

Amministrazione centrale

Area Ricerca e Trasferimento Tecnologico Settore Dottorati, Assegni e Borse di Ricerca

D.R. Rep. n. 713/2019 - Prot. n. 30029 Attachments 1

of 12/07/2019

Year 2019 Tit. III Cl. 6 Fasc. 4.2

HE RECTOR OF THE UNIVERSITY OF L'AQUILA

IN FORCE OF law May 9, 1989 n. 168, concerning the establishment of the Ministero dell'Università e della Ricerca Scientifica e Tecnologica;

IN FORCE OF law August 13, 1984 n. 476, establishing rules on university scholarships;

IN FORCE OF law November 30, 1989 n. 398, establishing rules on university scholarships;

IN FORCE OF article n. 4 of the law of July, 3 luglio 1998 n. 210, which provides that the universities, with their own regulation establish the Ph.D. schools;

IN FORCE OF article 19 of the law of December, 30 2010 n. 240;

IN FORCE OF legislative decree June 15, 2015 n. 81;

HAVING REGARD TO the D.P.C.M. of April 9, 2001 "Disposizioni per l'uniformità del trattamento sul diritto agli studi universitari" according to the article n. 4 of the law of December 2, n. 390;

IN FORCE OF legislative decree March 29, 2012 n. 68;

IN FORCE OF subsection 262 of the law of December 11, 2016 n. 232;

HAVING REGARD TO D.M. n. 45 of February 8, 2013 "Regolamento recante modalità di accreditamento delle sedi e dei corsi di dottorato e criteri per la istituzione dei corsi di dottorato da parte degli enti accreditati";

HAVING REGARD TO the DD. MM. 509/1999 e 270/2004 which provides rules about the didactic autonomy of Universities;

HAVING REGARD TO the rules for the admission of foreign students to the university course pubblished on MIUR web site;

HAVING REGARD TO the Regulation of the Ph.D. Schools of the University of L'Aquila;

HAVING REGARD TO the Grant Agreement n. 813884 of the project "Lowcomote";

HAVING REGARD TO the resolution of the Board of Professors of Ph.D. in Information and communication technologies – ICT of March 13, 2019;

HAVING REGARD TO the protocol, signed on July 1, 2019, by INTECS Solutions S.p.A. for the activation of a doctoral position through an apprenticeship contract for higher education and research;

HAVING REGARD TO the resolution of the Academic Senate of June 26, 2019;

HAVING REGARD TO the resolution of the Board of Administration of June 26, 2019;

HEREBY DECREES ART. 1

The indiction of a public contest, on the basis of qualifications and exams, for the award of 1 apprenticeship contract for advanced education and research, in the framework of the Ph.D. programme in Information and communication technologies – ICT, at the University of L'Aquila.

1



Amministrazione centrale

Area Ricerca e Trasferimento Tecnologico Settore Dottorati, Assegni e Borse di Ricerca

