



Curriculum 2014-2016

AP Degree in Automotive Technology

Autoteknolog

Version 2.4
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1. Curriculum's framework

1.1. Commencement of the curriculum

The curriculum applies to students starting in September 2014, and the joint part is shared by the following institutions:

Business Academy Aarhus
www.baaa.dk

Dania Academy of Higher Education
www.eadania.dk

*Zealand Institute of Business and
Technology*
www.zibat.dk

*Lillebælt Academy of Professional Higher
Education*
www.eal.dk

1.2. Transitional scheme

This joint national part of the curriculum is valid from the 1 September 2014 and this is valid for all students who are now enrolled and who enrol later, as well as all exams begun on or after the aforementioned date.

The joint national part of the curriculum from September 2013 will be repealed with effect from 31 August 2014.

However, exams which have been started before the 1 September 2014, must be completed according to this joint national part by the 31 August 2014 + 2 semesters.

2. Admission to the programme

2.1. Requirements for the programme and/or subject distribution as well as any entrance examination

Access to the programme is granted according to Ministerial Order nr. 223 from 11 March 2014 pertaining to business academy programmes and professional bachelor programmes. The Ministerial Order can be found at retsinfo.dk (in Danish only).

2.2. Learning objectives

Goals for the learning outcomes include the knowledge, skills and competencies that a student must achieve in the programme and must demonstrate that the programme's learning outcomes/graduation level has been achieved, cf appendix 1 of Ministerial Order no. 690 from 3 July 2009 for the programme: Automotive Technology

Knowledge and understanding

The student will gain knowledge about:

- technology and design at product and component level
- construction and materials knowledge
- electronic principles and systems
- driving systems and vehicle dynamics
- IT systems as tools for troubleshooting and diagnosis
- sales and service focusing on customer care
- operational and financial management
- personnel management.

Skills

The student will get the skills to:

- use their automotive technology knowledge for diagnosis, troubleshooting, repair and optimisation of vehicles and for the professional communication with importers and manufacturers
- select and use the correct and advanced measuring equipment and tools for a given assignment
- communicate assignments, solution proposals and technological knowledge to the people in charge of executing the technical work assignments
- prepare documentation regarding damage, service, repairs and complaints handling in English
- use industry-relevant English in daily communication with customers and others in the industry.

Competencies

The student will learn to:

- acquire skills and new knowledge within the field
- independently handle technically complex troubleshooting
- systematically handle complex technological issues in connection with the localisation of complex faults and in connection with the optimisation of vehicles in racing teams
- carry out mechanical and electronic optimisation of a vehicle's driveability
- manage systems and methods to make servicing and troubleshooting more efficient
- undertake the overall management, operation, financial management, quality control and safety management of the garage, including issues relating to the administration and training of staff
- manage customer service, sales and distribution of automotive technology products in a way that ensures a good working relationship with customers and suppliers

3. Core areas of the programme

The programme comprises the following core areas:

1. Technology and design (20 ECTS)
2. Optimisation and repairs (10 ECTS)
3. It management (5 ECTS)
4. Consultancy and dissemination (5 ECTS)
5. Communication (5 ECTS)
6. Sales and service (4 ECTS)
7. Operational and financial management (5 ECTS)
8. HR management (5 ECTS)
9. Quality and safety (3 ECTS)
10. Documentation (3 ECTS)

A total of 65 ECTS

3.1. Content and learning objectives for technology and design

Weight: 20 ECTS

Content

- Construction
- Material understanding
- Design

Learning objectives

Knowledge and understanding

The student will gain knowledge about:

- acquiring development based scientific knowledge and understanding of practices and methods relating to vehicle construction and modification within the applicable guidelines
- understanding the practice and central choices for applied theories/methods within the vehicle's mechanical and electronic systems associated with technology and the design of products and component levels.

