Rectoral Decree no. 113 of 31/07/2023

Notice of competition for admission to the course of
PhD in "Intelligent Systems for Engineering" - XXXIX cycle

Art. 1
Announcement

1. A public selection by application, based on qualifications and interview, is announced for the admission to 8 (eight) places in the PhD Program in "Intelligent Systems for Engineering", code DOT14D6833 (hereinafter, in short "PhD" or "Course"), Academic Year 2023/2024, XXXIX cycle, based in theUniversity of Enna "Kore". The Ph.D. is for three years. Masculine expressions are simply adopted for the sake of economy of text: indeed, they refer indiscriminately to both candidates and applicants, as well as to Ph.D. students and doctoral candidates.

2. Those who hold a master's degree or an appropriate degree obtained abroad on the date of the notice deadline, regardless of citizenship, are eligible to apply for the selection. The suitability of the foreign degree is ascertained by the committee for admission to the doctoral course, in compliance with the regulations in force in Italy and in the country where the degree was awarded, as well as with international treaties or agreements on the recognition of degrees for the pursuit of studies. Those who obtain their degree by the date of enrolment in the Doctoral Program are also eligible to apply for the selection, otherwise the application will become invalid.

3. For all matters not specified in this notice, reference is made to the provisions contained in the University Regulations on Doctoral Degrees as per D. P. 160/2022, published on the website www.unikore.it.

4. Announcements regarding this selection, if not reported in the following articles, will be published, as notification to interested parties, on the official website of the University: www.unikore.it.

Art. 2
Study grants

1. The Ph.D. is allocated at least 6 (six) grants, of which 4 (four) are funded under Ministerial Decree 118 of 02/03/2023 and 2 (two) by the RETURN Extended Partnerships Project (Project Code PE0000005), in addition to any that are funded by the Sicilian Region.

2. The grants funded under Ministerial Decree 118 of 02/03/2023 concern the following components: 1 grant - M4C1-Inv.3.4 and 3 grant - M4C1-Inv.4.1.

3. Grants affiliated with the RETURN project (*CUP J73C22000520002)* must cover the following research topics: - analysis and evaluation of coastal stability in the study of erosive processes and coastal dynamics; - medium/large-scale dynamic tests for the study of dynamic soil-foundation-structure interaction; - evaluation of kinematic and inertial effects for the study of foundation behavior in seismic zones.

4. The grant—in the amount set by Ministerial Decree no. 247 of Feb. 23, 2022, amounting to €16,243.00 gross of charges to be borne by the grant holder—is for one year; the amount is disbursed monthly in arrears for a maximum period of three years. Within the aforementioned maximum period, the grant is subject to renewal from year to year on condition that the doctoral student has completed the program of activities planned for the previous year and has been admitted to the following year of the doctoral program.

5. Course attendance suspensions of more than thirty days will result in a corresponding suspension of the grant disbursement.

6. The amount of the grant is increased to the maximum limit of 50% in proportion to and in relation to periods
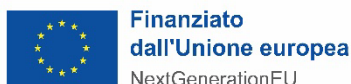
of training abroad set out in the training plan and previously authorised; this increase may be granted for a maximum period of twelve months. Periods of activity carried out abroad should normally have a total duration of not less than six months.

7. Each PhD student with a grant is assigned, within the financial resources of the University, a budget for research activities in Italy and abroad of no less than 10% of the value of the scholarship. The budget is placed at the disposal of the individual doctoral student and is gradually disbursed on the basis of activities planned and approved by the tutor and actually liquidated in whole or in part after the production of a statement endorsed by the Doctoral Coordinator. If the doctoral student is not evaluated positively for the purpose of renewing the grant, or renounces the grant, the unused amount is reinvested by the University in subsequent PhD cycles.

8. The study grant is paid only to those who do not register, during the period of entitlement to the grant, an annual income exceeding the annual amount of the grant itself.

Art. 3
Application to participate in the selection and annexes

1. The application for participation in the selection process must be registered compulsorily online, under penalty of exclusion, **starting at 9:00 a.m. on 07/08/2023 and by 11:59 p.m. on 06/09/2023** using the appropriate online procedure accessible from the same page of publication as this Notice, on the University's website www.unikore.it >>> Research >>> PhDs, and following the relevant instructions.

