

# PUBLIC COMPETITION, BY QUALIFICATIONS AND EXAMINATIONS, FOR ADMISSION TO RESEARCH DOCTORATE COURSES ACTIVATED AT THE UNIVERSITY OF MESSINA – 34th CYCLE

#### THE RECTOR

IN VIEW OF	the law of August 13 <sup>rd</sup> ,1984 n. 476, "Norms regarding scholarships and research doctorate courses in Universities", and subsequent amendments and integrations;
IN VIEW OF	the law of May 9th, 1989 n. 168 that establishes the Ministry of Universities and scientific and technological research;
IN VIEW OF	the law of August 2 <sup>nd</sup> , 1990 n. 241 that establishes: "Rules governing administrative procedures and the right to have access to administrative documents", and subsequent amendments and integrations;
IN VIEW OF	the art. 4 of the law of July $3^{\text{rd}}$ , 1990 n. 210 ", and subsequent amendments and integrations;
IN VIEW OF	EU General Data Protection Regulation n. 679/2016;
IN VIEW OF	the art. 3, 6 of the Ministerial Decree (D.M.) n. 270 of October 22 <sup>nd</sup> , 2004 and subsequent amendments and integrations;
IN VIEW OF	the telematic bulletin n. 14 of January $23^{rd}$ - $24^{th}$ , 2008 of CUN related to the assignment of master degrees of CUN areas;
IN VIEW OF	the art. 19, par. 1 of the law of December 30 <sup>th</sup> , 2010 n. 240 that has modified art. 4 of the law of July 3 <sup>rd</sup> , 1998 n. 210, that comprises norms regarding research doctorate courses;
IN VIEW OF	art. 7 and 8 of the EU regulation n. 1304/2013 regarding the promotion of the equality among men and women, increment of the sustainable participation and advancements of women in the employment sector, struggle against poverty of women;
IN VIEW OF	the Statute of the University Autonomy, issued with the Rector's Decree (D.R.) n. 1244 of May 14th, 2012 (published in the Italian Government Official Gazette – General Series, n. 116 of May 19th, 2012) and modified by the Rector's decree n. 3429 of December 30th, 2014 (published in the Italian Government Official Gazette – General Series, n. 8 of January 12nd, 2015);
IN VIEW OF	the Ministerial Decree (D.M.) n. 45 of February 8th, 2013 "Regulation bearing the procedures for the accreditation of centers and of Research doctorate courses and the criteria for the establishment of doctoral courses by the accredited institutions";
IN VIEW OF	the Regulation of the University of Messina concerning Ph.D. courses, issued with the Rector's Decree n. 1015/2016 of May $3^{\rm rd}$ , 2016;
IN VIEW OF	the "Guidelines for the accreditation of Ph.D. courses", as of the official Ministerial note prot. n. 11677 of April $14^{th}$ , 2017 and the "Operative indications on Ph.D. accreditation procedures academic year $2018/19 - XXXIV$ cycle prot. N. 3419 of February $5^{th}$ , 2018;

- IN VIEW OF the regulation related to the contribution of students issued with D.R. prot. n. 51503 of July 11th, 2017 (Rep. 1434/2017) " and subsequent amendments and integrations; IN VIEW OF the deliberation of the Administration Board of July 7th, 2017 with which it was quantified the amount of academic taxes and contributions for the academic year 2017/2018" and subsequent amendments and integrations: IN VIEW OF that for the courses already accredited no substantial changes have been made, therefore the persistence of the eligibility requirements prescribed by the national regulations has already been verified automatically, and that for the new according to Ministerial Decree 45/2013 (art.3, paragraph 7) there is no opinion by the University's evaluation board: the Ministerial Decree (D.M.) n. 40 of January 25th, 2018 that ordered the increase of the IN VIEW OF annual gross amount of Ph.D. scholarships; IN VIEW OF the deliberations of the Academic Senate and the Board of Directors of March 20th 2018 and June 12th 2018 in which the 34th cycle Ph.D. courses are approved, assigned the related scholarships and adopted all Agreements with public bodies and other Universities: IN VIEW OF agreements stipulated with universities and public or private research institutions, both Italian and foreign, for the activation and operation of Research Doctorate Courses, as indicated in the attachments n. 1-13;
- IN VIEW OF the MIUR Directorial Decree prot. n. 3728/2017 related to the possibility of financing of public research projects (PRIN);
- IN VIEW OF the MIUR letter prot. n. 15119 of May 15th, 2017 "Renewal of Ph.D. courses already accredited and accreditation of new established Ph.D. courses XXXIV cycle" academic year 2018-2019;
- IN VIEW OF the MIUR Directorial Decree prot. n. 1090/2018 related to the possibility of financing PON Innovation and Research 2014/2020 Ph.D. scholarships additional to those funded by the University of Messina with other modalities for the 34th cycle (academic year 2018/2019);
- IN VIEW OF some scholarships of the Ph.D. courses could be financed by the Sicilian Region on the European Social Fund;
- IT IS RESERVEDthe faculty to modify and integrate this Public competition by publicizing the changes on the University of Messina's website at the following address: http://www.unime.it/it/ricerca/dottorati-ricerca/bandi-dottorati-di-ricerca;

#### DECREES

# Art. 1 Establishment of Research Doctorate (Ph.D.) Courses

The 34<sup>th</sup> cycle of Research Doctorate Courses is established with its administrative center at the University of Messina (here on denominated University).

The comparative selections for admission to the Doctoral courses – 34<sup>th</sup> cycle, academic year 2018-2019, are announced, as indicated in the attachments n. 1-13, that are an integral part of this Public competition, where are indicated:

- The denomination of the Doctoral course;
- The type of degree required for admission;
- The characteristics of the Ph.D. course and employment opportunities;
- The conditions and selection criteria and the evaluation of candidates:
- The number of positions with and without a scholarship;
- Any other document required and/or different procedure, according to art.10 of the University Regulation concerning Research Doctorates, here on denominated Regulation.

