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Tuning Design Education

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TUNING DOCUMENT DESIGN EDUCATION

This tuning document has been produced by the CUMULUS International Association of Universities and Colleges of Art, Design and Media within the framework of the *inter}artes* thematic network, strand 2.

2.1 INTRODUCTION TO THE SUBJECT AREA

For the purpose of this document, the term 'Design' covers the following fields: industrial, furniture, interior, ceramics, glass, fashion, textile and graphic design – and to some extent also new media. Quite a number of national variations exist in what is considered design. In certain countries Design Education may be described in other tuning documents, for example fine art or architecture.

Design approaches production of objects and services from different perspectives: aesthetics, functionality, usability, production/manufacturing technology, sustainability and ethics. The emphasis may vary between different fields of design, countries and universities. This document also covers design management and leadership oriented programmes.

2.2 DEGREE PROFILES

First Cycle	<i>Typical degree:</i> Bachelor of Arts, Bachelor of Science, Bachelor of Engineering. <i>Subject area:</i> Design in one of the fields described above <i>Typical graduate occupations:</i> designer, different occupations within commerce, publishing, handicrafts.
Second Cycle	<i>Typical degree:</i> Master of Arts, Master of Science, Master of Engineering. <i>Subject area:</i> Design in one of the fields described above <i>Typical graduate occupations:</i> designer, different occupations within commerce, publishing, handicrafts, design entrepreneur.
Third Cycle	<i>Typical degree:</i> Doctor of Philosophy, Doctor of Arts, Doctor of Engineering. <i>Subject area:</i> Design in one of the fields described above <i>Typical graduate occupations:</i> researcher, designer, teacher, administration, different occupations within commerce and publication.

Role of the subject area in other degree programmes

Certain fields of design are partly covered by architecture (furniture, interior), fine art (textile, ceramics), engineering (industrial design), art

history (design history and theory), handicrafts (ceramics, textiles, and furniture), stage design/scenography or media studies. Furthermore, students of engineering and business may have a number of more general design courses/studies connected with their own specialisations.

2.3 LEARNING OUTCOMES AND COMPETENCIES – LEVEL DESCRIPTORS

The terms used in the following tables have been developed for the purpose of this document and are not necessarily synonymous with those used in all countries.

1st CYCLE LEARNING OUTCOMES AND COMPETENCIES ('BA-LEVEL)

Key Subject Specific Competencies	Key Generic Competencies
<p>'FINE DESIGN' SKILLS</p> <ul style="list-style-type: none"> ▪ Command of basic general and discipline specific design skills. ▪ Command of basic techniques and technology relevant to the design discipline. ▪ Basic knowledge of relevant design methodologies. <p>GENERAL KNOWLEDGE</p> <ul style="list-style-type: none"> ▪ Understanding of historical and theoretical underpinnings of design in general and own design discipline in particular. ▪ Awareness of the position of design in social, cultural/artistic, political, ecological, economical and ethical contexts. <p>THEORETICAL SKILLS</p> <ul style="list-style-type: none"> ▪ Basic knowledge of theoretical concepts related to design and how they have been applied in the past. <p>CONCEPTUALISATION SKILLS</p> <ul style="list-style-type: none"> ▪ Basic skills in formulating and evaluating design concepts. <p>IDEATION SKILLS</p> <ul style="list-style-type: none"> ▪ Ability to adapt general 	<p>GENERAL KNOWLEDGE</p> <ul style="list-style-type: none"> ▪ Awareness of basic contents and general principles of some (according to focus of the programme) design related fields (e.g. business, culture, future studies, ecology or technology). ▪ In education focusing on artistic aspects of design, basic command of relevant branches of art (e.g. sculpturing, painting, drawing) and their techniques. <p>THEORETICAL SKILLS</p> <ul style="list-style-type: none"> ▪ Basic understanding of analytical and critical thinking. <p>CONCEPTUALISATION SKILLS</p> <p>IDEATION SKILLS</p> <ul style="list-style-type: none"> ▪ Command of basic idea

ideation principles to design specific problems.

