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# Curriculum 2014 part 1

**IT Networks and Electronics Technology**

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IT Teknolog

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## 1. Programme structure

This curriculum constitutes the joint part of the curriculum for the Business Academy programme in IT Network and Electronics Technology, Executive Order no. 916 of 25 September 2009.

	<i>Core areas</i>	<i>1st year</i>	<i>2nd year</i>	
	Electronic systems 7.5 ECTS	7.5 ECTS		<i>Joint part</i>
	Communications systems 7.5 ECTS	7.5 ECTS		
	Software development 5 ECTS	5 ECTS		
	Business 10 ECTS	10 ECTS		
	Electronic systems 20 ECTS	10 ECTS	10 ECTS	<i>Electronics programme</i>
	Embedded systems 25 ECTS	20 ECTS	5 ECTS	
	Network system 35 ECTS	25 ECTS	10 ECTS	<i>Network programme</i>
	Advisory and consultant roles 10 ECTS	5 ECTS	5 ECTS	
<i>Elective elements</i>			15 ECTS	
<i>Internship</i>			15 ECTS	
<i>Main exam project</i>			15 ECTS	
<i>Total ECTS</i>		<b>60 ECTS</b>	<b>60 ECTS</b>	<b>120 ECTS</b>

## 2. Core areas

The programme is comprised of the following core areas:

### Joint for the two programmes

- |                           |                |
|---------------------------|----------------|
| 1. Electronic systems     | (7.5 ECTS)     |
| 2. Communications systems | (7.5 ECTS)     |
| 3. Business               | (10 ECTS)      |
| 4. Software development   | (5 ECTS)       |
| <b>Total</b>              | <b>30 ECTS</b> |

### Electronics programme

- |                       |                 |
|-----------------------|-----------------|
| 1. Electronic systems | (20 ECTS)       |
| 2. Embedded systems   | (25 ECTS)       |
| <b>Total</b>          | <b>45 ECTS)</b> |

### Network programme

- |                    |           |
|--------------------|-----------|
| 1. Network systems | (35 ECTS) |
|--------------------|-----------|

2. Advisory and consultant roles	(10 ECTS)
Total	45 ECTS

## 2.1 Programme structure

The table below shows the correlation between core areas, elective elements, internship and the main exam project:

	Core areas	1st year	2nd year	In total
<b>Joint part</b>	Electronic systems (7,5 ECTS)	7.5 ECTS		<b>30 ECTS</b>
	Communications systems (7,5 ECTS)	7.5 ECTS		
	Software development (5 ECTS)	5 ECTS		
	Business (10 ECTS)	10 ECTS		
<b>Electronics programme</b>	Electronic systems (20 ECTS)	10 ECTS	10 ECTS	<b>45 ECTS</b>
	Embedded systems (25 ECTS)	20 ECTS	5 ECTS	
<b>Network programme</b>	Network systems (35 ECTS)	25 ECTS	10 ECTS	<b>45 ECTS</b>
	Advisory and consultant roles (10 ECTS)	5 ECTS	5 ECTS	
<b>Elective elements</b>			15 ECTS	<b>45 ECTS</b>
<b>Internship</b>			15 ECTS	
<b>Main exam project</b>			15 ECTS	
<b>Total ECTS</b>		<b>60 ECTS</b>	<b>60 ECTS</b>	<b>120 ECTS</b>

## 2.2 Contents and learning objectives for the core area: Electronic systems (Joint for both programmes)

Weight: 7.5 ECTS

### Contents

The core area will ensure that the student gains skills and acquires new knowledge in the field of electronic systems, including basic electronics, interfaces, technical mathematics and embedded systems. The core area will also help ensure that the student can use tools and measuring devices in development and testing. Finally, the core area will teach the student to document and communicate.