According to the mentioned Ministerial decree (D.M.) n. 45 of the February 8<sup>th</sup>, 2013 the Research doctorate courses will be activated after the favorable opinion expressed by the ANVUR on compliance to the Ministerial accreditation requirements published on the web site <a href="http://dottorati.miur.it">http://dottorati.miur.it</a>. The duration of the courses is of three years with a predicted start the October 1st, 2018.

### Art. 2 Admission Requirements

Candidates can apply, without limits to citizenship, who at the deadline for applications, are in possession of a Specialist/Master degree or the old University degree or any other suitable qualification even obtained abroad, declared equivalent or recognized as suitable for access to the research doctorate courses on the basis of rules confirmed by relevant international agreements.

Those candidates who will obtain the qualification required by the October 31st, 2018 can also participate; in the case these candidates pass selection procedures and enroll in one of the Research doctorate courses, after having obtained the qualification, and not beyond the date above mentioned, must send to the Rector (Magnifico Rettore) of the University of Messina by PEC (Certified electronic mail) protocollo.pec@unime.it or directly at the University's registry office, or by Registered mail with return receipt to the address: Piazza Pugliatti, n. 1 – 98100 Messina, the self-certification with the date and signature (or the relevant certificates only in the case of academic qualifications obtained in NON European countries) accompanied by a copy of a valid identity card, indicating also: name of the University who issued the qualification, date in which it was obtained, type of qualification (specialist/master degree, old system degree), final evaluation.

Those candidates, who for whatever reason do not communicate the attainment of the degree within the expected deadline or send incomplete, erroneous information, by means or different addresses from those indicated will be excluded from Courses.

The suitability of the foreign qualification will be verified by the Examining Committee of the Research Doctorate course according to the current laws in Italy and in the Country where the qualification was issued and in compliance with the Treaties and International Agreements concerning the recognition of qualifications for the continuation of higher education.

All candidates are admitted to selections with reserve of verification of the declarations, according to the President of the Republic Decree (D.P.R) n. 445/2000 and subsequent modifications and integrations.

The University can in any moment during procedures and even after the start of courses make check-ups on the truthfulness of the declarations produced. In the case of false declarations the University can arrange in any moment, by provision of the Rector, the exclusion of candidates from selection procedures or from the doctoral course, without prejudice to the penal responsibilities that thus derive.

# Art. 3 Application to selection procedures

The application, together with the compulsory documents, as indicated in the attachments n. 1 – 13 must be filled in electronically by using exclusively the form available at the online address: <a href="https://unime.esse3.cineca.it">https://unime.esse3.cineca.it</a> and by following the instructions on that website.

At the end of the procedure, through the PagoPA® system, the payment for the compulsory contribution of € 50 (fifty) for participation to the public competition that must be paid definitely by the day after the expiry date, penalty the exclusion from selection procedures.

Only for candidates residing abroad, the payment of the contribution for the participation to selections can be paid by bank transfer on the - account IBAN: **IT 16W 02008 16511 000300029177** CODICE BIC SWIFT **UNCRITM1K66** entered to the University of Messina by specifying the reason for payment as hereby indicated: "<surname and name of candidate>.Contribution for the participation to the Research doctorate course in <denomination of the course>".

The candidates from the developing countries are exempted from the payment of the contribution mentioned above as defined in the Ministerial Decree n° 594 of August 1st, 2014.

The compulsory contribution for participation to selection procedures is not refundable for any reason at all. The receipt of payment must be kept by the candidate and must be shown when requested.

Selection procedures will be active for 30 days from the day after the publication of the Announcement on the on-line notice board of the University at the online address <a href="http://www.unime.it/it/ateneo/amministrazione/albo-online">http://www.unime.it/it/ateneo/amministrazione/albo-online</a>.

At the expiry date the link will be deactivated and it will not be possible to fill in the application form.

All applications that will arrive after this deadline and/or sent in a different way or are incomplete will be excluded from selection procedures.

Integration of documents will not be admitted after the expiry date of the Public competition. In the application the candidate must indicate the curriculum of the course for which he/she wants to participate.

Candidates must attach only in **PDF format** the requested documents as explained in attachments n. 1-13. European Union and NON European Union citizens who are in possession of foreign qualification/s obtained in a European Union and/or Non European Union country must attach a copy of the certificate/s of academic qualifications obtained from which are deduced the duration of the Degree course, the list of the examinations taken with the relevant mark, the name of the University who has issued the qualification, the date of the qualification and the final evaluation, with a relevant translation in the Italian or English language, care of and under the responsibility of the declarant, regularly dated and signed.

In the case of the candidate's admission to the course, this documentation must be produced and/or integrated at the moment of enrolment, according to art. 7 of the present Public competition.

<u>The candidate with a disability</u> must specify, in the application form, the necessary aids in relation to his / her and/or the necessity of additional time for the completion of examinations, documented by an appropriate certificate issued by the public health organization competent for the territory, pursuant to Law n. 104/92, as amended by Law n. 17/99.

The candidate with a diagnosis of specific learning disorders (DSA), must specify, in the application form, the necessary aids in relation to his / her and/or the necessity of additional time for the completion of examinations, documented by suitable certification issued by no more than three years from SSN, or by specialists and facilities accredited by the same, pursuant to Law n. 170/2010 and subsequent DM guidelines No. 5669, July 12nd, 2011.

For further information, the candidate can contact Dr. Rosalia Faraone (email: <a href="mailto:rofaraone@unime.it">rofaraone@unime.it</a>, tel 090 6768311) head for the "Servizi Disabilità/DSA" staff unit, located in via Consolato del Mare, n. 41, n. 41, Palazzo Mariani, Messina.