2. The application, which must be received by the University's Protocol Office by the same deadline as in paragraph 1 above, must be attached as an upload:

- The *curriculum vitae et studiorum*, with any attachments, prepared according to **ANNEX B**;
- degree diplomas or their replacement certificates with the indication of the degree grade (in the case of a degree to be obtained by the date of enrolment in the Doctoral program, an appropriate certification from the university stating the exams taken with an indication of the grades achieved);
- Up to a maximum of 3 publications with an ISBN or ISSN code, produced in digital files in pdf format;
- A Research Project proposal prepared according to the **ANNEX C** template;
- (if applicable) a document or statement proving eligibility, if any, in a previous doctoral admission procedure, indicating the university, the academic year, and the date of publication of the list of eligible candidates. Eligibility is taken into account only if it has not been used, that is, it has not resulted in enrolment in the doctoral program to which it relates;
- Copy of the payment of the competition contribution of €100,00 (Euro one hundred/00) via PagoPa;
- A valid identification document;
- the list of all evaluable qualifications submitted.

3. Up to two letters of recommendation in support of the application may also be attached to the application as an upload. Only letters written and signed by full professors, even if retired, of Italian or foreign universities other than the Kore University of Enna, and in any case not belonging to the Teachers' Board of the PhD programme, which, among other things, expressly declare that they know or have known the candidate, shall be taken into consideration.

4. When submitting the application for entry to the admission procedure, the applicant must state whether he/she is in possession of appropriate disability certification and, if so, which aids or organisational measures are required by the University in order to be able to take part in the interview.

5. Admission to the selection should be understood to be conditional for all applicants. Indeed, the University

reserves the right to ascertain the truthfulness of the documentation produced and may, at any time, by reasoned decision of the Rector, order exclusion from the selection procedure or from the Doctorate itself due to failure to meet the prescribed requirements, the presence of false declarations or other reasons. Any exclusion decision will be sent to the person concerned at the e-mail address indicated in the application.

6. In compliance with the University's operational and quality standards and with Regulation (EU) 2016/679, candidates who submit their application in accordance with the procedures described in this article will receive a unique alphanumeric identification code at the e-mail address they indicated in their application. In   the documents made public by the Università Kore di Enna relating to this selection procedure, each candidate will be identified solely by means of this code, with the exception of the general merit list of successful candidates.

Art. 4
Selection of applicants

1. The admission procedure is overseen by a Selection Board appointed by the Rector and constituted in accordance with the University Regulations.

2. Selection for admission to the doctoral program is by qualifications and interview.

3. It is aimed at ascertaining the candidates' knowledge, ability and aptitude for research. The assessment of qualifications is a precursor to admission to the interview. Only the following shall be considered as assessable qualifications - provided, however, that they are submitted at the same time as the application and comply with the requirements set out in Article 3(2) and (3) above:

   a. the admission qualification, with regard to the grade obtained in the master's degree or equivalent (or, if there is more than one degree, the degree with the highest grade). In the event of a degree to be obtained before the date of enrolment in the PhD course, the weighted average of only the marks in thirtieths obtained in the examinations passed, recalculated in hundredths and tenths, shall be evaluated;

   b. the *curriculum vitae et studiorum*;

   c. publications;

   d. letters of recommendation from full professors;

   e. previous eligibility not used for admission to PhD programs;

   f. The proposed Research Project.

4. The Commission shall have a maximum of 100 points for each candidate, which may also be used in fractions of 0.50 each, 65 of which shall be allocated to assessable qualifications, according to the following distribution with reference to the corresponding letters in the preceding paragraph:

   g. Up to **15** points to the master's degree (or corresponding degree), according to the table **ANNEX D**;

   h. up to **5** points to the *curriculum vitae et studiorum*: the maximum score corresponds to the concurrent presence of any additional degrees to the admission qualification, postgraduate degrees subsequent to master's degrees or equivalent, postgraduate state qualifications, documented collaborative activities in research projects at public or private entities, and other activities and skills deemed significant by the Commission;

   i. up to **5** points to publications, provided they are in addition to the dissertation, with a limit of **2.5** points for a single publication, as assessed by the committee;

   j. up to **5** points to letters of recommendation, with a limit of **3** points for a single letter, based on the Commission's evaluation;

   k. **5** one-off points for suitability in previous selections for admission to PhD courses at the Kore University of Enna or in other Italian or foreign universities, regardless of the number of successful

candidates and the cycle to which they refer, provided in any case that they are not used for attendance of the relevant PhD course;

l. Up to **30** points to the Research Project proposal, as evaluated by the Committee.

