

**Curriculum for**

# **Academy Profession Degree Programme in IT Network and Electronics Technology**

**Dania Academy of Higher Education  
Viborg**



Academy Profession Degree Programme in in IT Network and Electronics Technology at Dania Academy of Higher Education

Approved by the Rectorate on behalf of the Board

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Please note that changes can occur!

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## 1 Introduction

The curriculum describes how Dania Academy of Higher Education offers Academy Profession Degree in IT Network and Electronics Technology within the framework of Danish law.

The purpose of curriculum is to inform the student about the contents of the education and admission requirements, study process and assessment. The rules are stated in the law.

Elements in the curriculum have been made with all Danish academies approved for offering this education, and represented in the national education network. The cooperation exists to ensure that students achieve knowledge, skills and competencies at academy level as described in the Quality Framework of higher education. Also, the shared elements are there to ensure that students wishing to change study or institution are accredited the subjects passed and can finish his or her education.

## 2 The Framework of the Curriculum

### 2.1 Starting date

The curriculum comes into force as stated on the front page of this document and apply to all students starting the education on that date or later.

The curriculum from September 2014 is no longer in effect from August 2016. The latest edition of the curriculum is available on [www.eadania.dk](http://www.eadania.dk) where the education is described.

### 2.2 Prolongation

Students that have begun their education prior to August 2016, the curriculum of September 2014 shall apply.

Transitional schemes from the old curriculum to the second semester with the new curriculum:  
As there are significant changes in content and structure, we recommended that students who have completed the 1st or 2nd semester according to the previous curriculum and whom have since been delayed follow the programme course as described for this curriculum.

#### **Students who have completed the first semester on the previous curriculum:**

It is recommended that students be transferred to the new curriculum.

Alternative programme course: If students admitted to one of the previous curricula, wish to complete their programme according to this, the following specially planned programme courses for the following subjects have been prepared.

#### **Re-registration**

Students who are re-registered on the IT Technology programme, are generally registered according to the newest curriculum.

### 2.3 Current legislation for the curriculum

The curriculum adheres to the guidelines in the Ministerial Order about academy educations and bachelor's educations, Ministerial order no. 1047 of 30/06/2016 and ministerial order no. 916 of 25/09/2009 about academy educations in IT Network and Electronics Technology

The following current legislation applies to the programme:

- Ministerial Order no. 1147 of 23/10/2014: Ministerial Order for business academies and professional bachelor programmes (LEP-law).
- Ministerial Order no. 935 of 25/08/2014: Ministerial Order for business academies of higher education
- Ministerial Order no. 579 of 01/06/2014, Ministerial Order for assessment of foreign qualifications etc.
- Ministerial Order no. 85 of 26/01/2016: Ministerial Order for admission to business academies and professional bachelor courses
- Ministerial Order no. 1500 of 02/12/2016: Ministerial Order for examinations in higher educational business programmes
- Ministerial Order no. 114 of 03/02/2015: Ministerial Order for marking scales and other assessment criteria
- Ministerial Order no. 597 of 08/03/2015: Ministerial Order for talent initiatives in higher education

The Ministerial Orders and legislation can be found at [www.retsinfo.dk](http://www.retsinfo.dk) (only in Danish)

### 3 Competency profile for an IT Technologist

#### 3.1 Purpose of the Program

The purpose of the Business Academy Programme in IT Network and Electronics Technology is to qualify the graduate to: independently and by using innovative methods work with the planning, design and construction of electronic and communications systems, including translating customer needs into technical solutions within network and electronics. Further aim is to qualify students to independently undertake the project, quality and resource management when developing and designing tasks.

##### **The student will:**

##### **Gain knowledge about**

- 1) communication and interface technology,
- 2) programming technology,
- 3) innovation, project management and business skills, as well as advisory and consultancy functions and
- 4) technical mathematics.

The graduates in the study direction network technology also has knowledge of

- 1) client and server technologies,
- 2) database systems
- 3) network security and
- 4) network design.

The graduates in the study direction electronics also has knowledge of

- 1) embedded systems,
- 2) electronics technology and design and
- 3) production technology and management.

##### **Acquire Skills in how to**

- 1) Assess technical solutions based on business and customer requirements,

- 2) communicate and document tasks and solutions for those who need to perform the technical task as well as to businesses and customers,
- 3) Use tools and equipment in connection with the design, development and testing of both hardware and software,
- 4) communicate in writing and orally in Danish and English and
- 5) use innovative methods focused on user needs.

The graduates in the study direction network technology also acquire skills in how to

- 1) use the network technological knowledge in designing, planning, estimating costs, implementation, administration, operation and monitoring of complex network solutions,
- 2) evaluate and disseminate technical network solutions appropriateness in relation to the company and the customer and
- 3) use modern tools to build, test and maintenance of database systems.

The graduates in the study direction electronics also acquire skills in how to

- 1) use relevant CAE and simulation tools
- 2) evaluate and select relevant development model and
- 3) build and deploy test systems.

#### **Gain Competencies in how to**

- 1) communicate, document, present and support in Danish and English for internal and customer relations, including handling documentation and presentation of projects
- 2) handle both independent as well as customer- and team-based tasks
- 3) acquire skills and new knowledge in the discipline,
- 4) independently handle technical project management tasks and
- 5) participate in the practice-oriented development processes.

Graduates of study network technology also gain competencies in

- 1) handling complex network solutions and systems for internal and customer-related advice and consulting services both strategically and technically,
- 2) handling analysis, needs analysis, solution proposals, design, estimation of costs, preparation of requirements specification, design and planning of network and security solutions, including managing, coordinating, quality assuring and manage the resources of implementation and commissioning in all project phases and
- 3) managing and coordinating with respect to the administration, operation, monitoring, maintenance and troubleshooting of networks.

The graduates in the study area electronics technology also gain competencies in

- 1) handling design, development, construction, testing, product maturing and documentation of electronic systems, products and prototypes as well
- 2) handling the analysis, design, diagnosis, testing and servicing of the technology involved in working with electronic and computerized systems, taking into account financial, environmental and quality.

### **3.2 Duration of the Education**

The education is a short, higher education at an academy of higher Education with a duration of 2 years. This is a full time education giving the student 120 ECTS according to the European point-system (European Credit Transfer System). ECTS is used to rate the student's total study time and distribution on the study elements. 60 ECTS is equivalent to one year full time study. The education level is level 5 in the qualification framework for life-long learning.

### 3.3 Title of the Graduate

The title of the Program is Academy Profession Degree Programme in IT Network and Electronics Technology and the graduate holds the title of AP Graduate in IT Technology.

### 3.4 Admission Requirements

Admission to the education follows the demands of the ministerial order, see section 2.3.

#### Admission via high school diploma:

Specific demands: English B and either Mathematics C

### 3.5 Criteria for selection of applicants

If there are limited study places at the education, we refer to the academy's homepage [www.eadania.dk](http://www.eadania.dk) where the selection criteria are described.