The insertion of untruthful information in the application form will mean the exclusion from the final list in order of merit and the automatic loss of the right to enrolment, apart from sanctions that are applied by the

penal code and the related specific laws. Self certifications, as specified in the paragraphs 46 and 47 of the D.P.R. n. 445/2000 and subsequent amendments and integrations, can also be used by:

- European Union citizens
- NON European Union citizens with residency permit in Italy regarding only the status, personal qualities and facts certified by Italian public bodies (specifically: a qualification obtained at an Italian University).

## Art. 4 The Examining Committees

The Examining Committees for admission to the Research Doctorate Courses will be appointed by Decree of the Rector, on proposal of the Teaching board of the Course, according to art. 11 of the University of Messina Regulation. The above mentioned decree will be published after the expiry date for applications on the University's website at the link: <a href="http://www.unime.it/it/ricerca/dottorati-ricerca">http://www.unime.it/it/ricerca/dottorati-ricerca</a> will have formal notification value

The coordinator will then be informed of the publication and subsequently will take care of all consequential obligations and communications to all members concerned.

### Art. 5 Examinations

The examinations of each Course indicated in the attachments n. 1 - 13 of this public competition will be held at the University of Messina which is the administrative center of the Doctoral course.

The examination timetable, with the indication of the place, the day, the month and the hour of the exams will be published after the Public competition's deadline on the website of the University of Messina, at the link: <a href="http://www.unime.it/it/ricerca/dottorati-ricerca">http://www.unime.it/it/ricerca/dottorati-ricerca</a> and will have the value of official notification for candidates.

In order to do examinations, candidates must exhibit a valid document of identity.

Candidates, who have a valid and motivated request and is allowed by the specific Course, can do the oral examination via *video-conference by means of specific software*. The Committee in charge of the comparative evaluation of the candidates' qualifications must follow the criteria as provided by each doctoral course and indicated in the attachments of this public competition.

The evaluation of qualifications is carried out by the Examining Committee, who defines the criteria for the award of relevant points. It is not required the presence of the candidates at the moment of that evaluation.

The final mark of selection procedures, expressed in one hundredths, is the result of the sum of the points given to the examination and to the qualifications submitted for evaluation (qualifications and exam).

The results of the single evaluations of each candidate will be publicized at the Department, administrative center of the Course, on care of the President and the Secretary of the Examining Committee.

At the end of the assessments, the Examining Committee draws up the general ranking list in order of merit on the basis of the evaluation of the academic qualifications and the examination and draws up a list of candidates admitted and not admitted to the Doctoral course.

All Examining Committees must finish procedures within and not beyond **September 15<sup>th</sup> 2018**.

The final list in order of merit (*Graduatoria di merito*) will be published on the online Official noticeboard and on the University's website at the link: <a href="http://www.unime.it/it/ricerca/dottorati-ricerca">http://www.unime.it/it/ricerca/dottorati-ricerca</a>, and it has at all effects a *legal notifying value*.

### Art.6 Admission to Courses

The candidates are admitted to the Courses according to what is regulated by the art. 9 of the University Regulation. All candidates are considered "admitted on reserve" according to their position in the final ranking list until all positions for the Doctoral Course are covered. The scholarships are granted according to the ranking in the final list in order of merit.

The candidate, on the basis of the final list in order of merit, who is admitted to the Course must express the acceptance of the position within 10 days from the publication of the final evaluations by sending an enrollment application according to what is specified in the following art. 7.

Not applying for enrollment will mean the loss of any right to admission to the Course.

In the case of loss of right or renunciation on behalf of any candidate admitted to Courses, until three months after the start of lessons it will be possible the replacement of the ranking list. A replacement communication will be sent to the email address of the suitable candidate scored in the ranking list. The candidate will have to communicate his interest in the enrollment, by means of email, by the peremptory deadline of 3 days from the date when the communication of replacement was sent, thence, passed such a period, the candidate will be implicitly considered renunciative.

In the case of equal points between two or more candidates in the merit list, preference will be given to the candidate with the more disadvantaged economic situation (ISEE income lower) and, in the case of further equal merit, the candidate with the lowest age will prevail.

For positions without scholarship, preference will be given to candidates with the lowest age.

The candidates who have already been admitted, on approval, to examinations according to art. 2 of this Public competition, and are in possession of suitable foreign qualifications, or those who will obtain the required qualification by the October 31st, 2018, in the case of suitable placement in the ranking list, can have access to the Course respectively after:

- favorable approval of the foreign degree;
- the actual attainment of the qualification, needed for selection, by the October 31st, 2018.

The holders of Research funds will be admitted after passing selection procedures as indicated by the art. 20, par. 10 of the abovementioned Regulation.

All public service employees will be admitted to Courses after passing the selection procedures according to art. 20, par. 13 of the abovementioned Regulation.

### Art. 7 Enrolment to Courses

Candidates admitted to courses, with or without scholarship, must enroll by the deadline specified at art. 6, par. 2.

The candidate who participated at more than one selection and is placed as successful in more than one final list in order of merit must proceed by declaring his option right for one of the Courses within 10 days from the publication of the final lists of merit of all the Doctoral Courses in which he/she is admitted. Not completing enrolment procedures for the selected Course will mean the loss of any right to admission to all the Courses in which the candidate was admitted.

Candidates must use the enrolment procedure prepared by the University administration, available on the website: <a href="https://unime.esse3.cineca.it">https://unime.esse3.cineca.it</a> together with the declarations required by the Public competition and by the Regulation, in self-certification with all attachments.

The application must be sent electronically by the expiry date, penalty the exclusion.

