

**CURRICULUM**  
for the  
**Bachelor's Degree Programme in  
Product Development and Integrative  
Technology**

Revised 01/08/2018

Approved on 28/08/2018

Signed (Programme Director)



Signed (Rector)





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This, the national part of the curriculum for the Bachelor's Degree in Product Development and Integrative Technology, is issued pursuant to section 18, article 1 of the Executive Order on Technical and Commercial Academy Profession Degree Programmes and Professional Bachelor's Degree Programmes. This curriculum is supplemented by the institutional part of the curriculum, which is set by the individual institution offering the programme.

It has been prepared by the programme network for the Bachelor's Degree in Product Development and Integrative Technology and approved by each provider's Board – or by its Rector acting on authority – after taking advice from the programme committee and chief examiner for the programme at the institutions.

## 1. Learning outcome objectives of the programme

The learning outcome objectives encapsulate the knowledge, skills and competencies that a graduate with a professional bachelor's degree in product development and integrative technology shall attain on the programme.

### Knowledge

The graduate possesses:

- development-based knowledge of theory and practice in product development and integrative technology based on a concept of technology including these components: technique, knowledge, organization and product;
- understanding of practice and of applied theories and methods in relation to scientific theory and ethical issues in connection with product development and integrative technology;
- the ability to reflect on practice and application of theory and method in the profession, on the basis of the graduate's own qualifying expertise and with particular focus on the environment, safety and sustainability.

### Skills

The graduate is able to:

- assess practice-oriented and theoretical problems and justify and select relevant methods and tools for product development, construction, technical design and technological integration;
- be proficient in methods for the development of products and complex technical solutions in the graduate's own profession;
- make a specific, practical assessment of practice-oriented and theoretical problems of energy, environment, ethics and sustainability in product development and technical solutions, and justify and select relevant solutions to those problems;
- apply relevant knowledge gained to research and development in product development and integrative technology;
- communicate practice-oriented and professional problems and solutions to customers, partners and internally within the business.

### Competencies

The graduate is able to:

- manage complex product development, construction and technical design, bringing to bear knowledge of the development of the product or service, its production, use and disposal or discontinuation;
- independently engage in professional and interdisciplinary collaboration with internal and external partners and with customers, and assume responsibility within a framework of professional development process ethics.

- Identify his or her own learning needs and develop his or her own professional knowledge, skills and competencies.

### **1.1 Learning outcome objectives for the individual specializations**

The programme consists of three specializations:

- 1) IT and Electronics,
- 2) Installation and Automation,
- 3) Products and Production.

#### **1.1.1. The IT and Electronics specialization has these additional learning objectives:**

##### **Knowledge**

The graduate has:

- development-based knowledge of the environment and sustainability in electronic and data engineering, and in network design;
- understanding of practice, applied subject-specific methods and theories for use in the development of IT and network solutions and in electronic and data processing systems, and the ability to reflect on practice and the application of theory and method.

##### **Skills**

The graduate is able to:

- apply methods and tools in complex IT and network solutions and in electronic and data processing systems, and must be proficient in the further development and adjustment of solutions;
- assess practice-oriented and theoretical problems, and justify and select relevant approaches to ensuring sustainability in the choice of technology and materials;
- communicate practice-oriented and professional problems and solutions to partners and users.

##### **Competencies**

The graduate is able to:

- handle innovative, complex, development-oriented problem-solving tasks in the design and use of IT solutions in an industry setting;
- independently engage in professional and interdisciplinary collaboration with other professional groups in connection with complex IT and network solutions and electronic and data processing systems requiring integration in interdisciplinary projects, and assume responsibility within a professional ethical framework;
- identify his or her own learning needs and develop his or her own professional, interdisciplinary and methodological knowledge, skills and competencies in the field of complex IT and network solutions and of electronic

and data processing systems in relation to the development of interdisciplinary technical solutions.