## 4 Education Elements

The curriculum's joint national part includes, according to § 17 rules for the following:

1. Core areas according to the programme's Ministerial Order, including:
  - a. Content
  - b. ECTS weight
  - c. Learning objectives
2. Compulsory programme elements within the programme's core areas, including:
  - a. Content
  - b. ECTS weight
  - c. Learning objectives
  - d. Number of exams
3. Internship, including
  - a. ECTS weight
  - b. Learning objectives
  - c. Number of exams
4. Requirements for the Final exam project, respectively bachelor project.
5. Rules on credit, cf., § 18, including an indication of any credit agreements regarding the programme elements, which are covered by the curriculum's joint national part.

### 4.1 The Programmes structure

The IT Technology programme requires passing programme elements equivalent to a workload of 120 ECTS. A full-time programme for one semester consists of core areas, which take the form of cross-disciplinary programme elements, including an internship.

The programme consists of compulsory programme components equivalent to 75 ECTS, 15 ECTS for elective programme components, 15 ECTS for the internship and a Final exam project of 15 ECTS.

	<i>Subject areas</i>	<i>1st Year</i>	<i>2nd Year</i>	



	Electronic systems 7,5 ECTS	7,5 ECTS		<b>Common for both study di- rections</b>
	Network technology systems 7,5 ECTS	7,5 ECTS		
	Software development 5 ECTS	5 ECTS		
	Company 10 ECTS	10 ECTS		
	Electronic systems 20 ECTS	10 ECTS	10 ECTS	<b>Study direc- Electronics</b>
	Embedded systems 25 ECTS	20 ECTS	5 ECTS	
	Network technology systems 35 ECTS	25 ECTS	10 ECTS	<b>Study direc- Network</b>
	Advisory and consultancy func- tions 10 ECTS	5 ECTS	5 ECTS	
<b>Optional elements</b>			15 ECTS	
<b>Practical Training</b>			15 ECTS	
<b>Final examination pro-</b>			15 ECTS	
<b>Total ECTS</b>		<b>60 ECTS</b>	<b>60 ECTS</b>	<b>120 ECTS</b>

All programme elements, including the main project, are evaluated and assessed according to the section on the programme examinations. When a minimum mark of 02 is achieved, the programme element is considered passed.

#### Number of exams on the programme, and their timing:

There are 6 exams on the programme.

Examination	Allocation of the total 120 ECTS	Assessment	Semester
1. Study start assess- ment (optional)	None	Pass/Fail	1
2. 1st year examination	60	7-scale grading system	2
3. Technology examina- tion	15	7-scale grading system	2
4. Elective elements ex- amination <sup>2</sup>	15	7-scale grading system	3
5. Practical training ex- amination	15	7-scale grading system	4
6. Final examination project	15	7-scale grading system	4

#### Number of examinations in the compulsory elements, studydirection:

##### Electronics

The two compulsory elements are each concluded with an examination. See total overview of the examinations for the programme under "Examination overview".

Overview of correspondence of ECTS points between subject areas and compulsory elements.

<i>Compulsory elements</i>	<i>Electronic systems, Network technology systems, Software development, Company, Electronic systems and Embedded systems</i>	<i>Electronic systems and embedded systems</i>	
<b>Subject areas common for both study directions</b>	First year	Second year	
Electronic systems 7,5 ECTS	7,5 ECTS		<b>7,5 ECTS</b>
Network technology systems 7,5 ECTS	7,5 ECTS		<b>7,5 ECTS</b>
Software development 5 ECTS	5 ECTS		<b>5 ECTS</b>
Company 10 ECTS	10 ECTS		<b>10 ECTS</b>
<b>Subject area study direction</b>			
Electronic systems 20 ECTS	10 ECTS	10 ECTS	<b>20 ECTS</b>
Embedded systems 25 ECTS	20 ECTS	5 ECTS	<b>25 ECTS</b>
<b>Total ECTS</b>	<b>60 ECTS</b>	<b>15 ECTS</b>	<b>75 ECTS</b>

#### Number of examinations in the compulsory elements, studydirection:

##### Network

The two compulsory elements are each concluded with an examination. See total overview of the examinations for the programme under "Examination overview".

Overview of correspondence of ECTS points between subject areas and compulsory elements.

<i>Compulsory elements</i>	<i>Electronic systems, Network technology systems, Software, Company, Network and Advisory and consultancy functions</i>	<i>Network technology systems and Advisory and consultancy functions</i>	
<b>Subject areas common for both study directions</b>	First year	Second year	
Electronic systems 7,5 ECTS	7,5 ECTS		<b>7,5 ECTS</b>
Network technology systems 7,5 ECTS	7,5 ECTS		<b>7,5 ECTS</b>
Software development 5 ECTS	5 ECTS		<b>5 ECTS</b>
Company 10 ECTS	10 ECTS		<b>10 ECTS</b>
<b>Subject areas study direction</b>			
Network 35 ECTS	25 ECTS	10 ECTS	<b>35 ECTS</b>
Advisory and consultancy functions 10 ECTS	5 ECTS	5 ECTS	<b>10 ECTS</b>

<b>Total ECTS</b>	<b>60 ECTS</b>	<b>15 ECTS</b>	<b>75 ECTS</b>
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## 4.2 Subject Areas

### Common for both study directions

1. Electronic systems (7,5 ECTS)
2. Communications technology systems (7,5 ECTS)
3. Company (10 ECTS)
4. Software development (5

ECTS) Total 30 ECTS.

### For Study direction Electronics

1. Electronic systems (20 ECTS)
2. Embedded systems (25

ECTS) Total 45 ECTS.

### For study direction Network

1. Network technology systems (35 ECTS)
2. Advisory and consultancy functions (10

ECTS) Total 45 ECTS.

### 4.2.1 Subject area Electronic systems (common for both study directions)

#### Content

The objective is for the student to acquire new knowledge and skills within electronic systems, such as basic electronics, interface, technical mathematics and embedded systems, as well as the ability to use up-to-date tools and equipment in connection with development and testing. Finally the subject area contribute to that the student can communicate and document assignments.

#### Total 7,5 ECTS

#### Learning objectives

##### Knowledge

The student has acquired knowledge on

- Interface technology
- Technical mathematics

##### Skills

The student is able to

- Assess technical solutions based on the company and clients need
- Communicate and document assignments and solutions for those people in charge of executing the technical assignment
- Communicate and document assignments and solutions for companies and clients
- Use up-to-date tools and equipment in connection with design, development and testing of hard- ware

##### Competences

The student is able to

- Communicate, document, present and provide support in connection with internal and customer relations

- Handling documentation and presenting projects
- Participate in praxis-based development processes
- Acquire skills and new knowledge within electronic systems.

#### **4.2.2 Subject area Communications technology systems (common for both study direction)**

##### **Content**

The objective is for the student to acquire new knowledge and skills within communications technology systems, such as basic models, protocols and operating systems, as well as the ability to use up-to-date tools and equipment in connection with design and testing. Finally the subject area contribute to that the student can communicate and document assignments.

