Proposal of a PhD Programme (PhD)
administered at the Politecnico di Milano

PhD in: Architecture, Urban design, Conservation of Housing and Landscape
CYCLE: XXVIII

TYPE OF ACTIVATION PROPOSAL:

- B.) Re-proposal of a PhD already activated – no substantial changes to the training project

Proposing Department: Department of Architectural Design

Other proposing departments: Department of Structural Engineering (DIS)
PhD School of the Politecnico di Milano

Regulations of the PhD Programme in
Architecture, Urban design, Conservation of Housing and Landscape
XXVIII Cycle

Campus: Milano Bovisa
1. General Information

PhD School of the Politecnico di Milano

PhD Course: Architecture, Urban design, Conservation of Housing and Landscape
Official Languages: English, Italian

PhD Programme campus: Milano Bovisa

PhD School Website: http://www.ricerca.polimi.it/phd

PhD Programme Website: ................................................

2. General presentation of the PhD Programme:

<table>
<thead>
<tr>
<th>Name of SDS</th>
<th>Code</th>
</tr>
</thead>
<tbody>
<tr>
<td>Renovation</td>
<td>ICAR 19</td>
</tr>
<tr>
<td>Urban Design</td>
<td>ICAR 21</td>
</tr>
<tr>
<td>Architectural Composition</td>
<td>ICAR 14</td>
</tr>
<tr>
<td>Esthetic</td>
<td>M-FIL/04</td>
</tr>
<tr>
<td>Building Science</td>
<td>ICAR 08</td>
</tr>
<tr>
<td>Material Science and technology</td>
<td>ING-IND/22</td>
</tr>
</tbody>
</table>

Other Scientific disciplines partially covered by the course:

<table>
<thead>
<tr>
<th>Name of SDS</th>
<th>Code</th>
</tr>
</thead>
<tbody>
<tr>
<td>Drawing</td>
<td>ICAR 17</td>
</tr>
<tr>
<td>Applied Geo Physics</td>
<td>GEO/11</td>
</tr>
</tbody>
</table>

3. Mission and Goals:

The purpose of the course is to train aware professionals and researchers, committed to the production of conceptual and operative instruments for the design of contemporary living spaces while respecting historical values. Taking responsibility towards liveability of places, sustainability, good practices, while considering historical values within the complex and unstable reality, requires a critical review and update of the disciplinary instrumentation and of training and research methods: to this goal, the PhD Programme will take advantage of the contribution of thoughts and knowledge necessary to build effective conceptual apparatus and design instruments.

The PhD Programme has ‘the form of living space’ as a mandatory and strategic issue for the contemporary age.

Contemporary theoretical and practical research is addressed using different disciplinary branches, capable of dealing with questions such as the relationship between the existing context and new projects, the scales and the problems of the living space, in particular
housing, public space and landscape.

The PhD Programme is divided into three distinct but strongly interdependent “research itineraries” which together contribute to the training of PhD students, while retaining their specific approach.

1. New living architecture through definition of settlement principles and construction types, building process rules, with particular attention to sustainable experimental models.

2. Conservation and functional adaptation of buildings belonging to the historical and processing context, with particular attention to diagnostic, material safeness, historical, cultural and modeling aspects.

3. Traditional and innovating living spaces in relation to urban regeneration of suburbs and natural landscape.

Each year these guidelines will give rise to specific research projects to be defined according to the scientific interests of teachers and to social and economic events. In this respect the relationship with the advisory board, with public institutions and with regional, national and international partner organizations is crucial.

While keeping their own scientific autonomy, the three research itineraries have to be explored and deepened by PhD students with an interdisciplinary approach. The interdisciplinary character is an important peculiarity of the PhD Programme, viewed as a working method which prepares researchers with a better understanding of the close relationship between theoretical studies and their practical applications.

4. Professional opportunities and employment market

- 1. Academic research and teaching at various levels in the scientific-disciplinary sectors involved in the PhD Program;

- 2. High level positions in research and planning activities within public and private Institutions (Region, Province, Study Center, Supervision Office, City Administration, etc.)

- 3. Advisory activity into experimental projects for the building and the urban redevelopment sector.