5.   The evaluation of the qualifications referred to in points b), c), d), and f) shall be carried out by the Commission with regard to the specific research themes of the PhD, as set out in **ANNEX A**. The determination of the points relating to the qualifications referred to in points a) and e) is, on the other hand, determined as a matter of course and subsequently validated by the Commission, except in the case of non-Italian qualifications, for which the evaluation is carried out exclusively by the Commission on the basis of special scales of correspondence that it has identified. The evaluation of the research project proposal does not commit either the candidate or the University for the purposes of the subsequent project to be followed during the PhD course in the event of admission.

6. Candidates who obtained not less than 21/30 in the evaluation of the research project proposal are eligible for interview. Candidates admitted to the interview are required to attend it on 21/09/2023 at 10.00 a.m., with an appropriate identification document, at the location that will be announced on the University website at the same time as the list of those who have been accepted.

7. The interview focuses on the PhD research topics listed in ANNEX A and the qualifications submitted by the candidate. The Commission has **35** points available for the evaluation of the interview.

8. In the course of the interview, regardless of whether or not any language certificates have been produced, the Commission shall ascertain the appropriate level of competence in the Italian language for candidates whose mother tongue is other than Italian, and in English for candidates whose mother tongue is Italian, in both cases with reference to the scientific elements that are the subject of the interview.

   The outcome of these specific competences is taken into account by the Commission when awarding the overall mark for the interview.

9. At the end of the relevant procedures, the Commission draws up an overall merit list comprising only those candidates who have obtained a mark of not less than 24 thirty-fifths at the interview.

10. After the President of the University has ascertained that the documents are in order, the ranking of the successful candidates is approved by the Rector by decree, which constitutes the final decision. It shall be made public exclusively by publication on the University's website. Complaints may be lodged within five days for the sole purpose of rectifying clerical errors. Unsuccessful candidates will be notified by e-mail, as their names will not be made public.

11. Candidates placed within the eighth place in the final ranking list are admitted to the PhD course as successful candidates in the admission procedure.   In the event of a tie, the youngest candidate in terms of age takes precedence. The rights of the more disadvantaged are not affected by the awarding of grants. In the event of any withdrawals by the eligible candidates, they shall be replaced before the start of the course by an equal number of candidates in the order of the ranking list. Any shifting of the ranking after the start of the Course, in any case by the end of the first term, is subject to the approval of the Board of Teachers.

Art. 5
Fees and contributions

1. The annual fee for admission and attendance to the **PhD Course** is € 2,000.00, to be paid by the deadline for enrolment; in subsequent academic years by 30 October each year.

2. The amounts due shall be paid in accordance with the instructions that will be made available on the University's website. The annual fee is payable by all enrollees, including grant recipients, except where full or partial exemption is expressly stipulated.

Art. 6
Enrolment application

1. The winning candidates shall enrol in the PhD programme and pay the enrolment fee of € 2,000.00, via PagoPa, by **the deadline that will be announced on the University website**, under penalty of forfeiting the acquired right, following the procedures indicated on the same page of the University website.

3. Each grant recipient must also declare at the time of matriculation:

   a) that they have not previously been awarded any other grant (even for a single year or part thereof) for a doctoral course;

   b) to not combine the grant with any other study grant for any reason whatsoever, except with those awarded by national or foreign institutions useful to supplement the research activity with a stay abroad;

   c) to be aware that the grant is only awarded to those who do not have an annual income in excess of the amount of one year's grant during the grant period, and to undertake to promptly notify the Commission if this income limit is exceeded;

   d) to undertake to repay any monthly grant payments received in the year in which any income limit was exceeded;

   e) to be available for study and research stays abroad for the period stipulated in the Ph.D. pathway, and to be aware that failure to complete the foreign stay will result in revocation of the entire scholarship.

