

PROGETTO PRIN PNRR 2022, *finanziato dall'Unione europea – Next Generation EU*



Università degli Studi di Napoli Federico II
Dipartimento di Strutture per l'Ingegneria e l'Architettura
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Missione 4 “Istruzione e ricerca” Componente 2 Investimento 1.1

"Fondo per il Programma Nazionale Ricerca (PNR) e progetti di Ricerca di Rilevante Interesse Nazionale (PRIN)"

D.D. n. 433 of 11.06.2024

THE DIRECTOR

GIVEN Law 240 of 30 December 2010 and subsequent amendments, in particular Article 22, which governs Research Grants for carrying out research activities;

HAVING REGARD to the Ministerial Decree no. 102 of 9 March 2011, which determined the minimum annual amount of research grants for carrying out research activities, net of charges to be borne by the granting Administration;

GIVEN the Law decree of 30 April 2022, n. 36, converted from law of 29 June 2022, n. 79, informing on temporary rules for the Research Grants for the 180 days following the issuing of the aforementioned law;

GIVEN the Law decree Milleproroghe 2023 (d.l. 198/22), article 6, postponing until 31 December 2023 the deadline for which universities, institutions and public research bodies may continue to issue calls for conferring Research Grants;

GIVEN the Law n. 18 of 02/23/2024 converting the Milleproroghe 2023 decree-law, containing the extension to 31 July 2024 of the deadline for announcing the procedures for awarding research grants;

GIVEN the Legislative Decree n. 71/2024, containing the extension to 31 December 2024 of the deadline for launching the procedures for awarding research grants;

GIVEN the University Regulations for the awarding of fellowships for the conduct of research activities, issued with D.R. 2269 of 08.06.2023;

GIVEN the law 06.11.2012, n.190, and subsequent amendments containing the provisions for the prevention and repression of corruption and illegality in the public administration;

CONSIDERING the National Code of Conduct, issued with Presidential Decree no. 62 of 16.04.2013 and the current University Code of Conduct respectively;

GIVEN the currently active Integrated Plan for Activities and Organization of the University of Naples Federico II;

GIVEN the Resolution of the Council of the Department of Structures for Engineering and Architecture of 29.05.2024, with which the Department Council approved the activation of no. 1 Research grant, with funding from the funds deriving from the research project PRIN 2022 PNRR, Grant P20225NAMF CUP E53D2301688001;

GIVEN the constraint no. 7280 and no. 7281 of 30/05/2024

DECREES

The following call for applications has been issued for the awarding of 1 post-master grant for research activities pursuant to Article 22 of Law 240/10. **Ref. Check no. 15/2024**

CALL FOR COMPETITIVE SELECTION TO AWARD 1 POST-MASTER GRANT FOR RESEARCH ACTIVITIES PURSUANT TO ART. 22 L. 240/10

Article 1 - Purpose

The Department of Structures for Engineering and Architecture of the University of Naples Federico II, hereinafter referred to as "Structure", announces a public selection. This selection, which is based on qualifications and interview, for the award of no. 1 Post-master research grant for carrying out research activities, hereinafter referred to as "Research Grant".

The characteristics of the Grant are indicated in **Annex A** of this call, which in particular lists:

- the scientific area of interest and the scientific-disciplinary sector
- the location and duration of the grant
- the gross amount per year net of charges to be paid by the University
- the presumed date of commencement of the activity
- the compatibility or otherwise of the fellowship contract with teaching or supplementary teaching activities
- the description of the research program to be carried out and the funding body (where applicable)
- the scientific responsible, if already identified
- the required scientific experience
- the maximum number of scientific publications or other research products that can be submitted for the purposes of this selection

Article 2 - Required Educational Qualification

Applicants who possess a Master's degree Computer Science or Structural and Geotechnical Engineering or Architecture or Biomedical Engineering or its equivalent, are eligible to apply. If the degree was obtained from a foreign institution, provisional admission to the competition will be granted. The evaluation committee will assess equivalence during the qualifications review stage. The mandatory qualification must be held by the application deadline, which is indicated in Annex A.