**Total 7,5 ECTS**

##### **Learning objectives**

###### **Knowledge**

The student has acquired knowledge on

- Communications technology

###### **Skills**

The student is able to

- Assess technical solutions based on the company and clients need
- Communicate and document assignments for those people in charge of executing the technical assignment
- Communicate and document assignments and solutions for companies and clients
- Use up-to-date tools and equipment in connection with design and testing of communications technology systems

###### **Competences**

The student is able to

- Communicate, document, present and provide support in connection with internal and customer relations
- Handling documentation and presenting projects
- Participate in praxis-based development processes
- Acquire skills and new knowledge within communications technology systems

#### **4.2.3 Subject area Company (common for both study directions)**

##### **Content**

The objective is for the student to acquire new knowledge and skills within the company, such as innovation, project management, economics, quality and resource management, advisory and consultancy functions, as well as the ability to use innovative methods. Finally the subject area contribute to that the student can communicate and document assignments.

**Total 10 ECTS**

##### **Learning objectives**

###### **Knowledge**

The student has acquired knowledge on

- Innovation
- Project management

- Business understanding
- Advisory and consultancy function

**Skills**

The student is able to

- Written and oral communication
- Use innovative methods with a focus on the end user needs.

**Competences**

The student is able to

- Undertake independent as well as customer-bases and team-based assignments
- Acquire skills and new knowledge within the company
- Independently handle technical project management assignments

**4.2.4 Subject area Software development (common for both study directions)****Content**

The objective is for the student to acquire new knowledge and skills within software development, such as converting a specific assignment into technical solutions, as well as the ability to use up-to-date tools and equipment in connection with design, development and testing software. Finally the subject area contribute to that the student can communicate and document assignments.

**Total 5 ECTS****Learning objective****Knowledge**

The student has acquired knowledge on

- Programming technology

**Skills**

The student is able to

- Use up-to-date tools and equipment in connection with design, development and software testing

**Competences**

The student is able to

- Communicate, document, present and provide support in connection with internal and customer relations
- Handling documentation and presenting projects
- Acquire skills and new knowledge within software development
- Participate in praxis-based development processes

**4.2.5 Subject area Electronic systems (Study direction Electronics)****Content**

The objective is for the student to acquire new knowledge and skills within electronic technology and the design process of electronic systems, as well as acquiring knowledge about production technology and management of an electronic device. Finally the subject area contributes to that the student can use relevant CAE and simulation tools.

**Total 20 ECTS**

**Learning objectives****Knowledge**

The student has acquired knowledge on

- Electronic technology and design
- Production technology and management

**Skills**

The student is able to

- Use relevant CAE and simulation tools
- Assess and select relevant development model
- Design and use test systems

**Competences**

The student is able to

- Handle design, development, construction, testing of prototypes
- Handle product maturing of prototypes
- Handle documentation of electronic systems
- Handle analysis, diagnosis, testing and service of the electronic systems , taking into account financial, environmental and quality requirements

**4.2.6 Subject area Embedded systems (Study direction Electronics)****Content**

The objective is for the student to acquire new knowledge and skills within embedded systems, such as design, construction, programming and testing.

**Total 25 ECTS****Learning objectives****Knowledge**

The student has acquired knowledge on

- Embedded systems

**Skills**

The student is able to

- Assess and select relevant development models
- Design and use test systems.

**Competences**

The student is able to

- Handle design, development, construction, testing and documentation of embedded systems
- Handle analysis, construction, diagnosis, testing and service of the technology within data technology systems, taking into account financial, environmental and quality requirements

**4.2.7 Subject area Network technology systems (Study direction Network)****Content**

The objective is for the student to acquire new knowledge and skills within communications technology systems, such as server technology, database systems and network security, as well as the ability to use up-to- date tools for construction, testing and maintenance of database systems.

**Total 35 ECTS****Learning objectives****Knowledge**

The student has acquired knowledge on

- Server technologies
- Database systems
- Network security

**Skills**

The student is able to

- Apply knowledge on network technology in connection with design, project planning, implementation of complex network solutions
- Apply knowledge on network technology in connection with administration, operation and monitoring of complex network solutions
- Use up-to-date tools for construction, testing and maintenance of database systems

**Competences**

The student is able to

- Handle analysis, identification of requirements, solution proposals, design, preparation of requirements specification of network and security solutions in all project stages
- Handle projecting and planning related to network and security solutions

**4.2.8 Subject area Advisory and consultancy functions (Study direction Network)****Content**

The objective is for the student to acquire new knowledge and skills within network project planning. Finally the subject area contributes to that the student can apply knowledge on network technology in connection with advisory and consultancy assignments.

**Total 10 ECTS****Learning objectives****Knowledge**

The student has acquired knowledge on

- Network project planning

**Skills**

The student is able to

- Apply network technology skills in connection with project planning and estimation of costs on complex network solutions
- Assess and provide suitable technical network solutions to both the company and client.

**Competences**

The student is able to

- Provide internal and customer-related advisory and consultancy services relating to complex network solutions and systems, both strategically and technically.

- Manage, coordinate, quality-assuring and managing the resources of implementing and commissioning of network and security solutions
- Manage and coordinate in connection with administration, operation, monitoring, maintenance and trouble shooting of networks

### 4.3 Compulsory elements within the subject areas

The compulsory elements of the programme are

For study direction Electronics

1. Electronic systems, Communications technology systems, Software development, Company, Electronic systems and embedded systems (60 ECTS)
2. Electronic systems and embedded systems (15ECTS)

Total 75 ECTS

The two compulsory elements are each concluded with an examination For study direction Network

1. Electronic systems, Communications technology systems, Software development, Company, Electronic systems and embedded systems (60 ECTS)
2. Network technology systems and Advisory and consultancy functions (15 ECTS)

Total 75 ECTS

#### 4.3.1 Study direction Electronics, compulsory element: Electronic systems (1), Communications technology systems, Software development, Company, Electronic systems (2) and embedded systems

##### Content

The first compulsory element must contribute to that the student independently and in corporation with others is able to

- Construct and test interface systems
- Design, construct and test simple network technical systems
- Software development, where a concrete project is converted into a technical solution
- Use up-to-date tools and equipment in connection with development and testing
- Include the business aspect, such as project management, economics, quality and resource management
- Develop basic electronic systems at prototype level
- Develop basic embedded systems

**Total ECTS** 60 ECTS, of which

- 7,5 ECTS from common subject area Electronic systems
- 7,5 ECTS from common subject area Communications technology systems
- 5 ECTS from common subject area Software development
- 10 ECTS from common subject area Company
- 10 ECTS from study direction Electronics, subject area Electronic systems
- 20 ECTS from study direction Electronics, subject area Embedded systems

##### Learning objectives

###### Knowledge

The student has acquired knowledge on

*From common part:*

- Project management and business understanding



- Interface technology
- Communications technology
- Programming technology

*From study direction part:*

- Electronic technology and electronic design
- Embedded systems

### **Skills**

The student is able to

*From common part:*

- Assess technical solutions
- Use up-to-date tools and equipment in connection with development and testing of electronic systems and network systems

*From study direction part:*

Work with design, construction, test and documentation of electronic and embedded systems, such as the ability to use relevant CAE and simulation tools

### **Competences**

The student is able to

*From common part:*

- Document and present projects
- Acquire new knowledge and skills within basic electronic systems, communications technology systems, software development and company field

*From study direction part:*

- Design, develop, construct and testing of electronic prototypes and embedded systems

The compulsory element *Electronic systems (1), Communications technology systems, Software development, Company, Electronic systems (2) and embedded systems* is concluded with an examination.

