

Università degli Studi di Padova

# **SELECTION ANNOUNCEMENT NO. 2023T52**

BY QUALIFICATIONS AND EXAMINATIONS, TO RECRUIT NO. 1 LEVEL II RESEARCH TECHNOLOGIST (FINANCIAL POSITION "D3") ON A FULL-TIME FIXED-TERM CONTRACT, FOR NO. 36 MONTHS, PURSUANT TO ART. 24-BIS OF LAW NO. 240 OF 30.12.2010, AND TO THE NATIONAL COLLECTIVE BARGAINING AGREEMENT OF 19.04.2018, AT THE DEPARTMENT OF CIVIL, ENVIRONMENTAL AND ARCHITECTURAL ENGINEERING - ICEA.

By implementing Art. 24-bis of Law no. 240 of 30.12.2010 and the National Collective Bargaining Agreement of 19.04.2018, the University of Padua plans to recruit Level II research technologist (financial position "D3") by qualifications and examinations on a full-time fixed-term contract, for no. 36 months, at the Department of Civil, Environmental and Architectural Engineering - ICEA, to provide technical-administrative support for the "*Innovative SHM for civil infrastructures and cultural heritage maintenance*" project.

Through the new position of research technician, the ICEA Department aims to strengthen the research area related to structural monitoring applied both to existing infrastructures and to architectural and cultural heritage, developing new monitoring techniques based on the complementary use of static and dynamic investigations, data-driven and machine learning algorithms.

Specifically, the technologist will be called upon to carry out the following activities:

- the contribution in the development of algorithms for structural dynamic identification
- structural monitoring
- maintenance of laboratory instrumentation relating to dynamic investigations
- technical support to the development of a plan to enhance the activities relating to structural monitoring of the ICEA Department in agreement with the Department Head and the personnel involved
- technical support to the activity of research agreements, research projects and basic research activities related to the seismic analysis of existing buildings, to the structural analysis of existing infrastructures.

The aforementioned activities require the following professional skills, knowledge and competences:

- knowledge and skills in the area of:
  - structural and earthquake engineering
  - dynamic experimental investigation techniques and monitoring of existing structures
  - evaluation methods and strenghtening techniques of existing structures, with particular reference to bridges and viaducts
- knowledge in the area of:
  - risk assessment and reliability assessment methods of existing structures
  - automatic calculation of structures and knowledge related to the use of structural modeling software (e.g., *AutoCAD*, sofware of structural modeling)
  - data analysis and processing methods and programming (e.g., tcl language, phyton, matlab)
  - technical English language.

#### Admission requirements

Candidates must have the following requirements by the selection announcement deadline:

#### • academic qualifications:

- a first-cycle degree (*Laurea Triennale*) (ex D.M. 270/2004), in class: L-7 - Civil and environmental engineering, L-17 - Architecture, L-23 - Building Sciences

or a first-cycle degree (*Laurea Triennale*) (*ex* D.M. 509/1999) recognised as the equivalent by D.I. 09.07.2009, in class: 4 - Architecture and construction engineering, 8 - Civil and environmental engineering

or an Italian University Diploma ex D.P.R. n. 162/1982, recognised as the equivalent by D.I. 11.11.2011, in: *Rilevamento e rappresentazione dei beni architettonici, Topografo esperto* 

or an Italian University Diploma (*ex* Law 341/1990) recognised as the equivalent by D.I. 11.11.2011, in: *Edilizia*, *Ingegneria dell'ambiente e delle risorse*, *Ingegneria delle infrastrutture*, *Ingegneria delle strutture*, *Ingegneria edile* 

 a second-cycle degree (*Laurea Magistrale*) (ex D.M. 270/2004) in class: LM-4 - Architecture and Architectural engineering, LM-22 - Chemical engineering, LM-23 - Civil engineering, LM-24 -Construction engineering, LM-26 - Safety engineering, LM-27 - Telecommunications engineering, LM-28 - Electrical engineering, LM-30 - Energy and nuclear engineering, LM-35 - Environmental engineering

or a second-cycle degree (*Laurea Specialistica*) (*ex* D.M. 509/1999) recognised as the equivalent by D.I. 09.07.2009 in class: 4/S - Architecture and construction engineering, 27/S - Chemical engineering, 28/S - Civil engineering, 30/S - Telecommunications engineering, 31/S - Electrical engineering, 33/S - Energy and nuclear engineering, 38/S - Environmental engineering

or a degree (*Diploma di Laurea V.O.*) (*prior* to D.M. 509/1999) recognised as the equivalent by D.I. 09.07.2009 in: Architettura, Ingegneria edile - Architettura, Ingegneria chimica, Ingegneria civile, Ingegneria edile, Ingegneria delle telecomunicazioni, Ingegneria elettrica, Ingegneria nucleare, Ingegneria per l'ambiente e il territorio

or a degree (*Diploma di Laurea V.O.*) (*prior* to D.M. 509/1999) recognised as the equivalent by D.I. 26.04.2011 in: *Ingegneria civile per la difesa del suolo e la pianificazione*.