Skills

The student will get the skills to:

- use the key methods and tools in connection with construction and design
- technically assess the consequences and opportunities on the basis of real-life technological issues
- through illustrations present and choose options associated with the choice of materials in connection with construction
- disseminate real-life mechanical, hydraulic, pneumatic as well as thermal and aerodynamic problems and communicate solutions to partners and users.

Competencies

The student will learn to:

- deal with development-orientated situations in connection with technology and design

- participate in professional and interdisciplinary teams with a professional approach to finding a solution for advanced technological issues in relation to construction
- in a structured context, acquire new knowledge, skills and competencies in relation to construction and choice of materials.

3.2. Content and learning objectives for optimisation and repairs

Weight: 10 ECTS

Content

- Vehicle dynamics
- Performance systems
- Networks and data communication

Learning objectives

Knowledge and understanding

The student will gain knowledge about:

- acquiring development based knowledge and understanding of practices and methods relating to the optimisation of the vehicle's characteristics, like technical vehicle systems and vehicle dynamics
- understanding the practice and central choices for applied theories/methods within electronic principles and systems

Skills

The student will get the skills to:

- use key methods and tools related to the read-out of data in connection with vehicle diagnostics, troubleshooting, repairs and optimisation of vehicles
- assess the real-life issues and choose the appropriate solutions for working with mechanical/electronic optimisation of the vehicle's characteristics
- disseminate real-life auto technology issues and solutions to partners and users.

Competencies

The student will learn to:

- manage development-orientated situations associated with technically advanced troubleshooting
- participate in professional and interdisciplinary teams with a professional approach to finding a solution for advanced technological issues in relation to the optimisation of vehicles
- in a structured context, acquire new knowledge, skills and competencies in relation to improving the efficiency of service and troubleshooting.

3.3. Content and learning objectives for IT management

Weight: 5 ECTS

Content

- IT tools
- Own diagnosis
- Analysis and diagnosis techniques

Learning objectives

Knowledge and understanding

The student will gain knowledge about:

- acquiring development based knowledge and understanding of practices and methods associated with the diagnosis of technical and electronic systems
- understanding the practice and central choices for applied theories/methods within work on the diagnosis of electronic principles and systems
- knowledge about the creation and use of knowledge networks.

Skills

The student will get the skills to:

- use central methods and IT tools related to own diagnosis, data registration, data collection and processing, as well as the operational simulation of vehicle systems
- assess and analyse real-life issues and choose correct measuring equipment in relation to a given task
- disseminate real-life auto technology issues and solutions to partners and users.

Competencies

The student will learn to:

- manage development-orientated situations associated with technical and advanced electronic troubleshooting, as well as develop competencies within the use of IT for communication and documentation
- participate in professional and interdisciplinary teams with a professional approach to finding solutions for advanced technological issues in relation to localising any errors and in connection with the optimisation of vehicles
- in a structured context, acquire new knowledge, skills and competencies in relation to the use of IT as a tool for fault-diagnosis of vehicles.

3.4. Content and learning objectives for consultancy and dissemination

Weight: 5 ECTS

Content

- Learning and competency development
- Learning processes and individual learning styles

- Methodology and didactics
- Dissemination media/knowledge sharing
- Participant qualifications

Learning objectives

Knowledge and understanding

The student will gain knowledge about:

- acquiring development based knowledge and an understanding of practices and methods associated with consultancy and dissemination to and from individuals and groups, as well as dissemination through dissemination media and knowledge sharing networks based on various participant qualifications
- understanding the practice and central choices for applied theories/methods within work on the dissemination and motivation of individuals and groups based on various participant qualifications.

Skills

The student will get the skills to:

- use the central methods and tools related to consultancy and dissemination through knowledge sharing
- assess the real-life issues and select the appropriate solutions in the form of methodological and didactic considerations for working with consultancy and dissemination
- disseminate real-life issues and solutions to partners and users in a motivational and pedagogic manner.
- through training, courses, presentations and the like, convey their technological knowledge to individuals and groups, taking into account the diverse participant qualifications and individual learning styles.