### **1.1.2 The Installation and Automation specialization has the following additional learning objectives:**

#### **Knowledge**

The graduate possesses:

- development-based knowledge of environment and sustainability in complex building and industrial installations and the optimization and operation of automatic systems;
- understanding of practice, applied subject-specific methods and theories of development in the field of complex building and industrial installations and the optimization and operation of automatic systems, and the ability to reflect on practice and the application of theory and method.

#### **Skills**

The graduate is able to:

- apply optimization methods and tools in complex building and industrial installations and in the operation of automatic systems, and must be proficient in the further development and adjustment of solutions;
- assess practice-oriented and theoretical problems, and justify and select relevant approaches to ensuring sustainability in the choice of technology and materials;
- communicate practice-oriented and professional problems and solutions to partners and users.

#### **Competencies**

The graduate is able to:

- handle innovative, complex and development-oriented problem-solving tasks for the design and application of automated solutions in an industry setting;
- independently engage in professional and interdisciplinary collaboration with other professional groups in connection with the optimization of complex building and industrial installations and the operation of automatic systems, and assume responsibility within a professional ethical framework;
- identify his or her own learning needs and develop his or her own professional, interdisciplinary and methodological knowledge, skills and competencies in the optimization of building and industrial installations and the operation of automatic systems in relation to interdisciplinary technical solutions.

### **1.1.3 The Products and Production specialization has the following additional learning objectives:**

#### **Knowledge**

The graduate possesses:

- development-based knowledge of environment and sustainability in relation to the enterprise's business and production;
- understanding of practice, applied subject-specific methods and theories of development, planning and application in the conception, design and construction of industrial products and the optimization, operation and integration of production systems, and the ability to reflect on practice and the application of theory and method.

#### **Skills**

The graduate is able to:

- apply methods and tools in the conception, design and construction of industrial products and the optimization and operation of production systems, and must be proficient in the further development and adjustment of solutions;
- assess practice-oriented and theoretical problems, and justify and select relevant approaches to ensuring sustainability in the choice of technology and materials;
- communicate practice-oriented and professional problems and solutions to partners and users.

#### **Competencies**

The graduate is able to:

- handle innovative, complex and development-oriented problem-solving tasks in the design and application of technological solutions in an industry setting;
- independently engage in professional and interdisciplinary collaboration with other professional groups in connection with the conception, design and construction of industrial products and the optimization and operation of production systems requiring integration in interdisciplinary projects, and assume responsibility within a professional ethical framework;
- identify his or her own learning needs and develop his or her own professional, interdisciplinary and methodological knowledge, skills and competencies in the conception, design and construction of industrial products

and the optimization and operation of production systems in relation to the development of interdisciplinary technical solutions.

## **2. National subject components included in the programme**

### **2.1 Common subject components**

#### **2.1.1 Integrative Technology**

##### **Content**

The subject component is concerned with the understanding of the concept of technology, with research into new technologies and with their application. This is set in a business context as the basis for further study of the integration, utilization and implementation of technology and concepts in a cross-organizational perspective. The subject component also includes methods and tools for consultancy and for leadership and management of interdisciplinary development activities.

##### **Learning objectives for Integrative Technology**

###### **Knowledge**

The student possesses:

- development-based knowledge of essential practical and theoretical aspects of integration in relation to products and systems, and of management, planning and evaluation tools in the field of the environment, including environmental management, environmental management systems and sustainability philosophies;
- understanding of practice, applied theory and method in product development and innovation, seen in the context of business organizations and systems, and the ability to reflect on how they are used in a business context.

###### **Skills**

The student is able to:

- apply methods and tools for the identification and analysis of significant technological factors relating to the connection between the construction, manufacture and use of a product, and must be proficient in the evaluation of essential practical and theoretical aspects of the integration of products and systems, including the relationships between technology, technique, knowledge and organization(s);
- assess practice-oriented and theoretical problems in implementation processes associated with the use of new technologies across the organiza-

tion, identify strengths and weaknesses in them and justify and select relevant solution options;

- communicate practice-oriented and professional problems and solutions to partners and users, including the use of relevant IT tools in the preparation and presentation of projects, concepts and proposed solutions.

