

# profiles of the graduates

from European schools of architecture

**Expectations of educators**

An inquiry on the competences and learning outcomes

9<sup>th</sup> meeting of heads of schools of architecture in Europe 2006

02-05/Sept.06 | chania | crete



**A five-step process of preparing the list of competences**



Recording

Evaluating

Pilot circulation of the Questionnaires

Recording of problems

Diffusion of the final Questionnaires

## Recording

A working group prepares the list of competences taking into account:  
The Tuning project experience  
The specificities of architecture as a creative discipline  
The existing institutional framework

## Evaluating

Inputs on the question of competences from the previous meetings of Heads and more specifically from the 7th Meeting

## Pilot circulation of Questionnaire

A small number of teachers and professionals (about 34) from different Countries contributes to the inquiry

## Recording of problems

Technical Problems and solutions  
Content issues and new strategies

## Diffusion of the final Questionnaire

Process in progress  
Data Processing and results

**Bachelor** **Masters** **PhD**

Generic  
Competences

**20**  
Competences

**20**  
Competences

**20**  
Competences

Specific  
Competences  
on Profession

**23**  
Competences

**23**  
Competences

**23**  
Competences

Specific  
competences  
on Research

**18**  
Competences

**18**  
Competences

**18**  
Competences

# **Questionnaire addressed to Educators**

Generic | Profession | Research competences

# generic competences

DATA |  
number of competences :**20**

- 15 High level computing skills including the ability to use the Internet critically as a means of communication and a source of information

---

- 13 “Learning to learn” ability

---

- 9 Capacity to apply a spirit of synthesis of ideas and forms

---

- 16 Personal and social skills in expression and communication by speaking, writing and sketching

---

- 8 Capacity to apply knowledge in practice

---

- 7 Capacity to develop an analytical and critical thinking and understanding

---

- 10 Capacity to generate creatively new ideas and forms

---

- 17 Ability to receive and respond to a variety of information sources ( textual, numerical, verbal and graphical)

---

- 18 Basic knowledge of all the professional applications of the discipline

---

- 6 Ethical commitment

Generic competences of **Bachelor**  
Ten most popular

- 7 Capacity to develop an analytical and critical thinking and understanding

---

- 9 Capacity to apply a spirit of synthesis of ideas and forms

---

- 10 Capacity to generate creatively new ideas and forms

---

- 2 Ability to develop a trans-disciplinary understanding

---

- 16 Personal and social skills in expression and communication by speaking, writing and sketching

---

- 15 High level computing skills including the ability to use the Internet critically as a means of communication and a source of information

---

- 8 Capacity to apply knowledge in practice

---

- 17 Ability to receive and respond to a variety of information sources ( textual, numerical, verbal and graphical)

---

- 1 Ability to work in an interdisciplinary team

Generic competences of **Master**  
Ten most popular

- 7 Capacity to develop an analytical and critical thinking and understanding

---

- 12 Capacity to evaluate ideas, proposals, forms

---

- 3 Appreciation of the diversity and multicultural quality of contemporary European society

---

- 13 “Learning to learn” ability

---

- 16 Personal and social skills in expression and communication by speaking, writing and sketching

---

- 17 Ability to receive and respond to a variety of information sources ( textual, numerical, verbal and graphical)

---

- 2 Ability to develop a trans-disciplinary understanding

---

- 19 Responsibility for one’s own work and ability to be self-critical in relation to that

---

- 14 Decision – making skills

---

- 1 Ability to work in an interdisciplinary team

Generic competences of PhD  
Ten most popular

<b>Bachelor</b>	<b>Masters</b>	<b>PhD</b>
High level computing skills including the ability to use the Internet critically as a means of communication and a source of information.(15)	Capacity to develop an analytical and critical thinking and understanding.(7)	Capacity to develop an analytical and critical thinking and understanding.(7)
“Learning to learn” ability.(13)	Capacity to apply a spirit of synthesis of ideas and forms.(9)	Capacity to evaluate ideas, proposals, forms.(12)
Capacity to apply a spirit of synthesis of ideas and forms.(9)	Capacity to generate creatively new ideas and forms.(10)	Appreciation of the diversity and multicultural quality of contemporary European society.(3)
Personal and social skills in expression and communication by speaking, writing and sketching.(16)	Ability to develop a trans-disciplinary understanding.(2)	“Learning to learn” ability.(13)
Capacity to apply knowledge in practice.(8)	Personal and social skills in expression and communication by speaking, writing and sketching.(16)	Personal and social skills in expression and communication by speaking, writing and sketching.(16)

