HANDBOOK

PHD PROGRAMME IN CIVIL ENGINEERING AND ARCHITECTURE

YEARS 2020-2023

THIS VERSION 21/06/2020 APPLIES FROM 1ST NOVEMBER 2020 TO THE PHD STUDENTS ENROLLED IN YEAR 2020-21 (36TH COHORT)

THIS DOCUMENT MAY BE UPDATED THROUGHOUT THE YEAR BE SURE TO CHECK THE UPDATED ONLINE VERSION AT THE PHD PROGRAMME WEBSITE
https://dia.unipr.it/en/PhD_programme_Civil_Engineering_and_Architecture_unipr

UNIVERSITY OF PARMA
# TABLE OF CONTENTS

**PRESENTATION** ........................................................................................................................................... 1

1. INFRASTRUCTURES AND ENVIRONMENTAL ENGINEERING ................................................................. 1

LABORATORIES .................................................................................................................................................. 2

2. STRUCTURAL AND GEOTECHNICAL ENGINEERING ................................................................................. 2

LABORATORIES .................................................................................................................................................. 3

3. ARCHITECTURE AND URBAN PLANNING ............................................................................................... 3

LABORATORIES .................................................................................................................................................. 3

1. WHO IS WHO ................................................................................................................................................ 4

COORDINATOR ................................................................................................................................................ 4

VICE-COORDINATOR ..................................................................................................................................... 4

RESPONSIBLE FOR QUALITY ASSURANCE ................................................................................................. 4

FACULTY BOARD ........................................................................................................................................... 4

REPRESENTATIVES OF THE PHD STUDENTS .............................................................................................. 4

ADMINISTRATIVE STAFF ............................................................................................................................... 4

STUDENTS ....................................................................................................................................................... 4

ALUMNI ........................................................................................................................................................... 4

2. OVERVIEW OF THE PROGRAMME ............................................................................................................. 5

CREDITS .......................................................................................................................................................... 5

1. TRAINING ACTIVITY .................................................................................................................................. 5

2. SCIENTIFIC TRAINING ............................................................................................................................. 6

3. STUDENT TEACHING ACTIVITY ............................................................................................................... 6

4. RESEARCH .................................................................................................................................................. 6

INTERNATIONALIZATION ............................................................................................................................. 7

3. ATTENDANCE AND EXAMS .................................................................................................................... 7

4. SUPERVISOR .............................................................................................................................................. 7

5. ROAD MAP ............................................................................................................................................... 7

ACTIVITIES DURING THE THREE YEARS ........................................................................................................ 8

1st YEAR ......................................................................................................................................................... 8

2nd YEAR ....................................................................................................................................................... 8

3rd YEAR ....................................................................................................................................................... 8

6. DISSERTATION .......................................................................................................................................... 8

FORMATTING REQUIREMENTS ................................................................................................................... 9

7. FINAL EXAMINATION ............................................................................................................................. 9
The **PhD Programme in Civil Engineering and Architecture** is part of the **Doctorate School in Engineering and Architecture** (SDIA).

The **School** was founded with the aim of supervising and rationalizing the activities envisaged within the three PhD Programmes in the **Department of Engineering and Architecture** so that, ensuring an optimal level of aggregation of resources and scientific skills, PhD students are offered adequate research facilities and high levels of quality and scientific productivity.

By respecting the specific cultural needs, the **aim of the School** is to promote interdisciplinarity and acquisition of transversal skills, which support the specific skills of each research field. This is also pursued by encouraging **international openness and mobility**, in compliance with the principles of the European Researchers’ Charter.

By considering the significantly applied and interdisciplinary nature of the scientific knowledge that develops within the Department of Engineering and Architecture, the School aims to increasingly intercept the needs of the labour market which is much broader than the academic field. This means that the School is not only attentive to the training of researchers in the strict sense, but it is also **oriented towards that of innovators**, who are capable of transferring knowledge in both industry and public administration.

The **PhD Programme in Civil Engineering and Architecture** started in 2000 (15th cohort) with the name of **PhD Programme in Civil Engineering**. Since 2014 (29th cohort) the new name has become **PhD Programme in Civil Engineering and Architecture**.