5. PhD Programme Enrolment
5.1 Admission requirements
Italian and foreign citizens can apply. They are required to have graduated in accordance with the pre-existing laws MD 3.11.1999 n. 509 or to have a master of science degree in accordance with MD 3.11.1999 n. 509 or a master of science in accordance with MD 22.10.2004 n. 270 or similar academic qualification obtained abroad, equivalent in duration and content to the Italian qualification and for an overall duration of university studies of at least five years.
Knowledge of the English language to at least B2 level is required.
Admission to the programmes will be decided according to evaluation of the curricula of studies, the cover letter and according to an illustrative paper on the development of possible PhD research, which candidates will send together with their application for selection.

5.2 Admission deadlines and number of places available
The number of places available is indicated in the call for admission to the 28th PhD Programme cycle: http://www.polimi.it/phd
Scholarships both on general and on specific topics are available, in accordance with that specified in the admission call.
6. PhD Programme Contents

6.1 Qualification attainment requirements:

Attainment of the PhD in Architecture, Urban design, Conservation of Housing and Landscape requires at least three years full-time equivalent study, research and development of the PhD thesis.

The PhD in Architecture, Urban design, Conservation of Housing and Landscape foresees 55 credits from PhD level courses to be acquired as indicated in the following paragraph 6.3

6.2 Development of research and the PhD thesis

The aim of PhD programmes at the Politecnico di Milano is the development in candidates of a research-oriented mind-set, with expertise and skills in a specific research topic.
To develop a research-oriented mind-set, candidates have to acquire problem-solving capabilities in a complex context, including in-depth analysis of the problem, identification of an original solution and the capability of evaluating a solution and its applicability in given contexts.
These skills provide PhD candidates with major opportunities of development in their research both in the academic field and in public and private organisations.
The main objective is the development of an original research contribution. The PhD thesis must contribute to increasing knowledge in the research field of the candidate. Besides, it has to be coherent with the research topics developed in the department, in which the PhD Programme chosen by the candidate, is carried out.
The original research has to be submitted via a PhD thesis which contains and discusses the contribution, also in the field of the state of the art in the research community on the research issue.
The PhD research will be developed according to the guidelines of a supervisor, who supports the candidate in the setting-out and in the everyday activities regarding the development of the thesis.
The supervisor does not have to be a member of the Academic Board and can also belong to an institution other than the Politecnico di Milano. The supervisor can be supported by one or more co-supervisors.
To develop the capability of carrying out research activities, the candidate must attend courses according to the PhD programme, defined for his/her study plan and pass them with a positive evaluation.
For each candidate admitted to the programme, a tutor, belonging to the Academic Board, is appointed. The tutor supervises and supports the candidate in the overall training path. The supervisor and the tutor can coincide. The choice of courses will be overseen by the tutor, and will be formalized in a study plan and approved by the Coordinator of the PhD Programme.
Other activities for the development of own personal skill and research expertise are
encouraged during the PhD programme. The candidate has to acquire the capability to present and discuss his/her work in his/her research community. Consequently both participation in international conferences and publication of research results in international journals with review are encouraged. Candidates are also encouraged to carry out part of their research activities in contact with other research groups in their field of interest, preferably abroad. Research visits of at least three months are strongly encouraged to research groups through which the candidate can acquire further skills to develop his/her research work and the thesis. The duration of the programme is normally three years.

6.3 Objectives and overview of teaching activities
The Ph.D. Programme and the Ph.D. School may activate various types of training with different valences (courses, seminars, project workshops, laboratories). All activities will aim at:

- creating common starting knowledge for the PhD programme;
- examining the basic research issues (problems, theories, research methods) which represent the cornerstone of the PhD Programme and which identify clearly its cultural position;
- exploring in a specialised manner certain research topics related issues developed in the thesis.

Courses are offered in English, unless otherwise provided for individual courses. Certain teaching activities entitle to acquisition of ECTS credits (Structured teaching activities); other activities, typically specialised and for which it is difficult to make an assessment of learning and quantification of the same, fall within the scientific activities which the Academic Board will take into account in the overall assessment, but whose value is not quantified in ECTS.

Teaching Structure
The PhD programme lasts three years and revolves around three different phases, closely related to each other and coherent with the research plans:

1. in the first period, training proceeds along three interacting levels: start up of the permanent (three years) workshop, based on discussion and cross-disciplinary discussion between students and academic board, focused on the main topics of the PhD programme; a design research workshop, able to handle the complexity of different scales and problems in the living project; a lecture tour aiming at developing the issues dealt with during the workshop. The triple activity, feeding the fundamental attitude to interconnect different knowledge, methods, codes and techniques, lets each student gain the critical and methodological awareness necessary to identify the specific areas of interest and to start up, coherently with the central themes of the PhD programme, the research work for the thesis.
2. in the second period, the PhD student, besides being involved in launching and organising the permanent workshop activities, will develop his thesis research, taking advantage of participation in congresses, meetings, internships (it is mandatory to
have at least one internship) in Italy or abroad, at institutions or research laboratories having an agreement with the PhD programme, or at other institutes approved by the academic board.

