



Curriculum Bachelor of Web Development

2011

BSc Web Development

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PART I

1. Background and framework

The National Curriculum for the PBA Web Development programme is prepared in co-operation by the providers of the education and effects all approved providers of the programme.

The curriculum has been developed within the framework of existing acts and ministerial orders (examination regulations, main order and programme order) and is valid for students starting the PBA programme from the 1st of September 2010.

1.1 Programme objectives

The programme aims to train graduates who immediately after completing their education may be included in the design and construction of web applications of all sizes. The training is aimed at recruitment in internal development departments in companies of all sizes, or in larger consulting or software companies in the web area.

Graduates will, after some years of employment, be able to perform general functions related to planning and architecture of complex web-systems.

The professional bachelor's degree in Web Development is a programme designed to qualify graduates for development in a society, where rapid evolving of both society's overall digitization needs and industry/media methods is a field.

Finally, the training qualifies graduates to pursue relevant training at postgraduate level.

1.2 Scope of the programme

The programme, which is a full-time study, is rated as an FTE (full time effort) of 1½ years of study. A student's yearly FTE is a full-time student's work in 1 year.

A student's yearly FTE is equivalent to 60 ECTS points (European Credit Transfer System). The programme is rated for a total of 90 ECTS.

1.3 Title

Those who have completed and passed the programme are entitled to use the title **Bachelor of Web Development** (BSc Web Development).

1.4 Admission to the programme

The Bachelor of Web Development is a top-op programme (a degree) to both the Multimedia Design and Communication diploma (AP Degree) and the Computer Science diploma (AP Degree) programme, which both allow for direct admission.

Other candidates may be placed on a concrete assessment of their actual qualifications see Order No. 8 of 10 January 2008 for individual competence assessment (actual competence assessment) in higher adult education (VVU) and diploma courses in further education for adults.

1.5 Methods of Teaching and Studying

Teaching at the Bachelor of Web development programme at Business Academy Aarhus is conducted as a dynamic, interactive process where the main emphasis is on the active participation of the students. The students take responsibility for their own learning and students as well as teachers contribute constructively to the learning process.



The teaching is conducted as a combination of classroom teaching and individual and team-based project work – most often involving interdisciplinary issues and always with an application-oriented starting point.

To ensure the individual student the optimum professional learning and personal development the Bachelor of Web development Programme applies varied teaching methods with main emphasis on dialogue, discussion and projects. The teaching plan is varied and includes classroom teaching, work in groups, interdisciplinary cases, theme-based work, guest lectures, company visits and project work.

2. Overall learning objectives for the programme

2.1 Knowledge

The objective is that the student gain knowledge about:

- World Wide Web formal and de facto standards
- World Wide Web standards as a platform for applications
- XML family's role in both data warehousing and application development
- Normal development environments for web development
- Content Management Systems
- The roles of web applications in society and its development

2.2 Skills

The objective is that the student has skills to:

- Select appropriate and suitable object-oriented programming languages to implement the development aspirations
- Select an appropriate and suitable database system to ensure coherence in both data and application.
- Design of appropriate interfaces adapted to relevant target groups
- Utilization of the World Wide Web special design and aesthetic possibilities

2.3 Competences

The objective is that the student has the competence to:

- Analyse, plan and develop applications based on specific development aspirations
- Analyse and plan expansions in the framework of existing systems
- Implement development in light of the analysis and planning carried out
- Execute a development process based on an external analysis and plan

The overall objective is utilized into a series of targets for knowledge, skills and competences that are described under the individual training modules.

3. Structure of the programme, core and mandatory educational elements

The Bachelor programme is modular and consists of:

- Bridging Modules
- Core Modules
- Possible elective modules



- Internship (15 ECTS)
- Final bachelor project (15 ECTS)

3.1 Modules

The line consists of several modules which together spans the field and thus provides the student the relevant skills.