### Learning objectives

#### Knowledge and understanding

The student will gain knowledge about:

- Interface technology
- Technical mathematics

#### Skills

The student will get the skills to:

- Evaluate technical solutions based on the needs of the company and the customer's needs
- Communicate and document the tasks and solutions for those who need to carry out the technical work
- Communicate and document the tasks and solutions for companies and customers
- Use tools and equipment related to the design, development and testing of hardware

### **Competencies**

The student will learn to:

- Communicate, document, present and support in connection with internal and customer relationships
- Manage the documentation and presentation of projects
- Participate in real-life development processes
- Acquire new skills and knowledge within electronic systems

## **2.3 Contents and learning objectives for the core area: Communications systems (Joint for both programmes)**

Weight: 7.5 ECTS

### **Contents**

The core area will ensure that the student gains skills and acquires new knowledge in the field of communications systems, including basic models, protocols and operating systems. The core area will also help to ensure that the student can use tools and measurement equipment in design and testing. Finally, the core area will teach the student to document and communicate.

### **Learning objectives**

#### **Knowledge and understanding**

The student will gain knowledge about:

- Communications technology

#### **Skills**

The student will get the skills to:

- Evaluate technical solutions based on the needs of the company or customer
- Communicate and document the task for those who need to carry out the technical work
- Communicate and document the tasks and solutions for companies and customers
- Use tools and equipment associated with the design and test of communications systems.

### **Competencies**

The student will learn to:

- Communicate, document, present and support in connection with internal and customer relationships
- Manage the documentation and presentation of projects
- Participate in real-life development processes
- Acquire new skills and knowledge within communications systems

## **2.4 Contents and learning objectives for the core area: Business (Joint for both programmes)**

Weight: 10 ECTS

### **Contents**

The core area will help ensure that the student gains skills and acquires new knowledge within the business area, including innovation, project management, finance, quality and resource management, and the advisory and consultancy function. The core area will also help ensure that the students can use innovative methods. Finally, the core area will teach the student to document and communicate.

### **Learning objectives**

#### **Knowledge and understanding**

The student will gain knowledge about:

- Innovation
- Project management
- Business understanding
- Advisory and consultancy functions

#### **Skills**

The student will get the skills to:

- Communicate orally and in writing
- Use innovative methods with a focus on user needs

### **Competencies**

The student will learn to:

- Manage individual, customer and team-based assignments
- Acquire skills and new knowledge in the area of the company
- Independently handle technical project management tasks

## **2.5 Contents and learning objectives for the core area: Software development (Joint for both programmes)**

Weight: 5 ECTS

### **Contents**

The core area will help ensure that the student gains skills and acquires new knowledge in software development, including translating a specific task to a technical solution. The core area will also help ensure that the student can use tools and equipment in connection with the design, development and testing of software. Finally, the core area will teach the student to document and communicate.

### **Learning objectives**

#### **Knowledge and understanding**

The student will gain knowledge about:

- Programming techniques

#### **Skills**

The student will get the skills to:

- Use tools and equipment related to the design, development and testing of software

#### **Competencies**

The student will learn to:

- Communicate, document, present and support in connection with internal and customer relationships
- Manage the documentation and presentation of projects
- Acquire new skills and knowledge within software development
- Participate in real-life development processes

## **2.6 Contents and learning objectives for the core area: Electronic systems (Electronics programme)**

Weight: 20 ECTS

### **Contents**

The core area will help ensure that the student gains knowledge of electronics technology and skills in the design process for electronic systems. In addition, the core area will give the student knowledge of production techniques and production management for electronic devices. The core area will also help the students to apply relevant CAE and simulation tools.

### **Learning objectives**

#### **Knowledge and understanding**

The student will gain knowledge about:

- Electronics technology and electronics design
- Production engineering and Production management

#### **Skills**

The student will get the skills to:



- Apply relevant CAE and simulation tools
- Assess and select the appropriate development model
- Build and use test systems

### **Competencies**

The student will learn to:

- Manage the design, development, construction and testing of prototypes
- Manage product development of prototypes
- Manage documentation of electronic systems
- Manage the analysis, diagnostics, testing and servicing of the technology involved in working with electronic systems, taking into account financial, environmental and quality requirements.

## **2.7 Contents and learning objectives: Embedded systems (Electronics programme)**

Weight: 25 ECTS

### **Contents**

The core area will help the student to gain knowledge and skills in embedded systems, including design, construction, programming and testing.