Competencies

The student will learn to:

- manage development-orientated situations linked to learning and competency development based on different participant qualifications and individual learning styles
- participate in academic and interdisciplinary teams with a professional approach to the solution of diverse consultancy and dissemination tasks
- in a structured context, acquire new knowledge, skills and competencies in relation to improving the efficiency of consultancy and dissemination.

3.5. Content and learning objectives for communication

Weight: 5 ECTS

Content

- Professional oral communication
- Professional written communication

Learning objectives

Knowledge and understanding

The student will gain knowledge about:

- acquiring development based knowledge of practices and methods associated with psychological and communicative tools that can be used for communication
- understanding the practice and central choices for applied theories and methods for communication with employees, customers and suppliers.

Skills

The student will get the skills to:

- use the key methods and tools in the context of professional communication with, for example, importer and manufacturers
- document real-life issues and selected solutions
- apply industry-related English to convey the real-life issues and possible solutions to customers and others in the industry.

Competencies

The student will learn to:

- manage oral and written communication
- participate in disciplinary and interdisciplinary cooperation with a professional approach in an industry-related English
- In a structured context, acquire new knowledge, skills and competencies to communicate with customers and others in the industry.

3.6. Content and learning objectives for sales and service

Weight: 4 ECTS

Content

- Sales techniques
- Customer care
- Marketing

Knowledge and understanding

The student will gain knowledge about:

- acquiring development based knowledge and an understanding of practices and methods associated with the sales and service, with focus on customer care
- acquiring development based knowledge and an understanding of practices and methods associated with guarantees and ex gratia cases
- understanding the practice and central choices for applied theories/methods within sales and service with an emphasis on loyalty and revenue
- understanding the practice and central choices for applied theories/methods within marketing

Skills

The student will get the skills to:

- use central methods and tools in connection with sales and service with regard to the different types of people
- assess the real-life issues and choose the appropriate solutions for working with objections
- disseminate real-life issues and solutions to customers and partners on the basis of a needs-related related conversation structure
- use central methods and tools for professional dissemination and establishment of solutions for marketing efforts.

Competencies

The student will learn to:

- manage development-orientated situations in connection with customer service and sales of automotive technical products with focus on loyalty and revenue
- participate in academic and interdisciplinary teams with a professional approach to the coordination of sales and service with a focus on customer satisfaction, loyalty and increased profits
- in a structured context, acquire new knowledge, skills and competencies in relation to marketing.

3.7. Content and learning objectives for operation and economy management

Weight: 5 ECTS

Content

- Operation and management of auto-related companies
- Administration
- Economy

Learning objectives

Knowledge and understanding

The student will gain knowledge about:

- acquiring development based knowledge and an understanding of practices and methods associated with the operation and management of finances
- understanding the practice and central choices for applied theories/methods within operation, accounts and reporting in relation to an industry-related company.

Skills

The student will get the skills to:

- use central methods and tools used within the operation of an auto-related company

- assess the real-life issues and choose the appropriate solutions for work with the administrative aspects of the garage's products, services and general tasks
- disseminate real-life economic issues and possible solutions to customers and partners.

Competencies

The student will learn to:

- manage development-orientated overall management, operation and financial management of a garage
- participate in academic and interdisciplinary teams with a professional approach to the operation and management of an auto-related business
- in a structured context, acquire new knowledge, skills and competencies in relation to financial analyses and forecasts regarding internal operation and optimisation.

3.8. Content and learning objectives for HR management

Weight: 5 ECTS

Content

- HR management
- Employee administration
- Coaching
- Analysis models

Learning objectives

Knowledge and understanding

The student will gain knowledge about:

- development based knowledge of the profession and the subject's practice and centrally applied theory and methods associated with employee management and employee administration
- understanding of practices and centrally applied theory and method in connection with coaching and analysis models.