### **Competencies**

The student is able to:

- handle parts of complex product and technology development, including those relating to modifications of products and systems;
- independently engage in professional and interdisciplinary collaboration across the organization and across customary professional boundaries in order to implement technologies and concepts, and assume responsibility, including managing and leading technical development projects, within a professional ethical framework;
- identify his or her own learning needs and develop his or her own knowledge, skills and competencies relating to the development, implementation and management of technological integration.

### **ECTS rating**

The Integrative Technology subject component carries 15 ECTS credits.

## **2.1.2 Product Development**

### **Content**

The subject component is concerned with product development and process optimization from a business perspective, including how to identify and involve experts and users in development and optimization processes. There is an emphasis on the interdisciplinary and on ways of identifying, collecting, processing and further developing data in a product and process development context.

### **Learning objectives for Product Development**

#### **Knowledge**

The student possesses:

- development-based knowledge of the practical and theoretical methodological structure of a technology project;
- understanding of practice, applied theory and method at all stages of product development processes, including the financial implications of the project during both preparation/development and operation, and the ability to reflect on how these are used in a business context.

#### **Skills**

The student is able to:

- apply methods and tools for identifying and collecting enterprise data, and use it to contribute to cross-organization process development and optimization, and must be proficient in planning development work, testing the

product/solution (proof of concept) and identifying the quality of a technology project in relation to results, validity, reliability and relevance;

- assess practice-oriented and theoretical problems with the meaning and application of concepts in the context of the development of professional terminology and technology, and justify and select relevant concepts;
- communicate practice-oriented and professional problems and solution options seen in a business context and including environmental and sustainability considerations relating to product development, to peers, users and partners.

### **Competencies**

The student is able to:

- handle both commercially and technologically appropriate product development, and create a project design for a technology project based on the selection, analysis and demarcation of a problem;
- independently engage in professional and interdisciplinary collaboration across the organization and customary professional boundaries in order to implement product development, and assume responsibility within a professional ethical framework;
- identify his or her own learning needs and develop his or her own knowledge, skills and competencies in product development.

### **ECTS rating**

The Product Development subject component carries 15 ECTS credits.

## 2.2 National subject components in the specializations

### 2.2.1 Design and Sustainability

#### Content

The subject component is concerned with design and dimensioning based on the students' qualifications and specialization. Sustainability is also covered in relation to the specialization and the programme's emphasis on product development and integrative technology.

#### Learning objectives for design and sustainability

##### Knowledge

The student possesses:

- development-based knowledge of practice and applied theory and methods in environmental management, environmental management systems and sustainability philosophies;
- understanding of practice, applied theory and method in design and product development within the specialization, and the ability to reflect on how the environment and sustainability perspective affects an enterprise's business.

##### Skills:

The student is able to:

- apply process automation methods within the specialization, and is proficient in process optimization methods within the specialization;
- assess practice-oriented and theoretical problems in connection with the design of solutions, and justify and select relevant approaches to the design of complex solutions using sustainable technologies;
- communicate practice-oriented and professional approaches and solutions to partners and users.

##### Competencies:

The student is able to:

- handle the design of complex and development-oriented solutions within the specialization;
- independently engage in professional and interdisciplinary collaboration to optimize existing solutions in an industry setting, and assume responsibility within a professional ethical framework;
- identify his or her own learning needs and develop his or her own knowledge, skills and competencies in design and sustainability within the specialization.

**ECTS rating:**

The Design and Sustainability subject component carries 5 ECTS credits.

**2.2.2 Innovation and Industrial Design****Content**

The subject component is concerned with innovation generally, and with systematic ways of generating innovation in product development and process optimization based on an understanding of the industry and conditions of the specialization.

**Learning objectives for Innovation and Industrial Design****Knowledge**

The student possesses:

- development-based knowledge of practice and applied theory and methods relating to technological solutions in the industry of the specialization;
- understanding of practice, philosophy, applied theory and method relating to the application of technology in an industry setting, and the ability to reflect on alternative applications and associated ethical issues.