These modules are closely linked, so each module is given meaning through the whole they are part of - the total quantity of modules.

There will be an opportunity for the student to point his/her programme in different directions depending on choice of modules.

Bridging

Some modules are based directly on previously acquired skills that are specific to either the Computer Science (AP Degree) or the Multimedia Design and Communication programme (AP Degree).

The following modules are mandatory:

- Web programming and network. Backend programming (mandatory for Multimedia Design and Communication)
- Web programming and network. Front end programming (mandatory for Computer Science)

Core Modules

- Databases and XML (10ECTS)
- Interface design and digital aesthetics (10 ECTS)

EG. Of Elective Modules

- Project Management (10 ECTS)
- Security (10 ECTS)
- Science (additional module) (5 ECTS)
- Development environments and CMS (10 ECTS)
- Web communication and network sociology (10 ECTS)
- Advanced media technologies (10 ECTS)

Other

- Internship (15 ECTS)
- Final bachelor project (15 ECTS)

4. Learning objectives for programme elements:

4.1 Programming and network. Backend Programming (10 ECTS)

Prerequisites

Completed Multimedia Design and Communication programme or equivalent.

Purpose

The purpose is to enable the student to develop modern web applications using the object-oriented programming paradigm, using modern standardized protocols and client / server model



options. The emphasis is on providing skills that are not significantly incorporated in the Multimedia Design and Communication programme.

Objectives

Knowledge

The objective is that student has knowledge about:

- design patterns
- TCP / IP architecture as the Internet's protocol-related foundation
- the Internet's structure as client / server platform
- World Wide Web fundamental protocols
- client / server architecture capabilities and limitations

Skills

The objective is that student has acquired skills to:

- object-oriented programming using the basic concepts; object, class, method, constructor, encapsulation, interfaces, inheritance, specialization, extension, and polymorphism
- use protocol-based special techniques in the programming of web applications
- use programming techniques in conjunction with protocols to ensure data and system access

Competences

The objective is that the student is competent to:

- analyze a development request for the construction of a web-based client / server application
- select and apply an appropriate object-oriented programming language for developing web-based client / server applications, and in general
- meet the purpose of the programme

4.2 Web-programming and network. *Front-end programming (10 ECTS)*

Prerequisites

Completed Computer Science programme or equivalent.

Purpose

The purpose is to enable the student to develop modern web applications using the object-oriented programming paradigm, using modern standardized protocols and client / server model options. In addition, understanding of basic design and visual communication. The module will also enable the student to design simple user interfaces by use of an aesthetic and communicative principles

Objectives

Knowledge

The goal is that the student has knowledge about:

- the Internet's structure as client / server platform
- TCP / IP architecture as the Internet's protocol-related foundation
- World Wide Web fundamental protocols
- different media specific characteristics, strengths and weaknesses



- developing a communication strategy taking into account the sender, audience, media and tools

Skills

The objective is that the student has acquired skills to:

- use protocol-based special techniques in the programming of web applications
- program and implement a modern, dynamic web application
- master the design principles of typography, chromatology, layout, composition, aesthetics and imagery. The student must be able to apply these principles in the production of interactive user interfaces
- use programming techniques in conjunction with protocols to ensure data and system access
- use communication theories, models and methodologies for planning and production of digital visual communication concepts
- apply theories of user-friendliness and to plan and carry out user tests

Competences

The objective is that the student is competent to:

- analyze a development request for the construction of a web-based client / server application
- select and apply an appropriate programming language for developing client side of web
- analyze and use standardized models in collaboration with the selected client-side programming

4.3 Databases and XML (10 ECTS)

Purpose

The purpose is to enable the student to analyze and apply the relational model and / or XML as an integral part of a web application.