### **Examination**

The examination is evaluated using the 7-scale grading system and counts for a total of 60 ECTS.

The learning objectives of the element are identical to the learning objectives of the examination (1<sup>st</sup> year examination)

#### **4.3.2 Study direction Electronics, compulsory element: Electronic systems and embedded systems**

##### **Content**

The second compulsory element must contribute to that the student independently and in corporation with others is able to

- Develop electronic and embedded systems, such as product maturing
- Use up-to-date tools and equipment in connection with development and testing

##### **Total ECTS**

15 ECTS, of which

- 10 ECTS from study direction Electronics, subject area electronicsystems
- 5 ECTS from study direction Electronics, subject area embedded systems

**Learning objectives****Knowledge**

The student has acquired knowledge on

- Production technology and management

**Skills**

The student is able to

- Work with design, construction, testing, product maturing and documentation in connection with electronic and embedded systems, such as using relevant CAE and simulation tools
- Assess and select relevant development model

**Competences**

The student is able to

- Handle analysis, construction, diagnosis, testing and service of the electronic systems, data technology systems and embedded systems , taking into account financial, environmental and quality requirements

The compulsory element *Electronic systems and embedded systems* is concluded with an examination.

**Examination**

The examination is evaluated using the 7-scale grading system and counts for a total of 15 ECTS.

The learning objectives of the element are identical to the learning objectives of the examination (Technology assessment)

**4.3.3 Study direction Network, compulsory element: Electronic systems, Communications technology systems, Software development, Company, Network technology systems and advisory and consultancy functions****Content**

The first compulsory element must contribute to that the student independently and in corporation with others is able to

- Construct and test interface systems
- Design, construct and test simple network technical systems
- Software development, where a concrete project is converted into a technical solution
- Use up-to-date tools and equipment in connection with development and testing
- Include the business aspect, such as project management, economics, quality and resource management
- Construct and test database systems
- Construct network solutions from analysis, project planning implementing to commissioning

**Total ECTS** 60 ECTS, of which

- 7,5 ECTS from common subject area Electronic systems
- 7,5 ECTS from common subject area Communications technology systems
- 5 ECTS from common subject area Software development
- 10 ECTS from common subject area Company
- 25 ECTS from study direction network, subject area network technology systems
- 5 ECTS from study direction network, subject area advisory and consultancy

**Learning objectives****Knowledge**

The student has acquired knowledge on

*From common part:*

- Project management and business understanding
- Interface technology
- Communication technology
- Programming technology

*From study direction part:*

- Server technology
- Database systems
- Network project planning

**Skills**

The student is able to

*From common part:*

- Assess technical solutions
- Use up-to-date tools and equipment in connection with development and testing of electronic systems and network

*From study direction part:*

- Use up-to-date tools for construction, testing and maintenance of database systems
- Select suitable network solution
- Apply knowledge on network technology in connection with design and project planning of network solutions

**Competences**

The student is able to

*From common part:*

- Document and present projects
- Acquire new knowledge and skills within basic electronic systems, communications technology systems, software development and the company

*From study direction part:*

- Handle network solutions in all project stages, from analysis to commissioning

The compulsory element *Electronic systems (1), Communications technology systems, Software development, Company, Network technology systems (2) and advisory and consultancy functions* is concluded with an examination (1<sup>st</sup> year examination).

**Examination**

The examination is evaluated using the 7-scale grading system and counts for a total of 60 ECTS.

The learning objectives of the element are identical to the learning objectives of the examination (1<sup>st</sup> year examination)

#### 4.3.4 Study direction Network, compulsory element: Network technology systems and Advisory and consultancy functions

##### Content

The second compulsory element must contribute to that the student independently and in corporation with others is able to

- Handle complex network solutions from analysis, project planning, implementation to commissioning and maintenance
- Provide advice and consultancy on complex network solutions from strategy to technology

**Total ECTS** 15 ECTS, of which

- 10 ECTS from study direction Network, subject area Network technology systems
- 5 ECTS from study direction Network, subject area Advisory and consultancy functions

##### Learning objectives

###### **Knowledge**

The student has acquired knowledge on

- Network security
- Advisory and consultancy functions

###### **Skills**

The student is able to

- Apply knowledge on network in connection with design, project planning, estimation of costs, implementation, administration, operation and maintenance of complex network solutions
- Apply knowledge on network in connection with advisory and consultancy assignments

###### **Competences**

The student is able to

- Handle network solutions in all project stages, from analysis to commissioning, such as managing, coordinating, quality-securing and resource management the implementation
- Manage and coordinate in connection with administration, operation, monitoring, maintenance and trouble shooting of network
- Provide advice and consultancy on complex network solutions from strategy to technology

The compulsory element Network technology systems and Advisory and consultancy functions is concluded with an examination (Technology assessment)

##### Examination

The examination is evaluated using the 7-scale grading system and counts for a total of 15 ECTS.

The learning objectives of the element are identical to the learning objectives of the examination (Technological assessment)

## 4.4 Themes

The following describes content, ECTS weight, learning objectives and the exams for each of the themes within the course of study.

The following themes are specific to the institution in Viborg:

**Table: The distribution of ECTS for the themes**

	Themes							Sum (horizontal)	
	First semester			Second Semester					
	Theme 1 Company	Theme 2 Specifica- tion	Theme 3 Develop- ment	Theme 4 Test and de- ployment	Theme 5 Consul- tancy	Theme 6 Electronics and Com- munication.	Network- ing Theme		
Company (10 ETCS)	5 ETCS		2 ETCS	2 ETCS	1 ETCS			10 ETCS	
Software develop- ment (5 ETCS)		3 ETCS	2 ETCS					5 ETCS	
Electronic systems (7,5 ETCS)		1,5 ETCS		1 ETCS		5 ETCS		7,5 ETCS	
Network technology systems (7,5 ETCS)			2,5 ETCS			5 ETCS		7,5 ETCS	
Network technology systems (25 ETCS)		5 ETCS	9 ETCS	1 ETCS			10 ETCS	25 ETCS	
Advisory and con- sultancy functions (5 ETCS)					5 ETCS			5 ETCS	
Theme sum up	5 ETCS	9,5 ETCS	15,5 ETCS	4 ETCS	6 ETCS	10 ETCS	10 ETCS		
Semester sum up	30 ETCS			30 ETCS					60 ETCS

### 4.4.1 Theme 1 – Company (1st semester 5 ECTS)

#### **Content:**

The programme element ensures that the students will have an understanding of good business sense and will be able to analyze a company's business model and on the basis of this, develop innovative alternatives.

