UNIVERSITÀ DI PADOVA
Dipartimento
di Ingegneria Civile,
Edile e Ambientale - ICEA

PhD Course in

Sciences of Civil, Environmental and Architectural Engineering



November 17th, 2026

UNIVERSITÀ DI PADOVA
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Key features



- **3-years** PhD Programme
- totally taught in **English**
- **+600 hours** of training
- at least **3 months abroad** in **Universities/Research Centers**
- possibility of **internships in companies/industries**
- **a network** of **+30** Italian and foreign Universities
- **+80** professors, researchers and international scientists
- **+60** students from more than 15 different countries

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2 Curricula and 6 Educational Profiles

PhD Course is structured in 2 Curricula, each with 3 Educational Profiles for candidates to predominantly identify with.



CURRICULUM 1

Materials, Structures, Complex systems and Architecture

1. Numerical and Constitutive Modeling of Complex Systems
2. Structures, Infrastructures, Buildings and Transportation
3. Architecture: History, Design, Urban and Land Planning

CURRICULUM 2

Risk, Vulnerability, Environment, Health and Territory

4. Environment and Health
5. Risk Analysis, Vulnerability, and Land Management
6. Water Engineering and Fluid Mechanics



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PhD student activities

- PhD activities combine **advanced and soft skill courses**, participation to **seminars, conferences, workshops, summer/winter schools**, **activities toward students** and **research** on the doctoral thesis topic.
- Each candidate follows a tailored training path (the educational program), completing at least **6 specialized courses** taken from the educational offer of the PhD School in the **three years**.
- The PhD School offers, in addition to specialized courses, cycles of seminars and courses aimed at the development of soft skills.
- Admission to the next year is granted if the PhD student completes the activities outlined below, measured in terms of educational credits (CFU).

	YEAR I		YEAR II*		YEAR III*	
	Min CFU	Max CFU	Min CFU	Max CFU	Min CFU	Max CFU
SPECIALIZED PHD COURSES	12	16	8	12	0	4
SOFT SKILLS COURSES	4	8	4	8	0	0
SEMINARS, CONFERENCES, WORKSHOPS, SUMMER/WINTER SCHOOL	4	4	4	4	6	6
ACTIVITIES TOWARD STUDENTS (INTEGRATIVE TEACHING AND/OR TUTORING)	2	4	2	4	2	4
RESEARCH	28	38	32	42	46	52

- Correspondence between hours and credits (CFU): 6 hours = 1 CFU
- 60 CFU/year
- *(YEAR II and YEAR III): periods spent at qualified academic and/or industrial institutions, or at public or private research organizations, in Italy or abroad, entail a reduction in the number of CFU required for soft skills, seminars, conferences and activities toward students, equal to 4 CFU for each month of stay.

A Moodle course and a personal folder in Google Drive have been created, so that PhD students can manage and monitor their doctoral career and educational programme.

Research products, such as journal articles, publications in conference proceedings, book chapters (etc...) must be constantly updated in Moodle course and IRIS.

Courses offered by our PhD School

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YEAR I COURSES	Educational Profiles					
	Curr. 1			Curr. 2		
	1	2	3	4	5	6
Dynamics of moored floating bodies under linear waves				X	X	X
Elements of tensor and numerical algebra	X	X				
Emerging issues of digital earth for climate resilient development	X	X		X		
Geographic Information Systems for land use-transport system analysis: theoretical concepts and practical application*	X	X			X	X
Geomatics methodologies for acquisition, processing and manipulation of 3D data			X	X	X	X
Helicoids, structure and architecture: geometric genesis, digital applications and advanced modelling		X	X	X	X	X
Life cycle design for sustainable structures		X	X			
Mechanics of turbulence				X	X	
Nonlinear continuum mechanics for finite element analysis		X	X			
Numerical methods for engineers					X	X
Object-oriented programming for engineers	X	X			X	
Smart technologies in transport infrastructures	X	X			X	X
Source criticism and advanced research methods for architecture and urban history	X	X			X	X
Statistics for engineers			X			
Strategies for architectural regeneration of the historic city and urban peripheries	X	X	X	X	X	X
Sustainable design			X			
Sustainable environmental management of water, wastewater and waste		X	X	X		

SPECIALIZED 1ST YEAR COURSES

- Course calendar: https://www.dicea.unipd.it/en/phd-course/calendar
- Educational activities: https://www.dicea.unipd.it/en/phd-course/educational-activities
- Enrolment to courses in Moodle: https://stem.elearning.unipd.it/course/index.php?categoryid=529

Specialized PhD courses are offered in English and, for the completion of each course, the PhD student is required to take a final examination.