The Geotechnical Colleagues, currently mainly active in the Thematic **Structural and Geotechnical Engineering**, were enrolled in another **PhD Programme in Geotechnical Engineering**, 18th–27th cohorts (26th cohort was not activated). Many Colleagues Architects, currently active in the Thematic **Architecture and Urban Planning**, were enrolled in another **PhD Programme in Shapes and Structures of Architecture**, 21st–28th cohorts.

Almost 100 students have achieved the degree and are presently enrolled in Universities and Industries.

The Programme’s **mission** is to prepare PhDs for competition in the international academic job market as well as to pursue careers in public Administrations and Industries.

The PhD Programme **combines both structured coursework and individual research**. In the first year, the PhD students take a range of classes and participate in a series of seminars. Students choose their own research projects, taking into consideration the resources available in the PhD Programme, including numerous laboratories.

The **University of Parma** has a broad range of international agreements with other Universities, Research Institutes, and International Organisations that facilitate research periods abroad.

The PhD Programme is structured into **three thematic areas** and research topics:

### 1. INFRASTRUCTURES AND ENVIRONMENTAL ENGINEERING

The research topic focuses on the following objectives:

1. training of experts in the area of transport infrastructures;
2. development of expert knowledge in the field of surveying, management and analysis of spatial data in the control and monitoring of displacements and strains at all scales;
3. study of topics related to surface water and groundwater;
4. development of topics related to stability of natural and artificial slopes and underground excavations.
PhD in Civil Engineering and Architecture

(1) Theoretical and experimental subjects are examined, related to the characterization of the mechanical behaviour of road materials. This approach stems from the need to identify requirements that ensure an optimal timing of construction activities (new, rehabilitation, maintenance, preservation and reconstruction) with respect to the current and future traffic and environmental demands. Issues related to both geometric design of roads and road condition assessment to ensure high levels of safety while driving are also addressed.

(2) Special attention is paid to the following issues, to be examined by taking into account the interest of the Ph.D. Students: automation of orientation and returning in digital photogrammetry; segmentation of point cloud from photogrammetric survey and scanning laser; mobile mapping; algorithms and techniques for the survey in close range and by drones; use of low-cost GPS for monitoring; reverse engineering for BIM.

(3) The main topics are: evaluation of the impact of the global climate change, laboratory scale models of hydraulic structures and of seepage phenomena, numerical modeling of unsteady free surface flows and floodings, also by means of high speed computational devices (GPUs); analytical and experimental modeling of sea gravity waves and of sediment transport, turbulence and exchange phenomena at the air-water interface; saline and turbidity gravity currents; gravity currents of non-Newtonian fluids in isotropic and anisotropic porous media, aimed to soil remediation and CO₂ sequestration; rheology and rheometry of non-Newtonian fluids.

(4) The following issues are examined: analysis of landslides on slope scale and large area, and of the prevention and/or risk mitigation systems. Specific interest is reserved for underground excavation, in both infrastructural and mining field; in particular, issues related to numerical modelling of excavation and effects induced on the boundary are discussed from both mechanical and hydrological point of view.

LABORATORIES

- Materials and Structures Testing Laboratory
- HyLab – Parma Hydraulic Research Lab
- Laboratory of Hydraulics and Hydraulic Constructions
- Laboratory of Rheology and Rheometry

2. STRUCTURAL AND GEOTECHNICAL ENGINEERING

The research topic focuses on the following objectives:

(1) development of expert knowledge in the field of mechanical behaviour and characterization of construction materials;
(2) development of nonlinear formulations to analyse mechanical behaviour of structural components and structures;
(3) training of experts in the area of mechanical behaviour and characterization of soils, geotechnical structures and ground works.

(1) Integrity of materials is examined to evaluate the safety of structures, even according the recent knowledge in the field of fracture mechanics and fatigue. Further, general formulations related to the local behaviour of reinforced concrete, fiber-reinforced concrete and high-performance concrete are treated, aimed to analyse structures, even under fire conditions.