**Skills**

The student is able to:

- apply optimization methods to existing solutions in the specialization, and is proficient in methods for the application of technologies in solutions within the specialization;
- assess practice-oriented and theoretical problems connected with innovation and design in specific solutions, and to justify and select relevant solution design methods;
- communicate practice-oriented and professional approaches and solutions to industry partners and users.

**Competencies**

The student is able to:

- handle innovative problem-solving methods in complex development-oriented industry situations within the specialization;
- independently engage in professional and interdisciplinary collaboration to design new, innovative solutions in an industry setting, and assume responsibility within a professional ethical framework;
- identify his or her own learning needs and develop his or her own knowledge, skills and competencies relating to innovation and industrial design within the specialization.

**ECTS rating:**

The Innovation and Industrial Design subject component carries 5 ECTS credits.

### 2.3. Number of examinations in the national subject components

One externally assessed and two internally assessed examinations are held in the national subject components. In addition, there is one externally assessed examination on the bachelor's project.

Please see section 3 for the number of examinations in the placement.

For a combined overview of all examinations on the programme, please see the institutional part of the curriculum, as the national subject components described in this curriculum may be examined together with subject components set out in the institutional part of the curriculum.

## 3. Placement

### Learning objectives for the placement

#### Knowledge

The student has:

- development-based knowledge of product development and integrative technology as applied in the particular business;
- understanding of practice, applied theory and method in the business given its financial and organizational circumstances, products and markets, and the ability to reflect on the business's use of innovation, product development, technology and sustainability.

#### Skills

The student is able to:

- apply methods and tools in the planning of systematic development tasks in the business, with the involvement of interdisciplinary components in the process, and to be proficient in managing these tasks;
- assess practice-oriented and theoretical problems in product development, optimization and technological integration, and to justify and select relevant theoretical and analytical working methods associated with development in the profession;
- communicate practice-oriented and professional problems and solutions to partners, the business and users.

#### Competencies

The student is able to:

- handle complex development-oriented situations in the particular business;
- independently engage in professional and interdisciplinary collaboration

- and assume responsibility within a professional ethical framework;
- identify his or her own learning needs and develop his or her own knowledge, skills and competencies in relation to the profession and the needs of the business.

### **ECTS rating**

The placement carries 15 ECTS credits.

### **Number of examinations**

The placement concludes with one internally assessed examination.

## **4. Requirements for the bachelor's project**

The learning objectives for the bachelor's project are identical to the programme learning objectives set out in section 1 above.

The bachelor's project shall demonstrate the student's understanding of, and ability to reflect on, professional practice and application of theory and method in relation to a practice-oriented problem. The problem, which must be key to the programme and to the profession, shall be formulated by the student, in collaboration with a private- or public-sector business if appropriate. The problem shall be approved by the institution.

The project paper, which constitutes the written part of the examination, shall contain:

- front page including title;
- list of contents;
- introduction, including presentation of the problem, problem statement and angles of approach;
- background, theory, method and analysis, including a description of and justification for the choice of any empirical data, in response to the problem statement;
- conclusion;
- contextualization;
- bibliography (including all sources referenced in the report);
- annexes.

The final examination project shall be at least 20 and at most 30 standard pages in length. For each additional student taking part in the final project, this shall be increased by at least 10 and at most 20 standard pages.

| Group size | Minimum | Maximum |
|------------|---------|---------|
|------------|---------|---------|

|            |          |          |
|------------|----------|----------|
| 1 student  | 20 pages | 30 pages |
| 2 students | 30 pages | 40 pages |
| 3 students | 40 pages | 50 pages |

The title page, list of contents, bibliography and annexes do not count towards the required number of pages. Annexes are not assessed.

### **The test on the bachelor's project**

The examination project concludes the programme in the final semester, when all preceding examinations have been passed.

### **ECTS rating**

The final examination project carries 15 ECTS credits.

### **Examination format**

The examination is an externally assessed oral and written examination with a combined individual mark awarded on the 7-point scale for the written project paper and oral performance.