Article 3 - Exclusions

Permanent staff from universities, institutions and public research and experimentation bodies, the National Agency for New Technologies, Energy and Sustainable Economic Development (ENEA) and the Italian Space Agency (ASI), as well as institutions whose scientific specialization diploma has been recognized as equivalent to the title of research doctor in accordance with article 74, fourth paragraph, of the decree of the President of the Republic 11 July 1980, n. 382.

Participants who have up to the fourth degree of kinship or affinity with a professor belonging to the Department that has resolved on the issuance of the selection procedure or where the research activity is conducted, or with the Rector, the Director-General, or a member of the Board of Directors of the University of Naples Federico II.

Applicants who have previously been recipients of Research Grants under Law No. 240/2010, including any extensions, for a cumulative duration that, when added to the duration of the Grant offered through this announcement, surpasses six years, with the exclusion of any periods coinciding with doctoral

programs, are ineligible. Additionally, Applicants who have previously held contracts under Articles 22 (Research Grants) and 24 (Fixed-term researchers) of Law No. 240/2010, whether with different universities, whether state, non-state, or online, or with entities covered by Article 22(1) of Law No. 240/2010, for a cumulative duration that, when combined with the duration of the Grant available under this announcement, exceeds twelve years, even if not consecutive, are also ineligible. Periods of maternity or health-related leave, as per prevailing regulations, are not considered in the calculation of the duration of these associations.

Article 4 – Application submission

The deadline for submitting the application for participation in the competition is **8th July 2024, no later than 12:00 CET**, failure to comply will result in exclusion.

The application, whether digitally signed or accompanied by a scanned signature along with a copy of an identification document, must be sent via email to the following address: dist@unina.it, with the subject line stating 'Research Grant Competition Application,' followed by the competition's identification number. In the email body, please provide your last name, first name, address, and the competition's identification number. Supporting documents for the application should either be attached to the email or listed and transmitted using any specified electronic file transfer service mentioned in the same email. The University shall not assume any responsibility for potential technical issues during email transmission or in case the file transfer service does not function correctly.

If the Participant intends to apply for multiple selections for the award of Research Grants with different identification numbers, separate applications via distinct emails have to be sent.

Article 5 - Content of the application and attachments

The application must be drawn up in accordance with Annex B of this announcement and must contain the following information and declarations:

- a) personal details, date and place of birth, citizenship, residence and tax code (if already available, in the case of candidates with foreign citizenship);
- b) the specific indication of the number of identification of the procedure and of structure where research is performed (see Annex A for details);
- c) the e-mail address, possibly certified, and the telephone number on which you wish to receive communications relating to this selection, as well as the commitment to promptly communicate any changes to these contact details (note: no communications will be sent by post paper);
- d) declaration of possession of two-year master degree with specification of the Title of the Master program and indication of the vote;
- e) declaration of not falling into any of the situations of exclusion from the competition listed in art. 3 of this announcement.

The application must be accompanied by:

- 1) Copy of an identification document
- 2) Curriculum of one's scientific and professional activity
- 3) List of publications or other research products referred to at point 4
- 4) Publications or other research products, within the maximum number possibly specified in Annex A of this announcement. The master's degree or doctoral thesis can be presented in place of a publication.

5) Copy of the documentation proving the possession of the required qualification, referred to in Article 2, or substitutive declaration of certification, pursuant to art. 46 of the Presidential Decree no. 445/2000, provided in accordance with Annex C of this announcement.

6) Copy of the documentation proving the possession of any other qualifications held that are considered useful for the purposes of the competition (degrees, masters, specialization diplomas, research doctorates, post-graduate courses obtained in Italy or abroad, scholarships study, contracts or other formal research assignments both in Italy and abroad, etc.), or substitutive declaration of certification, pursuant to art. 46 of the Presidential Decree no. 445/2000, provided in accordance with Annex C of this announcement.

Applications that do not contain the required declarations and to which the required documentation is not attached will not be taken into consideration.

It should be noted that the Administration assumes no responsibility for the case of dispersion of communications due to inaccurate indications of the contact information by the applicant or failure or late communication of their change, nor for any postal or telematic problems not attributable to fault of the Administration itself.