CREATIVE SKILLS

- Basic understanding of creativity in design and how to develop it in oneself.

PROCESSUAL SKILLS

- Understanding of different stages in the design process and how these are being realised in own design work.
- Ability to plan and manage small scale design projects
- Ability to be responsible for smaller parts of large scale design projects as a member of the design team.

LEARNING SKILLS

- Basic understanding of different ways of learning related to design studies and how they apply to own studies, including the concept of life-long learning.

COMMUNICATION SKILLS

- Ability to communicate own ideas and design processes to audience of peers and design related professionals.
- Ability to evaluate and discuss design related subjects with fellow designers.
- Ability to bring out design point of views in multidisciplinary teams.

AND/OR

ENTERPRENEURIAL SKILLS

production, evaluation, development and selection methods.

CREATIVE SKILLS

- Basic understanding of what creativity is and how it can be developed.

PROCESSUAL SKILLS

- Basic understanding of project management.

LEARNING SKILLS

- Basic understanding of different ways of learning.

COMMUNICATION SKILLS

- Basic understanding of efficient communication in written, oral and visual forms, and, depending on national regulations and traditions, including one or more foreign languages.
- Basic knowledge of rhetorical skills.
- Ability to explain basic principles of own discipline to others outside the discipline.

ENTERPRENEURIAL SKILLS

- Basic understanding of how to run your own business (legal, financial & commercial. issues).

2nd CYCLE LEARNING OUTCOMES AND COMPETENCIES ('MA'-LEVEL)

Key Subject Specific Competencies	Key Generic Competencies
<p>'FINE DESIGN' SKILLS</p> <ul style="list-style-type: none"> ▪ command of the main general and specific design skills, and basic expert skills in own specialisation within the discipline ▪ Command of the most important techniques and technologies relevant to the design discipline including techniques and technologies specific to own specialisation. ▪ Basic ability to adapt and develop design skills, techniques and technologies to new types of problems and recognise problems that can be solved by design. <p>GENERAL KNOWLEDGE</p> <ul style="list-style-type: none"> ▪ Ability to ground own work into the theoretical and historical framework of design. ▪ Ability to participate in the discussion about the position of design in social, cultural (incl. artistic), political, ecological and economical contexts. <p>THEORETICAL SKILLS</p> <ul style="list-style-type: none"> ▪ Ability to discuss and expand theoretical concepts related to own design work. ▪ Understanding of philosophy of design. <p>CONCEPTUALISATION SKILLS</p> <ul style="list-style-type: none"> ▪ Command of formulating and evaluating design concepts. <p>CREATIVE SKILLS</p>	<p>GENERAL KNOWLEDGE</p> <ul style="list-style-type: none"> ▪ Deeper understanding of basic contents and general principles of some (according to focus of the programme) design related field (e.g. business, culture, future studies, ecology or technology) and ability to use this knowledge to ground the student's own work. ▪ In education focusing on artistic aspects of design, advanced command of relevant branches of art (e.g. sculpturing, painting, drawing) and their techniques, as well as familiarity with the contemporary art world. <p>THEORETICAL SKILLS</p> <ul style="list-style-type: none"> ▪ Familiarity with analytical and critical thinking in general. ▪ Basic understanding of philosophy of art, science and technology depending on the focus of the programme. <p>CONCEPTUALISATION SKILLS</p> <ul style="list-style-type: none"> ▪ Ability to relate design concepts to comparable tools in design related disciplines. <p>CREATIVE SKILLS</p>

- Advanced understanding of creativity in design, ability to direct and develop own creativity.

IDEATION SKILLS

- Ability to analyse and develop ideation principles and practices to better fit own ways of working.

PROCESSUAL SKILLS

- Ability to analyse and develop own design process.
- Ability to plan and manage medium scale design projects.
- Ability to be responsible for major parts in large scale design projects / R&D projects as a member of a design team.

LEARNING SKILLS

- Advanced understanding of own weaknesses and strengths in learning, and how lifelong learning can be beneficial for further learning needs.

COMMUNICATION SKILLS

- Ability to communicate own ideas and design processes to clients and general audience.

