use proper storage.



## Training duration:

Training duration: 6 days - hours: 36 hours

Classroom hours: 6 hours - Practical hours: 30 hours

Assessment hours: 50 minutes

## Credit levels; 3 | EQF compliancy; 3

## Learning outcome

- Basic cooking skills
- Skills within selection of raw material
- Apply the five basic flavors

**Target group:** Students or trainers

## Learning objectives

The students will...

## Competences

- be able to use the most common basic cooking methods within frying, baking, leveling etc.

## Skills

- be able to use the five basic flavors in the cooking
- be able to choose the raw material which is suitable for the cooking method and food production
- be able to use kitchen science terms
- be able to plan simple meals and menus in relation to target group, season and diet principles
- be able to apply food hygiene and self-monitoring when cooking

## Knowledge

- have basic knowledge of the international modern kitchen
- have basic knowledge of the different modern kitchen techniques
- have basic knowledge of the raw material, storage and use
- have basic knowledge of food hygiene and self-monitoring

## Assessment

The exam is a combined written and practical assignment. Duration 50 min.







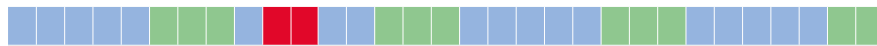
# Course inspiration within Beauty and Wellness

Certificate Hairdresser

# Hairdresser

Master hairdressers employ hairdressers where hair and wig work are performed on women as well as men including beauty care. In addition, hairdressers can also be employed in the public sector at hospitals and nursing homes. This course is for you who would like to develop and expand your range of techniques and competences to perform hairdressing at a higher level.

In this course, you will learn to master different techniques. Every task is based on hands-on and individual performance.



## **Training duration:**

Training duration: 10 days - hours: 60 hours  
Classroom hours: 30 hours - Practical hours: 30 hours  
Assessment hours: will be decided upon

## **Credit levels; 3 | EQF compliancy; 4**

## **Learning outcome**

- Different hairdressing techniques for women and men
- Supervise about hairstyling

## **Learning objectives**

The students will...

## **Competences**

- be able to master different techniques to perform hairdressing

## **Skills**

- be able to master permanent and curling techniques
- be able to style women hair, long and short
- be able to style men hair, short and long
- be able to master balayage and glamour techniques

## **Knowledge**

- have basic knowledge women and men hair, styles, types of hair
- have basic knowledge of the different bombage and blow-drying techniques
- have basic knowledge of the trends and seasons within hairdressing

## **Assessment**

The exam will be decided upon.





# Course inspiration within Technical, Industrial programs and Automation

Certificate Technical Design

Certificate Industrial programs CAD Basic

Certificate Automation Fault Finding

Certificate Hybrid Cars Basic

Certificate Robots

Certificate Aviation – Advanced composite structures repair technician

Certificate Basic drone courses

# Technical Design - Basic

The qualified technical designer typically works in production companies with development and construction tasks in connection with the preparation and review of drawing material for the production. In many companies, the technical designer participates in the development of new products, quality control, project management, operations, planning and stock control, etc.

The below module is basic course for students with a minimum of experience from the technical design trade or other relevant areas.



## **Training duration:**

Training duration: 20 days - hours: 120 hours

Classroom hours: 60 hours - Practical hours: 60 hours

Assessment hours: will be decided upon

## **Credit levels; to be decided upon | EQF compliancy; 3-4**

## **Learning outcome**

- Basic understanding and knowledge of 2D and 3D CAD
- Basic knowledge of construction, materials, work techniques
- Use of Information technology and the preparation of a technical report structure

## **Learning objectives**

The students will...

## **Competences**

- be able to use different IT programs and technology to design simple products

## **Skills**

- be able to use 2D and 3D CAD programs to make work drawings when designing new products/solutions
- be able to use Information technology to make a technical report structure
- be able to use specific mathematics methods to construct the right composition within construction and industrial manufacturing

## **Knowledge**

- have basic knowledge different work drawing programs
- have basic knowledge and understand construction, materials and work techniques
- have basic knowledge information technology
- have basic knowledge of rules and standards for designing technical documentation in the construction sector
- have basic knowledge and understanding of contexts in the organization of industrial manufacturing

## **Assessment**

The exam will be decided upon.

# Industrial programs

## CAD Basic

A CNC (Computer Numerical Control) technician works with metal. The qualified person has learned how metal can be shaped in the computerised CNC machines. An important part of the work is about programming the machine so it knows where to drill, turn and mill the metal which, for example, can be shaped into a tool. A CNC technician can work at large companies in the metal industry or at smaller machinery and tool companies.