Ph.D. Course in		
INFORMATION AND COMMUNICATION TECHNOLOGIES – ICT		
Positions available	1	
Financial employment	Apprenticeship contract for advanced education and research	
Grant Funding	Project "Lowcomote"- HORIZON 2020 Actions-MSCA-ITN-2018-ETN Marie Skłodowska - Curie Innova-tive Training Networks, Project ID 813884	
Local Project Coordinator	Professor Davide Di Ruscio davide.diruscio@univaq.it	
Project Description	The project will be performed in the context of the EU Marie-Sklodowska-Curie Innovative Training Network (ITN) Lowcomote. In the domain of the smart cities, the deployment of a pervasive system capable of collecting and processing data seamlessly can enable real-time monitoring of the urban fabric and allows the stakeholders to offer enhanced services for endusers, while improving global efficiency. However, the development of such systems require multi-disciplinary techniques and tools enabling the design of UX interfaces, and managing scalability issues related to the amount of data produced by heterogeneous sources. The INTECS Data Manager Framework (DMF) is a service-oriented framework used to decouple data gathering and processing, allowing the deployment of high-level logic independently from the type of sensors/actuators used in the system. Integration of external sub-systems is provided by dedicated software components, which are in charge of integrating data and enabling communication with the attached sub-systems. The objective of this project is to investigate how to improve the model-driven design and development of IoT systems on frameworks such as the DMF, by using Scalable LCEPs to model data-sources heterogeneity, standards and technologies involved in communications, interoperability with external systems, scalability and resilience.	
Candidate Profile	We are looking for candidates with interest and knowledge in one or more of the following research areas: software engineering, model driven engineering, Service Oriented Application (SOA) technologies, Internet of Things (IoT), Smart Cities, Artificial Intelligence, Machine Learning, Big Data, Cloud Computing. Moreover, the following skills/experiences will be evaluated: design and development of complex software systems, modelling languages and frameworks (e.g. EMF, ATL, Epsilon), safety and security. A good command of written and spoken English is required.	
Duration	3 years	
Curriculum	Emerging computing models: algorithms, software architectures and intelligent systems	



Amministrazione centrale

Area Ricerca e Trasferimento Tecnologico Settore Dottorati, Assegni e Borse di Ricerca

University Department Responsible for the Ph.D. Course	Department of Engineering, computer science and mathematics
Ph.D. Course Coordinator	Professor Vittorio Cortellessa vittorio.cortellessa@univaq.it
Admission Pre-requisites	All Master-level Degrees or foreign degrees with certified equivalency or recognized as equivalent to the aforementioned qualifications. At the time of recruitment, the candidates must not have resied, or carried out his/her activity in Italy for more than 12 months in the 3 years prior to recruitment date. When starting their contract selected researchers should be within the first four years of their careers. This means being both within a four years window following their most recent graduation and not having been awarded a prior doctoral degree so far.
Admission Procedure	Qualification assessment and oral exam. Foreign applicants may sit the oral exam in English. Candidates residing abroad may request to take the oral exam via web (Skype and other). In this case the candidate must specify the means they wish to use for their interview indicating a valid contact address. This request must be authorized by the testing commission once the identity of the candidate has been certified, to this end the candidate shall be required to show a valid identification document with recent photo during the oral exam.
Documents to be enclosed in the Application	 CV Candidates holding Italian Degrees must provide a self-certification concerning their Bachelor-level Degree and Master-level Degree with a list of exams taken and marks obtained (only for candidates who have obtained their Degree in Italy or a EU country); if the candidate has a foreign Degree obtained in a non-EU country, a copy of the Degree certification obtained with a transcript of records of the exams taken and an Italian or English translation provided by the applicant under his/her responsibility; any other documentation deemed useful for the qualification assessment (Diploma Supplement, declarations etc.). In any case, the examination commission reserves the right to evaluate the foreign Degree presented by the candidate. The candidate must indicate the name of at least 2 referees with their e-mail address. They will receive the instructions for writing the recommendation letter directly on line. Motivation letter highlighting the coherence of the candidate's profile with the proposed research project. Any publications and research projects in which the candidate has participated, deemed useful for the purposes of the evaluation. Other qualifications deemed appropriate for evaluation. Photocopy of the candidate's identity card and, for those who request to take the oral exam via web, a recent photograph is required.
Language(s)	Assessment of foreign language skills English language skills and competence shall be assessed during the oral exam. Admission The candidate may take the oral exam in ENGLISH



Amministrazione centrale

Area Ricerca e Trasferimento Tecnologico Settore Dottorati, Assegni e Borse di Ricerca

Exam schedule	Evaluation of documentation: 10 th September 2019 at 10:30 a.m. at the Department of Information engineering, computer science and mathematics.
	<i>Interview:</i> 12 th September, 2019 at 1:00 p.m. at the Department of Information engineering, computer science and mathematics.
Assessment Criteria	The assessment procedure consists in two phases: qualification assessment and an oral exam. Scores are indicated out of a total of 100 points, assigned as follows: 1. Qualification assessment: Max. 50/100 points attributed through assessment of the candidate's CV, letters of recommendation, publications and other qualifications. The minimum score required for admission to sit the oral exam is 30/100.
	Oral exam: Max. 50/100, the oral exam aim is to evaluate the candidate's aptitude and motivation for research.The exam includes assessment of the candidate's English language skills. Foreign students may sit the oral exam in English.