### **Learning objectives**

#### **Knowledge and understanding**

The student will gain knowledge about:

- Embedded systems

#### **Skills**

The student will get the skills to:

- Assess and select the appropriate development model
- Build and use test systems

### **Competencies**

The student will learn to:

- Manage the design, development, construction, testing and documentation of embedded systems
- Manage the analysis, diagnostics, testing and servicing of the technology involved in working with technical systems, taking into account financial, environmental and quality requirements.

## 2.8 Contents and learning objectives for the core: Network systems (Networks programme)

Weight: 35 ECTS

### Contents

The core area will help ensure that the student gains skills and acquires new knowledge in the field of communications systems, including server technologies, database systems, and network security. The core area will also teach the student to use tools for building, testing and maintaining database systems.

### Learning objectives

#### Knowledge and understanding

The student will gain knowledge about:

- Server technologies
- Database systems
- Network security

#### Skills

The student will get the skills to:

- Apply knowledge on network technology in the design, planning and implementation of complex network solutions
- Apply network technological knowledge in the administration, operation and monitoring of complex network solutions
- Apply up-to-date tools for building, testing and maintenance of database systems

#### Competencies

The student will learn to:

- Manage analysis, needs analysis, solution design, and the preparation of requirements specification for network and security solutions in all project phases
- Manage the design and planning of network and security solutions

## 2.9 Contents and learning objectives for the core area: Advisory and consultant roles (Networks programme)

Weight: 10 ECTS

### Contents

The core area will help ensure that the student gains skills and acquires new knowledge in network design. The core area will also help ensure that the student can use the network technological knowledge associated with advisory and consultancy roles.

## Learning objectives

### Knowledge and understanding

The student will gain knowledge about:

- Network design

### Skills

The student will get the skills to:

- Apply knowledge of network technology in the design and estimation of costs of complex network solutions
- Evaluate and communicate the appropriateness of technical network solutions in relation to the company and the customer

### Competencies

The student will learn to:

- Manage complex network solutions and systems in relation to internal and customer related advisory and consultancy services, both strategic and technical
- Manage, coordinate, quality assure and control resource implementation and commissioning of network and security solutions
- Manage and coordinate in relation to the administration, operation, monitoring, maintenance and problem-solving of networks

## 3. Compulsory programme elements

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The compulsory programme elements are:

### Within the Electronics programme

1. Electronic systems, Communications systems, Software development, Business, Electronic systems and Embedded systems (60 ECTS)
2. Electronic systems and Embedded systems (15 ECTS)

Total 75 ECTS.

The two compulsory programme elements are each completed with an exam.

### Within the Network programme

1. Electronic systems, Communications systems, Software development, Business, Electronic systems and Embedded systems (60 ECTS)
2. Network systems and Advisory and consultant roles (15 ECTS)

Total 75 ECTS

The two compulsory programme elements are each completed with an exam.

### 3.1 Electronics study programme, contents and learning objectives: Communications systems, Software development, Business, Electronic systems and Embedded systems

Weight: 60 ECTS

Hereof:

- 7.5 ECTS from joint core area Electronic systems
- 7.5 ECTS from joint core area Communications systems
- 5 ECTS from joint core area Software development
- 10 ECTS from joint core area Business
- 10 ECTS from study programme Electronics, core area Electronic systems
- 20 ECTS from study programme Electronics, core area Embedded systems

### Contents

The first compulsory programme element will ensure that the student independently and in collaboration with others is qualified to:

- Construct and test interface systems
- Design, construct and test simple network engineering systems
- Do software development, where a specific task is translated to a technical solution
- Use tools and measuring equipment in connection with development and testing
- Include business aspects, such as project management, finance, quality and resource management
- Develop basic electronic systems at a prototype level
- Develop basic embedded systems

### Learning objectives

#### Knowledge and understanding

The student will gain knowledge about:

*From the joint part:*

- Project management and business skills
- Interface Technology
- Communication Technology
- Programming Techniques

*From the study programme part:*

- Electronics technology and electronics design
- Embedded systems

#### Skills

The student will get the skills to:

*From the joint part:*

- Evaluate technical solutions
- Use tools and equipment related to the development and testing of electronic systems and network engineering systems

*From the study programme part:*

- Work with the design, construction, testing and documentation of electronic and embedded systems, including using relevant CAE and simulation tools

#### Competencies

The student will learn to:

*From the joint part:*

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

*From the study programme part:*

- Design, develop, construct and test electronic prototypes and embedded systems.