(2) The safety of structural components and structures is examined up to failure by applying the nonlinear finite element method. The mechanical behaviour of structures made of reinforced concrete, fiber-reinforced concrete and high-performance concrete is modelled and examined, aimed at the analysis of full-scale structures (such as beams, precast long span roof or floor elements, tunnel linings), even under fire conditions.
Structural dynamics is also treated, by examining the nonlinear behaviour of structures subjected to earthquake and wind.

(3) Experimental tests and theoretical models to examine the mechanical behaviour of soils under static and dynamic conditions are developed, by taking into account the problems related to the interaction between soil and structures, with particular reference to surface and deep foundations, the restraint works and the filtration problems in steady and varied regime. The recent interest for prevention and mitigation of earthquake risk has led to study special materials to be introduced into the soil, in order to mitigate the effects of the earthquake on the soil.

3. ARCHITECTURE AND URBAN PLANNING

The research topic focuses on the following objectives:

(1) the theoretical, formal, distributive and functional aspects of architecture, and the analysis and criticism of contemporary architecture and urban habitat;
(2) the problems and techniques for the survey and the graphic and video representation of architecture at the scale of the single building and of the urban fabric;
(3) the issues connected to the development, regeneration and management of the urban settlements, also in relation to the territorial infrastructures and the landscape;
(4) the historical, artistic, technical and aesthetic issues of the architecture of the past, both addressed to the development of a critical knowledge and to the cultural valorization in the present time;
(5) the theoretical and operational tools for the knowledge of the built heritage and for the definition of the intervention methodologies aimed at its conservation and restoration.

LABORATORIES

- SMART CITY 4.0 Sustainable LAB
- UAL Urban Architectural Laboratory
- MADlab laboratory monitoring analysis and diagnostics of the structures
The Programme Bodies are the PhD Programme Faculty Board, the Programme Coordinator, the Vice-Coordinator, the Responsible for Quality Assurance.

**COORDINATOR**

The Programme Coordinator is indicated by the Faculty Board each year.

Sandro LONGO, Professor of Hydraulics, is the Coordinator of the Programme since January 2020.

**VICE-COORDINATOR**

The Vice-Coordinator is nominated by the Coordinator from among the members of the Faculty Board.

Andrea MARANZONI, Professor of Hydraulics, has been nominated as the Vice-Coordinator.

**RESPONSIBLE FOR QUALITY ASSURANCE**

The Responsible for Quality Assurance is nominated by Board from among the members of Faculty Board.

Francesco FREDDI, Professor of Structural Mechanics, has been nominated as the Responsible for Quality Assurance.

**FACULTY BOARD**

The list of the 61 Faculties for the 36th cohort is available at the following website:
https://dia.unipr.it/en/Faculties_Board

A number of 38 Faculties belong to the University of Parma, the other 23 Faculties belong to several foreign Universities and to Research Institutes from Europe and USA.

**REPRESENTATIVES OF THE PHD STUDENTS**

The election of the PhD Representatives is held in December, the vote is secret. All PhD students need to vote in person (no vote by email allowed). A Representative for each cohort is elected for the three years of his/her doctorate, with a total of three Representatives.

The non-voting Representatives of the PhD Students participate in Faculty Board meetings only in the discussion of issues regarding the general progress of the PhD Programme and the courses. In conjunction with the meeting, a request for inputs to all the PhD students is recommended.

**ADMINISTRATIVE STAFF**

Sonia RIZZOLI (sonia.rizzoli@unipr.it) – Responsible for the UO Formazione Post Lauream.

**STUDENTS**

The list of the 27 Students of the 33rd, 34th and 35th cohorts is available at the following website:
https://dia.unipr.it/en/Students_PhD_IngArch

**ALUMNI**

The list of the 72 Alumni since the 15th cohort is available at the following website:
https://dia.unipr.it/en/Alumni_PhD_programme_Civil_Engineering_and_Architecture
2. OVERVIEW OF THE PROGRAMME

The PhD Programme is partly interdisciplinary, mainly focused on the topics of the three Thematics, and consists of structured coursework and the elaboration of a research dissertation. A period of at least six months (not necessarily consecutive) for research outside Italy is highly recommended. Further academic activities include participation in Seminars organized by the Doctorate School in Engineering and Architecture (SDIA), by the PhD Programme in Civil Engineering and Architecture, and autonomous study.