Skills

The student will get the skills to:

- apply key methodologies and tools for advising individual mechanics and the whole garage/team or racing team in relation to both technical and personnel issues
- assess real-life staffing issues and compare and choose possible solutions for this
- disseminate real-life and possible solutions to staff, suppliers and customers in a coaching-based context.

Competencies

The student will learn to:

- manage development-orientated situations in connection with employee management
- participate in disciplinary and interdisciplinary cooperation with a professional approach in relation to the administration and training of staff
- in a structured context, develop their own practices in the field of employee administration.

3.9. Content and learning objectives for quality and safety

Weight: 3 ECTS

Content

- Quality management systems
- Certifications
- Evaluations
- Audits
- Environmental and working environment conditions (WPA)

Learning objectives

Knowledge and understanding

The student will gain knowledge about:

- practices and methods associated with the quality and safety management of companies
- real-life and a key selection of applied theories/methods within the work with quality assurance and working environment conditions at all levels of management.

Skills

The student will get the skills to:

- apply key methodologies, models, tools and management tools related to working with quality assurance and working environment conditions at all levels of management
- assess real-life problems and choose the appropriate options for working with, and the evaluation of, quality assurance and working environment conditions
- convey the real-life issues and solutions for partners and users in relation to quality assurance procedures and working environment conditions.

Competencies

The student will learn to:

- manage development-orientated situations linked to quality assurance and working environment conditions, including auditor functions and evaluation work
- professionally participate in disciplinary and interdisciplinary teams to solve quality procedures, as well as participate in working environment organisations and do workplace risk assessments

- in a structured context, acquire new knowledge, skills and competencies in relation to quality assurance and working environment conditions.

3.10. Content and learning objectives for documentation

Weight: 3 ECTS

Content

- Damage evaluation
- Warranty claim handling
- Industry-related cases
- Construction at the component and product level

Learning objectives

Knowledge and understanding

The student will gain knowledge about:

- practices and methods associated with the preparation of industry-related documentation
- real-life and selected theories/methods used in working with industry-related documentation in connection with work tasks
- real-life and selected theories/methods used in working with industry-related documentation in connection with doing reports.

Skills

The student will get the skills to:

- use the key methods and tools related to the preparation of documentation in relation to damage evaluation, service and repair tasks as well as warranty claim handling
- assess the real-life issues and choose the appropriate solutions for working with documentation
- via documentation disseminate real-life issues and solutions to partners and users.
- communicate and document the real-life issues and solutions for partners and users by reference to the documentation.

Competencies

The student will learn to:

- manage development-orientated situations associated with the preparation of documentation in connection with industry-related tasks and reporting
- professionally participate in disciplinary and interdisciplinary teams to solve tasks in connection with reporting, damage evaluation and reparation extent
- in a structured context, acquire new knowledge, skills and competencies in relation to improving the efficiency of documentation.

4. Compulsory programme elements

The programmes compulsory programme elements are:

1. Management, communication, operation and engineering (50 ECTS)
2. Innovation, technology and design (15 ECTS)

A total of 65 ECTS

The two compulsory programme elements both end with an exam.

4.1. Content and learning objectives for compulsory programme element 1: Management, communication, operation and engineering

Weight: 50 ECTS

Content

- Finance and law
- HR management
- Communication and service
- Quality
- Consultancy and communication
- Innovation, optimisation, technology and design understanding
- IT, analysis and diagnosis techniques
- Safety and SRS systems
- Comfort, performance and telecommunications equipment
- Gear and transmission

Learning objectives

Knowledge and understanding

The student will gain knowledge about:

- industry practices and centrally applied theory and methods for construction and material understanding concerning vehicles
- practice and centrally applied theory and methods for design of vehicles at component and product level
- industry practices and centrally applied theory and methods for vehicle construction and optimisation
- industry practices and centrally applied theory and methods for vehicle propulsion systems and drive lines
- industry practices and centrally applied theory and methods for vehicle driveability
- understanding the practice and central choices for applied theories/methods within electronic systems in vehicles
- understanding the practice and central choices for applied theories/methods within comfort equipment in vehicles

- development based knowledge of the profession's practice and centrally applied theory and methods associated with the repair of vehicles
- development based knowledge of the profession's practice and centrally applied theory and methods associated with the diagnosis of vehicles
- understanding the practice and central choices for applied theories/methods within IT as a tool for diagnosing
- understanding the practice and central choices for applied theories/methods within active and passive safety of vehicles
- understanding the practice and central choices for applied theories/methods within the use and establishment of knowledge networks
- development based knowledge of the profession and centrally applied theory and methods associated with sales and service, which focuses on customer care
- understanding the practice and central choices for applied theories/methods within communication with external parties
- development based knowledge of the profession and centrally applied theory and methods associated with methods of communication
- development based knowledge of the profession and centrally applied theory and methods associated with methods of marketing
- development based knowledge of the profession and centrally applied theory and methods associated with methods of consultation
- development based knowledge of the profession and centrally applied theory and methods associated with dissemination and motivation
- understanding the practice and central choices for applied theories/methods within the operation of a company
- understanding the practice and central choices for applied theories/methods within management of working environment conditions
- development based knowledge of the profession and centrally applied theory and methods associated with methods of employee management
- development based knowledge of the profession and centrally applied theory and methods associated with methods for quality management systems
- development based knowledge of the profession and centrally applied theory and methods associated with methods for repair of gears and transmission systems

Skills

The student will get the skills to:

- apply key methodologies and tools for solving technological issues
- disseminate real-life issues about technology and design to business partners and users
- assess the real-life issues related to the repair of vehicles and compare and select options
- apply key methodologies and tools for the diagnosis and optimisation of vehicles
- apply key methods and tools in connection with technology and design
- assess the real-life issues regarding choice of materials in connection with constructions and compare and choose solution options

- apply key methods and tools in connection with comfort systems
- disseminate real-life issues about comfort systems to business partners and users
- assess real-life issues related to the use of tools and measurement equipment, and compare and choose solution options
- assess real-life issues related to an ECUs impact on emissions, and compare and choose solution options
- apply key methods and tools within IT for data registration and simulation of the operation of vehicles
- disseminate real-life issues concerning IT using different learning styles to business partners and users
- assess the real-life issues related to marketing and compare and select solution options
- assess the real-life issues related to complaints and compare and select solution options
- apply key methods and tools for the coordination of industry-related cases
- disseminate real-life issues by means of technical knowledge to business partners and users
- apply key methods and tools for communication of industry-related cases
- disseminate real-life issues related to sales and service in English to business partners and users
- apply key methodologies and tools within management styles for the optimisation of sales and service
- apply key methods and tools for assessment of various types of people
- apply key methods and tools for the economic analysis of the industry's companies
- assess the real-life issues related to legal issues and compare and select solution options
- disseminate real-life issues related to operation and economy to employees and business partners
- assess the real-life issues related to employee issues and compare and select solution options
- apply key methods and tools for the management of staff
- disseminate real-life issues related to the management of staff to employees and business partners
- apply key methods and tools to quality management
- assess the real-life issues related to work environment cases and compare and select solution options
- disseminate real-life issues related to work environment cases to employees and business partners in connection with an audit
- disseminate documented real-life issues to employees and business partners
- apply key methods and tools to work with functions and technological issues on gear and transmission systems.