## **5. Transferable credit regulations**

Successfully completed programme components are equivalent to the corresponding programme components at other educational institutions offering the programme.

The student has an obligation to declare completed programme components from another Danish or foreign higher education programme, or employment, that may be assumed to bear transferable credit.

The educational institution approves credit transfer in each individual case on the basis of completed programme components and employment comparable with subjects, programme elements or placement elements.

The decision will be made on the basis of a professional assessment.

In the event of prior approval of a study visit in Denmark or abroad, the student has an obligation, after the study visit has ended, to provide evidence of the programme components completed during the approved study visit.

When prior approval is sought, the student shall give consent that the institution may collect the necessary information after the study visit has ended.

Upon approval in accordance with the above, the programme component shall be regarded as completed, provided that it has been passed according to the regulations governing the programme in question.

## **7. Entry into force and transitional arrangements**

Entry into force

This national part of the curriculum enters into force on 01/08/2018 and shall be in effect for students enrolling after 01/06/2018, although tests commenced before 1 August 2018 may be concluded under the previous curriculum until 1/2/2019.

# CURRICULUM

## for the

# Bachelor's Degree Programme in

# Product Development and Integrative

# Technology

Institutional part

Revised 15/08/2018

Approved on 28/08/2018

Signed (Programme Director)



Signed (Rector)

## **1. Admission to the programme**

### **1.1. Entry requirements**

Admission to the programme is conditional on fulfilment of the entry requirements as set out in the Annex to the Executive Order on Access to Academy Profession Programmes and Professional Bachelor's Degree Programmes on [retsinformation.dk](http://retsinformation.dk).

### **1.2 Conditions of admission**

Fulfilment of the entry requirements in section 1.1 is necessary, but not in itself sufficient for admission.

UCL University College stipulates and publishes further regulations on the criteria by which applicants to the professional bachelor's degree programme will be admitted should there be more applicants qualified under section 1.1 than there are places available.

UCL University College publishes these selection criteria on the University College website in accordance with the timeframes required by the Ministry of Higher Education and Science.

## **2. Local subject components**

The local programme components consist of study activities equivalent to 20 ECTS credits.

### **2.1. Theory of Science**

The subject component is concerned with schools, paradigms and methodologies of the theory of science related to product development and integrative technology. This includes the understanding, analysis and application of basic aspects of scientific working methods and of qualified information retrieval and data collection in the profession at an academic scientific level.

#### **Learning objectives for Theory of Science**

##### **Knowledge**

The student shall:

- be able to contextualize knowledge, insight and awareness relevant to professional practice;
- be familiar with the meaning of knowledge in a scientific sense;
- be familiar with essential issues and schools of the theory of science in a scientific perspective;

- be familiar with methodological approaches supporting knowledge creation;
- be able to reflect on key paradigms of scientific disciplines;
- be able to reflect on the application of theory and method in the profession;
- be able to reflect on the link between research and technological development.

### **Skills**

The student shall be able to:

- critically assess empirical and analytical studies;
- understand what knowledge is, how it emerges and how it is applied;
- reflect on and engage in dialog on science production;
- integrate understanding of scientific work and method;
- collect, process and interpret quantitative and qualitative data;
- critically evaluate secondary data sources for relevance, currency, validity, reliability and generalizability;
- prepare a problem analysis and carry out problem demarcation, propose hypotheses and carry out methodological deliberations and justify the choice of investigative methods.

### **Competencies**

The student is able to:

- apply research findings in the processing of problems;
- communicate investigative findings and proposed solutions in a report containing a clear problem statement, methodological deliberations and a validity and reliability assessment;
- adopt a scientific theory-based, methodical approach to the solution of innovative and practice-oriented problems;
- engage in interdisciplinary collaboration on the development of a scientific theory-based investigation, including assessment of the strengths and weaknesses of alternative methods of investigation.

### **ECTS rating**

The Theory of Science subject component carries 5 ECTS credits.