<table>
<thead>
<tr>
<th>CREDITS</th>
</tr>
</thead>
<tbody>
<tr>
<td>The total number of credits to be obtained over the three-year period is <strong>180</strong>.</td>
</tr>
</tbody>
</table>

In general, the rule is that the acquisition of 1 credit implies a commitment of the doctoral student corresponding to 25 hours, divided between frontal lessons and study or research commitment.

The number of annual credits that can be acquired is **60** and is divided into:

1. **Interdisciplinary and disciplinary training activity.**
2. **Scientific training activities** (attending conferences, workshops, internships, seminars, summer schools, offered by the PhD and/or attended in other Italian and foreign locations; seminars on how to participate in calls for funding for research projects (ERC, SIR, PRIN, Horizon 2020); publications.
3. **Teaching activities** (integrative didactics carried out by the PhD student in the courses of the University of Parma, tutoring, exercises, for a maximum of 20 hours per year).

---

1. TRAINING ACTIVITY

During the three-year period, **at least 20 credits** must be obtained in scientific and training activities, of which:

- **at least 8 credits** in interdisciplinary training activities;
- **at least 8 credits** in disciplinary training activities.

Supplementary credits to 20 may be acquired by other training methods (participation in seminars, conferences, etc.).

The acquisition of the credits requires participation in the training activity and a judgement of suitability by the teacher responsible for the course, expressed according to the evaluation criterion reported in the Syllabus.

The Training Activities recognized by the SDIA fall into the following types:

- **Teaching provided by the SDIA (ISD)**, with a final test. 1 credit = 6 h of frontal lesson + 19 h of study commitment.
- **Advanced teaching provided by PhD Programmes (ICD)** related to the SDIA. A final test is required. 1 credit = 6 h of lectures + 19 h of study commitment.
- **External University Teaching (IUE)** (advanced teaching provided by Master's Degree and 2nd level Master's courses, teaching from other schools/doctoral courses). A final test is required. Credits communicated by the teacher.
For the description of the Courses offered by the PhD Programme, please visit the website
https://dia.unipr.it/en/training_offer_36_Cycle

2. SCIENTIFIC TRAINING

The Scientific Training Activities can be traced back to the following typology indicated by the SDIA:

- *Other external teachings, short courses* (IE) (summer schools, short courses, tutorials, training courses for the use of equipment, software, particularly complex technologies, management training courses). A final test is required. 1 credit = 8 h of frontal lesson + 17 h of study commitment.

The SDIA also recognizes the Certification of attendance at courses of the previous types (in training and education), and seminars (AF). No final test is required. 1 credit = 25 h.

The recognition of credits requires documentation of the activities carried out, indicating the type, the number of hours of attendance or the number of credits communicated by the lecturer for the IUE.

3. STUDENT TEACHING ACTIVITY

The student can carry out teaching activities (optional) up to a maximum of 20 hours per year. This activity (lectures, seminars, supplementary teaching activities, tutoring for undergraduates) does not include participation in the examination committees and must take place on topics relevant to the research project. This activity must be reported under “other activities” in the year-end report.

The teaching activity may be assigned to the student with the student’s consensus. The student can carry out tutoring activities with the authorization of the Coordinator. The Faculty Board recognizes 1 credit every 10 hours of teaching activity.

4. RESEARCH

During the three-year period **at least 120 credits** for research are required for the thesis work. The schematic of the credits is listed in the following table.