#### **Learning objectives:**

##### **The student will gain knowledge and understanding about:**

- Different types of business models and concepts - offline and online.
- theories and models about the company's value creation
- the company's accounting matters, including the Annual Report and the financial reporting forms, as well as additional reports
- the company's revenue base and costs, including fixed costs and variable costs
- concepts and theories in organizational structure and organizational culture
- concepts and theories of supply chain structure
- theory of innovation, sources of innovation and the innovative organisation
- how the company's competencies originate and develop through many different activities, functions, processes, relationships, etc.

##### **The student will get the skills to:**

- analyze the company's strategic platform
- assess the company's competencies and resources focusing on their efficiency in value creation

- evaluate the company's internal strategic situation and its ability to deliver added value
- be able to assess the basic financial reporting in the annual report
- assess the company's structure and organization as the company's competency base
- Company IT systems in general. How organization around IT is structured – and how this relates to the actual IT setup.
- participate in innovation processes and use innovation tools both in product innovation and in organizational innovation

**The student will learn to:**

- participate in the company's innovation processes in interaction with others
- manage the structuring and analysis of significant economic posts in the annual report
- Communicate and present solutions in danish / english with regard to customer and company related activities.

**4.4.2 Theme 2 – Specification (1<sup>st</sup> semester 10 ECTS)**

**Content:**

The goal with this theme is to focus on the specification and analysis of requirements for technical projects and systems. How to specify new tasks within areas such as software, databases, electronics and computer networks.

Methods for doing analysis and specification with regard to presentation of the results and documentation.

This theme will cover a number of needed skills and competences.

- UML
- Technology Evaluation (Case CEBIT)
- Presentation
- Software specification
- Project writing and development
- Database Design
- Programming languages understanding, syntax and practical use
- Communicate, document, present and provide support in connection with internal and customer relations for software development.
- Electronic specification and basic understanding
- Computer and network specification
- Basic computer and network understanding

**Learning objectives:**

**The student will gain knowledge and understanding about:**

- where UML are applied within software and electronics specification.
- when to apply a technology evaluation, and what a technology evaluation can uncover.
- When software specification is used and where
- Programming technology
- software development models and commonly used project models – Agile and phased approach
- Presentation techniques
- Project writing
- Design rules when creating databases
- Syntax, formatting, structure and usage of PHP, MySQL
- Number Systems: Binary, Hexadecimal, Decimal, Octal  
Logarithms and Decibel Notation, Boolean Algebra, Truth tables, Logic Gates, Karnaugh Maps
- Radio Frequency (RF) theory

- Modulating and Coding
- Computer operation and technologies, including hardware and software
- Networking topologies & principles
- OSI model and its use
- TCP/IP protocol as fundament for modern networking
- NAT and IPv6/IPv4

**The student will get the skills to:**

- Differentiate between the various UML diagrams and when to use them.
- Presentation
- Use up-to-date tools and equipment in connection with design of software – Case tools to generate a system model.
- Project writing and development
- Distinguish between network topologies

**The student will learn to:**

- Use the UML diagrams in practical real world cases
- Design databases according to best practices
- Presentation
- Project writing and development
- Communicate, document, present and provide support in connection with internal and customer relations
- Specify software programs by the use of UML and flow diagrams
- Communicate, document, present and provide support in connection with front-end web development using PHP, MySQL
- Independently acquire skills and new knowledge within PHP, MySQL

**4.4.3 Theme 3 – Development (1<sup>st</sup> semester 10 ECTS)****Content:**

The goal with this theme is to focus on the development phase in a project. Making it possible for the students to create solutions for what they have specified. These solutions are within software, electronics, servers and networks.

Contents in general:

- Development of end to end Web solutions
- Consultancy in the networking world
- Project management
- Sale and marketing
- Server configuration and understanding
- Network principles and basics
- UI and interface design

**Learning objectives:****The student will gain knowledge and understanding about:**

- Recognize the role of the systems analyst in business information systems development projects and the role of methodologies, techniques and tools in the process.
- Software development platforms and environments – including mobile targets
- Knowledge of content management systems and their function
- routing protocols and concepts

- the principles of basic network security
- Wireless protocols and networks
- Understand server roles and features in a network solution
- Group Policy and Active Directory solutions

**The student will get the skills to:**

- Explain basic algorithmic problem-solving concepts using programming.
- Use the various data encoding techniques in use today.
- Explain the use of data communication techniques and the control of data links.
- Explain signal multiplexing and the various techniques used to increase efficiency in long distance data communications.
- Develop a simple mobile application, with focus on HTML5 and CSS
- Develop a simple website using a CMS tool
- Configure network equipment according to specification
- Configuring Hyper V solutions

**The student will learn to:**

- Write, compile and debug programs independently – displaying competences within the various structures of a computer program.
- Develop a small scale prototype for a business application using an appropriate prototyping tool - emphasis on navigation, and on sample screen and report layout.
- Create a web page using HTML5, CSS3 and scripting languages.
- Design networks – according to specifications
- Manage and maintain Networks according to specification
- Develop networks in PacketTracer
- Install and configure Core Networking Server Services
- Installing and managing Active Directory and Group Policy solutions
- Installing and configuring Windows Servers

#### **4.4.4 Theme 4 – Test and Deployment (2<sup>nd</sup> semester 5 ECTS)**

**Content:**

The purpose with this theme is to focus on deployment of solutions and documentation of this. This includes various skills within networking, server configuration, project management, accounting, and budgeting.

This also has relevance within software development, as programs need to be tested and prepared for deployment.

This theme will cover a number of needed skills and competences.

- Key software test principles and programs
- Networking deployment and testing
- Accounting
- Project plannings

**Learning objectives:**

**The student will gain knowledge and understanding about:**

- Key strategies for software testing and debugging
- Prepare cash budgets and operational budgets
- Project planning and tools to document this



**The student will get the skills to:**

- Apply the principles of management accounting to a business organization.
- Debug programs and locate problems in code
- Use programs to find static errors in programs
- Document deployment and test
- Present projects

**The student will learn to:**

- Deploy a network and find faults in the configuration
- Develop own programs and find the flaws in them
- Work with Networking deployment in theory and practice

**4.4.5 Theme 5 – Consultancy (2<sup>nd</sup> semester 5 ECTS)****Content:**

The purpose of this course is to introduce the concepts of consultancy to the students with a technology perspective. In practice – consultancy is the combined effort you get when you get a skilled bystander to evaluate your technical or organisation for you, with the purpose of introducing or suggesting changes in a specific direction.