Admitted candidates, benefiting of a scholarship, are considered equal to university students for the purposes of the annual all-inclusive contribution payment, as established by the "Regulation concerning the contribution of students" of this University. Therefore, students must pay, through the PagoPA® system, for each year of Ph.D. course, an all-inclusive contribution determined according to the corresponding earning class quantified after the presentation of the ISEE-U attestation according to the attached table (attach. 14). During the enrollment, the admitted candidate will have to pay €156,00 (in the amount of € 140,00 related to the regional tax and € 16,00 related to the virtual stamp). As far as the amount of the all-inclusive contribution, it will be paid according to modalities and deadlines defined by the deliberation of the Administrative Board council of July 7<sup>th</sup>, 2017 except for each different re-calculation by competent Academic Authorities.

Admitted candidates, who will not benefit of scholarships, according to the law 232/2016, will be exempted by the payment of contributions and taxes to the University and they will pay for each year of Ph.D. course, through the PagoPA® system, €156,00 (in the amount of € 140,00 related to the regional tax and €16,00 related to the virtual stamp) except each different re-calculation by competent Academic Authorities.

The candidates in possession of a foreign academic qualification **obtained in a European Union** country must attach to the enrolment application:

 certificate/s of the qualification/s possessed with attached a translation, in Italian or in English declared identical to the original text by the competent Diplomatic or Consular Authorities abroad.

The candidates in possession of a foreign academic qualification **obtained in a NON European Union** country must attach to the enrolment application:

- 1. certificate/s of the qualification/s possessed with attached a translation, in Italian or in English declared identical to the original text by the competent Diplomatic or Consular Authorities abroad;
- 2. a "Dichiarazione di valore in loco" issued by the competent Diplomatic or Consular Authorities abroad, that certifies the duration of the degree course along with a list of the examinations taken and the relevant marks and also the academic value of the qualification in the Country that has issued it.

The candidates in possession of a qualification obtained abroad, who do not produce evidence of the documents required when matriculating, will be enrolled on reserve, and will be excluded from the doctoral course with the obligation to repay the scholarship rates wrongly received if they do not hand in the documents within six months from the start of the Course and/or, if verified, the qualification produced is not in compliance with the requirements indicated in the present public competition.

# The citizens of NON European Union countries must also hand in a copy of their current *Residence* permit in Italy within 10 days after the start of all Doctoral course activities.

At the beginning of each year following the first year of the Course, the Doctoral student, admitted to attend the following academic year, must renew his/her enrolment by the 30<sup>th</sup> of October of each year, by using the specific procedure available at the website: <a href="https://unime.esse3.cineca.it">https://unime.esse3.cineca.it</a>.

A fee will be applied of an amount that will be determined by the competent academic organs to all enrolments made after the expiry date.

The false declarations in the enrolment application will mean the exclusion from the final list in order of merit and loss of all rights.

In the above case, the University administration will retrieve any benefits conceded to the candidate and all fees already paid will not be reimbursed. False declarations will bring to a legal action by the interested counterparts for compensation.

## Art. 8 Incompatibility

Candidates admitted to Doctoral courses and already enrolled at other courses, not compatible, according to art. 19 of the University Regulation, are obliged to request a temporary interruption of their academic career when they enroll at the Doctoral course.

Candidates who are enrolled at a School of specialization must also suspend their studies apart from the cases described in the following paragraph.

It is possible to combine the attendance of a Doctoral Course with that of a medical Specialization Course, and therefore have a reduction to a minimum of two years for the Doctoral Course according to the following general criteria:

- a) The candidate must be admitted to a Doctoral Course at the same University or a consortium where he attends the medical School of Specialization
- b) A combined attendance of both Courses can be allowed during the last year of the School of Specialization but the Doctoral course must be compatible with the activities and the commitments of the School and after an official authorization by the Teaching Board of the School
- c) The Teaching Board of the Doctoral Course will decide on granting the request for a reduction after having examined the research activity already carried out during the Medical Specialization Course and certified by the Teaching Board of the same Course
- d) During the year of combined attendance of Courses the candidate cannot receive the scholarship of the Doctoral course.

The Teaching Board of the Doctoral course and the Board of the School of Specialization will arrange the manner of the combined attendance of both Courses.

# Art.9 Fees and Scholarships

The Research Doctorate scholarships have the duration of one year and are renewed after a specific verification by the Teaching Board of the completion of the previous year's Course programme together with an evaluation of the Research activities developed. Scholarships are paid after a positive evaluation of the activities carried out.

The rules in this article do not apply to holders of foreign scholarships or the recipients of financial support obtained within specific mobility programmes regulated by specific norms.

The whole annual amount of the scholarship, granted in monthly instalments, is equal to € 15.343,28, gross of withholding social security contributions that the Doctoral student must pay.

The value of the scholarship can be increased up to 50 % of the amount for an overall period not longer than 18 months and more than 15 days if the Doctoral student is authorized by the Teaching Board to carry out research activity abroad.

The requests for study activity abroad, duly authorized by the Teaching Board together with information regarding the place, the period of stay and the motivation, must be sent by the Doctoral Course Coordinator to the Research Doctorate Management's Office at least *thirty days* before leaving in order to draw up the relevant Rector's decree.

Starting from the second year, it is expected a fund for the research activities in Italy and abroad according to art. 17 of the Regulation.

In the case of suspension, withdrawal or loss of rights of the Doctoral student who has a scholarship, the student is not entitled to the sum that remains of his scholarship.

The Doctoral student, when admitted to the Course, can decline the scholarship grant by sending an official communication to the Rector of the University. In this case, though maintaining his status, he/she loses all rights to the scholarship and the whole or partial amount can be attributed under the same conditions and

terms to the first entitled Doctoral student without a scholarship from the moment in which the scholarship was declined.