3. The third year will be devoted to the working on the thesis: contents and methods, besides being constantly verified by the tutor, will be discussed with other PhD colleagues and with the academic board during the permanent workshop activity.

At the end of the three years, the thesis will be the final dissertation subject and will be judged by a commission of external examiners, allowing to the PhD student to obtain the qualification of PhD.

**Assessment procedure**

Each year, the entire activity of the PhD student will be evaluated in order to assess admission to the next year. At the end of the three year period, the thesis will be subject of a final dissertation and evaluation, upon which the achievement of the PhD qualification will be decided.

**Programmes**

Detailed programmes of activities will be given to all students at the beginning of the PhD training.

The tables below show the foreseen path for candidates and refer only to coursework activities. At the same time, the programme foresees that the candidate is devoted to research activity in a continuous manner, following the lead of his/her supervisor and of the Academic Board.

**First Year**

<table>
<thead>
<tr>
<th>Courses</th>
<th>Possible details or reference to following tables</th>
<th>Number of credits</th>
<th>Note</th>
</tr>
</thead>
<tbody>
<tr>
<td>PhD School Courses</td>
<td></td>
<td>5</td>
<td></td>
</tr>
<tr>
<td>Courses characterising the PhD Programme</td>
<td></td>
<td>25</td>
<td></td>
</tr>
</tbody>
</table>

**Second Year**

<table>
<thead>
<tr>
<th>Courses</th>
<th>Possible details or reference to following tables</th>
<th>Number of credits (min-max)</th>
<th>Note</th>
</tr>
</thead>
<tbody>
<tr>
<td>PhD School Courses</td>
<td></td>
<td>0</td>
<td></td>
</tr>
<tr>
<td>Courses characterising the PhD Programme</td>
<td></td>
<td>25</td>
<td></td>
</tr>
</tbody>
</table>
Programme

| Other PhD courses | 0 |

**Third year**

In the third year the candidate is expected to be devoted entirely to research and development of the PhD thesis.

**PhD COURSES**

**A**) The PhD Programme in Architecture, Urban design, Conservation of Housing and Landscape organises the following Characterising Courses (see table A)

Each year courses to cover up to 25 credits are provided by the PhD Programme.

For admission to the final exam acquisition of 50 credits is mandatory. These credits have to be acquired through the “characterising” PhD courses offered by the PhD Programme.

**B**) The PhD School organises every year general and Interdoctoral courses and courses with foreign professors. Acquisition of at least 5 credits is mandatory among the courses of type B.

In the following, the scheduled planning is provided for the 2012-13 academic year. It is possible that other courses are subsequently activated by the PhD School; in this case candidates will be promptly informed. Candidates will be able to insert these new courses in their study plan.

**Table A: PHD COURSES CHARACTERISING THE PHD PROGRAMME**

<table>
<thead>
<tr>
<th>SDS</th>
<th>Name of Course</th>
<th>Professor</th>
<th>A.Y./Semester</th>
<th>Language</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>ICAR14 ICAR21 ICAR 19 M-FIL/04</td>
<td>Theories</td>
<td></td>
<td>2013</td>
<td>Ita/Engl</td>
<td>5</td>
</tr>
<tr>
<td>ICAR 14 ICAR 21 ICAR 19</td>
<td>Projects</td>
<td></td>
<td>2013</td>
<td>Ita/Engl</td>
<td>5</td>
</tr>
<tr>
<td>ICAR 08 ICAR 19</td>
<td>Houses</td>
<td></td>
<td>2013</td>
<td>Ita/Engl</td>
<td>5</td>
</tr>
<tr>
<td>ICAR 14 ICAR21 ICAR 19 ICAR 08</td>
<td>Construction</td>
<td></td>
<td>2013</td>
<td>Ita/Engl</td>
<td>5</td>
</tr>
<tr>
<td>ICAR14 ICAR21 ICAR 19 ICAR 08</td>
<td>Ethics</td>
<td></td>
<td>2013</td>
<td>Ita/Engl</td>
<td>5</td>
</tr>
</tbody>
</table>
Table B SUGGESTED CROSS-SECTORAL COURSES OR WITH A FOREIGN PROFESSOR