In general, the course will focus on the following subjects:

- Technology evaluation
- Organisation theory
- Consultancy process
- Change management

**Learning objectives:****The student will gain knowledge and understanding about:**

- Common Organisation structures
- What factors affect an organisation and when it's needed to change
- How technology can affect a business
- Principles of the consultancy process
- Principles of change management

**The student will get the skills to:**

- Investigate technology using methods such as, Brainstorm, Idea Advocate, Opportunity Analysis, Factor and Cluster Analysis
- Use tools as Venn Diagram, Dendogram, Reverse Brainstorming
- Evaluate the requirements for implementing a change, using cases
- Perform consultancy tasks, based on doing cases

**The student will learn to:**

- Work with technology introduction and evaluation
- Evaluate the requirements for a consultancy task

**4.5 Elective educational elements**

The education has electives on 3rd semester which amount to 15 ECTS. The electives give the student the opportunity to improve his/her study competences and professional competences via specialization.

Every year the education offers a number of specific electives which are described by name, ECTS, contents, learning objectives and testing. These will be available on [www.eadania.dk](http://www.eadania.dk)

## 4.6 Internship (4<sup>th</sup> semester 15 ECTS)

### Content

The internship will be organized in a manner so that the student will gain practical competences as part of the AP programme.

The objectives of the internship is to give the student the option of using taught methods, theories and tools in practice and solve concrete praxis-based assignments within the fields of electronics or/and network.

### Learning objectives:

#### **The student has acquired knowledge on**

- Daily operations and functions in the internship company

#### **The student has skills to**

- Apply a variety of technical and analytical working methods in relation to the profession
- Assess praxis-based problem issues and suggest solutions
- Structuring and planning of daily working tasks in the profession
- Present praxis-based problem issues and justify choice of problem solution

#### **The student is able to**

- Handle development-oriented practical and professional situations in relation to the profession
- Acquire new knowledge, skills and competences in relation to the profession
- Participate in professional and interdisciplinary collaboration with a professional approach

### Exam

The practical training period is concluded with an examination.

The learning objectives of the element are identical to the learning objectives of the examination.

## 4.7 Requirements for the Final exam (4<sup>th</sup> semester 15 ECTS)

### Content:

In the final examination project the students must be able to document their ability to analytically and methodically solve a complex and practice-oriented problem in relation to a specific assignment within the field of the education. The problem statement in the final examination project must be based on a central subject related to the programme, and must be prepared by the student, and if possible in cooperation with a private or public company. The Academy must approve the problem formulation.

The student must hand in a final project report and maybe a product.

The project report which is the written part of the final examination project must contain the following as a minimum;

- Front page with title
- List of contents
- Introduction and problem statement
- Analysis and assessment
- Conclusion
- Bibliography (incl. all sources with a reference in the project)

- List of appendices (only include appendices which are relevant for the project)

The volume of the written project is a maximum of 20 normal pages + 20 normal pages per student. A normal page is 2400 keystrokes including blanks and foot notes. Front page, list of content, bibliography and list of appendices are not included in the number of required pages. Nor will the included appendices be considered in the assessment of the project.

### **Writing and spelling ability**

Showing good writing and spelling abilities are elements included in the final examination project. The final assessment is based on an overall evaluation of the content, spelling and writing ability.

Students with impaired physically or mentally abilities may apply for an exemption from the requirement that good writing and spelling abilities are included in the final assessment. The application must be directed to the Head of education at the relevant Academy no later than 4 weeks prior to the assessment.

### **Learning objectives:**

The final examination project must document that the learning objectives of the education are achieved according to the appendix no. 1 in the Order for the IT Technology AP Degree, study direction **Electronics**:

#### **The student has acquired knowledge on**

- 1) Communications and interface technology
- 2) Programming technology
- 3) Innovation, project management and business understanding, advisory and consultant functions
- 4) Technical mathematics
- 5) Embedded systems
- 6) Electronics technology and design and
- 7) Production technology and management

#### **The student has skills to**

- 1) Assess technical solutions based on the company's and the clients' needs
- 2) Communicate and document assignments and solutions for the people in charge of executing the technical assignments as well as for companies and customers
- 3) Use up-to-date tools and equipment in connection with design, development and testing of both hardware and software
- 4) Written and oral communication
- 5) Use innovative methods focused on user needs
- 6) Use relevant CAE and simulation tools
- 7) Assess and select relevant development model and
- 8) Design and use test systems

#### **The student is able to**

- 1) Communicate, document, present and provide support in Danish and English in connection with internal and customer relations, including handling documentation and presentation of projects
- 2) Undertake independent as well as customer-based and team-based assignments
- 3) Acquire skills and new knowledge within the field
- 4) Independently undertake technical project management assignment and
- 5) Participate in practice-oriented development processes
- 6) Handle design, development, construction, testing, product maturing and document of electronic systems, products and prototypes and
- 7) Handle analysis, construction, diagnosis, testing and services of the technology involved in the work on electronic and computerised systems, taking into account financial, environmental and quality

requirements

The final examination project must document that the learning objectives of the education are achieved according to the appendix no. 1 in the Order for the IT Technology AP Degree, study direction **Network**:

**The student has acquired knowledge of**

- 1) Communications and interface technology
- 2) Programming technology
- 3) Innovation, project management and business understanding, advisory and consultancy functions
- 4) Technical mathematics
- 5) Client and server technologies
- 6) Database systems
- 7) Network security and
- 8) Network project planning

**The student has skills to**

- 1) Assess technical solutions based on the company's and the clients' needs
- 2) Communicate and document assignments and solutions for the people in charge of executing the technical assignments as well as for companies and customers
- 3) Use tools and equipment in connection with design, development and testing of both hardware and software
- 4) Written and oral communication
- 5) Use innovative methods focused on user needs
- 6) Apply knowledge on network technology in connection with design, project planning, estimation of costs, implementation, administration, operation and monitoring of complex network solutions
- 7) Assess and communicate the suitability of technical network solutions vis-à-vis the company and the client and
- 8) Use up-to-date tools for construction, testing and maintenance of database systems

**The student is able to**

- 1) Communicate, document, present and provide support in Danish and English in connection with internal
- 2) and customer relations, including handling documentation and presentation of projects
- 3) Undertake independent as well as customer-based and team-based assignments
- 4) Acquire skills and new knowledge within the field
- 5) Independently undertake technical project management assignment and
- 6) Participate in practice-oriented development processes
- 7) Handle complex network solutions and systems in connection with internal and customer-related advisory and consultancy services, both strategically and technically
- 8) Handle analysis, identification of requirements, solution proposals, design, estimation of costs, preparation of requirements specification, projecting and planning relating to network and security solutions, including managing, coordinating, quality-assuring and managing the resources in respect of implementation and commissioning in all project stages and
- 9) Manage and coordinate administration, operation, monitoring, maintenance and problem solving relation to networks

**Exam**

The final examination is external and evaluated using the 7-scale grading system.

The final examination is partly a written project and partly an oral examination. The student will receive one combined grade only. Students must have passed all examinations and the practical training period to be entitled to do the final examination project.

## 5 The Tests on the Education

### 5.1 General information about tests

The purpose of testing is to assess to which degree the student meets the professional objectives stated for the education and its elements. The curriculum distinguishes between two types of tests:

- **External test:** Assessed by the internal examiner and one or more appointed external examiners.
- **Internal test:** Assessed by one or more lecturers or others selected by the academy.