## **2.2. Quality and Economics**

### **Content**

The subject component aims to enable the student to understand and reflect on work with common economic concepts in connection with product development. A systematic methodology used in the development of products in known markets and known products in new markets, including:

1. Planning new products,
2. Designing product specifications,
3. Setting process criteria,

4. Production process control,
5. Documentation of existing product requirements.

## **Learning objectives for Quality and Economics**

### **Knowledge**

The student shall possess knowledge of:

- the economic development of a product during preparation, development and operation;
- the significance of fixed and variable costs in an operations organization;
- the structure of a Cost-Volume-Profit analysis;
- the importance of preparing a Net Present Value (NPV) analysis of an investment;
- the significance of the ROI and break-even recoupment periods;
- tools for collecting customer wishes;
- tools for translating qualitative wishes into quantitative requirements.

### **Skills**

The student shall be able to:

- evaluate and apply relevant economic data;
- evaluate economic calculations;
- collect, prepare and communicate an economic analysis;
- carry out/use analytical tools to collect/highlight customer wishes;
- carry out/use tools to translate qualitative customer wishes into qualitative requirements/terms understandable to the engineer;
- document existing product requirements.

### **Competencies**

The student is independently able to:

- participate in settings with a professional approach to economics;
- independently undertake evaluations and take decisions in an economic context;
- demonstrate a basic knowledge of economics;
- identify economic consequences on the basis of CVP and NPV;
- independently prepare a business case;
- prioritize implicit and explicit customer requirements and needs;
- translate customer requirements and needs into technical characteristics and specifications;
- develop and deliver the product in accordance with customer requirements.

### **ECTS rating**

The Quality and Economics subject component carries 5 ECTS credits.

### 2.3. Electives

For the current range of elective programme components, including learning objectives and examination formats, please see the Elective Subject Catalogue, available on Fronter.

#### ECTS rating

The Elective subject component carries 10 ECTS credits.

### 2.4. Table of programme components

Overview of distribution of programme ECTS credits by semester

| Subject components/content       | Sem. 1    | Sem. 2    | Sem. 3    | ECTS      |
|----------------------------------|-----------|-----------|-----------|-----------|
| <b>Product Development</b>       |           |           |           | <b>15</b> |
| Innovation                       | 5         |           |           | 5         |
| Product Maturation               |           | 5         |           | 5         |
| Strategy and Business            | 5         |           |           | 5         |
| <b>Integrative Technology</b>    |           |           |           | <b>15</b> |
| Project Management               |           | 5         |           | 5         |
| Team Building                    | 5         |           |           | 5         |
| Sustainability                   | 5         |           |           | 5         |
| <b>Specialization</b>            |           |           |           | <b>10</b> |
| Design and Sustainability        |           | 5         |           | 5         |
| Innovation and Industrial Design | 5         |           |           | 5         |
| <b>Local subject components</b>  |           |           |           | <b>20</b> |
| Theory of Science                | 5         |           |           | 5         |
| Quality and Economics            |           | 5         |           | 5         |
| Elective                         |           | 10        |           | 10        |
| <b>Total</b>                     | <b>30</b> | <b>30</b> |           | <b>60</b> |
| Placement and project            |           |           | 15        | 15        |
| Bachelor's project               |           |           | 15        | 15        |
| <b>Total</b>                     | <b>30</b> | <b>30</b> | <b>30</b> | <b>90</b> |

### 3. Tests and examinations

#### 3.1 General examination regulations

For all general examination regulations, please see the *Regulations on the Conduct of Examinations on Full-Time Programmes at UCL University College*, available on [ucl.dk](http://ucl.dk), and the Executive Order on Examinations on Vocational Higher Education Programmes and Executive Order on Marking Scales and Other Assessment Schemes on [retsinformation.dk](http://retsinformation.dk).

Embarking on a programme element, semester etc. also constitutes enrolment on the appropriate examinations. De-enrolment is not possible.

#### 3.2 Examination of programme components

An overview of tests and examinations on the Bachelor's Degree Programme in Product Development and Integrative Technology is shown below. The requirements for and details of the individual tests, including the examination period, formalities and the use of aids, are published in the Catalogue of Examinations on Fronter.