# generic competences

DATA |

Comparison chart of the 5 most popular

Chania | Crete | Sept. 2006

# profession competences

DATA |  
number of competences :23

9	Understanding of the relationship between people and buildings and between buildings and their environments, and of the need to relate buildings and the spaces between them to human needs and scale
6	Knowledge of contemporary and historical works that have achieved the highest standards in architecture
2	Adequate knowledge of the history and theories of architecture and related arts, technologies and human sciences
15	Understanding of the structural design, construction and engineering problems associated with building design
1	Ability to create architectural designs that satisfy both aesthetic and technical requirement
10	Awareness of the potentials of new technologies
16	Adequate knowledge of physical problems and technologies and of the function of buildings so as to provide them with internal conditions of comfort and protection against climate
21	Awareness of the need for continuous professional development
19	Ability to work both with a high degree of autonomy and collaboration
23	Ability to communicate appropriately to a variety of audiences in oral, written and graphic forms

profession competences of **Bachelor**  
Ten most popular

9	Understanding of the relationship between people and buildings and between buildings and their environments, and of the need to relate buildings and the spaces between them to human needs and scale
2	Adequate knowledge of the history and theories of architecture and related arts, technologies and human sciences
1	Ability to create architectural designs that satisfy both aesthetic and technical requirement
23	Ability to communicate appropriately to a variety of audiences in oral, written and graphic forms
3	Awareness of the issues and themes of present day architectural debate
10	Awareness of the potentials of new technologies
21	Awareness of the need for continuous professional development
15	Understanding of the structural design, construction and engineering problems associated with building design
11	Understanding of the profession of architecture and the role of architects in society, in particular in preparing briefs that account for social factors
7	Ability to abstract and present key elements and relationships

profession competences of **Master**  
Ten most popular

4	Ability to recognize and use appropriately architectural theories, concepts, paradigms and principles
2	Adequate knowledge of the history and theories of architecture and related arts, technologies and human sciences
23	Ability to communicate appropriately to a variety of audiences in oral, written and graphic forms
7	Ability to abstract and present key elements and relationships
3	Awareness of the issues and themes of present day architectural debate
9	Understanding of the relationship between people and buildings and between buildings and their environments, and of the need to relate buildings and the spaces between them to human needs and scale
13	Critical awareness of the relationship between current developments in architecture and the past
10	Awareness of the potentials of new technologies
6	Knowledge of contemporary and historical works that have achieved the highest standards in architecture
21	Awareness of the need for continuous professional development

profession competences of **PhD**  
Ten most popular

<b>Bachelor</b>	<b>Masters</b>	<b>PhD</b>
Understanding of the relationship between people and buildings and between buildings and their environments, and of the need to relate buildings and the spaces between them to human needs and scale.(9)	Understanding of the relationship between people and buildings and between buildings and their environments, and of the need to relate buildings and the spaces between them to human needs and scale.(9)	Ability to recognize and use appropriately architectural theories, concepts, paradigms and principles.(4)
Knowledge of contemporary and historical works that have achieved the highest standards in architecture.(6)	Adequate knowledge of the history and theories of architecture and related arts, technologies and human sciences.(2)	Adequate knowledge of the history and theories of architecture and related arts, technologies and human sciences.(2)
Adequate knowledge of the history and theories of architecture and related arts, technologies and human sciences.(2)	Ability to create architectural designs that satisfy both aesthetic and technical requirement.(1)	Ability to communicate appropriately to a variety of audiences in oral, written and graphic forms.(23)
Understanding of the structural design, construction and engineering problems associated with building design.(15)	Ability to communicate appropriately to a variety of audiences in oral, written and graphic forms.(23)	Ability to abstract and present key elements and relationships.(7)
Ability to create architectural designs that satisfy both aesthetic and technical requirement.(1)	Awareness of the issues and themes of present day architectural debate.(3)	Awareness of the issues and themes of present day architectural debate.(3)