<table>
<thead>
<tr>
<th>ACTIVITIES</th>
<th>Credits during the 3-years course</th>
<th>DESCRIPTION</th>
</tr>
</thead>
<tbody>
<tr>
<td>Interdisciplinary activities</td>
<td>≥ 8</td>
<td>Soft skills, (i.e. public speaking, intellectual properties, ethics in science), ISD</td>
</tr>
<tr>
<td>Institutional activities</td>
<td>≥ 8</td>
<td>Courses and seminars specifically activated for the PhD course, ICD, IUE</td>
</tr>
<tr>
<td>Research-related activities</td>
<td>≤ 4</td>
<td>Workshop, summer or winter schools, PhD schools, study abroad period, etc., IE, AF</td>
</tr>
<tr>
<td>Other activities</td>
<td>≤ 4</td>
<td>Complementary didactic activities carried out by the candidate within courses of the University of Parma (teaching hours: <strong>max 20</strong>), i.e. class exercises, laboratories assistance</td>
</tr>
<tr>
<td><strong>TOTAL</strong></td>
<td>≥ 20 (minimum budget) &amp; ≤60</td>
<td></td>
</tr>
</tbody>
</table>
The PhD Programme encourages international mobility and study abroad during the three-year period. It is strongly recommended to stay in foreign research facilities for a period of 90-180 days also not continuously. The scholarship is increased for any stay abroad for research activities at the rate of 50% for a total period not exceeding 18 months, or in the form of a grant with access modalities and amounts made known by the PhD office.

It is possible to attend the PhD course in co-tutelle with a foreign University by prior agreement with the tutor and the coordinator and after signing an agreement between the two Universities. The co-tutelle can be activated, subject to the approval of the Faculty Board, for students enrolled in the first or second year of the course, in order to allow the research program to be carried out at both contracting institutions.

Any scientific activity carried out abroad in international mobility is calculated up to a maximum of 5 credits per month among the "Scientific training activities" and is supplementary to the training activity carried out at the University of Parma.

3. ATTENDANCE AND EXAMS

PhD activity is equivalent to full-time employment and Students have to attend courses and other academic activities organised by the PhD Programme, continuously engage in research and study activities, and present regular updates on their work to their supervisor.

4. SUPERVISOR

The task of the Supervisor (Tutor) and the co-Tutor is to follow the PhD student’s research progress, to supervise the writing of the dissertation, to approve research budget expenses, research periods abroad and participation in conferences and summer/winter schools, as well as to assist the candidate’s pursuit of an academic or professional career. Continuation in the Programme depends on regular progress reports provided by the supervisors. Students must stay in regular contact with their Supervisors, and keep them informed of their progress.

PhD students choose a Supervisor for their research dissertation subject to the approval of the Faculty Board.

5. ROAD MAP

At the beginning of the year, the student discusses with the tutor the annual plan of the training activity, and therefore the balance of the scientific, didactic and research activities appropriate for carrying out the thesis in the current year.

At the end of the year, the student submits for the tutor's approval the annual summary of the activities carried out, including an analytical list of these activities, certification of the qualifications achieved, and a summary of the research activity carried out (methodology, objectives, results obtained, etc.).

The tutor verifies the consistency of the annual activity carried out with the overall three-year plan of the student's training and research activities. The student then sends the final report signed by the tutor to the PhD Programme coordinator.

Once the final annual report has been obtained, the Faculty Board organizes a meeting usually in October, during which the student presents a report on the activity carried out. The Board’s positive evaluation is compulsory for admission to the next year.

After a positive evaluation of the annual report, the Faculty Board recognizes the credits for the annual activity
PhD in
Civil Engineering
and Architecture
carried out by the student and sends the relevant documentation to the PhD office.

### ACTIVITIES DURING THE THREE YEARS

#### 1st YEAR

The first year student typically participates in interdisciplinary and disciplinary training, participates in other relevant scientific activities, and defines the theme of the research with the support of the tutor. It is highly suggested to acquire at least 10 credits (excluding credits for research).

In **late September**: annual summary and list of the activities, certification of the qualifications, summary of the research activity and results. The results will be briefly (5 minutes) presented to the Board in October as it were a short conference. Upon approval, the student is admitted to the 2nd year.

#### 2nd YEAR

The second year student typically integrates interdisciplinary and disciplinary training and scientific activities, spends periods of study abroad, participates in national and international conferences and call for papers, with the presentation of papers and communications, and starts to define the thesis writing plan. It is highly suggested to acquire at least 10 credits (excluding credits for research), completing the budget of 20 credits.

In **late September**: annual summary and list of the activities, certification of the qualifications, summary of the research activity and results. The results will be presented to the Board in October as if it were a conference (10 minutes). Upon approval, the student is admitted to the 3rd year.