ART. 2 Requirements for Access

Candidates holding a Master-level Degree or other University Degree corresponding to criteria specified in DM – Ministerial Decree – 509/1999, or those holding a foreign Degree with certified equivalency, within the deadline of this selection announcement, may, with no limitations as to age or citizenship, apply to participate in the Ph.D. selection process.

Candidates holding a foreign Degree who have not as yet obtained certified equivalency required for the admission to the Ph.D course, must include the following documents in their application (necessary for the Examination Commission to evaluate the Degree as conforming to requirements):

- a copy of the Degree certification obtained with a transcript of records of the exams taken and an Italian or English translation provided by the applicant under his/her responsibility;
- any other documentation deemed useful for the qualification assessment (Diploma Supplement, declarations etc.) .

The academic qualification held by the candidate must refer to a course with a duration of at least 4 years and allow the access to a Ph.D. course in the country in which it was awarded.

Eligibility of the qualification will be verified by the Course's Admission Committee and will only be granted for the sole purpose of admission to the chosen Ph.D. course.

The selection procedure is **NOT OPEN** to candidates who have already been awarded by a doctoral degree.

The selection procedure is **NOT OPEN** to candidates that at the time of recruitment, have resided or carried out their main activity (work, studies, etc.) in Italy for more than 12 months in the 3 years prior to recruitment date.



Amministrazione centrale

Area Ricerca e Trasferimento Tecnologico Settore Dottorati, Assegni e Borse di Ricerca

ART. 3 Applications

The application form may only be submitted using the dedicated online procedure, available at: https://pica.cineca.it/univaq/dott35-appr/. Applications must be submitted no later than the August 26, 2019 at 1:00 p.m. (CEST).

The application must be signed, missing the signature the application will be rejected.

There are 3 methodologies to sign it and the candidate must select one of them and read carefully they directions.

- By digital signature using smart card, USB token or remote signature which allow the owner to sign general documents by means of a signature software or a Remote Signature web portal made available by the Auditor. Those who have a Digital Signature smart card or USB token shall verify that they are compatible with the Digital Signature system integrated in the system server. If so, the owner may sign the application directly in the system server (e.g. ConFirma);
- Those who do not have compatible digital signature devices and the Remote Digital Signature Owners who may access a web portal for signing general documents shall save in their own PC the .pdf file generated by the system and, without modifying it, digitally sign it in CAdES format. A .p7m file will be generated, which shall be saved and uploaded again in the system. Any editing to the file before signing with the Digital Signature shall interfere with the automatic check of correspondence between the content of such a document and the original, and this will bring to the application exclusion;
- If none of the above-mentioned options can be used candidates shall save in their own PC the .pdf file generated by the system and, without modifying it, print and sign it with full original signature in the last page of the printed document. A scanned .pdf copy of such a document shall be produced and the file thus obtained shall be uploaded to the system.

All required documents to be submitted, listed in the information sheet for the Ph.D. course, must be annexed to the application form, together with a copy of an identity document. All documentation must be attached in pdf format.

For all legal purposes, the application is to be considered as a self-certification of the data included therein and of the attached documents, in accordance with articles 46 and 47 of Italian Presidential Decree no. 445/2000 and subsequent amendments.

The candidate must request of at least 2 reference letters. A notification will be sent automatically sent to the selected referee only when the application has been fully submitted. The referee must compile the reference letter scheme and submit it by the deadline of September 2, 2019 at 1:00 p.m. CEST.