Objectives

Knowledge

The goal is that the student has knowledge about:

- at least one widely used modelling language for computational modelling
- distributed databases and their spread and use in web applications
- Object-oriented databases and their spread and use in web applications
- description of the problems with XML and use of XML in developing a web application
- XML-family components and their interrelationships, and applications
- XML application specific importance for web applications

Skills

The goal is that the student has acquired skills to:

- use the relational data model in the development and maintenance of web applications
- use SQL's sophisticated query options, including different JOINVILLE and embedded SELECT



- use active operation to ensure data
- use a standards-based language for the development of triggers and stored procedures in a database system

Competences

The objective is that the student is competent to:

- analyze and choose which tasks should be expediently resolved by database system and which should be solved with a general server-based programming language

4.4 Development Environments and Content Management Systems (10 ECTS)

Purpose

The purpose is to enable the student to make an expedient choice of development environments in terms of platform and network. The student must also be able to make a choice between Content Management Systems, depending on the desired functionality and platform.

Objectives

Knowledge

The objective is that the student has knowledge about:

- common development platforms (such as Eclipse or Visual Studio) and their capabilities and limitations
- common development environments (e.g. Java or .Net) and their capabilities and limitations
- cross-platform development, such development in Linux for use in a Windows system or under Mac to a Linux system
- general functionality requirements for a Content Management System
- the importance of the choice of data storage platform in the context of a CMS

Skills

The objective is that the student has acquired skills to:

- use at least one common development environment
- use at least one common development platform
- model a CMS in regards to individual development

Competences

The objective is that the student is competent to:

- analyze and select a suitable platform and a suitable environment for a given task
- analyze and apply a common example system

4.5 Web communication and network sociology (10 ECTS)

Purpose:

The purpose of the module is to qualify the student to work with the development of network-based communications solutions across platforms, media and applications.

Objectives

Knowledge



The objective is that the student has knowledge about:

- significant standards in the publishing field (XML, micro formats)
- communicative components that create sensory (audio / visual / olfactory etc.) identity, cross-media
- requirements for material, which simultaneously must establish said identity cross-media
- re-mediation theories and their influence on the expression of the media
- knowledge of theoretical models - and their influence on the description of competences in network
- micro-sociological theory - and its influence on the perception of individual positioning in relation to medium term

Skills

The goal is that the student has acquired skills to:

- establish sensory identity for a publication task
- use evidence of sensory identity
- design products in accordance with various re-mediation theories
- use micro-sociological theory to develop a digital portfolio

Competences

The aim is that the student is competent to:

- analyze the publications forms across media (print, web, mobile etc) and use this knowledge in planning and administration of large publishing tasks objectives, topics:

4.6 Interface Design and digital aesthetics (10 ECTS)

Module purpose

The purpose of the module is that student should be able to analyze and reflect on the relationship between functionality and design, taking into account the aesthetic as well as the user oriented aspects.

The student must be able to assess the theoretical and practical issues in light of current methodologies, models and theory in the field of interaction design, interface design and usability design.

The module will also enable the student to engage in complex contexts and independently manage the design process in the shaping of complex user interfaces.

Objectives

Knowledge

The objective is that the student has knowledge about:

- current accessibility standards
- functional and design standards in the development of graphical user interface (GUI) components in a variety of platforms and in a variety of application contexts
- interaction design in technology history
- psychological factors in the interaction between human and computer
- a variety of assessment techniques and identification and selection of appropriate evaluation methods in practical problems



Skills

The objective is that the student has acquired skills to:

- use abstract models for modelling of interaction between people and systems
- identify and use formal aesthetic design criteria
- identify and use formal design principles for interactive systems
- identify and apply various standard interaction principles
- use standardized formal design methods in the development of user interfaces, including prototyping
- use different principles for structuring and organizing information
- use standardized methods of documenting the design and evaluation
- use standardized methods and models for the visualization of information architecture

Competences

The objective is that the student is competent to:

- analyze and give perspective on the aesthetics role in user interfaces
- analyze the accessibility-oriented issues and apply universal accessibility principles in a practical context
- analyze and translate complex information architecture, navigation structure and data visualization
- analyze and apply standards for the display of complex data

4.7 Advanced Media Technologies (10 ECTS)

Module purpose

The purpose of this module is that the student should be able to use and analyze methods for the manufacture of advanced media technology productions. The student must also be able to analyze advanced media technology productions and the context in which these are used. Subject matter covers video, audio and animation.