<table>
<thead>
<tr>
<th>SDS</th>
<th>Name of Course</th>
<th>Professor</th>
<th>Semester</th>
<th>Language</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>ICAR14 ICAR 21 ICAR 19 M-FIL/04</td>
<td>Epistemology of scientific and technical research 'Guido Nardi' (VI edition)</td>
<td>Maria Grazia Folli Andrea Campioni Simona Chiodo Alessandra Zanelli</td>
<td>2013</td>
<td>Ita/Engl</td>
<td>6.4</td>
</tr>
</tbody>
</table>

6.4 Study plan submission
Each PhD candidate must submit his/her study plan. The candidate will have the opportunity to review it periodically (every three months) in order to adapt it to any possible changes in the training offer or to needs dictated by the development of his/her study plan. The study plan is approved by the Coordinator of the PhD programme, according to the procedures established by the Academic Board of the PhD Programme itself.

6.5 Annual exam procedures
All candidates are subjected to an examination to be admitted to the following year. In the annual exam of the third year the candidate will be assessed for admission to the final exam with the external Commission. Candidates present their work to the Academic Board at least once a year. After each annual assessment, the candidate will receive an assessment (A/B/C/D) or, if the examination is not passed, will be defined as Repeating (Er) or Not Suitable to continue the Ph.D. programme (Ei). In the last year, candidates having achieved sufficient results but who need more time to write the thesis may obtain an extension up to a maximum of 12 months.

6.6 PhD thesis preparation procedures
The PhD study and research work will be carried out, full time, during the three years of the PhD course. The possibility of internships or study periods in Italian or in foreign companies
or external entities and universities is foreseen.
The main objective is the development of an original research contribution.
The PhD thesis has to contribute to increase knowledge in the research field of the candidate.
The thesis must also be coherent with the research issues developed in the department at which the PhD programme, chosen by the candidate, is developed.
The candidate must present the original thesis, discussing its contribution to the state of the art in the research field in the research community.
The PhD research will be developed following the lead of a supervisor, who supports the candidate in setting out and in the everyday activities regarding thesis development.
At the conclusion of studies, admission of the candidate to the final exam will be evaluated by the Academic Board, and, subsequently, a final exam will be taken to obtain the qualification, in which the research work carried out and the thesis will be evaluated by an examination Committee composed of three members, of which at least two external examiners.

7. Laboratories, PhD Secretary Services

Workshops for experimental activities:

- Computer workshop: this is a service which provides computer support for teaching and research activity inside the Department, concerning architectural design, drawing and printing, editing and archiving documents. It has 14 PCs, 1 Silicon Graphics workstation, 2 plotters, one scanner, one A0 scanner, 5 printers and more.
- Modeling workshop: to produce models of urban and architectural projects, interior design and design objects, of particular complexity and scientific value, using traditional and computer aided instrumentation.
- Macro-urban design and mobility workshop: to carry out design, research and advisory activity on behalf of a third party in the sector of urban re-qualification and planning, from territory to city scale.
- Workshop for the conservation and re-use of existing buildings: to carry out activities such as analysis and sorting of materials, surveys and diagnostics, development of new techniques and methods for the conservation of existing buildings in relation to the new building project.
- Material Test workshop of the Structural Engineering Department (“Wall structure, stone, mortar diagnostics for Cultural Heritage” branch)
- “Materials and Methods for the Cultural Heritage Conservation” Workshop and “Concrete and durability” Workshop of the Chemistry, Material and Chemical Engineering Department.
- Number of Personal Computers used exclusively by the PhD students: 0.8/student; each student has a code to use the Department multi-function Canon machine (copy/scan/fax/print); PhD students can also freely use the A0 Plotter owned by the PhD Programme;
- Scientific secretariat to support the organisation and proper functioning of the PhD Programme.

Relevant references:

Scientific secretary
8. Internationalisation and other activities
Conducting studies and research in collaboration with other institutions is strongly encouraged. The University also offers the possibility of Ph.D. programmes with foreign universities as well as double and joint Ph.D. programmes. Further information can be found on the Ph.D. School and Ph.D. programme websites.