#### 3rd YEAR

The third year student typically completes scientific activities and write the thesis. Only exceptionally the Board authorizes the acquisition of the credits required to satisfy the minimum budget of 20 credits.

In **late September**: presentation of the relevant elements of the thesis as if it were a conference (>20 minutes). Upon approval, the student is admitted to the final examination.

During the three years, the student prepares **at least 1 scientific paper per year**, as author or co-author, that has been published or is under review in a recognized scientific journal or in a volume of similar relevance.

### 6. DISSERTATION

A dissertation is a work of original research as a result of the PhD attendance, showing the ability of the Candidate to offer new insights and cutting edge perspectives in the research topic by entering the academic debate with a critical command and by communicating research findings in an effective way. It is an autonomous and individual piece of research.

The dissertation plan should start from the very beginning. The courses and conferences offered during the first academic year, along with the discussions and inputs received in multidisciplinary and methodological classes, constitute a stimulating environment to help PhD students elaborate their initial research question.

The student formulates the research question(s) in a research proposal, which constitutes the blueprint for the development of the research during the following semesters and will be presented at the end of the first year.
FORMATTING REQUIREMENTS

There is no set length, although many dissertations run in the range of 80,000 to 100,000 words, exclusive of footnotes, bibliography, and appendices. The Dissertation must be double-spaced with a reasonable margin on all sides.

The title page should show the University logo, the dissertation title, the candidate’s full name, the name of the University, the Supervisor and co-Supervisor(s) (if any), the name of the PhD Programme and the submission date.

The abstract should follow the title page and must be no longer than 300 words. No specific citation style is required. Nonetheless, students must ensure accuracy and consistency in the citation of their research sources by adopting one of the citation styles most commonly used within their research field. The appearance of name of the Authors in the citation, instead of the number of the cited reference as shown in the References, is preferred.

No specific software is suggested, although LaTeX is widely used for books and thesis due to its stability.

7. FINAL EXAMINATION

By September of the third year, the PhD student presents a request for admission to the Final Examination. The request is evaluated by the Programme Committee, together with a report on activities. In the request for admission the student shall also indicate whether she/he wants to obtain the label of Doctor Europaeus, if the necessary criteria have been fulfilled.

DOCTOR EUROPÆUS

The criteria for the conferral of the “European Doctor” label, as established by the Confederation of European Union’s Rector’s Conferences in its declaration of the 1991 Salamanca Congress, are:

1. “The PhD thesis defence will be accorded if at least two professors from two higher education institutions of two European countries, other than the one where the PhD thesis will be defended, have given their judgment concerning the manuscript.”
2. “At least one member of the jury should come from a higher education institution in European countries, other than the one where the PhD thesis will be defended”
3. “Part of the defence must take place in one of the official languages, other than the one(s) of the country where the PhD thesis will be defended”
4. “The PhD Thesis must partly have been prepared as a result of a period of research of at least one trimester spent in another European country.”

In order to satisfy the fourth criterion, PhD candidates must present a certificate, issued by the institute where the research was conducted, testifying to the duration and nature of their stay.

RULES AND PROCEDURES

The title of doctor of research, abbreviated with the words: "Dott. Ric" or "Ph.D.", is obtained upon passing the final examination.

The Candidates for the examination for the Ph.D. degree, subject to a favourable judgement of the Board, must apply to the Magnifico Rettore, and must be in line with the payment of the registration fees for the three years of the course.

Candidates, within the last month of the last year of the course, must also submit their thesis in electronic format at the institutional repository of the University of Parma "Dspace-Unipr".
At the time of final filing, following admission to the final examination, Candidates submit a declaration to the Magnifico Rettore, certifying the absolute conformity of the electronic copy deposited with hard copies.

The copies of the thesis, countersigned by the Tutor and by the Coordinator, should be subsequently transmitted to each of the members of the final examination committee.

The University of Parma is fully controlling plagiarism and self-plagiarism with the adoption of advanced software. Ethics in research and publication is a key element in the training of PhD Students.

The thesis, accompanied by a summary in Italian or English, is written in Italian or English language or also in another language with the prior authorisation of the Board.