The student may be examined in multiple programme components at the same examination, and each individual examination will appear with a combined mark on the examination certificate. See also the table below, if required, for when the examinations take place.

**Table relating examinations to programme components and showing when they take place**

| Semester   | Examination title (internal/external)               | Programme component  | ECTS | How shown on examination certificate |
|------------|---|--|------|--------------------------------------|
| Semester 1 | Project 1 Business Analysis (internal)              | Theory of Science<br>Strategy and Business<br>Team Building                                    | 15   | Single combined mark                 |
|            | Project 2 Ideation (internal)                       | Innovation<br>Innovation and Industrial<br>Design  | 10   | Single combined mark                 |
|            | Project 3 Sustainability                            | Sustainability   | 5    | Single mark                          |
| Semester 2 | Project 4 Product and Project Management (external) | Product Maturation<br>Project Management<br>Quality and Economics<br>Design and Sustainability | 20   | Single combined mark                 |
|            | Elective  | Elective   | 10   | See Electives                        |

|                   |   |                           |    |                      |
|-------------------|---|---------------------------|----|----------------------|
|                   | (one or more internally assessed examinations)    |                           |    | Catalogue            |
| <b>Semester 3</b> | Placement report (internal)                       | Placement                 | 15 | Single combined mark |
|                   | Bachelor's project / final examination (external) | Final examination project | 15 | Single combined mark |

### 3.3 Other requirements regarding completion of activities

In addition to the examinations listed above, there are a number of requirements on the programme regarding completion of compulsory activities, which the student must meet in order to sit the examination and continue the programme; see the Executive Order on Examinations, section 10 and section 5, article 3.

#### 3.3.1 Compulsory learning activities: attendance requirement and submission of work

It is a requirement of several programme components that the student shall have completed a number of compulsory learning activities in order to sit the examination. Should the compulsory learning activities not have been completed, the student may not sit the examination and will have used up one examination attempt. The student will automatically be enrolled on the next examination, and must still meet the conditions in order to sit the examination.

The compulsory learning activities vary from one programme component to another, and may for example consist of an attendance requirement, presentations or submission of work. The compulsory learning activities on the Bachelor's Degree Programme in Product Development and Integrative Technology are described as examination entry requirements and are set out in the Catalogue of Examinations on Fronter.

#### 3.3.2 The induction test

In accordance with Section 10 of the Executive Order on Examinations, a student must pass the induction test in order to continue on the programme.

|  |
|--|
| <b>Induction Test</b>  |
| <b>When held:</b> the induction test takes place no more than two months after the start of the programme. |
| <b>Format:</b> the induction test is described in the Catalogue of Examinations.                           |
| <b>Assessment:</b> Pass/fail.  |

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| <b>Entry requirements:</b> none.  |
| <b>Consequences of a 'fail' result:</b> should the test not be passed at the first attempt, the student shall be entitled to a resit, which shall take place no more than three months after the beginning of the programme. Should the resit not be passed, the student may not continue on the programme and will be disenrolled in accordance with section 10 of the Executive Order on Examinations.  |
| <b>Special considerations applicable to the induction test:</b> in accordance with section 10, article 4 of the Order on Examinations, the induction test is not subject to the regulations on complaints about examinations. UCL University College may waive the deadlines laid down for passing the induction test in the case of an individual student where this is justified by illness, maternity or unusual circumstances. Evidence must be supplied of such circumstances. |

### 3.3.3 Study activity requirements: the Year 1 test

On Academy Profession Degree programmes and Professional Bachelor's Degree programmes, the test or tests that the student must, in accordance with the Executive Order or the curriculum, take part in before the end of the first academic year following commencement of study (the Year 1 test) must be passed before the end of the student's second academic year following commencement of study in order for the student to continue the programme.

Note that the Year 1 test described in this section consists, not of an examination, but of a requirement that all first-year examinations shall be passed before the end of the first academic year.

