

## INDIVIDUAL TRAINING PLAN

<p><b>Requirements for the Individual Training Plan</b></p>	<p><i>Specify what a PhD student must do, over the three-year period, to fulfil these criteria (for example, follow 3 compulsory and 2 optional courses, follow a minimum number of fixed lesson hours, etc.)</i></p> <p>The PhD Program in Management Engineering and Real Estate Economics (3-year programme) includes both compulsory and optional activities carried out within universities, companies or research centres at both national and international levels. In particular, the PhD Program offers 16 courses (corresponding to 44 credits) and PhD students are required to attend courses obtaining at least 33 credits. Some of these courses are compulsory (6 courses/23,5 credits), some are strongly recommended depending on the PhD specializations (i.e. Management Engineering or Real Estate Economics); finally, PhD students are free to choose and attend other courses for a total of 29 hours, in accordance with their supervisor. During the program, they are also strongly encouraged to attend at least two International schools shared with other national and/or international doctoral Programs, which allow PhD students to get in touch with academics and practitioners experts in the areas of Management Engineering and Real Estate Economics.</p>
<p><b>Objectives of the Individual Training Plan</b></p>	<p><i>Specify what you has to be achieved with the acquisition of skills related to individual training</i></p> <p>The aim of the training programme is to enrich the background of PhD students to equip them with the competences and knowledge needed to carry out their research project. The acquired competences refer to three main areas:</p> <ul style="list-style-type: none"> <li>• research methodologies skills (e.g. carrying out a structured literature review; selecting and applying different qualitative and quantitative methodologies according to the research objectives);</li> <li>• soft skills (e.g. presenting research results to different types of audience, both academic and managerial; research management). We also develop competences on intellectual property management and research results exploitation;</li> <li>• disciplinary, thematic competences (e.g. managing of long-term and high-uncertainty projects; detecting weak signals of ongoing innovative trends; operations management; investment decisions under uncertainty).</li> </ul> <p>Along the three years, PhD students are required to present the results of their research to the PhD Board, which provides <i>stimuli</i> and suggestions for further improvement.</p>
<p><b>Training Plan</b></p>	<p><i>Specify what types of activities each PhD student can or must do to be able to fulfil the requirements of their individual training plan</i></p>

	<p>To be admitted to the second year, PhD students are required to attend at least 75% (182 hours) of the total amount of CFU offered at the first year by our PhD Program, receiving a positive evaluation. In addition, PhD students must attend the course “Practicing critical thinking and continuous improvement in scientific research” along the three years.</p>
1) Definition of course	<p><i>Specify what is meant by course (minimum number of hours, final exam, if at the end of the course an assessment by the student is required, etc.)</i></p> <p>The courses range from a minimum of 6 hours to a maximum of 60 hours and they are taught in English by different professors. In many cases, the PhD students are required to read or study documents and/or articles before attending the course. At the end of each course, the professors provide a final evaluation.</p>
2) Definition of seminar	<p><i>Specify what is meant by a seminar (for example, a presentation lasting at least 1 hour held by qualified personnel on a subject of high specialization, etc.)</i></p> <p>Along the three years, different experts from universities, companies or research centres at both the national and international level offer many seminars. They are optional and they focus on very specific topics; PhD students who attend these seminars are not evaluated. While courses tend to be stable from year to year, seminars are typically one-time events. Furthermore, while courses tend to be spread on several days and involve several academics, seminars tend to be concentrated in one-two days and taught by one-two experts.</p>
<b>Training Plan activities</b>	
a) Compulsory course	<p><i>Specify if PhD students must / can take compulsory courses to complete their educational obligations.</i></p> <p>The PhD Program offers 6 compulsory courses corresponding to 23,5 credits that PhD students are expected to attend mainly during the first year.</p>
b) Sectorial/specific course	<p><i>Specify if the PhD students can follow specific /sectoral courses to complete the training obligations.</i></p> <p>The PhD Program in Management Engineering and Real Estate Economics offers 7 sectorial/disciplinary courses, related to the different research areas that characterize our Program. Furthermore, particular attention is dedicated to providing a solid background on the most important research methodologies. The information on the courses and the syllabus are available at the following webpage: <a href="http://www.gest.unipd.it/en/research/phd-">http://www.gest.unipd.it/en/research/phd-</a></p>

	<p>programmes/management-engineering-and-real-estate-economics/educational-programme?set_language=en.</p> <p>In addition to these courses, PhD students are encouraged to attend other courses and summer schools offered by other Italian and foreign universities, in accord with the supervisor. In particular, there is an agreement with other Italian PhD Courses meant to share some training activities.</p>
c) <i>Soft skills</i> courses	<p><i>Specify if PhD students must / can take soft skills courses to complete the training obligations.</i></p> <p>The training program of the PhD Program in Management Engineering and Real Estate Economics includes some courses aimed to increase the PhD students' soft skills. Particular attention is devoted to, among others, enhancing their competences in preparing and writing papers, understanding the research ethics, and approaching the important topic of knowledge valorisation through IPRs. Some of these courses are offered in collaboration with other PhD Programs within our University. Furthermore, there is an agreement with other Italian PhD Courses meant to share some training activities in this domain.</p>
d) Seminars	<p><i>Specify if the PhD students must / can attend seminars to complete the educational obligations. Obviously, it will not be possible to list all the seminars that will be offered to PhD students</i></p> <p>PhD Students are encouraged to attend seminars, organized both within our Program and in other Italian and foreign institutions. The Annual Report document, which PhD Students are required to prepare and update regularly along the year, contains a section specifically dedicated to the attendance at these seminars.</p>
e) Group activities	<p><i>Specify if the PhD students must / can participate in group activities to complete the training obligations</i></p> <p>Most of the courses stimulate and encourage team working and group activities. PhD students are frequently called to discuss among each other to develop a critical thinking attitude.</p>
f) Schools	<p><i>Specify if PhD students must / can participate in schools to complete their educational obligations.</i></p> <p>PhD students are strongly recommended to participate to national and international Schools. Each PhD student, in agreement with the supervisor, must prepare a research plan meant also to describe his/her training plan, which includes the compulsory and optional courses and the other events or initiatives he/she wants to attend (conferences, schools, workshops, etc) to enrich his/her background. These activities are documented in the Annual Report document. Supervisors are involved in carefully choosing the</p>

	conferences, summer schools and workshops to maximize the PhD students benefit in comparison with the costs.
g) Other training activities	<p><i>Specify whether PhD students must / can participate to other types of educational activities to complete their educational obligations (for example: courses held by other UNIPD doctoral courses, PhD courses held by other universities - including foreign, medical specialty courses, master's degree courses, courses held by qualified industry associations, etc.)</i></p> <p>In addition to the training offer organized by the PhD Program in Management Engineering and Real Estate Economics, a variety of other courses are offered to the PhD students. For example, it is possible to attend a set of selected courses held by other Italian Doctoral Programs, thanks to a collaborative initiative with the Italian Association of Management Engineering. Finally, courses and seminars offered by Industrial associations, foreign universities and organizations are proposed to PhD students.</p>
h) Participation to conferences	<p><i>Specify if the PhD students must / can participate in conferences to complete the educational obligations</i></p> <p>PhD students are strongly encouraged to participate to international conferences, submitting articles and presenting the results of their research project.</p>
i) Other	Other activities are offered by our PhD Program which include, among others, participation to European, national and regional projects, organization of workshops, posters preparation and presentation.