Courses offered by our PhD School

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YEAR II COURSES	Educational Profiles					
	Curr. 1			Curr. 2		
	1	2	3	4	5	6
Advanced monitoring and modelling in geotechnical engineering	X	X		X	X	
Advanced tools for hydrology in a changing climate				X	X	X
Advanced tools in fluid mechanics	X				X	X
Constitutive modelling for hyperelastic and visco-hyperelastic materials	X			X		X
Fluid mechanics for the functional assessment of cardiovascular devices	X			X		X
Historic construction and infrastructures: Analysis and structural assessment		X	X			
Innovative Techniques for the expansion of existing buildings		X	X			
Inspection, Risk and Resilience Analysis for Asset Management Purposes			X		X	
Technical innovation in complex building renovation projects		X	X			
Urban planning and transport infrastructure solutions for sustainable and smart cities		X	X		X	

Soft Skill PhD Courses

Advanced methodologies for projects on competitive tenders
How to give a scientific presentation
Digital database for advanced research

SPECIALIZED 2ND YEAR & SOFT SKILL COURSES

- Course calendar: https://www.dicea.unipd.it/en/phd-course/calendar
- Educational activities: https://www.dicea.unipd.it/en/phd-course/educational-activities
- Enrolment to courses in Moodle: https://stem.elearning.unipd.it/course/index.php?categoryid=529

Soft skill PhD courses are offered in English and, for the completion of each course, the PhD student is required to take a final examination.

Soft-skill courses offered by UniPD

https://www.unipd.it/en/phd-interdisciplinary-teachings

Main deadlines

- ✓ Definition of personalized **Educational Program** and appointment of **Supervisor** and **Co-supervisor** → by Feb. 2027
- ✓ Upload of **Annual report** in Moodle, after Supervisor approval → by Sept. 30th of each year
- ✓ **End of year presentation** → by Oct. 15th of each year
- ✓ **Period abroad** (at least 3 months, recommended 6 months) → preferably by the 2nd year
- ✓ Admission to the **final evaluation of the PhD thesis** and definition of the external evaluators → by Oct. 15th, 2029
- ✓ Upload of the **final examination form** in Uniweb together with the thesis for external evaluators → by Oct. 31st, 2029
- ✓ Upload of the **final version of the thesis** → *(tbd by PhD Office)*
- ✓ **Final exam** → *(tbd by PhD Office)*

For more info: https://www.unipd.it/en/dottorato/esame-finale-consegna-tesi-dottorati

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Integrative Teaching and Tutoring



Subject to the Academic Board authorization, PhD students are allowed to carry out paid activities toward students:

- **Integrative teaching** within bachelor and master's degree courses (max 40 hh per a.y.)
- **Tutoring** to bachelor and master's degree students (max 100 hh per a.y.)

Since these activities are mandatory, as part of your Educational Program, you are required to carry out **at least 2 CFU**.
For the above-mentioned activities, University Regulations governing PhD Programmes define a maximum amount of 40 hours of Integrative teaching and 100 hours of Tutoring per academic year.

Fill-in the dedicated authorization request form and submit your request here:
https://stem.elearning.unipd.it/course/view.php?id=11173

Working activities

Subject to authorization by the Academic Board, PhD students may carry out **paid working activities** that enable them to acquire skills relevant to their field of research, provided that such work is compatible with the successful completion of the educational, academic and research activities set out in their doctoral programme, and always in agreement with their Supervisor.