The compulsory programme element Electronic systems (1), Communications systems, Software development, Business, Electronic systems (2) and Embedded systems is completed with an exam.

#### **Assessment criteria**

The exam is assessed according to the 7-point scale and totals 60 ECTS.

The learning objectives for the programme element are identical to the learning objectives of the exam (First Year Exam)

For examination form and organisation etc. refer to the joint part of the curriculum.

### **3.2 Electronics study programme, contents and learning objectives: Electronic systems and Embedded systems**

Weight: 15 ECTS

Hereof:

- 10 ECTS from study programme Electronics, core are Electronic systems
- 5 ECTS from study programme Electronics, core area Embedded systems

#### **Contents**

This second compulsory programme element will ensure that the student independently and in collaboration with others is qualified for:

- Developing electronic and embedded systems, including product development
- Using tools and measuring equipment in connection with development and testing

#### **Learning objectives**

##### **Knowledge and understanding**

The student will gain knowledge about:

- Production engineering and production management

##### **Skills**

The student will get the skills to:

- Work with the design, construction, test product development and documentation of electronic and embedded systems, including using relevant CAE and simulation tools
- Assess and select appropriate development model

### **Competencies**

The student will learn to:

- Analyse, construct, diagnose, test and service the technology involved in working with electronic, data technical, and embedded systems, taking into account financial, environmental and quality requirements.

The compulsory programme element Electronic systems and Embedded systems is completed with an exam.

### **Assessment criteria**

The exam is assessed according to the 7-point scale and totals 15 ECTS.

The learning objectives for the programme element are identical to the learning objectives of the exam (Technology Exam).

For examination form and organisation etc. refer to the joint part of the curriculum.

## **3.3 Network study programme, contents and learning objectives: Electronic systems, Communications systems, Software development, Business, Network systems and Advisory and consultant roles**

Weight: 60 ECTS

Hereof:

- 7.5 ECTS from joint core area Electronic systems
- 7.5 ECTS from joint core area Communications systems
- 5 ECTS from joint core area Software development
- 10 ECTS from joint core area Business
- 25 ECTS from study programme Network technology, core area Network systems
- 5 ECTS from study programme Network technology, core area Advisory and consultant roles

### **Contents**

The first compulsory programme element will ensure that the student independently and in collaboration with others is qualified for:

- Constructing and testing interface systems
- Designing, constructing and testing simple network engineering systems
- Software development, where a specific task is translated into technical solutions
- Using tools and measuring equipment in connection with development and testing
- Including business aspects, such as project management, finance, quality and resource management
- Building and testing database systems

- Making network solutions from analysis, design, implementation to commissioning

### Learning objectives

#### Knowledge and understanding

The student will gain knowledge about:

*From the joint part:*

- Project management and business understanding
- Technical Interfaces
- Communication techniques
- Programming techniques

*From the study programme part:*

- Server technologies
- Database systems
- Network design

#### Skills

The student will get the skills to:

*From the joint part:*

- Asses technical solutions
- Use tools and equipment related to the development and testing of electronic and network engineering systems

*From the study programme part:*

- Use tools for building, testing and maintenance of database systems
- Select the appropriate network solutions
- Use the network technological knowledge in the design and planning of network solutions

#### Competencies

The student will learn to:

*From the joint part:*

- Document and present projects
- Acquire skills and knowledge in basic electronics, communications systems, software development and the business area

*From the study programme part:*

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

The compulsory programme element Electronic systems, Communications systems, Software development, Business, Network systems and Advisory and consultant role is completed with an exam. (First Year Exam)

#### Assessment criteria

The exam is assessed according to the 7-point scale and totals 60 ECTS.

The learning objectives for the programme element are identical to the learning objectives of the exam (First Year Exam)

For examination form and organisation etc. refer to the joint part of the curriculum.