4. Successful applicants who are not Italian citizens must meet the following requirements at the date of the application deadline:

   (a) enjoy civil and political rights also in the states of nationality or origin unless different status;

   (b) be in possession, with the exception of holding Italian citizenship, of all other requirements for Italian citizens.

Art. 7
Attendance, rights and obligations of doctoral students

1. Admission to the PhD course involves an exclusive full-time commitment. For details on the freedoms, rights, prohibitions and obligations of doctoral students, please refer to the relevant University Regulations.

2. Doctoral students are required to comply with the provisions of the Code of Ethics of the University of Enna 'Kore', which can be consulted at: www.unikore.it

Art. 8
Final exam and title achievement

1. The doctoral thesis, written in Italian or English, or in another language subject to authorisation by the Board of teachers, must be accompanied by an abstract in Italian if the thesis is produced in English or in another foreign language, or in English if the thesis is produced in Italian. After evaluation, the thesis is then publicly discussed before a Commission appointed by the Rector at the proposal of the Dean of the Faculty.

2. There is an admission fee for the final exam of 400 euros including statutory taxes.

3. The title of doctor of research (abbreviated to "Dott. Ric." or "Ph.D.") is awarded, following the successful completion of the research thesis, upon passing the final examination at the end of the legal duration of the course, and is conferred by the Rector.

Art. 9
Processing of personal data and Responsible Official for the process

1. The data requested are necessary for the purposes of managing this selection and for eventual matriculation, in accordance with the principle of minimisation imposed by G.P.R. 679/2016.

2. Pursuant to Law no. 241 of 7 August 1990, as amended and supplemented, the person in charge of the procedure referred to in this notice is the Director of the Teaching and Research Services Area of the Libera Università degli Studi di Enna "Kore", Dr. Giovanni Lavalle.

Art. 10
Final rules

1. Submission of the application for admission to the selection procedure referred to in Article 3 implies acceptance by the candidates of the rules contained in this notice and the University Regulations to which it refers. Failure to comply with the rules will result in exclusion from the admission competition or exclusion from the PhD.

2. For matters not explicitly specified in this notice and in the University Regulations, reference should be made to the laws and regulations on PhDs currently in force, within the limits of applicability to non-state universities.

3. There is an English language edition of the main contents of this notice. In the event of any dispute, only this text in the Italian language shall prevail.

4. The following annexes mentioned in the text constitute integral parts of this notice:

ANNEX A - Doctoral Course Summary Sheet;
ANNEX B - Template for drafting curriculum *vitae et studiorum*;
ANNEX C - Directions for drafting the Research Project proposal;
ANNEX D - Table of evaluation of master's degree or equivalent.

THE RECTOR
Prof. Francesco Tomasello

ANNEX A
PH.D. IN
INTELLIGENT SYSTEMS FOR ENGINEERING

Requirements for admission

All master's degrees

Other requirements

English language proficiency is required.

Course objectives

The Ph.D. is the natural completion of studies in the fields of engineering and architecture. The objectives are geared towards advancing knowledge in the area of intelligent systems in the fields of Computer Engineering, Aerospace Engineering, and Civil Engineering and Architecture. The purpose is to create cultural profiles in the following fields: 1) Artificial Intelligence; 2) Speech and Image Processing 3) AI for Health, 4) Human-centric AI, 5) Smart mobility, 5) Infrastructure Networks and Transport Infrastructures, 5) Intelligent Systems in Structures and Aerospace Systems, 7) Intelligent Systems for the Architectural Design of Environmentally Friendly (green) Structures. The training courses are thus aimed at transferring knowledge on specific topics in engineering, computer science, aerospace engineering, and civil engineering and architecture, in order to train highly specialised individuals capable of dealing with complex research and/or application issues. Due to the interdisciplinary nature of the topics, the doctoral programme is organised into distinct training courses (curriculum) with general courses in the first year and specialised courses in the second and third year The training is supplemented by experience in the university's laboratories, where there are skills, personnel and equipment that can support the doctoral students, participation in seminars and tutorials offered by research organisations, universities or during international conferences, as well as research periods at Italian and foreign universities and research centres.
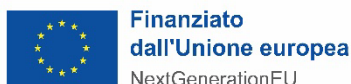
Disciplinary and interdisciplinary teaching activities