#### Consequence of failure to pass the Year 1 test

Should a student not pass the examinations in the relevant programme components, the student will be disenrolled from the programme in accordance with section 8, article 1 of the Order on Examinations and section 37, article 1, point 4 of the Order on Access.

### 3.4 Use of aids

All aids are permitted by default unless otherwise laid down in the Catalogue of Examinations.

### 3.5 Language of examination

The language of examination is the same as the language of instruction on the individual programme components, i.e. either Danish or English. In Danish-language examinations, tests may be taken in Swedish or Norwegian unless the

purpose of the test is to demonstrate the student's Danish skills; see section 18 of the Order on Examinations.

Should the University College have decided to conduct all or part of the programme with instruction in English in view of classes being attended by both Danish and international students, it shall be permissible to sit the examination in Danish unless one of the objectives of the subject is to demonstrate foreign language skills.

## **4. Other programme regulations**

### **4.1 Teaching and working formats**

Several different teaching and working formats are in use at UCL University College. These include lectures, casework, business projects, minor assignments, practical and theoretical exercises, laboratory work, oral presentations, homework, excursions etc.

Instruction may also be topic-based or divided into different subjects.

The aim of the work formats is that, through the approach selected by the programme, students should acquire knowledge, skills and competencies in the core areas of the programme, and that the student should also apply these in accordance with the learning objectives of the programme.

Further details of the course of study, i.e. objectives, content, structure, working formats etc., may be found in the Lecture Plans available on Fronter.

### **4.2 Differentiated instruction**

Differentiated instruction is used to the extent relevant.

### **4.3 Language of study**

The Bachelor's Degree in Product Development and Integrative Technology is an English-language programme, and all instruction is therefore offered in English. In individual cases, it may be possible to take elective programme components in Danish, and it will also be possible to go on placement with a Danish-speaking company.

### **4.4. Regulations on the conduct of the placement**

#### *Requirements applicable to the parties involved*

The placement host company shall make a contact person available to the student during the placement. In collaboration with the student, the contact person shall draw up a placement agreement stating which tasks the student will work on during the placement. The tasks must conform to the placement learning objectives.

In the organization of the placement, account shall be taken of the student's prerequisites and prior abilities. The placement agreement shall be forwarded to the educational institution for approval.

For the Bachelor's Degree Programme in Product Development and Integrative Technology, UCL University College has appointed a number of placement supervisors, one of whom shall act as coaching partner to the student throughout the placement, and shall also act as examiner in respect of the placement report.

A placement manual has been prepared for the placement. The manual describes the placement arrangements and guidelines in more detail.

When the placement is over, UCL University College shall prepare an electronic evaluation of the placement, with the participation of both the student and the company.

#### **4.5. Spelling and clarity of expression**

Whichever language the project report is written in, the student's spelling ability and clarity of expression shall be taken into account in the marking of the final project/Bachelor's project, but with most weight attached to the academic content, in accordance with section 35, article 4 of the Order on Examinations.

#### **4.6 Compulsory study visit**

The programme does not include a compulsory study visit.

#### **4.7 Waiver regulations**

UCL University College may waive anything laid down in this curriculum by the institution(s) alone if this is justified by unusual circumstances.

A student must apply for a waiver and provide evidence of the special circumstances causing the need for it. UCL University College will consider the case and give notice of its decision when available. Regulations regarding waivers and how to apply for them are set out in more detail on the UCL University College website, [ucl.dk](http://ucl.dk).

#### **4.8 Leave of absence**

It is possible to apply for leave of absence from the programme on such grounds as maternity, adoption or military call-up. UCL University College cannot grant a student leave of absence until the person concerned has passed the examinations following the first academic year on an Academy Profession Degree programme or a Professional Bachelor's Degree programme, or has completed the first half-year of study on a self-contained top-up programme (Professional Bachelor).

Detailed regulations regarding leave of absence and how to apply for it may be found on the UCL University College website, [ucl.dk](http://ucl.dk).



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UCL University College may waive these regulations if unusual circumstances apply.