### **3.4 Network study programme, contents and learning objectives: Network systems and Advisory and consultant role.**

Weight: 15 ECTS

Hereof:

- 10 ECTS from the study programme network technology, core area Network systems
- 5 ECTS from the study programme network technology, core area Advisory and consultant role

#### **Contents**

The second compulsory programme element will ensure that the student independently and in collaboration with others is qualified for:

- Creating complex network solutions from analysis, design and implementation to commissioning and operation
- Advising and providing consulting services on complex network solutions ranging from strategy to technology

#### **Learning objectives**

##### **Knowledge and understanding**

The student will gain knowledge about:

- Network security
- Advisory and consultant roles

##### **Skills**

The student will get the skills to:

- Use network technical knowledge in the design, planning, estimation of costs, implementation, management, operation and monitoring of complex network solutions
- Use network technical knowledge associated with advisory and consultant roles

##### **Competencies**

The student will learn to:

- Work with network solutions in all project phases from analysis to commissioning, including managing, coordinating, quality assurance and resource control implementation
- Manage and coordinate in relation to the administration, operation, monitoring, maintenance and troubleshooting of networks
- Work with advisory and consultancy roles on complex network solutions ranging from strategy to technology

The compulsory programme element Network systems and Advisory and consultant roles is completed with an exam (Technology Exam)

##### **Assessment criteria**

The exam is assessed according to the 7-point scale and totals 15 ECTS.



The learning objectives for the programme element are identical to the learning objectives of the exam (Technology Exam)

For examination form and organisation etc. refer to the joint part of the curriculum.

### 3.5 Number of exams in the compulsory programme elements, Electronics study programme

The two compulsory programme elements are each completed with one exam. For an overview of the exams, see chapter 7.

Overview of the ECTS correlation between the core areas and the compulsory programme element:

Compulsory programme element	Electronic systems, Communications systems, Software development, Business, Electronic systems and Embedded systems	Electronic systems and Embedded systems	ECTS in total
<b>Joint core areas for the two study programmes</b>			
Electronic systems 7.5 ECTS	7.5 ECTS		7.5 ECTS
Network systems 7.5 ECTS	7.5 ECTS		7.5 ECTS
Software development 5 ECTS	5 ECTS		5 ECTS
Business 10 ECTS	10 ECTS		10 ECTS
<b>Core areas, study programme</b>			
Electronic systems 20 ECTS	10 ECTS	10 ECTS	20 ECTS
Embedded systems 25 ECTS	20 ECTS	5 ECTS	25 ECTS
<b>Total ECTS</b>	<b>60 ECTS</b>	<b>15 ECTS</b>	<b>75 ECTS</b>

### 3.6 Number of exams in the compulsory programme elements, Networks study programme

The two compulsory programme elements are completed with one exam. For an overview of the exams, see chapter 7.

Overview of the ECTS correlation between the joint core areas and the compulsory programme elements.

Compulsory programme elements	Electronic systems, Communications systems, Software development, Business, Network systems and Advisory and consultant roles	Network systems and Advisory and consultant roles	ECTS in total
<b>Joint core areas for the two study programmes</b>			
Electronic systems 7.5 ECTS	7.5 ECTS		7.5 ECTS
Network systems 7.5 ECTS	7.5 ECTS		7.5 ECTS
Software development 5 ECTS	5 ECTS		5 ECTS
Business 10 ECTS	10 ECTS		10 ECTS
<b>Core areas, study programme</b>			
Network systems 20 ECTS	10 ECTS	10 ECTS	20 ECTS
Advisory and consultant roles 25 ECTS	20 ECTS	5 ECTS	25 ECTS
<b>Total ECTS</b>	<b>60 ECTS</b>	<b>15 ECTS</b>	<b>75 ECTS</b>

## 4 Internship

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Weight: 15 ECTS

### Contents

The internship is organised so that, in combination with the programme, it contributes to the student developing practical skills. The internship aims to make the student able to use the programme methods, theories and tools in solving practical tasks in network engineering and/or electronics.

### Learning objectives

#### Knowledge and understanding

The student will gain knowledge about:

- The day-to-day operation of the Internship company

#### Skills

The student will get the skills to:

- Apply versatile technical and analytical methods of work related to employment within the industry
- Evaluate practical issues and commission solutions

- Structure and plan daily tasks in the industry
- Communicate practical issues and solutions

### **Competencies**

The student will learn to:

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

The internship is completed with an exam.