AND/OR

TEACHING SKILLS

- Basic competence and preparedness to teach design and/or design related techniques and technologies to design students, or those interested in design, including supervision of graduation projects.

AND/OR

ENTREPRENEURIAL SKILLS

- Advanced understanding of what creativity is and how to apply creative skills learned in design to other types of problems.

IDEATION SKILLS

PROCESSUAL SKILLS

- Advanced understanding of project management.

LEARNING SKILLS

COMMUNICATION SKILLS

- Command of efficient communication in written, oral and visual forms, including in one or more foreign languages (depending on national regulations and traditions).

TEACHING SKILLS

ENTREPRENEURIAL SKILLS

- Advanced understanding of how to run your own business (legal, financial and commercial issues).

2nd CYCLE LEARNING OUTCOMES AND COMPETENCIES ('DOCTORAL'-LEVEL)

Within the doctoral cycle the competences are directed by the subject of the studies far more than in the previous cycles.

Key Subject Specific Competencies	Key Generic Competencies
<p>'FINE DESIGN' SKILLS</p> <ul style="list-style-type: none"> ▪ Expertise in own specialisation of design including techniques and technologies involved. ▪ Full command of adapting and developing design skills, methods, techniques and technologies in new types of problems. <p>AND/OR</p> <p>GENERAL KNOWLEDGE</p> <ul style="list-style-type: none"> ▪ Ability to contribute to and restructure the theoretical and historical framework of design ▪ Ability to initiate and lead the discussion on the position of design in the social, cultural/artistic, political, ecological and economical contexts. <p>AND/OR</p> <p>THEORETICAL SKILLS</p> <ul style="list-style-type: none"> ▪ Ability to create and develop theoretical concepts related to own design work and design in general. ▪ Contribute to the further advancement of design philosophy. <p>CONCEPTUALISATION SKILLS</p> <p>IDEATION SKILLS</p> <p>CREATIVE SKILLS</p> <ul style="list-style-type: none"> ▪ Fully-fledged understanding of creativity in design, ability to direct and develop creativity in 	<p>GENERAL KNOWLEDGE</p> <ul style="list-style-type: none"> ▪ Ability to participate in the academic discussion in related fields (e.g. economics, culture, technology, art) from the design / design research /design theory perspective. <p>THEORETICAL SKILLS</p> <ul style="list-style-type: none"> ▪ Ability to contribute to general theoretical discussions with ideas and theories developed in design and understanding their potential for other fields. <p>CONCEPTUALISATION SKILLS</p> <ul style="list-style-type: none"> ▪ Ability to formulate and evaluate concept-type tools in general. <p>IDEATION SKILLS</p> <ul style="list-style-type: none"> ▪ Ability to analyse and develop general ideation philosophy, principles and practices. <p>CREATIVE SKILLS</p>

other fields.

PROCESSIONAL SKILLS

- Ability to develop the general design process.
- Ability to plan and manage large scale design / design research /R&D projects.

AND/OR

LEARNING SKILLS

- Ability to develop learning theories and methods in design.

COMMUNICATION SKILLS

- Ability to communicate own ideas and design processes to academic audiences.

TEACHING SKILLS

- Ability to teach design and/or design related techniques and technologies to design students in all levels, including supervision of doctoral projects.

PROCESSIONAL SKILLS

- Ability to develop general project management concepts and methods based on experience in design.

LEARNING SKILLS

COMMUNICATION SKILLS

- Ability to develop new modes of communication in written, oral and visual forms, including in one or more foreign languages.

TEACHING SKILLS

- Ability to lecture/teach design to students of other academic disciplines.

2.4 CONSULTATION PROCESS WITH STAKEHOLDERS

The design tuning exercise has been carried out within the CUMULUS network (for more information www.cumulusassociation.org). Three meetings have been organised, in Stockholm April 2006, Nantes June 2006 and Warsaw October 2006, where subject-specific and general competencies have been discussed in groups consisting of teachers, deans/managers and students. Between these meetings three drafts have circulated among the participants of those meetings and among the CUMULUS members in general, also including the board of the organisation. The tuning document has been coordinated by *inter}artes* partner University of Art and Design Helsinki (TAIK) and the version preceding the final one has been open for comments on the CUMULUS website in May 2007.