The thesis, to which is attached a report of the PhD student on the activities carried out during the PhD and on any publications, is assessed by at least two high level scientists and/or experts qualification, including those belonging to foreign institutions, external to the parties that contribute to the issue of the doctoral degree, hereinafter referred to as evaluators, designated by the Board by the latest month of the last year of the course.

By the end of the doctoral cohort, all PhD students, except those who have obtained the suspension of doctoral activities, shall send the thesis and the annexes to the Coordinator, who shall ensure timely transmission to the evaluators.

The evaluators, within 30 days of receipt of the documentation, express a written analytical judgment on the thesis and transmit it to the Coordinator by proposing admission to the public discussion or postponement for a period of time that cannot be more than six months if they consider that significant additions or corrections are necessary. The judgement is transmitted by the Coordinator to the candidate and to the competent offices. The Coordinator shall also forward the judgement to the members of the Commission.

After the possible period of postponement, the thesis shall in any case be admitted to public discussion, accompanied by a new written assessment by the same evaluators made in the light of any corrections or additions made.

For the period between the end of the cohort and the final examination, including the possible period of suspension of doctoral activities, the PhD Candidate shall not receive grants and maintains the possibility of access to the necessary university facilities for the refinement of his research.

**THE COMMITTEE**

The Magnifico Rettore appoints the members of the Committee, as well as the substitute members, on the proposal of the Faculty Board, which also establishes the timetable of the Final Examination, within the deadlines set by the competent offices.

The Committee shall be composed of three members chosen from among university professors and researchers, specifically qualified in the disciplines related to the areas scientifically relevant to the PhD thematic. The Committee may be supplemented by no more than two experts belonging to structures carrying out public or private research activities, including those of foreign countries. Different rules can be applied in the presence of co-tutelle and international agreements.

The thesis, with a reasoned collegial written judgment, is approved or rejected. The Committee, by unanimous vote, has the faculty to attribute laude in the presence of results of relevant scientific importance.

In case of negative judgement, the PhD Candidate loses the right to discuss the thesis again.
The title of PhD is awarded upon passing the final exam and is conferred by the Magnifico Rettore, with the issue of the relative parchment.

At the request of the interested party, the University will certify the achievement of the PhD degree.

8. RIGHTS AND DUTIES OF PHD STUDENTS

The rights and duties of PhD studies are governed by the relevant articles of two documents:

1. the University Regulations for Doctoral Courses;
2. the Regulations of the School of Doctorates in Engineering and Architecture.

Both documents are available at the PhD Programme website.

**RESEARCH BUDGET**

Starting from the second year of the Programme the student has a budget for research activities (participation in conferences/seminars in Italy and abroad, mobility for archival research, etc.) of not less than 10% of the amount of the grant.

**INSTITUTIONAL AFFILIATION**

It is a rule that on every event in which the PhD students are involved in their role – publishing an article, participating to institutional meetings, attending conferences and seminars – they indicate their affiliation as PhD Student/Candidate at the PhD Programme in Civil Engineering and Architecture, University of Parma, Italy. The students are requested to create their Open Researcher and Contributor ID (ORCID), specifying their affiliation. At the beginning of the first year, they should send a photo to be included in the Students web site.

**ITALIAN AS FOREIGN LANGUAGE**

Foreign students are strongly encouraged to acquire at least a working knowledge of Italian. Attending and passing courses of Italian language will be credited by the Board according to the acquired level.

**ATTENDANCE, LEAVE AND EXTERNAL COLLABORATIONS**

PhD students cannot take up employment, even if part-time or independent, without the express permission of the PhD Programme Board.

During the regular duration of three years, PhD students have the right to obtain a leave of absence, up to a maximum of one year, in case of maternity, military service, serious and documented illness and special family situations with interruption of the grant and subsequent recovery.

External collaborations will only be authorised if compatible with the doctoral Programme in terms of subject matter (in line with the student’s research) and time commitment (part-time). The students must consider all classes and other PhD Programme activities as their absolute priority.

Any external collaboration request will be considered in line with the above, with particular emphasis on the subject, contract type and tasks proposed.