The learning objectives for the programme element are identical to the learning objectives of the exam.

For examination form and organisation etc. refer to the joint part of the curriculum.

## **5 The Main Exam Project**

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Weight: 15 ECTS

### **Requirements for the Main Exam Project**

The main exam project must demonstrate the student's understanding of practice and key analytical and methodical application in relation to a practical problem, based on a specific task in the area of the programme. The practical problem must be central to the education and the profession, and be formulated by the student, possibly in cooperation with a private or public company. The school approves the thesis statement.

A project report must be handed in as well as any product.

For the written part of the exam, the project report must contain at least:

- Front page with title
- Table of contents
- Introduction, including thesis statement
- Method
- Analysis
- Any suggestions for solutions
- Conclusion
- Bibliography (including all sources referred to in the project)
- Appendices (only include appendices central to the report)

The project report must not exceed 20 pages in length + 20 pages per student.

The front page, table of contents, bibliography and appendices do not count in the required number of pages. Appendices will not be out of the scope of the exam.

A page is 2,400 keystrokes including space and footnotes. Front page, table of contents, bibliography and appendices do not count towards this. Appendices will not be assessed.

### **The effect of spelling and writing abilities**

Spelling and writing skills are part of the main exam. The assessment reflects an overall rating of the academic content as well as spelling and writing ability.

Students who can document a relevant disability can apply for an exemption from the requirement that spelling and writing skills are included in the assessment. An application must be sent to the applicable head of department no later than four weeks before the exam is due to be held.

## **5.1 Learning objectives, Electronics study programme**

The main exam project must show that the programme's objectives have been reached, cf. appendix 1 of Executive Order for IT Technology programme, Electronics study programme:

The learning objectives include the knowledge, skills and competencies that an IT technologist must have.

### **Knowledge and understanding**

The graduate has knowledge about about:

- Communication and interface technology
- Programming Techniques
- Innovation, project management and business skills, as well as advisory and consultant roles
- Technical Mathematics
- Embedded systems
- Electronics Technology and Design
- Production engineering and management

### **Skills**

The graduate is able to:

- Evaluate technical solutions based on the company's and customer's needs
- Communicate and document the tasks and solutions for those who need to perform the technical tasks, as well as to businesses and customers
- Use tools and equipment related to the design, development and testing of both hardware and software
- Communicate in writing and orally
- Use innovative methods with a focus on user needs
- Apply relevant CAE and simulation tools
- Assess and select appropriate development models
- Build and use test systems

### **Competencies**

The graduate is able to:

- Communicate, document, present and support in Danish or English in internal and customer-relating situations, including dealing with documentation and presentation of projects
- Manage individual, customer- and team-based assignments
- Acquire new knowledge and skills in the subject area
- Independently handle technical project management tasks
- Participate in practical development processes, manage design, development, construction, testing, product development and documentation of electronic systems, products and prototypes
- Manage the analysis, design, diagnosis, testing and servicing of the technology involved in working with electronic and computerised systems, taking into account financial, environmental and quality requirements

## 5.2 Learning objectives, Networks study programme

The main exam project must show that the programme's objectives have been reached, see appendix 1 of Executive Order IT Technology programme, Networks study programme:

The learning objectives include the knowledge, skills and competencies that an IT technologist must have.

### Knowledge and understanding

The graduate has knowledge about:

- Communication and interface technology
- Programming Techniques
- Innovation, project management and business skills, as well as advisory and consultant roles
- Technical Mathematics
- Client and server technologies
- Network security
- Network Engineering

### Skills

The graduate is able to:

- Evaluate technical solutions based on the company's and customer's needs
- Communicate and document the tasks and solutions for those who need to perform the technical tasks, as well as to businesses and customers
- Use tools and equipment related to the design, development and testing of both hardware and software
- Communicate in writing and orally
- Use innovative methods with a focus on user needs
- Apply knowledge on network technology in the design, planning, estimation of costs, implementation, management, operation and monitoring of complex network solutions
- Evaluate and disseminate the appropriateness of technical network solutions in relation to the company and the customer