## It is specified that:

a degree awarded *prior* to D.M. 509/1999 in *Architettura* should be treated as equivalent, by the University which awards said degree, to a Master's Degree in class LM-4 - Architecture and Architectural engineering,

a degree awarded *prior* to D.M. 509/1999 in *Ingegneria elettrica* should be treated as equivalent, by the University which awards said degree, to a Master's Degree in class LM-26 - Safety engineering or in class LM-28 - Electrical engineering.

#### It is specified that:

Candidates **holding a foreign degree** may take part in the selection only after completing a degree equivalency process pursuant to Art. 38, paragraph 3 of Legislative Decree DL 165/2001. Candidates are conditionally admitted to the selection procedure if the equivalency process is underway, but no final decision has been reached. They must have had their degree recognised as the equivalent of an Italian degree by the time they are recruited.

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The degree-equivalency process must be started before the selection-announcement deadline, otherwise the candidate will be excluded from the selection procedure. Candidates must inform the procedure manager that they have applied for degree equivalency.

Pursuant to decreto-legge (decree-law) no. 228 of 30 December 2021, the Public Function Department will conclude the recognition procedure only with regard to the successful candidates, who have the obligation, under penalty of forfeiture, to notify the Italian Ministry for Universities and Research (MUR) of the publication of the ranking list within 15 days. The degree-equivalency application form is available at:

http://www.funzionepubblica.gov.it/strumenti-e-controlli/modulistica;

- specific professional and/or cultural qualification pertinent to the research:
  - documented professional experience, at least two years, carried out in research structures public or private, national or foreign, operating in the field of structural engineering (e.g. contracts for research grants) and/or felloships / advanced educational training experiences, at least two years, relevant to the field of structural engineering;
- italian citizenship (Italians who are not citizens of the Republic of Italy have the same rights as Italian nationals), or citizenship of an EU Member State. Following implementation of Art. 7 of Law 97/2013, the following may also apply for the selection procedure: family of citizens from an EU Member State who do not have citizenship of an EU Member State, but do have the right of residence, or the permanent right of residence; and third-country nationals with a long-term EU permit of stay, with refugee status, or with subsidiary protection status;
- candidates with full political rights;
- candidates who are physically suitable for the specific position.

## Non-Italian nationals are required to:

- have full civil and political rights in their country of origin;
- fulfil the same requirements as Italian nationals, but do not need Italian citizenship;
- have a good knowledge of Italian.

Those who have been excluded from the exercise of active electoral rights, as well as those who have been dismissed or excluded from employment with a public administration due to persistent inadequate performance, pursuant to Article 2, paragraph 7 of D.P.R. (Presidential Decree) no. 487/1994, in accordance with sectoral regulations, or removed for the same reasons or for disciplinary reasons pursuant to legal or contractual regulations in force, or declared disqualified for having obtained the appointment or employment by producing false documents or documents affected by irremediable nullity, as well as those who have been convicted of offences constituting an impediment to employment in a public administration, are not eligible for selection.

# Application form

The application form and appendices for this selection announcement <u>must be submitted online</u> with the Pica platform at: <u>https://pica.cineca.it/unipd/tipologia/pta</u>.

To apply online, candidates must have a valid email address so that they can register with the system. They must also provide all of the information needed to complete the application and attach the required documents in electronic form.

The system allows the application to be saved in draft form until the submission deadline. The online application procedure and submission must be completed by **2 pm of the 15<sup>th</sup> day**, when the selection announcement closes.

The system will certify the date that the online application form is submitted by emailing candidates an automatic receipt. Once the submission deadline has expired, the system will shut down access and applications can no longer be sent.

If necessary, a submitted application form can be withdrawn and another one submitted **before the** application deadline (2:00 p.m. of the fifteenth day).