Article 6 - Evaluation procedure and assignment of the research fellowship

The commission consists of three members chosen from university professors and researchers.

The commission must conclude its work within sixty days from the notification of the appointment decree. A technical-administrative staff member may participate in the committee's proceedings for the sole purpose of recording minutes.

During its initial meeting, the committee establishes the criteria and evaluation methods for qualifications and interviews, which are to be formalized in the respective minutes. The total score available for evaluation is **100** points, with **40/100** allocated to qualifications and **60/100** to the interview.

Prior to assessing qualifications, the committee verifies the equivalence of any foreign academic qualifications required for participation in the procedure and obtained by the candidates. During the qualification assessment, the committee must assign a separate score, in accordance with the above instructions, to each of the following items:

- graduation grade or equivalent qualification;
- publications and other research products presented for evaluation purposes, within the maximum number that may be provided for in Annex A of the announcement; the master's degree or doctoral thesis can be evaluated in place of a publication;
- any specialization diplomas and post-graduate specialization courses;
- eventual possession of a PhD degree or equivalent qualification pursued in Italy or abroad;
- other qualifications related to the research activity carried out, such as ownership of contracts, scholarships and positions in universities or national or international research bodies.

The assessment will consider the consistency of the qualifications with the scientific area of interest and / or the scientific-disciplinary sector as well as with the scientific experience required in the announcement. In evaluating publications and other research products, the Commission will also take into account the following general criteria: originality, innovativeness and methodological rigor; scientific relevance of the editorial position of publications and their dissemination within the scientific community; individual contribution of the candidate.

The minimum qualification score required for admission to the interview is a total of **25/100**.

The date of publication of the results of the evaluation of qualifications and the date of convocation of candidates for the purposes of the interview are indicated in Annex A. This notice constitutes a notification of convocation for candidates.

During the entire period of the competition procedure, notice may be given, with the value of official notification for candidates for all legal purposes, of any postponement of the test calendar and / or any further or different communication with respect to what is established in this article, through the University website www.unina.it at the link http://www.unina.it/assegni_ricerca and the website of the Department <https://www.dist.unina.it/bandi>.

This communication will be considered an official notification.

Therefore, all candidates are invited to consult the aforementioned sites for any further update.

The interview of a candidate can also be carried out remotely, guaranteeing the identification of the candidate and the publicity of the test. The interview can be held in English, or in another foreign language that is relevant to the planned research activity. At the end of the interviews, the Commission of selection will publish the list of candidates examined, with an indication of the scores reported by each, by posting at the place where the interviews are held and electronically.

The Commission will formulate the merit ranking in descending order, summing the score of the qualifications and that of the interview. In the event of a tie, the youngest candidate will be considered a priority. Only candidates who have obtained an overall score greater than or equal to **70/100** will be considered suitable for the positions covered by the announcement.

The competition deeds are approved by decree of the Director of the Department. The deadline for accepting the position will be indicated in the same decree. Check positions are awarded to the first suitable candidates, according to the order of the ranking. In case of renouncement of the assignees or of non-acceptance within the specified deadline, or of forfeiture from the ranking due to failure to obtain the PhD title by the date indicated in attachment A, the fellowship is awarded to subsequent suitable candidates according to the order of the ranking.

The granting of the check takes place following the signing of a specific contract with the Structure, which must be signed by the Research Fellow within the times indicated by the Structure, under penalty of forfeiture of the right.

The responsible for the present call procedure is Dr. Anna Giannino – Responsible for Research Office – Management for Research grants for the Department of Structures for Engineering and Architecture, e-mail: anna.giannino@unina.it

The aforementioned responsible can assign in written form to other person within the unit the responsibility of procedural matters.

Article 7 - Activities and obligations of fellowship holders

The presumed start date is indicated in Annex A of the call. This date is subject to reasonable flexibility, as long as this does not affect the performance of the planned research activity and the financial coverage of the fellowship. The fellowship holders carry out their activity within the research project object of the announcement, as indicated in Annex A, under the direction of a scientific responsible appointed by the Structure, in compliance with the following criteria: flexibility to meet the needs of the activity, continuity of the activity, temporal definition, not mere occasionality, coordination with respect to the overall activity of the client University, close link with the realization of a research program, autonomous development

of collaboration within the program, absence of working hours predetermined, obligation to report ex post of the hours committed where required by the administration.