Danish industries are worldwide recognized for high quality and high standards.



### Training duration:

Training duration: 5 days - hours: 30 hours

Classroom hours: 15 hours - Practical hours: 15 hours

Assessment hours: will be decided upon

### Credit levels; to be decided upon | EQF compliancy; 3

### Learning outcome

- Basic understanding and knowledge of CAD programs
- Basic programming of the machine to work with the metal

### Learning objectives

The students will...

### Competences

- In this course, the student will work on how a topic drawing is constructed as well as using topic drawings in the production. You will also learn how to target cut images and thread markings on paper or CAD (Computer aided design) solids

### Skills

- The student can draw work drawings according to current standards using cad plants
- will be able to demonstrate an understanding of the work of working drawings as an internal, external and international technical communication tool
- will be able to use GPS symbols to indicate the target and tolerance of cad-made work drawings
- will be able to archive and retrieve drawings on a cad system

### Knowledge

- have basic knowledge of inventor CAD program
- have basic knowledge of party manufacture (Solid)
- have basic knowledge of drawing manufacturing
- have basic knowledge of assembly drawing

### Assessment

The exam will be decided upon

# Automation Fault Finding

The qualified person will work with automated systems in large as well as small companies with industrial production. In companies, the qualified person can be employed within automation and process, typically with service, repair and maintenance tasks independently and in cooperation with other employee groups. Fitting of controls for new machines as well as adjustment/commissioning of new production units, including adaptation of programmes and documentation.

In this module, you will work with troubleshooting on automatic machines and systems. Students need to have knowledge and competences within pneumatics, automation control techniques, PLC, hydraulics to enter this module. Those modules can also be offered differentiated into different levels of knowledge, skills and competences.



## Training duration:

Training duration: 5 days - hours: 30 hours

Classroom hours: 15 hours - Practical hours: 15 hours

Assessment hours: will be decided upon

## Credit levels; to be decided upon | EQF compliancy; 4

## Learning outcome

- Understanding and knowledge of different automatic machines and Installations
- Be able to handle fault finding

## Learning objectives

The students will...

## Competences

- In this course the student can mount and commission the mentioned automation systems on less automatic machine and process systems as well as from system knowledge to troubleshoot and troubleshoot module level, including perform and evaluate the specific technical measurements.

## Skills

- will be able to handle systematic fault finding on automatic machines and installations
- will be able to take measurements on pneumatic, hydraulic, electronic, electric and mechanic installations
- will be able handle fault finding of PLC programs with the help of programming devices and PC.
- will be able to test safety functions of a machine installation.

## Knowledge

- have knowledge automation and automation fault finding
- have knowledge of the different machines and installations,
- have experienced knowledge of programming devices and IT for automation fault finding

## Assessment

The exam will be decided upon.

# Robots

Electro-, automation-engineering students and students with similar skills.

Robots are a part of industry 4.0 and the maintenance of it also to be found as a part of the vocational training programs. The training is quite varied and ranges from courses available at EQF Level 4 and 5, e.g. Automation technician and process operator and modules in the electrician program, if one selects an Electrician specialization focusing on control and regulation technology. All of them are dual training apprentice programs, of which the automation technician is the most advanced whilst the other two are aimed at overviewing the processes. EQF Level 5 courses include a focus on developing production in the industry, e.g. design, development and construction of machines and process operations, production planning and quality management. This module is a part of the Training as an Automation Technician.



**Training duration:**  
Classroom hours: 5 days  
Workshop hours: 5 days  
Assessment hours: will be decided upon  
Total length of course: 2 weeks

**Credit levels - to be decided upon**  
**EQF compliancy: 4-5**

## Learning outcome

When the participant has completed this course, he/she is able to program complex software for an industrial robot.

The participants will:

- be able to start up and test the robot
- be able to make corrections, additions and extensions to existing robot program, as well as document the changes.
- be able to apply when programming and commissioning the robot
- have acquired knowledge about the safety of automated controlled systems.
- be able to troubleshoot and correct the robot, including locating and correcting program- and operational errors, and performing restart procedure after shutdown.
- be able to designate individual components such as servo system, gear, I / O, controller, peripheral equipment, etc., on the system,
- be able to describe functions, and is familiar with programs, calibration and system parameters.
- in connection with troubleshooting and repair work on industrial robot systems, be able to select and use relevant measuring instruments, and assess readings.
- be familiar with safety rules for robotic systems, so that troubleshooting and repairs are performed in a safe manner, and in accordance with valid laws and regulations



**Target groups** – Trainers or students

### **Learning objectives**

#### **Competences**

- How to service and program an industrial robot, used within industrial production.