# profession competences

DATA |

Comparison chart of the 5 most popular

Chania | Crete | Sept. 2006

# research competences

DATA |  
number of competences :**18**

- |    |  |
|----|--|
| 13 | Ability to use IT and Internet resources (statistical, cartographical methods, database creation, etc.)  |
| 11 | Ability to communicate appropriately in written, oral and graphic forms  |
| 3  | Awareness of the highest standards of achievement in architecture, in design, in built work and in scholarship   |
| 18 | Ability to evaluate evidence and draw appropriate conclusions  |
| 16 | Ability to write in one's own language, using correctly the various types of architectural literature  |
| 8  | Ability to identify and use appropriately sources of relevant information and to identify and use relevant retrieval tools (bibliographical sources, archival inventories, etc.) |
| 17 | Ability to reference sources accurately and appropriately  |
| 4  | Awareness of the moral and ethical issues of investigation and the need for professional codes of conduct in research (eg. appropriate acknowledgements of contributions, etc.)  |
| 2  | Critical awareness of the relationship between current architectural discourse and practice and the architecture of the past   |
| 1  | Awareness of the ongoing nature of architectural research and debate   |

research competences of **Bachelor**  
Ten most popular

- |    |  |
|----|--|
| 11 | Ability to communicate appropriately in written, oral and graphic forms  |
| 18 | Ability to evaluate evidence and draw appropriate conclusions  |
| 8  | Ability to identify and use appropriately sources of relevant information and to identify and use relevant retrieval tools (bibliographical sources, archival inventories, etc.) |
| 13 | Ability to use IT and Internet resources (statistical, cartographical methods, database creation, etc.)  |
| 17 | Ability to reference sources accurately and appropriately  |
| 16 | Ability to write in one's own language, using correctly the various types of architectural literature  |
| 3  | Awareness of the highest standards of achievement in architecture, in design, in built work and in scholarship   |
| 1  | Awareness of the ongoing nature of architectural research and debate   |
| 5  | Ability to define research topics which will contribute to knowledge and debate within architecture  |
| 2  | Critical awareness of the relationship between current architectural discourse and practice and the architecture of the past   |

research competences of **Master**  
Ten most popular

- |    |  |
|----|--|
| 17 | Ability to reference sources accurately and appropriately  |
| 8  | Ability to identify and use appropriately sources of relevant information and to identify and use relevant retrieval tools (bibliographical sources, archival inventories, etc.) |
| 18 | Ability to evaluate evidence and draw appropriate conclusions  |
| 5  | Ability to define research topics which will contribute to knowledge and debate within architecture  |
| 11 | Ability to communicate appropriately in written, oral and graphic forms  |
| 1  | Awareness of the ongoing nature of architectural research and debate   |
| 16 | Ability to write in one's own language, using correctly the various types of architectural literature  |
| 6  | Ability to formulate research questions  |
| 10 | Ability to work with a high degree of autonomy (eg. Accept responsibility for research project planning)   |
| 14 | Ability to collect and integrate several lines of evidence to formulate and test hypotheses  |

research competences of PhD  
Ten most popular

## Bachelor

## Masters

## PhD

Ability to use IT and Internet resources (statistical, cartographical methods, database creation, etc.).(13)

Ability to communicate appropriately in written, oral and graphic forms.(11)

Ability to reference sources accurately and appropriately.(17)

Ability to communicate appropriately in written, oral and graphic forms .(11)

Ability to evaluate evidence and draw appropriate conclusions.(18)

Ability to identify and use appropriately sources of relevant information and to identify and use relevant retrieval tools (bibliographical sources, archival inventories, etc.).(8)

Awareness of the highest standards of achievement in architecture, in design, in built work and in scholarship .(3)

Ability to identify and use appropriately sources of relevant information and to identify and use relevant retrieval tools (bibliographical sources, archival inventories, etc.).(8)

Ability to evaluate evidence and draw appropriate conclusions.(18)

Ability to evaluate evidence and draw appropriate conclusions .(18)

Ability to use IT and Internet resources (statistical, cartographical methods, database creation, etc.).(13)