Each application will be given an identification number which must be included in any correspondence, along with the selection announcement code stated in the online procedure. Candidates must complete each and every part of the application form in accordance with the online instructions. In case of access through SPID, no signature will be required when submitting the application. In case of accessing the system by another mode, the application is to be completed as follows:

- with a digital signature using a smart card, USB token or remote signature that enables the user to sign
  documents with signature software. Alternatively, a web portal may be used to provide a certified remote
  signature. Candidates with a smart card or USB token for digital signing can check for compatibility with
  the server's digital-signing system. If compatible, the user may sign the application on the server;
- candidates who do not have compatible digital-signing devices and users of remote digital signatures
  without web portal access for signing documents will have to save a system-generated pdf file on their
  computer. After which, they must not edit the file and e-sign it in CAdES format. A file with a p7m extension
  will be generated and uploaded into the system. If the file is edited before the e-signature is applied, the
  system will be unable to verify whether the content of this document matches the original. If this occurs, the
  application will be rejected;
- if none of the aforementioned options are available:

print and hand-sign the application form, then upload a scanned copy along with a scanned form of identification. Candidates not providing identification may be excluded from the selection procedure.

The system may be momentarily offline for technical reasons.

Non-Italian candidates are to submit their application form as per the methods and deadlines stated in this application procedure.

Documents must be in a static, non-editable format and must not contain executable codes or macroinstructions. PDF is the preferred format. Documents must not exceed 30 MB.

The University of Padua is not liable for undelivered correspondence should candidates not provide a complete address, or when late or no notification is provided should the address on the application form change. Nor is it liable for problems caused by third parties, misfortune or force majeure.

For additional information or queries about the application procedure, please contact the Technical and Administrative Personnel office on +39 049 827 3159 - 3494 between 9 am and 1 pm.

For technical problems only, contact the following link at home page PICA CINECA supporto.

Candidates must state under their own responsibility their surname and first name, their date and place of birth, their permanent address, any telephone number, any criminal convictions and pending criminal procedures, that they enjoy full political rights, a detailed statement they meet the aforementioned requirements, and the exact contact address for any correspondence.

Pursuant to Article 16 of Legge (Law) no. 68/1999 and Article 20 of Legge (Law) no. 104/1992, applicants must make an explicit request concerning the assistance they require and the possible need for additional time to complete the tests. To this end, candidates must enclose with their application to participate in the selection procedure a suitable certification issued by the appropriate Public Medical Board, to enable the Administration to prepare in good time the means and tools needed to ensure regular participation in the selection procedure.

Pursuant to Legge (Law) no. 170/2010, as amended and supplemented, candidates with specific learning disorders (SLD) may ask the Committee to have the written test replaced by an interview, or to make use of any technical aids to compensate for reading, writing and calculation difficulties, in order to take the aforementioned tests, as well as to make use of additional time not exceeding 50% of the time allocated for the test.

The request must be prepared following the instructions available in the online application procedure.

The adoption of the above measures will be determined at the sole discretion of the Selection Committee, based on the documentation provided by the candidate in the application.

Candidates are admitted to the selection procedure conditionally. Should any of the requirements not be met, candidates may be excluded from the selection procedure at any moment, even after they have taken the tests.

## Selection

Candidates are selected by qualifications and examinations.

A total of 90 points are awarded for qualifications and examinations. They are divided as follows:

- 30 points for qualifications
- 60 points for examinations, they are divided as follows:
  - 30 points for the written test
  - 30 points for the oral examination.

## Qualifications

The following qualifications, will be evaluated (max 30 points):

additional educational and training qualifications in	max 10 punti
addition to those required for access (Master	
Degree, PhD)	
professional qualifications: documented participation	max 15 punti
in research projects, financed on a competitive basis	
and of international and national relevance and	
participation or organization of conferences	

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publications in scientific journals in sectors related to	max 5 punti
the skills requested in the announcement	

EU candidates must provide all of the statuses, information and qualities that they deem useful for the assessment of their qualifications in a statutory declaration, as per Art. 46 and 47 of Presidential Decree DPR no. 445/2000. Non-EU candidates are not allowed to use a statutory declaration, as per Art. 3 of Presidential Decree DPR no. 445/2000.

The application must include the following significant elements:

- the exact name of the awarding body (public or private)
- the period (from dd/mm/yy to dd/mm/yy)
- the type of contract and any category it falls under, the functions carried out and the position held.

# Certificates issued by the European Union or Italy's Public Administration must not be submitted.

## Publications must be attached to the application and must conform to the original.

Only publications or texts accepted for publication, in accordance with current regulations, as well as essays included in collective works and articles published in journals on paper or in digital format will be assessed, with the exclusion of internal notes or departmental reports. Doctoral theses or equivalent qualifications are taken into account even in the absence of the aforementioned conditions.