Grant holders have the right to use, for the purpose of carrying out their research activities, facilities, equipment and services available at the Department where the research is located, on the basis of the same rules valid for other researchers of the Department. They can also receive mission assignments as part of research activities.

The holder of the fellowship may only carry out supplementary teaching activities free of charge, subject to the authorization of the scientific manager. The granting of a contract that involves the assumption of responsibility for a module or course is only allowed to holders of post-doctoral fellowships. The overall didactic activity, carried out in any capacity, excluding seminars, cannot exceed 60 hours per year.

On a regular basis, according to a schedule set by the Structure, fellowship holders are required to submit a written report on the research activity carried out, endorsed by the scientific director. At the end of the period of enjoyment of the grant, the holder must submit a final report on the activity carried out which, accompanied by the opinion of the scientific manager, will be subjected to a final evaluation by the decision-making body of the Structure.

The grants do not in any way constitute a subordinate employment relationship and do not give rise to any right with regard to access to university roles.

Article 8 - Prohibition of accumulation, incompatibility, expectations and interruptions

The check is individual. Beneficiaries cannot combine it - under penalty of forfeiture - with income from professional activities or employment relationships carried out on a continuous basis.

The fellowships cannot be combined with other scholarships awarded for any reason whatsoever, except with those granted by national or foreign institutions useful for integrating, with stays abroad, the research activity of fellowship holders.

The ownership of the fellowship is not compatible with the attendance of bachelor's, specialist or master's degree courses, research doctorates with scholarship and specialization in the health area, in Italy or abroad. Attendance of a PhD course is allowed without the use of a scholarship.

Fellowship holders are not allowed to carry out internal tasks within the University, with the exception of the provisions of Article 7. Without prejudice to the full performance of their duties, Fellowship holders may exceptionally request to carry out assignments external to the University, subject to the authorization of the decision-making body of the relevant Structure, having heard the opinion of the scientific manager, provided that they are occasional and of short duration, do not involve a conflict of interest with the specific research activity carried out by the holder of the Research Grant and, in relation to the activities carried out, they do not, in any case, prejudice the University.

The grants can be awarded to personnel serving in public administrations, provided they are placed on leave without a grant for the duration of the grant.

The research activity is suspended during the period of compulsory leave due to maternity and duly proven sickness, it being understood that the entire duration of the fellowship cannot be reduced due to the aforementioned suspensions. It is also possible to suspend the fellowship for other serious reasons that prevent the research from being carried out, at the request of the scientific manager and with the approval of the decision-making body of the Structure, as long as the suspension does not affect the financial coverage of the fellowship. It does not constitute suspension and, consequently, an overall period of justified absence not exceeding thirty days in a year must not be recovered.

Article 9 - Tax, social security and insurance treatment

The grants awarded pursuant to this regulation apply, in tax, social security, compulsory maternity leave and sick leave, as established by art. 22 paragraph 6 of the Law of 30 December 2010, n. 240. In the period of compulsory maternity leave, the allowance paid by INPS pursuant to art. 5 of the decree of the Minister of Labor and Social Security of 12 July 2007 is integrated by the University up to the amount of the research grant.

The University provides insurance coverage for accidents and civil liability towards third parties in favor of fellowship holders, as part of their research activity.

Article 10 - Forfeiture, withdrawal, termination

Those who, within the deadline communicated by the structure, do not sign the relative contract, except for reasons of health or force majeure duly and promptly proven, lose the right to stipulate the contract. Those who provide false declarations regarding the possession of the requirements, the reasons for exclusion or the incompatibilities referred to in art. 3 and 8 of this announcement, without prejudice to the additional sanctions provided for by the regulations in force.

The holder of the research fellowship may withdraw from the contract upon written communication to the structure, with at least 15 days' notice. The payment of the last month will be commensurate with the period of activity carried out. In the event of failure to give notice by the holder of the fellowship, the University has the right to withhold or recover from the Research Fellow an amount corresponding to the salary for the period of notice not given.