Objectives

Knowledge

The objective is that the student has knowledge of:

- time-based media productions structure
- media-based narrative technique
- concepts in media production
- different media platforms and media types
- methods and tools for digital finishing

Skills

The objective is that the student has acquired the skills to:

- analyse the time-based media productions structure and narrative structure
- analyze sophisticated media productions
- analyze the interplay between aesthetics and engineering
- analyze the overall media strategies, including cross media strategies
- use advanced media production in selected appropriate strategic context
- use a range of applied specialised software programs, targeting video, animation or audio production



- use applied relevant specialised software programs for refinement and clarification of aesthetic expression

Competences

The objective is that student is competent to:

- enter into professional multi-disciplinary and media production work
- independently evaluate media productions in a media appropriate strategic context
- independently develop media productions in cross media strategies

4.8 Project Management (Module selection) (10 ECTS)

Purpose

The purpose of this module is to qualify the student to manage small and medium development projects and maintenance projects and to assume responsibility for management tasks associated with major projects.

Objectives

Knowledge

Project formulation and strategies (design models)

The aim is that the student must:

- be familiar with a range of project models, which draws from various development methodologies and philosophies

Project management tasks

The aim is that the student must:

- recognise that human resource management is also part of the project management
- be familiar with different team-building techniques and may use them
- gain understanding of conflict management

Interaction with other projects and the organization

The aim is that the student:

- will understand that each project is / may be part of a larger whole and that alignment and prioritization therefore may be necessary

Skills

Project identification

The objective is that the student must:

- be able to identify the features of a task which does the task must or should be solved as a project
- be able to clarify and describe the framework, the project is implemented under

Project formulation and strategies (design models)

The objective is that the student must:

- be able to prepare a project formulation, which takes into account the project's conditions and environment
- be able to formulate a project strategy and organize the project in accordance with this

Project planning including estimation

The objective is that the student must:

- must be able to split the project into a number of activities and organize them in appropriate stages
- be able to illustrate these activities linkages and dependencies



- be able to use different estimating techniques for the resources and the schedule
- be able to prepare operational plans of both time and resources

Quality assurance and monitoring

The objective is that the student must:

- be able to establish quality standards for project deliverables
- be able to use various quality assurance techniques
- be able to establish a quality assurance plan for the project

Project management tasks

The objective is that the student:

- can apply different problem diagnostics and solution techniques
- may prepare a risk analysis and develop a risk management plan

Interaction with other projects and the organization

The objective is that the student must:

- be able to develop and implement an action plan for the project and each participant

Competences

The student will gain competences in:

- serving as project manager in all phases of a project, including independently making the necessary decisions concerning the project.

4.9 Security (optional module) (10 ECTS)

Purpose

The purpose is to make the student able to implement security analysis, propose solutions and action plans, conducting implementation of resolutions and participate in the ongoing management.

Objectives

Knowledge

Operating system security

The objective is that the student must:

- have knowledge of principles for access control in operating systems
- be able to explain how to maintain the operating system, in terms of updates and "disaster recovery"

Security Techniques

The objective is that the student must:

- be able to explain the general principles of cryptography, including symmetric and asymmetric encryption as well as the difference between weak and strong encryption keys
- be able to explain other security techniques more or less based on cryptographic principles, including Digital Signature Certificates and Message Digest
- be aware of some widely used cryptographic standards (e.g. AES and RSA)
- be able to explain the use of VPN
- have extensive knowledge of security used on the World Wide Web, including SSL and SSH