Fill-in the dedicated authorization request form and submit your request here:
https://stem.elearning.unipd.it/course/view.php?id=11173

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Research budget

Starting from the 1st year, each PhD student is guaranteed a **research budget** of **Euro 5.592,90** for their research activities*

ELIGIBLE EXPENSES:

- ✓ Study/research travel expenses (e.g., missions)
- ✓ Conference, seminar, and membership fees
- ✓ Research consumables (e.g., chemical reagents, audiovisual aids, photocopies, stationery, etc.)
- ✓ Publication costs
- ✓ Specific research training aimed at research (e.g., language courses)
- ✓ Books and articles
- ✓ Software licenses
- ✓ Computer equipment to support research
- ✓ Enrollment fees at another university in case of joint supervision



**For scholarships other than those provided by the University, the budget may vary. Please contact Silvia Manarin.*

Contact person: Silvia Manarin – silvia.manarin@unipd.it / 049 827-5664

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Missions



If you have to travel for study/research, you must request approval via **SIT portal**:

https://portal.cca.unipd.it/sit (**SSO Login**)

Approval needed from:

- **Dept. Head** (Prof. Andrea Giordano),
- **PhD Course Coordinator** (Prof. Massimiliano Ferronato)
- **Dept. Administrative Manager** (Dr Raffaella Celin)

Before submitting:

✓ Check on the University mission rules
✓ Get your Supervisor's authorization
✓ Check research budget availability in the online dashboard

Notifications:

- If using PhD scholarship funds → Notify missioni.phd@dicea.unipd.it
- If using Supervisor's funds (e.g. DOR, commercial) → Notify carmela.giudice@unipd.it

Contact person: Silvia Manarin – missioni.phd@dicea.unipd.it / 049 827-5664

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Mission Request Application

Coverage and Authorizations Panel - Mission Request Application

Copertura e autorizzazioni

Costo presunto complessivo della missione (in euro)	EUR 11.50
Tipo di fondo	Budget di Struttura
Descrizione del fondo	Dottorato I anno 40° ciclo
Utente che non necessita di autorizzazione	no
Struttura responsabile del fondo	Dipartimento di Ingegneria Civile, Edile e Ambientale - ICEA
Richiesta carta di credito virtuale	no

When using **PhD funds** (Fund type: *"Budget di struttura"),* please indicate your PhD cycle in the 'Fund Description'

Signature Request Panel – Mission Request Application

Firme richieste

Responsabile copertura finanziaria	TIZIANA PAMPANIN (tiziana.pampanin@unipd.it)
Responsabile autorizzazione	ANDREA GIORDANO (andrea.giordano@unipd.it)
Altre firme	Coordinatore del Corso di Dottorato

La richiesta verra` notificata a:

La richiesta verrà notificata a	SILVIA MANARIN (silvia.manarin@unipd.it)

From December 2026 the new Dept. Administrative Manager will be: **RAFFAELLA CELIN** (raffaella.celin@unipd.it)

Contact person: Silvia Manarin – missioni.phd@dicea.unipd.it / 049 827-5664

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Mission Request Application

Conference registration must be completed using a **Virtual Credit Card** (Vademecum Virtual Credit Card), which must be requested at least one week in advance, together with the mission request via the SIT portal.

Copertura e autorizzazioni

Costo presunto complessivo della missione (in euro)	EUR 100.00
Tipo di fondo	Budget di Struttura
Descrizione del fondo	Corso di Dottorato - XL ciclo
Utente che non necessita di autorizzazione	no
Struttura responsabile del fondo	Dipartimento di Ingegneria Civile, Edile e Ambientale - ICEA
Richiesta carta di credito virtuale	si

Carte di credito virtuali emesse

PAN	Massimale	Scadenza	Tipo	Usata
5216640698295690	1480 €	07/26	Aereo	SI
5216640671930693	56 €	10/26	Altro	SI
5216640631510858	690 €	07/26	Albergo	SI
5216640648976118	730 €	07/26	Convegno	SI
5216640635629696	**ANNULLATA**	07/26	Convegno	NO

Please make sure not to enter the exact amount, but a **slightly higher figure** (5–10 euros) to cover any potential fees.

The **Virtual Credit Card** can be used for:

- **Conference registration fees**
- **Accommodation payments**
- **Transportation costs** (e.g., flights and/or major train routes)

A separate Virtual Credit Card must be requested for each planned expense.
For suspected card misuse or technical issues preventing a transaction with a specific merchant, please contact AirPlus Customer Support at italy@airplus.com , specifying "Uni PD" in the email subject line and including the cardholder's name and the last four digits of the card number in the message.