Ad hoc lectures provided in the training course:

No. of lectures: 17,   Of which final verification is planned: 17

Lectures borrowed from master's degree programs	NO
Lectures borrowed from undergraduate courses (first level)	NO
Other educational activities	YES
Seminar cycles	YES
Research stays	YES
ITALY - outside the institutions involved	Expected average period: 3 months
FOREIGN - within the institutions involved.	Expected average period: 3 months
FOREIGN - outside the institutions involved.	Expected average period: 6 months

ANNEX B
Template for writing a curriculum vitae et studiorum

The recommended curriculum template is the **European Union Europass**. The accepted languages are Italian and English.

In order to draft your curriculum vitae appropriately and free of charge, it is advisable to avoid various templates on the web and to:

1) Go directly to the Europass website at this address:
   https://europa.eu/europass/eportfolio/screen/cv-editor?lang=it
2) in the upper left-hand corner select the language in which you wish to compile the curriculum;
3) upload a photo from your own computer;
4) fill in the mandatory fields and those deemed necessary (click on the '**i**' symbol - when present - for clarification);
5) at the end of each page record the data entered by clicking on 'Save' (ATTENTION: clicking on 'Next' will generate the curriculum already. In case of errors you can always go back);
6) add the sections you want to fill in one by one, selecting them from the drop-down list that appears after saving each page. For example, add the "Publications" section if you have any, add the "Language Skills" section to indicate these, etc;
7) when you no longer need to add sections, click "Next," and check the text you have entered;
8) choose one of the available models shown on the left side of the page;
9) then download the curriculum to your computer in PDF format
10) from your own computer, upload the PDF file to the University's website on the page dedicated to the PhD application when writing the application.

ANNEX C
Directions for writing the Research Project proposal.

Candidate   (Last   Name,   First   Name)

_____

PhD Code _____ **Optional resume**_____

TITLE OF THE RESEARCH PROJECT

_____

Keywords *(indicate at least 3)* _____

PROJECT ABSTRACT *(minimum of 500 to maximum of 1000 characters including spaces*)*

Within the broadest freedom of expression of the text within the space limits indicated, clearly identify the problem and indicate its significance in the context of the theme or curriculum of the PhD. Briefly describe the state of the art of research on the issue, with reference to what appears to be established in the existing studies and what, on the other hand, is worthy of further investigation. State on what, from among what has not yet been studied in depth or resolved, you wish to focus the research project, briefly indicating the expected results.

PROJECT DESCRIPTION *(minimum of 4,500 to maximum of 6,500 characters including spaces*)*

Within the broadest freedom of expression of the text within the space limits indicated, the following elements must still be included:

- A detailed description of the state of the art on the problem, with an indication of the main authors (or the main scientific schools) that have been involved in research to date and the most relevant results they have achieved.
- Indication of the basic bibliography of reference (scientific volumes and/or articles).
- Explanatory description of the research project, including clarification of the specific objectives to be pursued and reasoned highlighting of aspects relating to the project's usefulness, originality, scientific relevance and feasibility.
- Outline of the research pathway, indicating the approach to be adopted and the methodologies that will be relied upon, as well as the outline timetable spread over the three years of the PhD programme.
- Clear definition of the expected results (evidently not yet ensured by the state of the art of research) and their

relevance both in the disciplinary fields covered by the PhD and in areas outside them, with relative indication of their contribution to scientific research in terms of cognitive, methodological and interpretative innovation.

* Any failure to meet the specified limits will be considered among the negative evaluation factors and may result in non-admission to the next stage of selection.

ANNEX D - *Table of evaluation of master's degree or equivalent*

Graduation grade	POINTS
Up to 89/110	0
90	0.5
91	1
92	1.5
93	2
94	2.5
95	3
96	3.5
97	4
98	4.5
99	5
100	5.5
101	6
102	6.5
103	7
104	7.5
105	8
106	9
107	10
108	11
109	12
110	13
110 with honours	15

In the absence of a degree, the value of the weighted average of marks in hundredths is taken into account, with each '30 cum laude' being 30.33. Any decimal values in the final result should be rounded to the nearest integer (conventionally, up to 0.49 = 0; from 0.50 = 1).