Wireless Security

The objective is that the student must:

- have knowledge of the specific threats and problems in wireless communications



- be able to explain how best to secure wireless communications, including the use of encryption, MAC address validation and authentication

Firewalls

The objective is that student must:

- be able to explain the operation of various types of firewalls, including filtering routers and application firewalls
- have knowledge of IDS - Intrusion Detection Systems

Application Security

The objective is that student must:

- know the general, overall threats that should be taken into account in applications, and implement solutions to counter these threats

Skills

Security Analysis

The objective is that the student must:

- be able to explain and categorize the major security threats and the related safety techniques
- be able to prepare plans for physical security, redundant systems, backup strategies and monitoring mechanisms to detect security breaches
- be able to prepare a security policy
- be able to conduct a security assessment, including:
 - identifying the IT system's assets and defining the requirements for their protection
 - identifying threats
 - risk analysis
 - implementing parts of the security system
 - preparing an action plan for what to do at a security breach

Operating system security

The objective is that the student must:

- be able to provide guidelines for how to achieve good password protection
- be able to develop guidelines for controlling access to files and resources

Application Security

The objective is that student must:

- be able to identify the need to incorporate application-specific safety programs

Competences

The student will gain competences in:

- monitoring developments within the security area in order to identify new threats and the products and techniques for tackling these and already existing threats
- implementing / advising on the development of solid security applications

4.10 Interface Programming (10 ECTS)

Purpose

The purpose is to enable the student to analyze and program user interfaces of dynamic web applications that integrate client scripting and client side frameworks.

Objectives



Knowledge

The goal is that the student has knowledge about:

- use of semantic markup for structuring content in web applications
- at least one widely spread client side language for programming web user interfaces
- the interdependence of client- and serverside programming, including synchronous and asynchronous exchange of data between client and server
- various client side frameworks and their importance for rapid web development
- strategies for web application design to ensure that the content and functionality are available for all clients and that the end users receive an optimized user interface adapted to meet the capacity of their client software
- design and program user interfaces for handheld devices
- compatibility problems and compatibility testing

Skills

The goal is that the student has acquired skills to:

- use client side languages and relevant APIs for programming user interfaces in web applications
- use at least one client side framework in the development of web applications
- use programming strategies which provide optimized user interfaces considering the capacity of the client software
- to design and develop web solutions for handheld devices

Competences

The objective is that the student is competent to:

- analyze a development request for the construction of dynamic user interfaces of a web-based client / server application
- select and apply an appropriate programming language in conjunction with a client based framework for developing the client side of web
- analyze a desktop based web site in order to make a new version of it for handheld devices

4.11 Science (common add-on module) (5 ECTS)

Purpose

The purpose of this module is to qualify the student to examine epistemological issues and apply key theoretical concepts and theories to describe the relationship between man, science and technology.

Objectives

Knowledge

Philosophy of Science

The objective is that the student:

- has knowledge of key theoretical traditions and positions, including empiricism, rationalism, hermeneutics and phenomenology



- has knowledge of important scientific issues of a philosophical history of ideas, theoretical and scientific / methodological
- has knowledge of science and technology philosophical notions about relationships between science, people and technology

5. Internship (15 ECTS)

Internship

The internship is taken in one or more companies where the students must participate in, and gain knowledge of, relevant business functions. The internship can be organized flexibly, differentiated and must be able to form basis for the student's final bachelor project.

The purpose of the internship is to give students the opportunity to test the first two semesters of learning in practice by performing in a job situation relevant to the profession and the job function.

During the internship the student has an internship supervisor from respectively the academy and the business.