The Scholarship is not combinable with any other scholarship apart from those granted by Italian or foreign institutions given to integrate Research activity of the doctoral student conducted abroad, and the exclusion of the specialization activities conducted abroad according to the law n. 398/1989.

The Research Doctorate scholarship is subject to separate INPS social security contributions (*Gestione separata INPS*) that are paid, according to the laws in force, for 2/3 of the amount by the University and 1/3 by the Doctoral student.

The number of scholarships, set out in this notice, may be increased and/or funded - until 3 months from the start of the Ph.D. courses - following additional funds available, obtained:

- by public or private external institution, through agreements or conventions stipulated after the publication of this announcement;
- in the context of research projects funded on calls for National Operational Programmes RI 2014-2020, Regional Operational Programmess, European Social Fund, or other Community, National and Regional Programmes and/or International Projects.

Information regarding these increases and financial support will be publicized on the University website at the address: http://www.unime.it/it/ricerca/dottorati-ricerca.

### Art.10 Attendance, suspension, withdrawal and renunciation

The attendance of doctoral students is compulsory and requires an exclusive full-time commitment. The suspension, the withdrawal and the renunciation in continuing the Research doctorate course are regulated by the art.18 of the University of Messina regulation concerning Research Doctorate courses.

### Art. 11 The treatment of personal data

According to General Data Protection Regulation (EU) n. 679/2016, the University is obliged to respect the private nature of the information submitted by the candidate. By abiding to the relevant laws in force, all data submitted will be treated for the purpose of selection procedures and for the management of the Doctoral student's career.

### Art. 12 Final norms

For anything not stated in this Public competition the norms and regulations contained in art. 4 of the Law n. 210/1998, in art. 19 of the Law n. 240/2010, in the Ministerial Decree (D.M n. 45/2013) and in the University of Messina's Regulation concerning Research Doctorates (D.R. n. 1015/2016) and other laws in force apply.

The presentation of the application form through the online procedure, as stated in art.3, implies the acceptance on behalf of the candidate of all the regulations in this public competition and those in the already mentioned University of Messina's Regulation concerning Research Doctorates (D.R. n. 1015/2016)

This Decree, written both in Italian and in English, will be published on the on-line notice board of the University at the address <a href="http://www.unime.it/it/ateneo/amministrazione/albo-online">http://www.unime.it/it/ateneo/amministrazione/albo-online</a>.

The Announcement will be published on the EU websites of Euroaxess, on the Ministry of Education, University and Research (MIUR) website and on the University's website.

#### Disclaimer:

The official and legally binding announcement is the Italian one available at <a href="http://www.unime.it/it/ricerca/dottorati-ricerca">http://www.unime.it/it/ricerca/dottorati-ricerca</a>.

This translation cannot be used for legal purposes and is only meant to provide information in English on the public competition for selection procedures.

Changes and integrations in English will be published at <a href="http://www.unime.it/it/ricerca/dottorati-ricerca">http://www.unime.it/it/ricerca/dottorati-ricerca</a>.

The Rector Prof. Salvatore Cuzzocrea



### PUBLIC COMPETITION, BY QUALIFICATIONS AND EXAMINATIONS, FOR ADMISSION TO THE RESEARCH DOCTORATE COURSES - 34th CYCLE

#### **ATTACHMENT N° 1**

Research doctorate in Applied Biology and Experimental Medicine

Curricula In the application the candidate must indicate the denomination of

Doctoral course:

1. Experimental Medicine;

2. Biologic and Environmental Sciences

3. Pharmacological Sciences;

<u>Coordinator</u> Prof.ssa Maria Assunta Lo Gullo,

email: mlogullo@unime.it

Positions with scholarship 6 UNIME

Position without scholarship 2

<u>Required degrees</u> LM-6 Biology

LM-9 Medical, veterinary and pharmaceutical biotechnologies

LM-13 Pharmacy and industrial pharmacy)

LM-60 Natural Sciences 6/S (Speciality in Biology)

9/S (Speciality in medical, veterinary and pharmaceutical

biotechnologies)

14/S (Speciality in pharmacy and industrial pharmacy)

68/S (Speciality in natural sciences)

Speciality in pharmaceutical chemistry and technology

#### Requirements for foreign students

The suitability of the foreign qualification will be ascertained by the Examining Committee of the Research Doctorate course according to the current laws in Italy and in the Country where the qualification was issued and in compliance with the treaties and international agreements concerning the recognition of qualifications for the continuation of higher education.

#### Description and objectives of the course

The Ph.D. program in Applied Biology Research and Experimental Medicine (DBAMS) offers to young graduates a postgraduate training that is essential to undertake research and/or coordinating both academic and extra- both public and private University institutions. Among the priority objectives of the

Ph.D. program are considered essential issues related to the ethical motivations of the research, the awareness of the environmental risks inherent in the genome alteration or introduction of new species, the full accountability in terms of sustainable development. The Ph.D. program will form the modern figures have both an in-depth knowledge base that a strong propensity application in vast areas of modern biology; also confer to the doctoral students the ability and skills required to carry out research in an autonomous and competent manner in pre - clinical, clinical and post - marketing industry. The ability to use interdisciplinary knowledge's in the fields of biology and applied biotechnology represents an indispensable integration of groups that work towards a coordination of different strategies. This Ph.D. program implements several forms of collaboration with Italian and foreign research organizations in order to propose periods of study and research to learn new techniques and methods for scientific research.

#### Employment and career opportunities provided

Ph.D. program in Applied Biology and Experimental Medicine will provide professionals used in the territory, both in the public and private sectors, based on the address chosen. The curriculum of "Biological and Environmental Sciences" will be able to address the multiple problems related to the defence and protection of environmental resources through employability in private companies that deal with issues related to basic research in biotechnology, aimed at monitoring and improving animal breeding, as consultants of agro - food and pharmaceutical industries and in environmental monitoring. The Ph.D. doctor in "Pharmacological Sciences" must be able to design, characterize and develop new drugs, study its biological, chemical and chemical-physical, assets structure relationships, the development of methodologies designed to identify of new sources of natural active ingredients and the optimization of pharmaceutical formulations.