Universities and Institutions which are partners of the PhD Programme for research or training projects:

<table>
<thead>
<tr>
<th>Institution</th>
</tr>
</thead>
<tbody>
<tr>
<td>Council of Antiquities Cairo (Egypt)</td>
</tr>
<tr>
<td>National Park Service Washington D.C. (USA)</td>
</tr>
<tr>
<td>Iaurif (Parigi)</td>
</tr>
<tr>
<td>Regione Lombardia – Assessorato al Territorio e Assessorato all’Ambiente</td>
</tr>
<tr>
<td>ANCE – Associazione Nazionale Costruttori Edili</td>
</tr>
<tr>
<td>Fondazione Lerici</td>
</tr>
<tr>
<td>Labe in Bilbao</td>
</tr>
<tr>
<td>Unesco BRESCE</td>
</tr>
<tr>
<td>Institution</td>
</tr>
<tr>
<td>-------------</td>
</tr>
<tr>
<td>Ministero per i Beni e le attività culturali</td>
</tr>
<tr>
<td>Regione Lombardia- direzione Culture</td>
</tr>
<tr>
<td>ALER Milano</td>
</tr>
<tr>
<td>Dipartimento di Costruzioni e Trasporti dell'Università di Padova</td>
</tr>
<tr>
<td>M.I.T. Stati Uniti d'America</td>
</tr>
<tr>
<td>Uniboyacà Colombia</td>
</tr>
<tr>
<td>Istituto per i monumenti e la cultura di Berat (Albania) Albania</td>
</tr>
<tr>
<td>Institut d'Architecture de l'Université de Genève Svizzera</td>
</tr>
<tr>
<td>Universität Stuttgart - Lehrangebot Studiengang Architektur, Städtebau Institut Germania</td>
</tr>
<tr>
<td>Universität Politècnica de Catalunya Spagna</td>
</tr>
<tr>
<td>École d'architecture de Paris-Belleville - Parigi Francia</td>
</tr>
<tr>
<td>Facoltà di Architettura di Porto Portogallo</td>
</tr>
<tr>
<td>Faculty of Engineering of the University of Porto</td>
</tr>
<tr>
<td>École de architecture de Lyon Francia</td>
</tr>
<tr>
<td>Katholieke Universiteit Leuven, Faculty of Engineering Belgio</td>
</tr>
<tr>
<td>School of Geography and Planning, Sun Yat-sen University, Guangzhou Cina</td>
</tr>
<tr>
<td>Faculty of Architecture Building and Planning, University of Melbourne Australia</td>
</tr>
<tr>
<td>École Polytechnique Fédérale de Lausanne Svizzera</td>
</tr>
<tr>
<td>Columbia University, City of New York Stati Uniti d'America</td>
</tr>
<tr>
<td>KTH School of Architecture Svezia</td>
</tr>
<tr>
<td>OMA, Rotterdam Paesi Bassi</td>
</tr>
<tr>
<td>University of California, Berkley</td>
</tr>
</tbody>
</table>
Attachment A3. (summary forms for newly activated courses)

Summary Form

<table>
<thead>
<tr>
<th>Year</th>
<th>2013</th>
</tr>
</thead>
<tbody>
<tr>
<td>Assignment type</td>
<td>Ph.D</td>
</tr>
<tr>
<td>Course</td>
<td>Theories</td>
</tr>
<tr>
<td>Professors</td>
<td>Maria Grazia Folli, Maurizio Boriani, Silvano Tintori, Marialessandra Secchi</td>
</tr>
<tr>
<td>Credits</td>
<td>5</td>
</tr>
<tr>
<td>Course type</td>
<td>Mono-disciplinary</td>
</tr>
</tbody>
</table>

**Detailed Programme and foreseen learning results:**
The course is organised into five lectures which explore the theoretical aspects of research and paradigms of contemporary living. Each lecture will be given by a lecturer and a discussant. The aim of this lecture series is to provide all students the conceptual and multidisciplinary tools.

**Bibliography**
To be distributed during the course.

**Teaching Mix**

<table>
<thead>
<tr>
<th>Teaching issue type</th>
<th>Teaching hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>lecture</td>
<td>25.0</td>
</tr>
<tr>
<td>training</td>
<td>0.0</td>
</tr>
<tr>
<td>IT laboratory</td>
<td>0.0</td>
</tr>
<tr>
<td>Test laboratory</td>
<td>0.0</td>
</tr>
<tr>
<td>project</td>
<td>0.0</td>
</tr>
<tr>
<td>Project laboratory</td>
<td>0.0</td>
</tr>
</tbody>
</table>

**Information in English to support internationalisation**
Study material/slides available in English.
Textbook/Bibliography available in English.
It is possible to take the examination in English.
Support available in English.