See section describing study activity for more information about the prerequisites for participation and handing in assignments, projects etc.

It is the responsibility of the student to know and adhere to the rules of testing at the academy. When compulsory attendance has been met, assignments and projects are accredited, the student will automatically be signed up for exams and tests.

In case the student does not pass the first test, the student will automatically be signed up for a new test unless something else has been agreed on. For more information, see Dania's exam regulations.

If a student fails to show up for an exam a try has automatically been used unless the student can document illness. The student is entitled to 3 tries for each test.

All tests must be passed. Tests passed cannot be retaken.

#### Opting out from tests

The student is automatically signed up for all tests and exams at his/her education.

- Opting out from written exams – 7 days before the time of the exam
- Opting out from oral exam with written assignment – 7 days before deadline for handing in the written part
- Opting out from written assignment or project for evaluation – 7 days before the hand-in deadline
- Opting out from final exam report – 14 days before project hand-in deadline

If the student, as a consequence of unusual circumstances, wishes to opt out after the deadline, the student may apply for exemption. The exemption may be granted if the students can document unusual circumstances.

Opting out must be done by email to the study secretary of the education at the study location. When the student receives a confirmation from the academy the opting out is valid. After this, the student will be signed up for the next test in the subject area, and the test the student opted out from will not count as a try.

#### Illness at tests

If a student cannot sit a test because of illness, the student must inform the administration about this without delay. Also, the student must submit a doctor's note verifying illness.

The documentation must be received by our administration no later than three days after the test. The academy will set up a "new" exam as soon as possible.

If illness occurs during the test, invigilation must be informed and the student must abandon the room. The student must then send a doctor's notice to the academy so the test will not be counted as a try to take the exam.

If a student sits through the test despite illness, this will be counted as participation in the test. A student who has been absent from a test due to documented illness must sit the exam as soon as possible hereafter, and no later than the next ordinary exam time.

### **Special Test Conditions**

Students may, due to physical or psychological disabilities, apply for permission to get extra time for tests, special conditions or the like. A written application must be sent no later than 4 weeks before the test. If sudden health problems occur, the academy may accept another deadline.

The application must be accompanied by a doctor's notice, or other documentation for health problems.

The academy may accept special test conditions for the entire education.

#### **5.1.1 Complaints about exam**

Complaints about a test must be addressed to the academy. The complaint must be written (paper), substantiated, dated and signed. Complaints must be submitted no later than two weeks after the test or two weeks after the result of the test has been submitted to the student.

Complaint may be about; cf. exam regulations:

- 1) The basis of the test, including questions, the test itself and the like as well as the test in relation to the purpose of the education,
- 2) The actual execution of the test, or
- 3) The assessment of the test result

### **Exemption**

The institution may exempt from the times stated for passing tests if there is a health reason, including maternity leave.

#### **5.1.2 Irregularities, incorrect behaviour / breach of rules at exams**

If the academy finds that students cheat at tests, like getting help or using illegal means, the student will be expelled from the test. In serious cases the academy may decide to expel the student from the academy for a period of time. In such cases a written warning is given and repeat transgressions may lead to indefinite expulsion. An expulsion leads to loss of grade from the test and the use of a test try.

If the student is showing incorrect behaviour, the academy may expel the student from the test but only after warnings.

### **Use of own and others' work – plagiarism**

Plagiarism is when a written assignment contains complete or partial:

1. identical or almost identical reproduction of other's work without marking it with italics, quotes, indent or other clear reference to source
2. reuse of own already assessed material without meeting the requirements under point 1.

When an individual assignment contains text passages made with others in a group and is the same in multiple assignments it is also plagiarism.

### Taking tests when abroad

The student may in special circumstances be allowed to sit a test abroad, according to the current ministerial order. The test may be taken using skype or other approved video conferencing systems.

The institution appoint or approve invigilation who must be by the student during the test. Possible expenses must be covered by the student. The student must confirm, in writing, the acceptance of payment in advance.

## 5.2 Tests on the Diploma

The below test results will appear on the diploma.

Examination	Allocation of the total 120 ECTS	Assessment	Semester
1st year examination	60	7-scale grading system	2
Technology examination	15	7-scale grading system	2
Elective elements examination	15	7-scale grading system	3
Internship examination	15	7-scale grading system	4
Final examination project	15	7-scale grading system	4

## 5.3 Description of the Tests

### 5.3.1 Electives

See elective catalogue at eadania.dk for a precise description of test in elective.

### 5.3.2 Practical training exam (15 ECTS)

**Time:**

4<sup>th</sup> Semester

**Test type:**

The student's learning from the company internship is tested at an internal written test

The test assesses:

- The student's reflection on and achievement of the specific learning objectives for professional and personal development during the internship as stated in the internship agreement.
- The student's ability to relate the internship to the final report.

The internship must be passed before the students can take the exam in the final report

**Assessment criteria:**

The assessment criteria are identical with the learning objectives for the compulsory education element tested in the exam. The learning objectives may be found in the common part of the curriculum.

The grade is given on the basis of an oral presentation of a written report.

7-scale is used to assess.

*All trainee reports must be made individually and never in groups or pairs.*

**Prerequisite for taking the exam:**

The student must have concluded 2/3 of the internship to take this exam.

To be eligible for this exam, all tests on 1<sup>st</sup> and 2<sup>nd</sup> and 3<sup>rd</sup> semester must have been passed.

**Aids and language:**

All aids are available

The test is in English

**Duration of the test:**

15 minutes - oral test of written report

**Consequence if failing the test:**

Improve the traineeship report and/or re-exam in oral presentation.

The internship must be passed before the students can take the exam in the final report.

**5.3.3 Final exam project (15 ECTS)**

**Time:**

4th semester

**Test type:**

Oral exam on the basis of a written report.

The final report may be made individually or by 2-3 persons as a group.

The volume of the report must not exceed:

1 student: 100.000 characters

2 students: 150.000 characters

3 students: 200.000 characters

Characters include; spacing, foot notes, figures, and tables but not including front page, list of contents, list of sources and enclosures.

**Assessment criteria:**

The assessment criteria are identical with the learning objectives for the compulsory education element tested in the exam. The learning objectives may be found in the common part of the curriculum.

One grade is given for a collective assessment of the written and oral part, using the 7 scale. In the assessment the written part has a weight of 2/3 and the oral presentation a weight of 1/3. No parts grade is given.



The student's ability to spell and express him/herself fluently is part of the assessment. Students with another native tongue than Danish/English may be given an exemption from this assessment element. The academy must receive this request no later than 4 weeks before the test takes place.

*Special rules for differentiation of assessment at group tests: No*

**Prerequisite for taking the exam:**

To take this exam all other tests and exams must be passed.

**Aids and language:**

All aids are available

The test is in English

**Duration of the test:**

The oral exam is based on the written report, is individual, and takes 45 minutes including examiners' deliberation.

**Consequence if failing the test:**

If the grade achieved is less than 02 (fail) the student must make a new final report and sit a new oral exam.