Towards the holder of the research fellowship, who after starting the planned research activity does not continue it regularly and uninterruptedly for the entire period, without justified reason, or who is responsible for serious and repeated failures or non-compliance, the procedure for declaring the termination of the contract, on the reasoned proposal of the scientific manager, approved by the decision-making body of the relevant Structure. The specific causes of termination may be the following: unjustified failure to start the activity or delay in the actual start of the activity; unjustified suspension of the activity for a period that damages the research program; violation of the incompatibility regime repeated after a first notice; a negative opinion on the research carried out, expressed by the decision-making body of the relevant Structure.

Article 11 - Processing of personal data

Pursuant to EU Regulation no. 679/2016, candidates are informed that the processing of personal data provided by them will be processed, in paper or electronic form, for the sole purposes of this procedure and the possible establishment of the employment relationship and for the purposes related to its management.

The processing will be carried out by the persons in charge of the procedure, as well as by the selection board, with the use of computerized procedures, in the ways and within the limits necessary to pursue the aforementioned purposes, even in the event of any communication to third parties.

The provision of such data is necessary for the evaluation, for the verification of the participation requirements and the actual possession of the declared qualifications. Failure to indicate them may preclude such obligations and, in the cases provided for in the announcement, may result in exclusion from the selection procedure. Further data may be requested from candidates for the aforementioned purpose only.

The data collected may be disclosed to any subjects entitled under the law n. 241/1990, of Legislative Decree 33/2013 and their subsequent amendments and additions.

The data will be kept, in accordance with the provisions of current legislation on the subject, for a period of time not exceeding that necessary to achieve the purposes for which they are processed.

Pursuant to the GDPR 2016/679, the University of Naples Federico II may publish the curriculum vitae provided as an attachment to the winners' application for participation for institutional purposes and in compliance with Legislative Decree no. 33 of 14 March 2013 (Transparency Decree) as amended by Legislative Decree 97 of 2016. It is understood that, in addition to the complete Curriculum Vitae, it will be possible to provide a specific Curriculum Vitae, deprived of personal data, for the sole purpose of publication on the site University WEB.

Candidates are granted the rights referred to in the third chapter of EU Regulation no. 679/2016, in particular, the right to access their personal data, to request their correction, updating and cancellation, if incomplete, erroneous or collected in violation of the law, as well as to oppose their processing for legitimate reasons. Further information and indications on the procedures for any complaints and on the responsibilities of data protection are available on the dedicated website, address <http://www.unina.it/ateneo/statuto-e-normativa/privacy>.

Article 12 – Cross-reference

For matters not covered by this announcement, please refer to the current University Regulations for the awarding of grants for carrying out research activities.

Naples, 11/06/2024

The Director of the Department
Signed by Prof. ing. Andrea Prota

Dipartimento di Strutture per l'Ingegneria e l'Architettura

*Capo Ufficio Gestione Progetti di Ricerca
F.to Dott.ssa Anna Giannino*

ANNEX A

INFORMATION FORM FOR THE CALL	
Number of identification of the procedure	Ref. Check no. 15/2024 D.D. n. 433 Of 11.06.2024
Typology of the procedure	b
Structure where research is performed	Department of Structures for Engineering and Architecture
Scientific area	Computer Science, Structural Engineering, Architecture
Scientific Sector	INF/01, ICAR/09, ICAR/17
Typology of grant	Post-graduation
Title for admission to the assessment and deadline for title achievement	two-year Master Degree in Computer Science or Structural and Geotechnical Engineering or Architecture or Biomedical Engineering or equivalent qualification
Foreseen date for beginning of activities	01/09/2024
Duration of the contract (in months)	12
Gross salary per annum (to the worker)	€ 19.367,00
Compatibility with teaching activities paid according to art. 23 law 240/2010	Compatible only for supplementary teaching, subject to authorization of the head of the structure on the opinion of the scientific responsible
Title of the research program in english	AI-Driven Crack Detection and H-BIM model Integration for Structural Analysis
Synthetic description of the research program	The project aims to design an AI-based method for automatic damage detection from images, focusing mainly on the context of masonry churches. After the automatic detection, a convolutional neural network (CNN) is planned to be defined to classify the identified damage. The damage data will then be integrated into an H-BIM model through a semi-automatic operation, which will connect the digital photogrammetry results to the damage detected in the images through AI. Finally, the most probable damage mechanisms will be assessed by developing machine learning decision-making processes.
Financing entity (with grant number, when applicable)	PRIN 2022 PNRR PNRR Grant P2022NAMF CUP E53D2301688001
Scientific Responsible (if identified)	Prof. Claudia Casapulla
Possibly required scientific expertise	Knowledge of basic processes for building artificial intelligence algorithms and logical decision-making processes
Maximum number of scientific publications (or other research products) to present	10
Date, time and location of publication of qualification assessment results	09/07/2024 ore 10:30 http://www.unina.it/assegni_ricerca https://www.dist.unina.it/bandi
Date, time and location of interview	09/07/2024 - 11:00 CET online on MS Teams (the link will be published at the call deadline on the above websites)