Competencies

The student will learn to:

- participate in disciplinary and interdisciplinary collaboration concerning the development of technical systems with a professional approach
- in a structured context, acquire new knowledge, skills and competencies in relation to technology and design
- manage development-orientated situations in connection with innovation
- in a structured context, acquire new knowledge, skills and competences in connection with advice to customers and employees about safety and SRS systems
- participate in disciplinary and interdisciplinary collaboration concerning the optimisation of processes in connection with engine controls with a professional approach
- manage development-orientated situations in connection with advanced technical troubleshooting
- in a structured context, acquire new knowledge, skills and competencies related to the use of IT for data recording of vehicles
- participate in disciplinary and interdisciplinary collaboration concerning the optimisation of processes for analysis and diagnosis techniques with a professional approach
- manage development-orientated situations in connection with advanced electronic troubleshooting
- in a structured context, acquire new knowledge, skills and competencies related to the use of IT for communication and documentation
- manage development-orientated situations in connection with building relationships with customers and employees
- manage development-orientated situations in connection with sales and customer service
- participate in disciplinary and interdisciplinary collaboration within management with a professional approach
- participate in disciplinary and interdisciplinary collaboration in a working environment organisation and learn to prepare WPAs with a professional approach
- in a structured context, acquire new knowledge, skills and competencies in relation to the management of quality and safety
- manage development-orientated situations in connection with evaluation and audits
- participate in disciplinary and interdisciplinary collaboration concerning external communication from a company with a professional approach
- in a structured context, acquire new knowledge, skills and competencies in relation to communication
- participate in disciplinary and interdisciplinary collaboration concerning the economy and legal issues with a professional approach
- manage development-orientated situations in connection with sales and service, using knowledge of different learning styles
- in a structured context, acquire new knowledge, skills and competencies in relation to sales and service
- manage development-orientated situations in connection with the operation of a company

- participate in disciplinary and interdisciplinary collaboration concerning operation and the economic management of a company with a professional approach
- in a structured context, acquire new knowledge, skills and competencies concerning the optimisation of both operation and the economy in a company
- manage development-orientated situations in connection with quality management in a company
- participate in disciplinary and interdisciplinary teams concerning employee management with a professional approach
- in a structured context, acquire new knowledge, skills and competencies in relation to employee management
- manage development-orientated situations in connection with improving the efficiency of service and troubleshooting
- participate in disciplinary and interdisciplinary teams concerning quality control with a professional approach
- manage development-orientated situations related to advice for gear and transmission systems
- participate in disciplinary and interdisciplinary collaboration concerning troubleshooting of gear and transmission systems with a professional approach
- in a structured context, acquire new knowledge, skills and competencies in relation to gear and transmission systems

Assesment criteria

The exam is assessed according to the 7-point scale and is weighted 50 ECTS.

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

For exam forms and the exams organisation, etc. please refer to the institutional part of the curriculum.

4.2. Content and learning objectives for compulsory programme element 2: Innovation, technology and design

Weight: 15 ECTS

Content

- Innovation, optimisation, technology and design understanding
- Bodywork and construction
- Documentation

Learning objectives

Knowledge and understanding

The student will gain knowledge about:

- understanding the practice and central choices for applied theories/methods within Technological problems relating to bodywork and structure

- development based knowledge of the profession and centrally applied theory and methods associated with construction and material understanding
- understanding the practice and central choices for applied theories/methods within electronic systems and principles in vehicles
- development based knowledge of the profession and centrally applied theory and methods associated with design on product and component level
- development based knowledge of the profession and centrally applied theory and methods associated to driveability
- understanding the practice and central choices for applied theories/methods for solving technological problems relating to vehicle dynamics
- understanding the practice and central choices for applied theories/methods within management and documentation of industry relevant cases
- understanding the practice and central choices for applied theories/methods within reporting
- development based knowledge of the profession and centrally applied theory and methods associated with the documentation of economic and legal matters in connection with the operation of an auto related company
- understanding the practice and central choices for applied theories/methods for professional documentation

Skills

The student will get the skills to:

- assess real-life environmental issues in connection with repairs on the bodywork and single-component surfaces, including further work for the purpose of corrosion control
- disseminate real-life issues and possible solutions, as well as technological knowledge to employees and business partners
- assess real-life issues in connection with technology and design on vehicles as well as compare and select solutions
- apply key methods and tools to compile documentation about technological issues
- assess real-life issues in connection with the choice of methodology for problem solving as well as the choice and application of the tools for the job
- apply key methods and tools to optimise vehicles
- apply key methods and tools to diagnose vehicles
- disseminate real-life issues regarding diagnosis and optimisation of vehicles to employees and business partners
- apply the subject area's key methods and tools in connection with documentation
- apply the subject area's key methods and tools for documentation of industry-related cases
- assess the real-life issues related to documentation and compare and select solution options

Competencies

The student will learn to:

- participate in disciplinary and interdisciplinary collaboration concerning the development of technology and design with a professional approach
- in a structured context, acquire new knowledge, skills and competencies in relation to technology and design
- participate in disciplinary and interdisciplinary collaboration concerning the development of technical systems with a professional approach
- manage development-orientated situations in connection with advice about technology and design of vehicles
- in a structured context, acquire new knowledge, skills and competencies in relation to electronic principles and systems
- participate in disciplinary and interdisciplinary collaboration concerning troubleshooting of optimisation of vehicles with a professional approach
- manage development-orientated situations in connection with advice and dissemination and develop associated documentation
- manage development-orientated situations in connection with documentation of industry-related cases

Assessment criteria

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

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

For exam forms and the exams organisation, etc. please refer to the institutional part of the curriculum.

4.3. Number of exams in the compulsory programme elements

The two compulsory programme elements both end with an exam. See the overview of the programmes exams in the section 7 'Overview of exams'.

The overview of the connection of ECTS between the core areas and the compulsory programme elements are illustrated in the table below.

Compulsory programme elements	Management, communication, operation and engineering	Innovation, technology and design	ECTS in total
Core areas			
Technology and design	13	7	20
Optimisation and repair	6	4	10
IT management	5	0	5
Consultancy and dissemination	5	0	5
Communication	5	0	5

Sales and service	3	1	4
Operational and financial management	5	0	5
HR management	5	0	5
Quality and safety	3	0	3
Documentation	0	3	3
A total of	50 ECTS	15 ECTS	65

For a description of the learning objectives within the individual subjects/modules/projects/themes, see the programme's semester plan, where the learning objectives for the individual subjects/modules/projects/themes have been clarified.

5. Internship

Weight: 15 ECTS

The internship is completed with an exam which is judged according to the 7-pointscale. The exam's form and organisation is determined by the individual institution and is described in the institutional part of the curriculum.

5.1. Learning objectives for the internship

Knowledge and understanding

The student will gain knowledge about:

- the industry and the subject area's practice and centrally applied theory and methods
- understanding the expectations that the profession has for the student's knowledge, skills and competencies.

Skills

The student will get the skills to:

- apply the profession's key methods and tools and be able to apply the skills related to employment within the profession
- assess the real-life issues and compare and select solution options
- be able to communicate the real-life issues and possible solutions to business partners and users.

Competencies

The student will learn to:

- manage development-orientated situations

- participate in disciplinary and interdisciplinary collaboration with a professional approach
- in a structured context, acquire new knowledge, skills and competencies in relation to the profession.

Based on – and within – the above-mentioned learning objectives for the internship, the student, the company and the supervisor from the programme will jointly set concrete targets for the student's learning outcomes in the internship period.

6. The main exam project

The main exam project is weighted 15 ECTS.

6.1. Criteria for the main exam project

The main exam project is evaluated by an external exam. The exam consists of a project and an oral part, and one total mark is given.