2.5 WORKLOAD AND ECTS

First Cycle	180 to 240 ECTS
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Second Cycle	60-90-120 ECTS
Third Cycle	120-180-240 ECTS

2.6 TRENDS AND DIFFERENCES WITHIN THE EUROPEAN HIGHER EDUCATION AREA IN DESIGN

Different universities have different emphases in contextualising design education: traditionally design has been connected with fine art or handicrafts, and in the case of industrial design, with engineering. Increasingly, design studies also develop connections with business studies, sociology, cultural studies or future studies. This development is considered as desirable and makes it possible to educate designers who are able to tackle a wide variety of problems in different contexts. This also makes it possible to develop exchange and projects, taking into account similarities and differences as a necessary condition for successful development and implementation of ideas.

Current specialisations, such as sustainable design, management and leadership oriented design, development of design related research and service design, are undergoing the fastest development.

2.7 LEARNING, TEACHING AND ASSESSMENT

Pedagogical/didactic approaches vary depending of the historical association of design and design studies with other fields (e.g. fine art, handicrafts, and engineering) and more recent developments emphasising design management or leadership orientation. Typically, studies form a mix of some of the following: fine art (drawing, painting sculpturing), historical subjects (e.g. history of art, design or architecture), theoretical subjects (e.g. design theory, design philosophy), technical subjects (e.g. physics, electronics, material sciences), supporting studies (e.g. psychology, anthropology, business), communication (e.g. presentation and critique of design projects, marketing) and finally, the design skills themselves.

Teaching and learning methods include for example independent design work, interdisciplinary and cross-disciplinary team work, lectures, seminars, essays, fine art studio work and project co-operation with companies, institutions and private clients. Usually methods vary depending of the general emphasis of the design programme (e.g. artistic, technical, or theoretical). The degree of students' self-directness in their studies also varies according to the academic tradition and emphasis of the programme.

Assessment methods vary, again according to the academic tradition and the emphasis. In some institutions (and countries) the guidelines for

assessment are clear and unequivocal, in some institutions (and countries) hardly any guidelines exist.

Examples of best practice:

1. **Interdisciplinary projects:** In their professional life designers will have to solve problems interfacing technology, business, aesthetics, ecology etc. In interdisciplinary projects the students get a taste of working with professionals or future professionals in other fields, their expectations, language and culture. Furthermore, these projects give the students the possibility to start building interdisciplinary networks that will help them in their professional life.

2. **Co-operation with companies/other 'real' clients:** study projects carried out with 'real' clients provide students with the possibility to practise skills needed in their professional life and to acquire hands-on experience on the development and implementation of a project. Projects also bring students into contact with possible future employers or clients. This type of co-operation demands a firm prioritising of educational goals. Students should not be put in the position of competing under unfair conditions with practising professionals.

3. **Use of established design professionals as part-time teachers:** established designers act as role models, mentors and sources of inspiration for students, who get to know specific ways of solving design problems and philosophical approaches to questions related to design. Students also have the possibility to build professional networks and openings for employment and internships.

4. **Diploma Shows:** many institutions have a tradition of annual diploma work / graduation shows presenting student work. These shows introduce students to fellow designers and to the public with flair and confidence and and bring students into contact with possible employers and clients.

2.8 QUALITY ENHANCEMENT

The tuning report can support quality enhancement in design education for example in the following ways:

- Helping institutions in conceptualisation of teaching/learning contents, especially where institutions develop a Bologna compatible curriculum, introduce new programmes in different fields of design or suffer from 'uneven development' on certain programmes, practices or fields of design.
- Helping institutions in gaining better self-understanding and sharpening their educational profiles. This facilitates mobility among similar and/or different institutions and partners search partners for international projects.
- 'Division of labour' rising from sharpening profiles supports the idea and practice of doing successive degrees at different universities, which

increases students' access to European labour markets, their networking possibilities and social/cultural cohesion.