Ability to define research topics which will contribute to knowledge and debate within architecture.(5)

Ability to write in one's own language, using correctly the various types of architectural literature .(16)

Ability to reference sources accurately and appropriately.(17)

Ability to communicate appropriately in written, oral and graphic forms.(11)

# research competences

DATA |

Comparison chart of the 5 most popular

Chania | Crete | Sept. 2006

## generic

## profession

## research

High level computing skills including the ability to use the Internet critically as a means of communication and a source of information.(15)	Understanding of the relationship between people and buildings and between buildings and their environments, and of the need to relate buildings and the spaces between them to human needs and scale.(9)	Ability to use IT and Internet resources (statistical, cartographical methods, database creation, etc.).(13)
“Learning to learn” ability.(13)	Knowledge of contemporary and historical works that have achieved the highest standards in architecture.(6)	Ability to communicate appropriately in written, oral and graphic forms .(11)
Capacity to apply a spirit of synthesis of ideas and forms.(9)	Adequate knowledge of the history and theories of architecture and related arts, technologies and human sciences.(2)	Awareness of the highest standards of achievement in architecture, in design, in built work and in scholarship .(3)
Personal and social skills in expression and communication by speaking, writing and sketching.(16)	Understanding of the structural design, construction and engineering problems associated with building design.(15)	Ability to evaluate evidence and draw appropriate conclusions .(18)
Capacity to apply knowledge in practice.(8)	Ability to create architectural designs that satisfy both aesthetic and technical requirement.(1)	Ability to write in one’s own language, using correctly the various types of architectural literature .(16)

**bachelor**

DATA |

All competences related to Bachelor

Chania | Crete | Sept. 2006

## generic

## profession

## research

Capacity to develop an analytical and critical thinking and understanding.(7)	Understanding of the relationship between people and buildings and between buildings and their environments, and of the need to relate buildings and the spaces between them to human needs and scale.(9)	Ability to communicate appropriately in written, oral and graphic forms.(11)
Capacity to apply a spirit of synthesis of ideas and forms.(9)	Adequate knowledge of the history and theories of architecture and related arts, technologies and human sciences.(2)	Ability to evaluate evidence and draw appropriate conclusions.(18)
Capacity to generate creatively new ideas and forms.(10)	Ability to create architectural designs that satisfy both aesthetic and technical requirement.(1)	Ability to identify and use appropriately sources of relevant information and to identify and use relevant retrieval tools (bibliographical sources, archival inventories, etc.).(8)
Ability to develop a trans-disciplinary understanding.(2)	Ability to communicate appropriately to a variety of audiences in oral, written and graphic forms.(23)	Ability to use IT and Internet resources (statistical, cartographical methods, database creation, etc.).(13)
Personal and social skills in expression and communication by speaking, writing and sketching.(16)	Awareness of the issues and themes of present day architectural debate.(3)	Ability to reference sources accurately and appropriately.(17)

**master or 5** continuous years  
DATA |

All competences related to Master

Chania | Crete | Sept. 2006

## generic

## profession

## research

Capacity to develop an analytical and critical thinking and understanding.(7)	Ability to recognize and use appropriately architectural theories, concepts, paradigms and principles.(4)	Ability to reference sources accurately and appropriately.(17)
Capacity to evaluate ideas, proposals, forms.(12)	Adequate knowledge of the history and theories of architecture and related arts, technologies and human sciences.(2)	Ability to identify and use appropriately sources of relevant information and to identify and use relevant retrieval tools (bibliographical sources, archival inventories, etc.).(8)
Appreciation of the diversity and multicultural quality of contemporary European society.(3)	Ability to communicate appropriately to a variety of audiences in oral, written and graphic forms.(23)	Ability to evaluate evidence and draw appropriate conclusions.(18)
“Learning to learn” ability.(13)	Ability to abstract and present key elements and relationships.(7)	Ability to define research topics which will contribute to knowledge and debate within architecture.(5)
Personal and social skills in expression and communication by speaking, writing and sketching.(16)	Awareness of the issues and themes of present day architectural debate.(3)	Ability to communicate appropriately in written, oral and graphic forms.(11)