#### **Skills**

- How to evaluate a problem and correct the robot's positions, construct simple programs and correct minor faults in existing programming, as well as restart the robot after operational stop.
- How to proportionate the safety systems for a robot installation, based on the Labor Inspectorate's requirements for protection, shielding and emergency stops.
- Localization and remedy program- and operational mistakes, and implementation of restart procedure after operational stop, including background specifications required to assess com-pleted production process.
- Planning and execution of daily systematic maintenance of the robot and its peripherals.
- Evaluate how automation technology may be incorporated into an automatic production.
- Assess a problem and regulate robot positions, build programs and correct existing faults in the program, as well as correctly restart the robot after operational stop.
- Manage an industrial robot with PLC and related equipment during a production process, in accordance with work environment requirements and security.

- Independently program software for handling- and palletization, plus assessment, and evaluate whether the program fulfils the desired function, while including compilation of the necessary documentation.

#### **Knowledge**

- A knowledge of the construction of different industrial robots, their functions, movement patterns and areas of utilization in industrial production.
- Knowledge of proportionate safety systems within robots
- Basic knowledge of the industrial production related to robots

#### **Assessment**

To be decided upon.

# Aviation – Advanced composite structures repair technician

Inspect and work with developing of repair solution of damaged composite structures based on approved engineering process requirements using hand and power tools, specialized equipment and materials.

The course consist of the following modules: Inspection of composite structures, composite structures Repair process 1 and 2 and energy and energy efficiency

## Learning outcome

- Understanding Energy issues and role in composite materials, and energy efficiency in composite manufacturing in relation to accidents associated with working on electric or hybrid cars.
- Dealing with documentation, human safety and environmental risk procedures during teamwork with complicated composite repair.
- Classification of composites and lightweights materials, advanced inspection of composite structure damages, and selection of suitable inspection methods
- Selecting and executing on advanced composite structural repairs using required tools and machines and propose the optimal repair solution

**Target group:** Trainers/ aircraft technicians

## Learning objectives

The students will be able....

## Competences

- to support acknowledge about energy and energy efficiency issues in composites applications
- to work with the correct and latest amended reference system (according to trade), and develop creative repair solutions
- to comply with regulations and safety legislation during working at the workshop (work environment)
- to communicate and cooperate remotely with team members and other professionals, describing the tech-

## Training duration:

This is an upskilling course, which builds upon the level of a full-accredited aircraft technician.

Classroom lessons: 33,25

Work shop lessons: 48,5

Assessment hours: 2,25

Total 12,5 days

**Credit: Will be decided upon | EQF compliancy 5**

nical characteristics of the damage

- to differentiate between the different typologies and shapes of composites materials
- to carry out all inspection processes – search, detect and diagnose of structural failures
- assess, estimate and classify damages for determination for further repairing process according to the working conditions
- to give clearance after a routine check or composite changes
- to distinguish between the different ways of handling the composite material and doing it according to the safety requirements
- to select and execute the right repairs methods for failures eliminating according to technical manuals and design organization technical instruction.
- to evaluate personal competence and skill limits and where to receive assistance during maintenance.

### **Skills**

- to follow the energy performance requirements and instruction during work tasks
- to use the required documentation system – manuals concerning energy matters
- to navigate in the documentation system – manuals
- to follow the safety requirements and instruction at the work place
- to work and develop creative repair solutions and suggestions
- to use technical language and terminology
- to communicate in writing and orally on technical issues

- to apply the organizational, interpersonal and communication skills.
- to determine the lightweights and composite materials properties that are required for inspection process.
- to follow instructions provided by approved technical documentation
- to navigate in the composite manual
- to follow instruction in using Non-Destruction- Test Techniques and assessment of their strengths and weaknesses

### **Knowledge**

- to know basic concepts about energy and energy efficiency (second law of thermodynamics)
- to understand the architecture of the documentation system
- to know the specific safety requirement risks from work activities and protection methods
- to understand the importance of professional and organizational relationship and responsibilities
- to know Energy and energy efficiency issues and trends in manufacturing and production process
- to understand the impact of composite materials on energy efficiency
- to know basic light weights and composite materials properties
- to know the composite materials technologies
- to know damage types and resources of composite structures
- to know the basic Non- Destructive Testing methods and application

# Basic drone course

Basic drone course and Drones in precision farming. Introduction to the use of drones, how they are built and how do you use them, especially how to use them in modern farming.