**Notes on assessment procedures**
In-depth activities are foreseen, with a final written report.
Summary Form

Year 2013
Assignment type Ph.D
Course Projects
Professors Laura Montedoro, Simona Pierini, Vincenzo Petrini, Matilde Baffa, Mariacristina Giambruno.
Cfu 5
Course type Mono-disciplinary

Detailed Programme and foreseen learning results:
The course is organized into five lectures which explore the theoretical aspects of research through the project activity at the landscape, city and building scale. The aim of this lecture series is to stimulate a reflection on the meaning and role of the design project in architecture and urban planning.

Bibliography
To be distributed during the course.

Teaching Mix
Teaching issue type Teaching hours
lecture 25.0
training 0.0
IT laboratory 0.0
Test laboratory 0.0
project 0.0
Project laboratory 0.0

Information in English to support internationalisation
Study material/slides available in English.
Textbook/Bibliography available in English.
It is possible to take the examination in English.
Support available in English.

Notes on assessment procedures
In-depth activities are foreseen, with a final written report.
Summary Form

Year 2013

Assignment type Ph.D

Course Houses

Professors Massimo Fortis, Simona Pierini, Marialessandra Secchi, Elsa Garavaglia, Matilde Baffa.

Cfu 5

Course type Mono-disciplinary

Detailed Programme and foreseen learning results:
The course is organised into five lectures which explore the aspects of the relationship between urban and domestic scale, habitus and spaces. Each lecture will be given by a lecturer and a discussant. The aim of this lecture series is to start a multiscale and multidisciplinary research on the theme of housing in relationship with new social, spatial, economic and contemporary scenarios.

Bibliography
To be distributed during the course.

Teaching Mix
Teaching issue type Teaching hours
lecture 25.0
training 0.0
IT laboratory 0.0
Test laboratory 0.0
project 0.0
Project laboratory 0.0

Information in English to support internationalisation
Study material/slides available in English.
Textbook/Bibliography available in English.
It is possible to take the examination in English.
Support available in English.

Notes on assessment procedures
In-depth activities are foreseen, with a final written report.

Summary Form

Year 2013

Assignment type Ph.D

Course Constructions

Professors Massimo Fortis, Giulio Barazzetta, Cecilia Bolognesi, Vincenzo Petrini, Elsa Gravaglia

Cfu 5

Course type Mono-disciplinary

Detailed Programme and foreseen learning results:
The course is organised into five lectures which explore the aspects of techniques and aims of the building process. Each lecture will be given by a lecturer and a discussant. The lecture series aims to offer students theories and examples useful to assess the possible meanings of the techniques and matters in relation to the forms of architecture (in new interventions in the built-up environment).

Bibliography
To be distributed during the course.

Teaching Mix
Teaching issue type Teaching hours
lecture 25.0
training 0.0
IT laboratory 0.0
Test laboratory 0.0
project 0.0
Project laboratory 0.0

Information in English to support internationalisation
Study material/slides available in English.
Textbook/Bibliography available in English.
It is possible to take the examination in English.
Support available in English.

Notes on assessment procedures
In-depth activities are foreseen, with a final written report.

Summary Form

Year 2013

Assignment type Ph.D

Course Ethics

Professors Maria Grazia Folli, Cesare Macchi Cassia, Maurizio Boriani, Silvano Tintori, Simona Chiodo.

Cfu 5

Course type Mono-disciplinary

Detailed Programme and foreseen learning results:
The course is organised into five lectures which explore the aspects relating to responsibility, aesthetics, needs and destiny. Each lecture will be given by a lecturer and a discussant. The aim of these lectures will be to promote awareness and sense of responsibility in thinking and doing, in terms of environmental and social sustainability.

Bibliography
To be distributed during the course.

Teaching Mix
Teaching issue type Teaching hours
lecture 25.0
training 0.0
IT laboratory 0.0
Test laboratory 0.0
project 0.0
Project laboratory 0.0

Information in English to support internationalisation
Study material/slides available in English.
Textbook/Bibliography available in English.
It is possible to take the examination in English.
Support available in English.

Notes on assessment procedures
In-depth activities are foreseen, with a final written report.