## 6 Study start test

Students at 1st semester must take and pass the study start test to continue on the education. The purpose of the study start test is to evaluate if the student is actually studying.

The study start test is held no later than 2 months after study start and the result, pass/not pass will be known to the student no later than two weeks after the test.

The test consists of:

- A knowledge test in the subjects taught since studies started
- Assessment of study activity, comprising presence in class and quality of the assignments made

If students do not pass the test they have the chance to sit the test again no later than three months after study start. The students have two attempts to pass this test. This test is not regulated by the exam framework about tests and complaints.

If the student does not pass the test, he or she can no longer study at the academy.

## 7 Study activity

Study activity is measured as the student's attendance and participation in classes by handing in all compulsory assignments and projects. If these criteria are met the student may take the tests at the education. Study activity is always a condition for being qualified for SU.

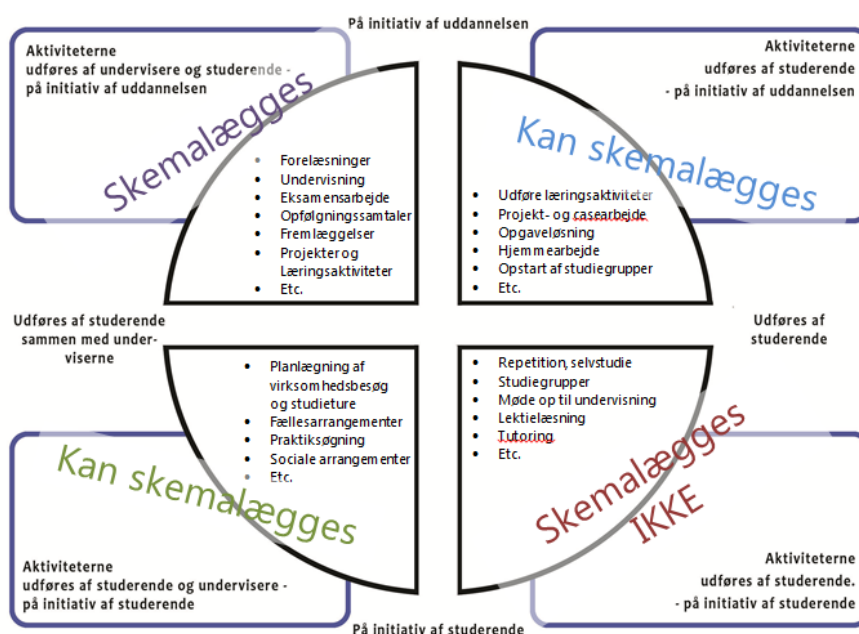
### 7.1 The Study Activity Model

When you start as a student at Dania academy of Higher Education you will meet activities and planning that is different from what you know. You must expect that the workload is similar to a full time job. The

education focuses on applying the science, which means that we have close cooperation with the business community during your education.

The studies include various types of activities. Some of the are initiated by the students themselves – others are planned by the academy. Some activities are executed by the students alone or with fellow students – others are done with the lecturers – and others again are done with companies. Either as part of the traineeship or in relation with projects or company visits.

The teaching at Dania is planned with the outset in the study activity model, dividing the activities in 4 categories:



## 7.2 Compulsory participation

At Dania Academy of Higher Education, we monitor the study activity of each student. We see our students as individuals with individual learning patterns and qualifications and use that as the basis for a combined valuation of participation.

## 7.3 Compulsory Assignments, projects etc.

Compulsory assignments, projects etc. must be handed in before we qualify the student as active and allow him/her to take tests.

For each semester there will be a plan on the intranet showing the assignments and tests of the semester as well as a description of each assignment, project etc.

## 8 Teaching and ways of working

The lectures incorporate the latest research and results from national and international research and development work from the disciplines relating to the profession taught. The teaching also include application of

theories from practice and knowledge from central tendencies in the profession and methods to develop the profession, as well as quality- and development work.

Teaching is done as lectures in lecture halls, class teaching, dialogue teaching, exercises, presentations, cases, seminars, guest lecturers; national and international, projects and company traineeship. .

### **The Role of the Lecturers**

It is Dania's policy that the lecturers plan and perform teaching on the basis of the following:

- Dania's values: We are curious, dynamic and visionary
- Study activity model
- Cross disciplinary approach
- Vary teaching methods
- A process approach to learning
- Close cooperation with the businesses in the profession
- Integration of innovation
- Expect the students to be independent, motivated and actively participating
- Use relevant IT tools

## **9 Rules for the Internship**

See section 4.5

### **Internship contract**

The student and the company sign a contract which will be approved by the programme manager to ensure relevant work tasks during the internship.

The contract contains the following:

- Duration of traineeship period and workhours per week
- Learning objectives
- The academy's responsibilities and framework for tutoring
- Expectations to the student
- Expectations to the company
- Responsibilities of the student, company and the academy
- How to handle a possible termination of the internship
- Demand to an action plan
- Framework for and possible demands for a dialogue between the parties
- Information about insurance
- Rules of confidentiality
- Additional information about work contract as enclosure
- Testing
- Evaluation

### **Work hours and Remuneration**

The internship is a full time job with the demand to work hours, participation, involvement and flexibility that a marketing graduate may expect to meet in his/her first job.

The number of work hours per week are negotiated individually between the student and the company.

The company is not required to pay the student a salary.

## 10 Internationalisation

The Academy Educations include the current international dimension in the lectures.

The structure of the education allows the students to take a semester abroad. Dania must approve the foreign institution and the content of the course chosen abroad. Subsequently, the student is dutybound to document completion of the course chosen. The student must also approve that the academy retrieves the necessary information from the foreign institution.

Also, the traineeship may be taken abroad. The company must be approved by the academy before the contract is valid. See general rules about traineeship.

## 11 Credits

### 11.1 Credits for parts of the subjects in this education

Dania may approve education elements on the same education taken at other institutions. The grade will be transferred.

Dania may approve educational elements passed at another institution and education are similar to education elements in Dania's current curriculum. If the subject has been graded using the 7-grade scale where the student has been tested and is equivalent to an entire subject, the grade will be transferred. In other cases the grade "pass" will be transferred and will not count in the grade average.

The student must send a written request with relevant enclosures to Dania to be eligible for credits. This also counts for Erasmus students.

### 11.2 Credits for and Access to Other Educations

The student must contact the student councillor to get topical information as this area develops all the time.

Students may also choose to take higher education abroad to achieve a Bachelor's degree in one or two years. Read more on

<http://ufm.dk/uddannelse-og-institutioner/videregaende-uddannelse/erhvervsakademier/faq-om-uddannelse/meritd4c0bd762d0c4180b072c625b708b402>

## 12 Leave

Students may be granted leave due to personal issues. More information about leave and the provisions for students on leave may be found in ministerial order no. 1486 of 16 December 2013 about access to academy professions educations and bachelor's educations.

## 13 Exemption

The institution may exempt students from the rules of the curriculum if the circumstances are unusual. The academies cooperate on uniform exemption rules.