Reference letters attached by the candidate will not be taken into consideration.

The application is automatically sent to the University when the online procedure has finally been completed. Therefore, no paperwork needs to be delivered or sent to the University's offices.

Candidates are invited to complete applications for the selection process well in advance of the closing date specified in this call. Candidates are responsible for verifying that the procedure is completed correctly. No complaints will be accepted for any malfunctioning of the IT system due to overload experienced by candidates near the closing date.

After the deadline of the call it will no longer be possible to change the application for participation.



Amministrazione centrale

Area Ricerca e Trasferimento Tecnologico Settore Dottorati, Assegni e Borse di Ricerca

In force of Italian Law no. 104/92, as amended by Italian Law no. 17/99, disabled candidates may request an individual examination (with the use of aids, any additional time required, etc.) to complete the required entry examinations.

In accordance with Italian Law no. 170/2010, candidates with specific learning disabilities are allowed 30% more time to complete written exams, if required for the selection process for admission to the chosen Ph.D. course, subject to a request for an individual examination. The request must be written in accordance with the instructions available as part of the online application procedure for the selection process.

ART. 4 Examinations

The selection procedures and the dates of the exams are indicated in art. 1.

The Candidates will receive communications about the admission, the date and the time of the interview by email from the Local Project Coordinator.

A candidate's absence at the time and place indicated for examinations will automatically mean he/she renounces to participate at the competition.

Candidates are not required to be present during the evaluation procedure of the submitted documents.

Candidates admitted to the interview must be present on the place, date and time indicated in this call, and exhibit a valid identity document.

Candidates may request to sit the oral exam in english language.

The interview may be carried out via video conference communication systems (e.g. Skype). In this case, the candidate is required to provide contact information in their application and guarantee the use of a web-cam to allow the Examination Committee to verify the candidate's identity.

ART. 5 Examination Committee Assessment Criteria and Ranking List

The Examination Committee is appointed by rectoral decree and is composed by a minimum of three to a maximum of five members among professors and assistant professors.

This committee can be integrated with at most 2 experts, also from abroad, selected from the staff of INTECS Solutions S.p.A. or within the participants to the Lowcomote project. The candidate's scores will be indicated out of a total of 100 points.

The results of the assessment of the qualifications will be published on the web site of the University http://www.univaq.it/section.php?id=1957 and on the web site of the concerned Department.

The interview concerns the topics of the research project object of this call. The evaluation committee, at the end of each session, compiles the list of the candidates interviewed with the grade assigned to each of them.

Such lists, signed by the President and by the secretary of the examination committee will be posted at the door of the room where the interview took place, at the notice board and at the web site of the department. Once the evaluation process has been completed the Examination Committee draws up the final ranking list according to the sums of the obtained scores. The University Administration, once the validity of the examination procedure has been checked, publishes it on the official notice board of the University and on the University web site.



Amministrazione centrale

Area Ricerca e Trasferimento Tecnologico Settore Dottorati, Assegni e Borse di Ricerca

Candidates will be admitted to the course according to the general merit ranking within the limit of the places specified in the announcement.

The candidate ranked first will be the beneficiary of the Ph.D. position.

In case of equal merit, the Ph.D. position will be conferred to the younger candidate.

The results of this selection process are valid also for the award of the apprenticeship contract for advanced education and research.