Learning objectives for the internship

- To gain insight into the demands and expectations that companies have towards software developers knowledge
- Skills and attitudes to work
- To experience a daily routine and tasks through a longer period within the profession.
- Work with development tasks in practice in accordance with their own learning objectives
- To test knowledge and skills in practice, which are achieved at PBA programme
- To gain experience of other working methods and tools for solving specific tasks

In addition, if necessary:

- To get ideas for a final bachelor project and a possible basis for the bachelor project

Based on the learning objectives of the internship, the student and two tutors establish in unity the objectives for the student's learning outcomes of the internship period. This is subsequently guide to the organization of the student's work in the internship period.

Upon completion of the internship the student delivers a written report addressing the learning outcomes of the internship. The report must be approved by the internship supervisor to ensure that the student can take the exam in the final project.

The internship equates a full-time job with the demands of work, effort, commitment and flexibility that the professional graduate is expected to meet in his/her first job.

The internship period is SU-justified, and the student and the company agrees on the economic terms for the business internship between themselves.



6. Final bachelor project (15 ECTS)

In the final bachelor project, the student must demonstrate the ability, on an analytical and methodical basis, to process a complex and practice-related problem to a specific task in the IT field. The final bachelor project should include key issues in programme.

Prerequisites

The student must have passed all previous tests to take the final exam. Furthermore, the internship must have been approved.

Content

The problem formulation to final exam is prepared by the student in collaboration with a company. The problem formulation must be approved by the academy.

In solving the identified problem, it is important that the student can apply key theories and methods.

The academy is to draw up detailed guidelines with the formal requirements for the project.

7. Scheduled placement of the modules

The following is the recommended sequence of modules.

Bridging Modules Web-line.	Semester	ECTS
Web programming and networking. Back-end programming	1.	10
Web programming and networking. Front-end programming	1.	10
Core Modules Web-line.		
Web communication and networking sociology	1.	10
Interface Design and digital aesthetics	1. el. 2.	10
Databases and XML	2.	10
Development Environments and CMS	1. el. 2.	10
Advanced Media Technologies	2.	10
Elective Modules:		
Project management	1. el. 2.	10
Security	1. el. 2.	10
Philosophy of Science	2.	5

8. Elective modules

10 ECTS are obtained through elective modules.



Business Academy Aarhus is continuously preparing elective modules to ensure a constant number of elective modules to choose from.

9. Tests

9.0 General conditions for examinations

All assessments are individual. If the test is based on a group project, the efforts of the student in this process will be included in the assessment.

9.1 Examination

To document that the student has achieved the learning objectives set for each module of the education, each module ends with an external or internal test.

Each module must be passed. In case the test is not passed the student will be recommended for a re-examination acc. to the regulations of the *Test and Examinations in Professionally Oriented Programmes*.

During the first year of study the student has 6 modules. *Minimum* 3 of the modules will be externally orally tested. By the end of each semester the Academy announces which modules will be externally tested. The modules not chosen for external testing will be tested internally.

For each external test applies:

Attendance at each exam requires that the student has handed in the module's compulsory tasks and that these have been approved.

Basis of test:	The specific module
Form:	Oral external test
Scope:	30 min. examination including deliberation. The exam can have either 30 minute preparation or a Synopsis, depending on the specific module.
Rating:	7-point scale

Internal test

For the modules which are not externally tested, the mandatory assignment is the basis of the internal test. For all modules a mandatory assignment must be handed in by the end of the semester. The assignment is evaluated by the lecturer and is marked "passed" or "not passed". When all mandatory assignments have been handed in and evaluated, the Academy will announce which modules will be examined externally.

9.2 Internship Test (Institutional part for the Business Academy Aarhus)

Internship evaluation

The test is internal and aims at assessing the student's individual teaching objectives set by the student and the involved organization and Business Academy prior to entering the internship.



Internal Test

The internship is assessed by the writing of an Internship report. It is recommended that the student keeps the log during the Internship.

The report must contain:

- A short description of the Internship company
- A description of the tasks/assignments and a reflection on these in relation to the theories that has been taught during the education.
- Reflection on the Internship and the gaining of it

A result or part-result of the solved tasks can be attached. The report must be 4-6 pages.