#### Description of the training activities

Linguistics	Some lectures and seminars will be held in English.
Informatics	Students have access to the computer workstations connected to the University network.
Research management, knowledge of research systems and funding systems	Students will be involved both in the design and in the full grant proposal experimental design in order to make them independent in the conduct of a project and in the search for future funding
Exploitation of research results and intellectual property	All research activities will be published in international journals with impact factor and presented by the Ph.D. students at national and international conferences

#### Documents to be attached

Necessary documentation to be included in pdf format, in the application under penalty of exclusion:

- scanned copy of an ID (or passport) with photo, valid according to expiration data reported on it;
- curriculum vitae:
- research project developed by the candidate (which is not binding on the subsequent doctoral thesis);

#### for candidates already in possession of the qualification:

a self-certification, signed and dated, indicating for the qualification: the name of Italian university who
has issued the qualification, degree, designation of the degree course, the date of the qualification, the
final evaluation, list the courses attended with individual results and indication of credits earned when
provided;

Self certifications can also be used by:

- European Union citizens
- NON European Union citizens with residency permit in Italy regarding only the status, personal qualities and facts certified by Italian public bodies (specifically: a qualification obtained at an Italian University).
  - European Union and NON European Union citizens who are in possession of foreign qualification/s obtained in a European Union and/or Non European Union country must attach a copy of the certificate/s of academic qualifications (Bachelor's and Master's degree) obtained from which are deduced the duration of the Degree course, the list of the examinations taken with the relevant mark, the name of the University who has issued the qualification, the date of the qualification and the final evaluation, with the relevant translation in the Italian or English language, care of and under the responsibility of the declarant, regularly dated and signed. These applicants will be provisionally admitted to the selection and may eventually be excluded from the selection and Ph.D. course in case, their documents prove to be ineligible for the call.
- Master or specialist or old system degree thesis

#### For candidates not yet in possession of qualification (undergraduates):

 Self-certification, signed and dated, indicating for the qualification: the name of University, degree, designation of the degree course, list the courses attended with individual results and indication of credits earned when provided;

#### Additional titles:

- publications;
- professional experiences:
- others title

#### **Evaluation criteria**

#### 1. Qualifications

The maximum score to the qualifications will be 20/100 points.

#### Qualifications are:

- degree thesis
- university career
- publications
- professional experiences
- curriculum vitae

#### 2. Project

The maximum score to the project will be 20/100 points. The research project on specific themes of the Ph.D. program should be carried out by the candidate and is not binding on the subsequent award of the Ph.D. thesis.

#### 3. Examination: oral examination

The maximum score to the oral examination will be 60/100 points, with a minimum rating of 42/100. It consists of an interview in order to ascertain the qualifications, skills, aptitude for scientific research and the motivations of the candidates. The interview also aims to verify the knowledge's of the candidates on topics that relate to training and procedures for the Ph.D. and includes the formal presentation of the proposed research project. During the oral exam will be a test of knowledge of the English language. The oral exam, on reasoned request, will be supported electronically by means of suitable and specific software.

Minimum overall assessment to be considered eligible: 60/100 points

Only for candidates residing abroad, the payment of the contribution for the participation to selections can be paid by bank transfer on the - account IBAN: IT 16W 02008 16511 000300029177 SWIFT BIC CODE UNCRITM1K66 name of the University of Messina, specifying the reason for payment as indicated below " < full name of applicant> participation doctoral contribution in "Applied Biology and Experimental Medicine."

The candidates from the developing countries are exempted from the payment of the contribution mentioned above as defined in ministerial decree n°594 of August 1st, 2014.

The receipt of the transfer must be carefully preserved and exhibited by the candidate in case of request.



### PUBLIC COMPETITION, BY QUALIFICATIONS AND EXAMINATIONS, FOR ADMISSION TO THE RESEARCH DOCTORATE COURSES - 34th CYCLE

#### **ATTACHMENT N° 2**

Research doctorate in Medical and Surgical Biotechnologies

<u>Coordinator</u> Prof. Giovanni Raimondo,

email: raimondo@unime.it

Positions with scholarship

5 UNIME

1 AOU Policlinico

#### Positions without scholarship 1

<u>Required degrees</u> LM-6 Biology;

LM-9 Medical, Veterinary and Pharmaceutical Biotechnology;

LM-41 Medicine and Surgery; LM- 42 Veterinary Medicine;

LM-46 Dentistry and Dental Implants

#### Requirements for foreign students

The suitability of degrees and any other certifications obtained abroad will be validated by the Ph.D. examination Committee in compliance with the current legislation in Italy and in the country where such certifications were issued, and in accordance with International agreements or conventions on the subject.

#### Description and objectives of the course

The aim of the doctoral programme is to provide professionals with the required skills in order to undertake a primary role in the field of Medical and Surgical Biotechnology. The course comprises of the following core areas: 1) study and development of biotechnology for infection prevention and control, with particular emphasis on biotechnology concerning perinatal, paediatric, gastrointestinal and surgical areas; 2) study of the underlying molecular mechanisms of cellular differentiation and proliferation, with the aim of identifying targets for tumour control as well as tissue and organ regeneration.

Medical and Surgical Biotechnological sciences have been an important factor contributing to the economic and social growth not only of developed but also of developing countries. The main aim of the present Ph.D. course is to create expert professionals with theoretical and practical fundamentals that will allow them to be active in a competitive international field such as Medical and Surgical Biotechnology. The course will focus on the most advanced methods to study morbidity and mortality due to perinatal,

paediatric and surgical infections and to prevent the chronic inflammatory state and the degenerative mechanisms that underline to the process of cancer development.