ART. 6 Enrolment in Ph.D. Courses

The successful candidate, **within September 26, 2019**, must send the following documents using the forms available on the web-site to: Settore Dottorati, Assegni e Borse di Ricerca dell'Università – Piazza Santa Margherita, 2 – Palazzo Camponeschi – 67100 L'AQUILA:

- a) enrolment application to the first year of the Ph.D. Course for the academic year 2019/2020, on certified paper "carta legale" in accordance with art. 46 and 47 of the Presidential Decree of 28 December, 2000, n-445, containing the following:
- self- certified declaration of citizenship
- self-certified secondary (high) school Diploma;
- self-certified Degree certificate indicating final mark;
- statement declaring that the applicant is not also enrolled in a University Degree Course or a School of Specialization or any other Master-level course, university-level vocational course or other doctoral or Ph.D. course;
- statement declaring that the applicant shall, for the full duration of the Ph.D. Course, NOT ENROL in any other university course, as specified above.
- statement declaring that the applicant shall adhere to and attend all activities prescribed for the Ph.D. Course they have been selected for in accordance with the decisions taken by the Board of Professors;
- statement declaring that the applicant shall ask the Board of Professors for authorization to accept, or continue to carry out, any other type of "external" work while they are enrolled in the Ph.D. Course;
- b) photocopy of the applicant's identification document;
- c) photocopy of assigned fiscal-code number;
- d) photocopy of the applicant's "permesso di soggiorno", Italian-residence permit, only for no EU-citizens;
- e) a passport-size photo;
- f) receipt of payment of the regional university tax of €140,00 to be paid via bank transfer to: "Azienda per il Diritto agli Studi Universitari, bank account:BPER Code or IBAN: IT 88D 053 870 3601 000 000 040 909".

Foreign citizens must declare possessing the following requisites:

- 1) that they benefit from civil rights and right to vote in their country;
- 2) that, aside from Italian citizenship, they possess all other requisites required for citizens of the Italian Republic.

Applicants holding a university Degree awarded abroad must enclose the following documents, translated and certified by competent Italian Diplomatic Authorities:

- copy of their university degree indicating their final mark;
- Degree transcripts indicating the exams taken during their course and marks awarded.



Amministrazione centrale

Area Ricerca e Trasferimento Tecnologico Settore Dottorati, Assegni e Borse di Ricerca

If the above documentation is not available at the time of enrolment, the candidate's enrolment shall be deemed "subject to verification" (con riserva). In this case all above mentioned compulsory documentation must be submitted by and no later than 31th December 2019, failure to do so will result in expulsion from the course.

False declarations lead to the candidate's expulsion from the Ph.D. course and to prescribed sanctions for such offenses, vacant positions will be assigned to other candidates according to the ranking list.

Successful candidate who do not want to enroll in the Ph.D. course must immediately send a signed letter of renouncement enclosing a photocopy (front-back) of their identity card.

Candidate selected as replacements must write a letter of acceptance within three days of notification that they have been accepted. All other necessary documents indicated in this announcement must be submitted within, and no later than, ten days after receiving notification.

ART. 7 Apprenticeship contract pursuant to art. 45 D.lgs. n. 81 of 15/06/2015

The candidate selected for the Ph.D. programme will be hired by INTECS solutions S.p.A., Pisa office, and awarded of the apprendiceship contract for the development of the research as described in art.1 of this call. The aforementioned apprenticeship contract will be activated pursuant to and in compliance with Legislative Decree no. 81/2015 and the Interministerial Decree of 10/12/2015.

Condition for the activation of the apprenticeship contract is that the candidate is under 29 years old. Without prejudice to the current regulations governing Ph.D. programmes, the contest winner must comply with the provisions of the contract and the regulations on apprenticeships for advanced education and research.

ART. 8 Mobility abroad

The Ph.D. programme foresees compulsory mobility periods abroad for training and research activities at the partner institutions according to a planned secondment scheme and to the advise of the project's local coordinator.

The training period abroad cannot exceed 18 months pursuant to item 2 of the art. 9 of the D.M. n. 45/2013. The Ph.D. student <u>before going abroad</u>, must sent to the Ph.D. office, *Settore Dottorati*, *Assegni e Borse di Ricerca*, the following documents:

- signed authorization by the course Coordinator for training/study periods abroad of less than 6 months or
- board resolution allowing a period of over 6 months.