Contact person: Silvia Manarin – missioni.phd@dicea.unipd.it / 049 827-5664

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Procedure for purchases with Doctoral Funds

1. **Verify your research budget availability**
   (email to silvia.manarin@unipd.it or use the online dashboard)

2. **Complete the purchase request form**
   Include authorization from the Supervisor and the PhD Coordinator (*Prof. Ferronato*)
   Purchase request form is available here:
   https://stem.elearning.unipd.it/mod/folder/view.php?id=595447

3. **Send the signed form to the Purchasing Office**
   (acquisti@dicea.unipd.it) and add silvia.manarin@unipd.it in copy



Conference Fees

Conferences must be paid using a **Virtual Credit Card**, requested at the same time as the mission application (which must therefore be submitted well in advance).
Only if payment by Virtual Credit Card is not possible, contact the Purchasing Office for registration.

Contact person: Silvia Manarin – missioni.phd@dicea.unipd.it / 049 827-5664

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Best practices for managing your research output

Keep your IRIS (Padua Research Archive) profile up to date

- access IRIS UniPD (https://www.research.unipd.it/) via your Single Sign-On credentials
- regularly add your publications and research outputs (journal articles, conference papers, etc...)
- when possible, upload the full-text (accepted version) to support **Open Access** compliance
- check that your affiliation (University of Padua) and metadata (DOI, authors, keywords) are correct
- keeping your profile current ensures the **visibility** and **traceability** of your research activities

Promote Open Access

- whenever possible, choose to publish in Open Access format
- take advantage of the University agreements with major international publishers (https://biblio.unipd.it/en/digital-library/about-publishing/agreements-with-publishers)

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HRS4R @UNIPD | Action Plan 27-29

HR Excellence in Research – Carta europea dei ricercatori all'Università di Padova



https://www.unipd.it/en/hrs4r

Dept. ICEA Ambassador: Prof. Livio Petriccione (livio.petriccione@unipd.it)

Vice-Rector for Research: Prof. Fabio Zwirner

Professor Cinzia Sada, Responsible for the Human Resources Strategy for Researchers (HRS4R) and the HR Excellence in Research accreditation at UNIPD

Professor Zuleika Murat, Coordinator of the HRS4R Implementation Group at UNIPD

International Relations office: HRS4R Coordination office@UniPD (hrs4r@unipd.it)

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The Academic Mediators

The Academic Mediators of the PhD Course have the task of giving support, listening and proposing possible solutions to PhD students who report relational problems (with supervisors and/or with other people within the PhD School) during their doctoral studies.



Matteo Camporese
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049 827-5447



Valentina Salomoni
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The Staff

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Massimiliano Ferronato
PhD Course Coordinator
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Giovanna Xotta
PhD Course Vice-Coordinator
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Francesco Brunetta
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049 827-5849



Silvia Manarin
Missions & reimbursements
missioni.phd@dicea.unipd.it
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THE ADVISORY BOARD

- Massimiliano Ferronato, Giovanna Xotta, Matteo Camporese, Fabio Gabrieli, Maria Cristina Lavagnolo, Livio Petriccione, Paolo Zampieri (from the Academic Board)
- Francesca Barone, Giovanni Gambasin (from the PhD student representatives in the Academic Board)
- Valentina Ruzza, Nicolò Spiezia, Cyrille Tetougeni (from Alumni UniPD Association)
- Giulia Bossi - CNR, Paolo Cecchin - HERAMBIENTE SPA, Pietro Farina - ANCE VENETO, Stefano Savoia – CONTEC INGEGNERIA SPA (stakeholder representatives)

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Useful links & contacts

PhD Programme:
https://www.unipd.it/en/dottoratoscheda/scienze-ingegneria-civile-ambientale-architettura
https://www.dicea.unipd.it/en/phd-course

Moodle STEM courses
https://stem.elearning.unipd.it/course/index.php?categoryid=529
webmaster@dicea.unipd.it

PhD students administration:
https://stem.elearning.unipd.it/mod/folder/view.php?id=595447
Google Drive personal folder

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PhD Office
https://www.unipd.it/en/doctoral-degrees-unipd
phd@unipd.it / 049 827-1827

WhatsApp Group for DICEA PhD Students
Scan the QR code to join!