Evaluation

The test is marked either “passed” or “not passed”.

Re-examination

As with the other examinations, the student has the right to take two re-exams.

Re-examination is based on a professional assessment:

- If assessment of “not passed” is due to insufficient participation in the internship, the student must take another internship.
- If assessment of “not passed” is due to insufficient reflection in relation to the learning objectives, a new test will be administered after approximately 2 weeks.

9.3 Final Bachelor project

The topic for the final bachelor project is formulated by the student in consultation with the institution and to the extent possible in cooperation with a company. The institution approves the formulation.

The examination in the final bachelor project is external, and involves an assessment of the project documentation and the deliverables supplied and an oral defence of this. A single grade is given, where the oral defence is used primarily to ensure that deliveries are made by the examinee and secondarily to make minor adjustments in the assessment of the examinee level.

Firstly, the project documented deliveries are assessed by supervisor and examiner jointly. It is then defended against the supervisor and the examiner.

If the final bachelor project is failed, a revised version of the original project report may be handed in for the re-examination.

The final bachelor project must demonstrate that learning and educational objectives are achieved and that a passing level has been achieved.

The bachelor's project can be undertaken in groups of usually up to 3 students. The institution will take further provision on this in consultation with each individual student.

The bachelor project is handed in to the institution in 3 copies, in the form of a report and, if appropriate, a product. Report excl. appendix must have a scope of max. 35 standard pages ** and additionally 10 pages per students. The product may, for example, be a program, system, an analysis or a study. The report is assessed individually, which means that it must clearly appear in



the report who is responsible for the individual parts. For the individual oral part of the examination it is the entire report which is the basis.

The bachelor project is examined by an individual oral defence lasting 30 minutes.

The process is that the students individually make a 10 min. presentation initially where after an examination dialogue is conducted for approximately 20 min. A single grade is given to each individual on the basis of the report and the oral examination.

10. General conditions for examinations

All assessments are individual. If the test is based on a group project, the efforts of the student in this process will be included in the assessment.

10.1 Product Requirements

Product requirements for mandatory assignments, projects, Synopses, internship reporting, and the bachelor project will be given in separate guidelines annexed to the curriculum..

10.2 Re-examination

A student who has participated in the recently held examinations and acquired the grade 00 or less from the 7-point scale, alternatively given the assessment “not passed”, has the right to be re-examined.

Access to re-examination requires:

- that the test is not part of another test that the student has already passed all together
- that the student has not previously passed the part of the education in which the current test is placed.

10.3 Examination attempts

The student can register for the same examination a maximum of three times. The Business Academy may allow registration for a fourth attempt if unusual conditions substantiate this.

10.4 Mandatory assignments

In each module mandatory assignments can be given, eg. as a case and/or project which has to be approved in order to be recommended for examination in that module. The assignments will be assessed by the teacher solely.

A student who has not participated in and/or had his mandatory assignment approved, must retake that module.

Other rules regarding the mandatory homework assignments, including deadlines, is communicated through the educational institution.



10.5 Evaluation and Censorship

All tests are individual tests. In connection with written group-based projects etc. the contribution of the individual student must be unambiguously identifiable. Further guidelines appear from the Programme's intranet.

In connection with oral tests where the student is tested on basis of a group-based product, the other members of the group must not be present in the examination room before they have been tested themselves.

The purpose of the tests is to evaluate if and to what extent the student's professional qualifications are consistent with the requirements and objectives established for the Programme in the curriculum.

10.6 Examination Language

The language used for the teaching of a subject is also used for the examination. The Business Academy may grant an exemption in special cases.

10.7 Special examination conditions

The Business Academy can deviate from stipulated conditions for individual examinations with a view to allowing special conditions for students with physical or mental disabilities, for students with another native language than Danish and for students with similar difficulties when this is deemed necessary to give such students equal conditions in an examination situation.