The main exam project must demonstrate the student's understanding of practices and centrally applied theory and methods in relation to a real-life problem, which is based upon a specific task within the programme's area. The problem statement that must be central to the programme and profession, is formulated by the student, in collaboration with a private or public company. The institution must approve the problem statement

The project, which constitutes the written part of the exam, must contain the following:

- Front page with title
- Table of contents
- Introduction, including a presentation of the problem statement, thesis statement and the angle of approach
- Background, theory, methodology, analysis, including description of and justification for the choice of any empirical data¹, which is used to elaborate on the thesis statement
- Conclusion (keep in mind that there must be coherence between the introduction and the conclusion. The two should, in principle, be able to be understood without reading the background and analysis sections)
- The broader perspective
- Bibliography (including all sources that are referenced in the project)
- Appendix (include only appendices which are important for the report)

¹ "Empirical data is material which is the subject of study and which can be referenced (observations, data, statements, texts, sources)". Rienecker L. & Jørgensen P.S. 2005 Den gode opgave – opgaveskrivning på videregående uddannelser 3rd Edition Frederiksberg: Samfundslitteratur.

The main exam project can only have a maximum 50,000 characters. The main exam project is prepared individually by each student and the student participates individually in the exam.

The appendix is not assessed.

The main exam project must demonstrate that the programme's objectives have been achieved, cf. appendix 1 in Ministerial Order 690 for the Automotive Technology programme.

6.2. Formulation and spelling skills

Spelling and formulation skills form part of the assessment of the main exam project. The assessment is indicative of an overall assessment of the professional content as well as the spelling and formulation skills.

Students who can document a relevant disability may apply for dispensation from the requirement that spelling and writing skills should be included in the assessment. Applications must be submitted to the head of the programme at least four weeks before the exam.

6.3. Assessment criteria

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

The exam consists of a project and an oral part. A single mark is given. The exam cannot take place until the final internship exam and all the other exams on the programme have been passed.

For exam forms and the exams organisation, etc. please refer to the institutional part of the curriculum.

7. Overview of the exams

Overview of all the programme's exams

Examination	120 ECTS distributed for exams	Assessment criteria
1. Study start exam (optional)	-	Pass/fail
2. First-year exam	50	7-point scale
3. Elective(s)	25	7-point scale
4. 3rd Semester exam	15	7-point scale
5. Internship exam	15	7-point scale

6. Main exam project	15	7-point scale
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8. Credit

The institution can authorise that successful programme elements or parts thereof passed at another institution, are equal to corresponding programme elements or parts thereof in this curriculum. If the relevant programme element was assessed according to the 7-point scale at the institution where the exam was carried out, and if this equates to a whole subject in this curriculum, the mark will be transferred. In all other cases, the assessment will be transferred as 'pass' and will not be included in the calculation of the mark average.

The institution can approve that passed programme elements from another Danish or foreign higher education programme take the place of programme elements that are included within the scope of this curriculum. Upon approval of this, the programme element is considered completed if it is passed according to the rules of the relevant programme. The assessment is transferred as 'pass'.

The students are obliged to provide information about previous successful programme elements, which can be assumed to be able to give credit.

8.1. Credit for elective programme elements

Passed elective programme elements are equivalent to the corresponding elements at other educational institutions that provide this programme as well as other programmes.

8.2. Prior credit approval

Students can apply for prior credit approval. With prior credit approval for study in Denmark or abroad, students are required to document each approved and completed programme element when they have completed each programme element. In connection with applying for prior credit approval, the students give permission that the institution can obtain the necessary information after the student's completion at other institutions.

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

8.3. Rules of exemption

The institution can deviate from what the institution or the institutions themselves have stated in the curriculum if this is justified by exceptional circumstances. Institutions providing the auto technologist programme, cooperate in regards to a uniform exemption practice.

9. Approval

This joint national part of the curriculum has been enacted and approved by the network for the Automotive Technology programme.

For Business Academy Aarhus

Date/Signature

For Dania Academy of Higher Education

Date/Signature

For Zealand Institute of Business and Technology

Date/Signature

For Lillebælt Academy of Professional Higher Education

Date/Signature