ANNEX B

APPLICATION FOR PARTICIPATION

To the Director of _____

University of Naples Federico II

_____ undersigned (surname) _____ (name) _____, born on _____ in _____ (province _____), resident in _____ (province _____), street _____, no _____, post code _____, citizenship _____, tax code (only if a citizen Italian) _____, CELL. _____ E-MAIL _____,

ASKS

to be admitted to the competition for the awarding of grants for carrying out research activities pursuant to art. 22 L. 240/10 with identification number _____, research location _____.

To this end, aware of the criminal penalties provided for by art. 76 of the Presidential Decree 28 December 2000, n. 445 for the case of false or false declarations,

DECLARES

A. To have obtained a Two-year master degree on _____ at the University _____ with vote _____ within the deadline specified in the call for applications

B. Not to fall into any of the situations of exclusion listed in art. 3 of the competition notice to which this application form refers.

The undersigned undertakes to promptly communicate any changes in the telephone and e-mail addresses indicated above.

The following documents are attached to this application:

- 1) Copy of your own identification document.
- 2) Curriculum of one's scientific and professional activity.
- 3) List of publications or other research products referred to in point 4
- 4) Publications or other research products proposed for evaluation.
- 5) Documentation proving possession of the qualification referred to in declaration A of this application, or corresponding substitutive declaration of certification, pursuant to art. 46 of the Presidential Decree no. 445/2000, provided in accordance with Annex C of this notice (if applicable).
- 6) Documentation proving the possession of any other qualifications held that are deemed useful for the purposes of the competition, or corresponding substitutive declaration of certification, pursuant to art. 46 of the Presidential Decree n. 445/2000, made in accordance with Annex C of this notice (also merged with the declaration referred to in point 5).

Finally, he declares to be aware that the personal data provided in this application and its attachments will be used by the university administration only for institutional purposes and for the completion of the competition procedure, as detailed in Article 11 of the call for applications.

(date)

(sign)

ANNEX C

SUBSTITUTE DECLARATION OF CERTIFICATION / NOTARY DEED

(ART. 46 and 47 Presidential Decree 28.12.2000, n. 445)

____ undersigned (surname) _____ (name) _____, born on _____ in _____ (province _____), resident in _____ (province _____), street _____, no _____, post code _____,

aware of the criminal penalties provided for by art. 76 of the Presidential Decree 28 December 2000, n. 445, for the case of false or misleading declarations,

in relation to your application for participation in the competition for research grants,

DECLARES

to possess the following qualifications (to be reported with the name of the entity that issued the qualification, the date of achievement, and details relating to the achievement of the qualification, e.g. final grade, etc.):

- 1) _____
- 2) _____
- 3) _____

...

ALSO DECLARES

that the following documents attached to the application are in conformity with the respective originals:

- 1) _____
- 2) _____
- 3) _____

...

(date)_____

(signature)

Note: This form must be accompanied by a photocopy of a valid identity document of the person who signed it.

Warnings:

- the declarant is criminally liable in the event of a false declaration (Article 76, Presidential Decree 28 December 2000, n. 445)

- The declarant loses any benefits obtained from the provision issued on the basis of the untruthful declaration (Article 75, Presidential Decree 28 December 2000, n. 445)