In the case of publications published abroad, the following details should be provided if possible: date, place of publication or, alternatively, the ISBN code or equivalent.

In the case of publications published in Italy before 2 September 2006, the obligations must be fulfilled in accordance with the forms provided for by article 1 of Decreto luogotenenziale (Legislative Decree of the King's Lieutenant) no. 660 of 31 August 1945. From 2 September 2006, the obligations must be fulfilled in accordance with the forms provided for by Legge (Law) no. 106 of 15 April 2004 and by the relevant regulation issued by D.P.R. (Presidential Decree) no. 252 of 3 May 2006, by the date on which the Call for Applications for Selection expires.

Publications and any documentation in a foreign language must be accompanied by a translation in Italian, certified as conforming to the original (foreign) text, prepared by the competent diplomatic or consular Representation or by an official translator or, where permitted, prepared by the candidates themselves with a statement that it conforms to the original text by means of a declaration in lieu of an affidavit which, pursuant to article 47 of D.P.R. (Presidential Decree) no. 445/2000, certifies the conformity of the translated text to the original text. Publications written in a foreign language may, however, be submitted in the original language (without the need for an accompanying translation) if this language is one of the following: French, English, German or Spanish.

Publications uploaded via the procedure may not exceed a total of 30 MB.

The evaluation of the qualifications will be carried out after the oral examination has taken place.

The score of evaluation of qualifications will be published on the noticeboard of the Department of Civil, Environmental and Architectural Engineering - ICEA, Via Marzolo, 9, - Padua, and on the University of Padua website at <a href="https://www.unipd.it/selezione-2023T52">https://www.unipd.it/selezione-2023T52</a>.

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## Examinations

Examinations will comprise a written test and an oral examination.

- The written test will focus on the following topics:
  - isostatic structure resolution
  - guidelines for risk classification and management, safety assessment and monitoring of existing bridges
  - destructive and nondestructive testing for the evaluation of existing structures
  - the oral examination will focus on the following topics:
  - diagnostic methods for existing structures
  - maintenance management for existing infrastructures, monitoring systems with reference to bridges and viaducts
  - seismic engineering, experimental modal analysis
  - basics of structural reliability and risk analysis
  - computer skills (*AutoCAD*, structural modeling software, *Office* package, at least one programming language).

The knowledge of the English technical language will be tested during the oral examination.

**Examinations (calendar, locations and process of selection)** will be published on the University of Padova's Official Register (<u>https://protocollo.unipd.it/albo/viewer</u>) and on the University of Padova website (<u>https://www.unipd.it/selezione-2023T52</u>) **starting from 2:00 p.m. on October 30**<sup>th</sup>.

No further notice will be given.

## Publication of this calendar is considered to be notification.

Candidates who are unable to comply with the aforementioned schedule due to pregnancy or breastfeeding will be entitled to participate in the examinations, also by holding asynchronous tests and, in any case, appropriate spaces will be made available to allow for breastfeeding.

Wherever possible, the candidates concerned will promptly notify the Director of the Student Services Office, so that the Administration can plan in good time how and when to ensure regular participation in the examinations.

Approved candidates must come on the date and at the time communicated. No further notice will be given.

Candidates must show a valid ID document before being admitted to the examinations.

Any candidates not coming to the examinations will be deemed to have waivered their place, regardless of the reason.

The examinations pass mark is 21/30 (7/10).

The list of candidates admitted to oral examinations will be published with their scores for the written test on the noticeboard of Department of Civil, Environmental and Architectural Engineering - ICEA, Via Marzolo, 9, - Padua, and posted on the University of Padova website at <u>https://www.unipd.it/selezione-2023T52</u>.

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All Commission sessions during the oral examination are public. At the end of each daily examination session, the Commission will draw up a list of the candidates assessed with a score for those who have passed the examination. This list will be posted on the noticeboard of the Department of Civil, Environmental and Architectural Engineering - ICEA, Via Marzolo, 9, - Padova, and on the University of Padova website at <a href="https://www.unipd.it/selezione-2023T52">https://www.unipd.it/selezione-2023T52</a>.

Candidates can access the list with a personal password provided to all selection participants.

## **Overall ranking**

The final score is calculated by adding up the score for the written test, the oral examination and the score for qualifications assessment.