Employment and career opportunities

Modern history in countries such as China, India and South Korea has shown that the main factor leading to economic development is economic and industrial innovation, particularly in the fields of informatics and biotechnology. Competitiveness in these fields has allowed developing countries to compensate for lack of advances in other areas. Similarly, the economic and social development of Italy and other European countries cannot exist without the presence of leading professional figures in the field of health biotechnology. Such professionals can play a central role in several areas related to human health: pharmaceutical industry, biotech start-ups, hospitals,public as well as private research centres. The increased demand for human resources in these areas will be associated to the need to reduce healthcare expenses through preventive healthcare strategies, particularly those related to the field of vaccines and the prevention of metabolic syndrome and cancer. Furthermore it is expected that there will be a significant expansion in the field of regenerative medicine that will require significant skills in the field of cellular differentiation and stem cell biology. For the above reasons, there is no doubt that students emerging from the present doctoral course are expected to have a pivotal role and wide professional opportunities in the medium- and long-term.

#### Description of the training activities

Language	During the course, English will gradually become the main language used. Seminars, journal clubs and thesis discussion will take place in English. Foreign students are expected to enrol in this doctoral programme; this should further encourage the use of the English language.
Informatics	The availability of individual personal computers with internet connection will favour better acquaintance with informatics tools. In addition, bioinformatics will be an essential part of the training provided.
Research, research systems and financial management	Research management and the related financial systems will be taught to the students on site, since the training will be based on individual projects. These projects must have clear definition and objectives in line with available resources. Such resources will be available from lecturers/researchers who are grant-winners and will ensure the financial feasibility of research activities.
Maximal use of research results and intellectual property	This will take place through a) the presentation of scientific results in International conferences and their publication in International peer-reviewed journals; b) application for patents related to undertaken projects; c) Exchange with external experts in the relevant areas, with emphasis on those working in the pharmaceutical and biotech industry.

#### Documents to be attached

Mandatory documents to be included in the application as pdf files. The absence of any of the following documents will result in exclusion:

- scanned copy of an ID (or passport) with photo, valid as per expiry date;
- curriculum vitae;

- research project-proposal written by the applicant in English language (that is not binding for the subsequent assignment of the doctoral thesis).
   The research project proposal has to have the following information:
  - Title: it must be no longer than 250 characters;
  - Description: it must be no longer than 1,000 words and it must include
    - 1. Background
    - 2. Aim
    - 3. Materials and Methods
    - 4. Expected results

#### for applicants meeting entry qualification requirements:

self-certification, including date and signature, stating the degree grade. The selfshould also state the University (or other institution) that released the title, the
degree
denomination, date of graduation, final comprehensive grade, list and grade of all the undertaken
exams, when available;

Self-certifications can be used also by:

- European Union citizens;
- citizens of non-European Union Countries, regularly residing in Italy, for titles obtained in accordance with the Italian law (namely eligible titles obtained from an Italian University).

The applicants, EU and non–EU citizens, with a title obtained in non-EU Countries must include the certification of degree (Bachelor's and Master's degree) stating the duration of the course, the final comprehensive grade and the grade for each exam undertaken. Also, the University from which the title has been issued must be stated, along the date the degree was awarded, and the Italian or English translation (if the title is not in Italian or in English), under the responsibility of the declarant, with date and signature of provided. These applicants will be provisionally admitted to the selection and may eventually be excluded from the selection and Ph.D. course in case, their documents prove to be ineligible for the call;

Master thesis (or analogous thesis);

#### for the applicants who do not have an eligible title yet, but who are about to graduate:

dated and signed self-certification indicating the title they are going to receive; University in which they
are enrolled, type of degree and its exact denomination, list of undertaken exams and grades
obtained, when applicable/available;

#### Other titles to be eventually included

- scientific publications;
- former professional experience;
- any other qualification held by the applicant

#### **Evaluation criteria**

#### 1.Titles

Maximum: 30/100 points.

Suitable titles are:

Master degree or other similar degree(s);

- academic carrier (exams grades, final grade);
- eventual publications;
- eventual professional experience and other qualifications;
- candidate research project (which is not necessarily related to the subsequent Ph.D. thesis);
- curriculum vitae.

#### 2. Oral Exam

The maximum score achievable by the oral exam will be 70/100 points, with a pass mark of 42/100 points. The oral exam will evaluate the knowledge, ability, aptitude to scientific research and motivation of the applicants. The interview will aim to assess the applicant's knowledge on the subjects related to the educational and methodological objectives of the Course, and will include the formal presentation of the proposed research project.

Knowledge of English will be assessed during the oral exam.

Upon a justified request, the oral exam may be undertaken online with the use of suitable and specific software.

Minimal total score eligible for admission: 60/100 points.

In compliance with the evaluation, at least 2 applicants will be admitted with LM or LMCU of Area 05 - Biological Sciences and at least 2 applicants will be admitted with LM or LMCU of Area 06 - Medical Sciences.

Only for candidates residing abroad, the payment of the contribution for the participation to selections can be paid by bank transfer on the - account IBAN: IT 16W 02008 16511 000300029177 CODICE BIC SWIFT UNCRITM1K66, payable to the University of Messina, specifying the reason for payment as indicated below: "full name of the applicant - Contributo partecipazione dottorato in BIOTECNOLOGIE MEDICHE E CHIRURGICHE"

Applicants from developing countries as defined in the Ministerial Decree n°594 of August 1st, 2014 are exempted from the payment of the above-mentioned contribution.

The receipt of the bank transfer must be kept by the applicant and provided, if requested.