10.8 Examination abroad

Under special circumstances permission to take the examination abroad can be given. The examination has to be taken at a Danish representation (eg. embassy, consulate or learning institution) after previous agreement with the representation.

10.9 Deadlines in connection with Examinations

The Business Academy's rules and deadlines concerning registration and de-registration to examinations, including make-up examinations, are available via the Programme's intranet.

10.10 Complaints of Evaluation

Complaints of evaluation, examinations, etc. must be submitted to the institution not later than 2 weeks after that the student has been notified of the evaluation. Instructions can be found at, e.g., www.kvu-censor.dk.

For further guidelines and rules regarding complaints, please contact the institution.

10.11 Diploma

A Diploma and a Diploma Supplement are issued in connection with the graduation when the student has passed all examinations in the Programme.

The diploma will show:

1. The result of the assessments of each examination
2. Weight of the grades – and their part of the total average
3. The achieved average rating for the studies as a whole



4. Note regarding the Internship

Students leaving the Programme without having graduated are entitled to receive documentation for tests passed. The documentation includes information of the type of test and the mark achieved.

11. Credit and other conditions

11.1 Credit Transfer

The Business Academy can approve that passed subjects or parts thereof, according to this curriculum, passed at another institution are equivalent to subjects or parts thereof in this curriculum. If the subject in question is assessed according to the 7-step scale at the institution where the examination has been held and corresponds to an entire subject in this curriculum, the mark is transferred. In all other cases the evaluation is transferred as "passed" and are not included in the calculation of the average grade.

The Business Academy can approve that passed subjects from another Danish or foreign programme substitute subjects included in this curriculum. On approval the subject is considered completed if it is passed according to the rules for the programme in question. The evaluation is transferred as "passed".

11.2 Credit student

The institution can approve that a student from other higher educations follows parts of the teaching and is examined in accordance with current rules. It is a condition that it is an accepted part of their own education.

11.3 Leave of Absence

A student may be granted leave of absence from the programme due to personal conditions. Further rules about absence of leave as well as rules applying to students on leave can be found in the Business Academy's guidelines.

11.4 Exemption from the Curriculum

When special conditions substantiate it, the Business Academy can grant an exemption from the rules in the curriculum which are not bound by the basis of the Executive Order.

11.5 Complaints

Complaints of decisions with reference to this curriculum are submitted to the Business Academy. The deadline for submitting of complaints is 2 weeks from the day the student has been notified of the decision.

The student can present the Business Academy's decisions according to this curriculum to the Ministry of Education when the complaint concerns legal questions. The deadline for presenting the complaint is 2 weeks from the day the student has been notified of the decision.

The complaint is addressed to the Ministry of Education, but is submitted to the institution. The institution gives a statement which the claimant has the opportunity to comment on – within the



time limit of one working week. Then the Business Academy forwards the complaint, the Academy's statement and the claimant's possible comment to the Ministry of Education.

12. Commencement

This curriculum becomes effective for students starting their studies as per August 2009.

13. Reference to the rules of law

The law applicable to the curriculum is the following legislation and ministerial orders:

- Act No 207 of 31 March 2008 on Academy Profession Degree Programmes and Professional Bachelor Education Programmes
- Executive Order No 636 of 29 June 2009 on Academy Profession Degree Programmes and Professional Bachelor Education Programmes
- Executive Order No 974 of 19 October 2009 on Bachelor in Web Development
- Executive Order No 106 of 9 February 2009 on Admission, Registration and Leave of Absence etc. for higher education
- Executive Order no 635 of 30 June 2000 on quality assurance and quality control in the Academy Profession programmes
- Executive Order No 782 of 17 August 2009 on Tests and Examinations in Professionally Oriented Programmes
- Executive Order No 262 of 20 March 2007 on Grading Scale and Other Forms of Assessment

The acts and orders are accessible under uvm.dk