The categories of citizens who have a preference, merit being equal, are:

- a) recipients of military and civil valour medals, if they have left the service;
- b) amputees and invalids for service in the public and private sectors;
- c) orphans of the fallen and children of the mutilated, disabled and permanently incapacitated for work due to service in the public and private sectors, including the children of health professionals, social workers and socio-medical workers who died as a result of the Cov-2 Sars infection contracted when exercising their activity;
- d) those who have performed meritorious service in any capacity whatsoever for not less than one year in the administration holding the competition, where they have no other preferential qualification by reason of their service;
- e) higher number of dependent children;
- f) invalids and civilian amputees who do not fall under (b);
- g) military volunteers of the Armed Forces who were not dishonourably discharged at the end of the regular or extended period of military service
- h) athletes who have sporting employment relationships with military sports groups and the civil corps of the State;
- i) people who have successfully completed the further improvement period at the process office pursuant to Article 50, paragraph 1-quater, of decreto-legge (Decree-Law) no. 90 of 24 June 2014, converted, with amendments, by legge (Law) no. 114 of 11 August 2014;
- people who have successfully completed the traineeship at the judicial offices pursuant to Article 37, paragraph 11, of decreto-legge (Decree-Law) no. 98 of 6 July 2011, converted, with amendments, by legge (Law) no. 111 of 15 July 2011, while not being part of the process office, pursuant to Article 50, paragraph 1-quinques, of decreto-legge (Decree-Law) no. 90 of 24 June 2014, converted, with amendments, by legge (Law) no. 114 of 11 August 2014;
- m) people who have successfully completed the internship at judicial offices pursuant to Article 73, paragraph 14, of decreto-legge (Decree-Law) no. 69 of 21 June 2013, converted, with amendments, by legge (Law) no. 98 of 9 August 2013;
- n) people who hold or have held collaboration assignments given by ANPAL Servizi S.p.A., in implementation of the provisions of Article 12, paragraph 3, of decreto-legge (Decree-Law) no. 4 of 28 January 2019, converted, with amendments, by legge (Law) no. 26 of 28 March 2019;
- o) minors.

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Pursuant to Article 3, paragraph 4, of DPR (Presidential Decree) no. 487/1994, as amended by DPR (Presidential Decree) no. 82/2023, which states that notices of competition shall take into account the gender representativeness referred to in Article 6, as at 31.12.2022, the percentage of representativeness of the male gender is 42.9%, while that of the female gender is 57.1%, and therefore the gender differential is 14.2%, i.e. not more than 30%.

The overall ranking will be published in the University of Padova Official Register. Any appeals may be filed the day after the ranking is published.

The overall ranking is effective immediately.

The winner is entitled to the gross annual salary for the "D" category, financial position "D3", as per the University section of the current National Collective Bargaining Agreement (C.C.N.L. *Comparto "Istruzione e Ricerca*"), as well as to an additional quota as specified in the "University Regulations for Recruiting and Regulating 'Fixed-term Research Technologists', in accordance with Art. 24-*bis* of Law no. 240 of 30 December 2010." The salary will be paid into a bank or post-office account only.

The administration may decide not to draw up the agreement should there cease to be the need, opportunity or resources to proceed.

The ranking is valid for three years from its publication date and may be used to recruit additional fixed-term technologists with the same profile and level. All other aspects of employment will depend on the University's specific needs.

Anything not stated above is covered by the "University Regulations for Recruiting and Regulating 'Fixed-term Research Technologists', in accordance with Art. 24-*bis* of Law no. 240 of 30 December 2010", available at: <u>http://www.unipd.it</u> (see "*Statuto e Regolamenti*").

Pursuant to Law no. 241 of 7<sup>th</sup> August 1990, the selection-procedure manager is Cristian Poletti - *Ufficio personale tecnico amministrativo*, Riviera Tito Livio, 6, Padua, Italy.

The Technical-Administrative Staff office (*Ufficio personale tecnico amministrativo*) is open to the public at the following times:

From Monday to Friday from 10 am to 1 pm and on Tuesday and Thursday from 3 pm to 4.30 pm.

Tel. 049 827 3155 - 3159 - 3494

e-mail: reclutamento.pta@unipd.it

NB: This selection announcement has been translated into English for publication purposes only. The Italian version is valid for all legal purposes and for the resolution of any disputes.

Padua

The Director-General Alberto Scuttari digital signature (ex Legislative Decree 82/2005)

Selection-procedure<br/>ManagerDepartment ManagerCristian PolettiTommaso Meacci