- Apply modern tools for building, testing and maintenance of database systems

### Competencies

The graduate is able to:

- Communicate, document, present and support in Danish or English in internal and customer-relating situations, including dealing with documentation and presentation of projects
- Manage individual, customer- and team-based assignments
- Acquire new knowledge and skills in the subject area
- Independently handle technical project management tasks
- Participate in practical development processes
- Manage complex network solutions and systems for internal and customer related advice and consulting services both strategic and technical
- Manage analysis, needs analysis, solution design, estimation of costs, demand specification design, design and planning of network and security solutions, including managing, coordinating, quality assurance and resource control implementation and commissioning in all project phases
- Manage and coordinate relative to the administration, operation, monitoring, maintenance and problem-solving on network solutions

### Assessment

The exam is assessed according to the 7-point scale

The exam consists of a project and an oral part. One collective mark is given. The exam can only take place after the final internship exam and all other programme exams have been passed.

For examination form and organisation etc. refer to the joint part of the curriculum.

## 6 Overview of the exams

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Overview of all programme exams and their relative placement:

Exam	120 ECTS distributed over the exams	Assessment
1. First Year Exam	60	7 - point scale
2. Technology Exam	15	7 - point scale
3. Elective Element Exam(s) <sup>1</sup>	15	7 - point scale
4. Internship Exam	15	7 - point scale
5. Final Exam Project	15	7 - point scale

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1. Elective elements and their corresponding exam(s) are described in the joint curriculum.

## 7 Credit

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Programme elements that have been passed are equivalent to similar programme elements at other educational institutions where the programme is offered.

Students are obligated to supply information about programme elements they have passed at other Danish or foreign institutions of higher education and any employment assumed to give credits. The educational institution approves credits individually on the basis of passed programme elements and employment that equal the subjects, programme parts and internship elements. The decision is based on an academic evaluation.

### 7.1 Credit for elective programme elements

Elective elements that have been passed are equivalent to similar programme elements at other educational institutions that offer the programme as well as other programmes.

### 7.2 Prior credit approval

Students can apply for prior credit approval. With prior credit approval of studies in Denmark or abroad, students are required to document each approved and completed programme component. In connection with applying for prior credit approval, the students give the institution permission to obtain the necessary information after completion.

Upon approval of the prior credit approval, the programme component is considered completed if it is passed according to the rules of the programme.

### 7.3 Credit schemes

See the institution website.

## 8 Commencement of the curriculum

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The curriculum is valid for students starting 01.08.2014 and afterwards, and is shared by for the following institutions:

*Business Academy Aarhus*  
[www.baaa.dk](http://www.baaa.dk)

*Erhvervsakademi Dania*  
[www.eadania.dk](http://www.eadania.dk)

*Erhvervsakademiet Lillebælt*  
[www.eal.dk](http://www.eal.dk)

*Københavns Erhvervsakademi*  
[www.kea.dk](http://www.kea.dk)

*Professionshøjskolen University  
College Nordjylland*  
[www.ucn.dk](http://www.ucn.dk)

## 8.1 Transitional scheme

This joint part of the curriculum commences on 1 August 2014 and applies to all students who are, or who later enrol, in the programme and for exams that begin on or after that date.

Any transitional provisions for students enrolled prior to August 2014 can be found in the institutional curriculum.

The joint national part of the curriculum from September 2013 is cancelled, effective from 31 July 2014.

## 9 Admission to the programme

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### 9.1 Requirements for the programme

Admission to the programme is provided according to Executive Order no. 1486 of 16 December 2013 concerning access to academic and professional degree programmes. The Executive order can be found on [retsinfo.dk](http://retsinfo.dk).

## 10 Rules of exemption

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The educational institution can deviate from what the institution or the institutions themselves have stated in the curriculum if this is justified by exceptional circumstances. The various institutions must cooperate in order to have a homogenous dispensation policy.

## 11 Approval

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This institutional part of the curriculum has been enacted and approved by the educational network for the software development programme.

On behalf of the network:



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Head of programme Gert Simonsen  
For Business Academy Aarhus