<u>Upon returning to Italy</u> the Ph.D. student shall present to thecourse Coordinator the certification from the foreign institution stating the Ph.D. student's attendance, to be transmitted to *Settore Dottorati*, *Assegni e Borse di Ricerca*.

ART. 9 Tuition Fees

The full tuition amounts to the required Regional university tax as specified in the art. 6. In case of delayed payment the students has to add to the previous amount the tax of ≤ 52.00



Amministrazione centrale

Area Ricerca e Trasferimento Tecnologico Settore Dottorati, Assegni e Borse di Ricerca

ART. 10 Rights and Duties

- 1. Ph.D. students are obliged to attend lessons and carry out all prescribed activities regularly in accordance with the programs and schedules set by the Board of Professors and according to the Coordinator of the EU-Network Lowcomote;
- 2. Ph.D. student must participate in the activities of the EU-Network Lowcomote as specified by the programme and/or required by the project coordinator and/or supervisors, including active attendance at meetings, conferences, lectures cycles, schools;
- 3. The Ph.D. student undertakes to write up the obtained research results and to submit research papers and publications to meetings, conferences following the supervisor's advice;
- 4. The University provides insurance coverage for the entire duration of the Ph.D. course and for activities pertaining to the course;
- 5. Interruptions in attendance shall be allowed for, illness or injury for periods of 30 days or more;
- 6. Maternity/paternity leave and leave for adoption or foster care may also be authorized. Maternity-leave laws and regulations as indicated in Gazzetta Ufficiale n. 247 of 23rd October, 2007 shall be applied only to scholarship holders.
- 7. A Ph.D. student's unexcused absence or non-fulfillment of obligations shall result in his/her exclusion from the course by the Board of Professors.
- 8. Ph.D. students enrolled at the University of L'Aquila may carry out limited teaching or tutoring activities within the University's Bachelor and Master-level degree courses if so established and programmed by the Board of Professors in agreement with the University Department.

ART. 11 Graduation

The Ph.D. thesis can be written in Italian or in English and has to have an abstract in Italian or English. The Ph.D. thesis can be written in a language different form Italian or English provided the Board of Professors's authorization.

The evaluation committee for the Ph.D. thesis defence will be appointed according to the Ph.D. Courses University Rules.

The title of Doctoral degree (Dott. Ric or Ph.D.) will be awarded provided a positive evaluation of the Ph.D. thesis.

ART. 12 Responsabilties of the competition procedure

According to the art. 5 of the law 07/08/1990, n. 241, it is appointed responsibile of the competition procedure the Responsabile del Settore Dottorati, Assegni e Borse di ricerca – Università degli Studi dell'Aquila – Via Giovanni Di Vincenzo n. 16/b - 67100 L'Aquila.



Amministrazione centrale

Area Ricerca e Trasferimento Tecnologico Settore Dottorati, Assegni e Borse di Ricerca

ART. 13 Legal Reference

For all other matters not foreseen or included in this announcement we shall refer to Law n. 210 of 03/07/98, Law n. 240 of 30/12/2010, Ministerial Decree 45/2013 and to the "Regolamento dei corsi di dottorato di ricerca" (Ph.D. regulations) of this University and to the Grant Agreement N. 813884 of the Project Lowcomote.

This announcement is available at: http://www.univaq.it/en/section.php?id=1957&lang_s=en_and may also be accessed through path: Home » Research » Research training » Research Doctorates » Announcements, assessment committees, ranking » XXXV Cycle

Further information may be requested by contacting the competent Ph.D. office: *Settore Dottorati, Assegni e Borse di Ricerca* – tel. 0862/432055/432062/432061/432032 e-mail: dot@strutture.univaq.it.

Further information concerning the EU Project Lowcomote may be requested by contacting the Local Project Coordinator:

Professor Davide Di Ruscio – tel. +39 0862 433187 - e-mail: davide.diruscio@univaq.it

L'Aquila, 11 luglio 2019

LA RETTRICE F.to Prof.ssa Paola Inverardi