The uses for drones are growing exponentially and so are the tech and legislation behind it all. The participants will get a basic knowledge of drone technology and the use of them for different purposes with a focus on agricultural.



## **Training duration:**

Total: 5 days

Assessment hours: will be decided upon

## **EQF compliancy; 4-5**

**Credit levels: will be decided upon**

## **Learning outcome**

- Introduction to the use of drones and how they are built.
- How to use drones in modern farming.

**Target group:** Students or Trainers

## **Learning objectives**

### **Competences**

- Introduction to drone technology with a hands on approach, sensors and software involved
- Processing of data. What advantages will data over time give you as a farmer?

### **Skills**

- Pre-flight and safety precautions, skills to fly a drone
- Training, a hands-on experience with indoor flight lessons
- Training outdoor, windy conditions, and learn to perform a "rescue" mission and more

### **Knowledge**

- Have knowledge about legislation and local requirements for certification and license to fly
- Have basic knowledge of drones

### **Assessment**

To be decided upon.





# Hybrid cars – basic

Globally we experience an enormous growth of hybrid and electrical cars. During this module the participant will learn how to be able to safely carry out maintenance and diagnostics on an electric passenger car. You will get knowledge of relevant first aid, as well as the structure of an electric car. You will have knowledge of charging technologies as well as the regenerative processes of electric cars. This is an upskilling course, which build upon the level of a full program of car mechanics or a person, who has worked within this field for many years.



## Training duration:

Training duration: total 6 days

- Classroom hours: 14 hours
- Work shop hours: 28 hours
- Assessment hours: will be decided upon

## EQF compliancy; 4-5 | Credit levels: will be decided upon

## Learning outcome

- how to safely work on near powerless or power conducting electric systems on electric or hybrid cars
- how to correctly use, check and maintain safety tools as well as personal protective equipment following relevant EN60900-standards when working on electric or hybrid cars
- basic first aid in relation to accidents associated with working on electric or hybrid cars.

**Target group:** Students or Trainers

## Learning objectives

### Competences

- the participants will be able to work safely on a near powerless or power conducting electric systems on electric or hybrid cars

### Skills

- of structure, maintenance work and troubleshooting of electric, or hybrid cars
- of battery and recharge technologies, such as regeneration and plug-in as well as various battery monitoring systems.
- of hybrid drive and AC systems

### Knowledge

- of hybrid and electric cars
- of relevant standards
- of various electric, engine designs such as interconnection of hybrid units and electric engine control units, e.g. inverter / converter systems

## Assessment

To be decided upon.



A young man with short brown hair, wearing a blue t-shirt with a logo, is focused on cutting a piece of wood with a teal and black miter saw. He is in a well-lit workshop with other people and wooden structures in the background. The scene is captured in a professional, high-quality style.

# Course inspiration within Building and construction

Certificate Carpenter (experienced)  
Certificate Bricklayer Basic



# Carpenter (experienced)

Most of the carpenter's work is performed on a construction site. Often in close cooperation with other tradesmen such as joiners and plumbers. Only a minor part of the preparatory work takes place in a workshop.

In this course, the student will work on a project from graphic conception to execution, gaining knowledge about materials and the overall construction process and the collaboration with the other branches in the construction industry. Work safety and quality requirements are central elements to the course.



## Training duration:

Training duration: 15 days - hours: 90 hours

Classroom hours: 45 hours - Practical hours: 45 hours

Assessment hours: will be decided upon

## Credit levels; to be decided upon | EQF compliancy; 4

## Learning outcome

- Use CAD programs and build in real life from the drawings
- Extended knowledge of exterior and interior roof structures, including energy-efficient solutions, insulation, ventilation and tightness, roof attachment and dimensions, choice of materials and tools, quality control standards, work ergonomics and safety requirements.

## Learning objectives

The students will...

## Competences

- be able to use CAD-programs and build in real life from the drawings

## Skills

- be able to construct drawings in 2D
- acquire skills in computer-based drawing using auto-CAD and are able to sketch, understand and execute correctly on scale.

## Knowledge

- acquire practical knowledge about assembling and manufacturing certain roof structures, as well as about quality standards, tools, documentation, work ergonomics and individual and collective safety requirements.
- have knowledge of exterior and interior roofing – measurements, material choice, fixing.
- have knowledge of exterior and interior wall structures – energy-efficient solutions, insulation, vapor and wind barrier, building shells, pressure and tightness tests.

## Assessment

The exam will be decided upon.

# Bricklayer (Basic)

The qualified bricklayer is typically employed within the building and construction area. Bricklayers can execute brickwork, roofing, pointing and plastering work, façade cladding as well as tiling and flooring.

This course is basic level and the project can be from a given example:

Imagine you are in an internship in a masonry company. In the company, you are building a new house. You have the task of walling an angular wall in the bathroom. At the back of the angular wall, there should be one shower. In the shower cubicle, cast abrasive layers as directed.

Elements from here can be chosen and differentiated into different levels of knowledge, skills and competences.

## Training duration

Training duration: 20 weeks - hours:  
600 hours, for full basic course

Classroom hours: 300 hours - Practical hours: 300 hours

Assessment hours: will be decided upon

## Credit levels; to be decided upon | EQF compliancy; 3

## Learning outcome

- Basic knowledge of all bricklayer areas such as masonry, tile, roof, renovation e.g.
- Be able to use methods to solve simple bricklayer task in compliance with relevant regulations.

## Learning objectives

The students will...

## Competences

- be able to use professionally related drawings and execute them for simple bricklayer tasks.

## Skills

- be able to use professionally related drawings, diagrams and IT
- be able to solve simple bricklayer tasks within, masonry, tile, roof e.g. In compliance with relevant regulations

## Knowledge

- have basic knowledge of simple bricklayer tasks
- have knowledge planning and quality assurance, rules and regulations
- have knowledge of constructions, materials and ergonomics
- have knowledge of mathematics and symbols used in bricklayer

## Assessment

The exam will be decided upon.







A close-up photograph of a man in a dark blue long-sleeved shirt working on a white sink. He is leaning forward, looking intently at the faucet assembly. His hands are positioned to adjust or tighten a component of the faucet. The background is slightly blurred, showing the white porcelain of the sink and the wall.

# Course inspiration within Green Engineering

**Certificate Plumbers (experienced)**

**Certificate Refurbishment of existing houses, Thermal Shell (experienced)**

# Plumbers (Experienced)

Globally sustainability is a hotspot issue that attracts a lot of attention.

Among private households, public stakeholders and industries, the demand for sustainable and carbon neutral solutions keeps increasing worldwide. Well-educated craftsmen are the key to implement these solutions.

Through this course, the participants will be acquainted with the latest developments on the Danish market in the field of Green solutions.



## Training duration

Training duration: 5 days - hours: 30 hours

Classroom hours: 15 hours - Practical hours: 15 hours

Assessment hours: will be decided upon

**Credit levels; to be decided upon | EQF compliancy; 5**

## Learning outcome

The student will learn about energy savings, optimization of the existing heating installations, district heating principles, optimization of ventilation systems

## Target group

This course is on an experienced level, which means the student has to have basic knowledge of plumber work.

## Learning objectives

The students will...

## Competences

- be able to optimize existing heating installations regarding energy savings and optimize ventilations systems.

## Skills

- be able to optimize existing heating installations
- be able to program and dimensioning energy systems
- be able to install a ventilation system

## Knowledge

- have knowledge of energy saving
- have knowledge of district heating network
- have knowledge of indoor climate control
- have knowledge of monitoring and troubleshooting of the systems
- have knowledge of ventilation systems, measuring leakages, regulations e.g.

## Assessment

The exam will be decided upon.

# Thermal Shell - Refurbishment of Existing houses (Experienced)

Globally sustainability is a hotspot issue that attracts a lot of attention.

Among private households, public stakeholders and industries, the demand for sustainable and carbon neutral solutions keeps increasing worldwide. Well-educated craftsmen are the key to implement these solutions.



## Training duration

Training duration: 5 days - hours: 30 hours

Classroom hours: 15 hours - Practical hours: 15 hours

Assessment hours: will be decided upon

**Credit levels; to be decided upon | EQF compliancy; 5**

## Learning outcome

- The student will learn about energy refurbishment of existing houses
- The student will learn about thermal shell

## Target group

This course is mainly for experienced roofers, carpenters, joiners, bricklayers, painters, apprentices

This course is on an experienced level, which means the student has to have basic knowledge of the above-mentioned areas.

## Learning objectives

The students will...

## Competences

- be able to optimize energy refurbishment of existing houses

## Skills

- be able to optimize energy refurbishment of existing houses within the student's area of work, for instance with mounting of underroof and insulation

## Knowledge

- have knowledge of energy saving
- have knowledge of thermal shell of roofs, walls, openings, floors etc.
- have knowledge of indoor climate control
- have knowledge of ventilation and air-conditioning
- have knowledge of solar thermal collector

## Assessment

The exam will be decided upon.

# Notes

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