#### PUBLIC COMPETITION, BY QUALIFICATIONS AND EXAMINATIONS, FOR ADMISSION TO THE **RESEARCH DOCTORATE COURSES - 34th CYCLE**

#### **ATTACHMENT N°3**

Cyber Physical Systems Ph.D. Subject

Coordinator Prof. Antonio Puliafito

email: apuliafito@unime.it

#### Positions WITH Scholarship

3 UNIME	
1 Kazan Federal University	The Ph.D. student will work on a topic related to Cyber Physical Systems in the context of Social and Urban Computing
1 Innopolis University	The Ph.D. student will work on a topic related IT for Cyber Physical Systems

#### Position WITHOUT Scholarship 1

#### Required Degree

Master Degree in Computer Science (LM-18 Informatica - 23/S specialistiche in informatica)

Master Degree in Computer Engineering (LM-32 Ingegneria informatica)

Master Degree in Automation Engineering (LM-25 Ingegneria dell'automazione -29/S

specialistiche in ingegneria dell'automazione)

Master Degree in Communication Engineering (LM-27 Ingegneria delle telecomunicazioni - 30/S specialistiche in ingegneria delle telecomunicazioni)

Master Degree in Electronic Engineering (LM-29 Ingegneria elettronica - 32/S

specialistiche in ingegneria elettronica)

Master Degree in Computer Security (LM-66 Sicurezza informatica - 35/S specialistiche

in ingegneria informatica)

#### Requirements for foreign (non-Italian) students

Equivalent Master Degree in the following disciplines: computer science, computer, automation, electronic engineering, telecommunications engineering.

Knowledge of English (mandatory) or Italian (optional)

The foreign student qualification will be assessed by the Doctoral Commission in accordance with the relevant legislation in Italy and in the issuing country, also based on international agreements, regulations and parameters.

#### Description and objectives of the Ph.D. programme

A cyber-physical system (CPS) is a computer system able to continuously interact with the physical environment in which it operates. Such a system is composed of physical elements combined to computing, communication and control capabilities. Computing and communication infrastructures, represented by the "cyber" prefix, form a distributed system that interacts directly and dynamically with the real (physical) world around it. Possible application fields are: smart grids, smart cities, domotics, cooperating robots, automotive, avionics, intelligent factories (see Industry 4.0).

Proper tools are therefore essential to interact with the surrounding world, made up of millions of intelligent objects. This Ph.D. programme focuses on Cyber Physical Systems and all related methodologies and technologies such as Cloud computing, Internet of Things, sensors, cyber security, concerning their design, development and evaluation techniques, both from theoretical and practical perspectives. The main goal of this Ph.D. programme is to train researchers and experts operating at infrastructure level as well as in service development, working on smart cities and industrial environments as workbench. Software development will closely follow the principles of software engineering and attention will be devoted to enhancing interaction with the industrial world.

#### Employments and career opportunities

The role of modern ICT technologies in determining and influencing the development of our society, both economically and socially, is strategic. The demand for specialized and continuously up-to-date expertise in this area is a consequence of the rapid evolution of technology which is increasingly available at lower cost, thus fostering the establishment of new small and medium enterprises on such topics. A Ph.D. in Cyber Physical Systems will have a prominent role in this process, required by IT companies as well as by the manufacturing sector.

A Doctor on Cyber Physical Systems could apply to Academic and technical departments of the Public Administration as well as to high-tech companies with automated manufacturing system and advanced management software, aiming at adopting distributed control techniques based on CPS.

#### Description of training activities

Language	In coordination with other PH.D. curricula in Italy and Russia, specific courses and activities to improve the student knowledge on the English language will be delivered. Ph.D. students will be invited at attending International English school. The Ph.D. Courses will be delivered in English, which will be the official language.
Informatics	In coordination with other PH.D. curricula in Italy and Russia, specific courses and activities to improve the student knowledge on specific computer topics such as operating systems, programming, domain specific languages, Mathematica, Matlab will be established. Efforts will be also devoted on the investigation of virtualization systems, bigdata, security, Cloud and IoT.
Research, research systems and financial management	Research management and the related financial systems will be taught to the students on site, since the training will be based on individual projects. These projects must have a clear definition and objective in line with available resources. These resources will be available from lecturers/researchers who are grant-winners and who ensure the financial feasibility of research activity.

# Dissemination and exploitation of research results and outcomes

This will take place through a) the presentation of research results in International conferences and their publication in International peer-reviewed publications; b) application for patents related to projects carried out; c) Exchange with external experts in the relevant areas, with emphasis on those that work in the CPS area and industry.

To this purpose, in coordination with other PH.D. curricula in Italy and Russia, specific courses and activities to improve the student knowledge on dissemination and exploitation of research results and outcomes as well as on different IPR systems.

#### Documentation required by the application

### Compulsory Documents to be included as pdf files. The absence of any of the following documents will be reason for exclusion:

- scanned copy of an ID (or passport) with photo, valid according to expiration data reported on it;
- curriculum vitae:
- research project written by the candidate, one A4 page maximum length. This project will not be the one that the candidate has eventually to work on for his Ph.D. thesis;

#### for candidates already in possess of entry qualifications:

- self-certification, including date and signature, stating the title grade. The self-certification should also state the University (or other) that released the degree, the degree denomination, degree date, final comprehensive grade, and grade for any of the exams, when available; Self-certifications can be used also for:
  - European Union citizens;
  - citizens of non-European Union Countries, regularly resident in Italy, for titles obtained according to Italian law (specifically for eligible titles obtained from an Italian University).

The candidates, EU citizens and non–EU citizens, with a title obtained not in Italy and obtained in non-EU Countries must include the title (Bachelor's and Master's degree) from which the duration of the course can be understood, plus the final comprehensive grade, and grade for any of the exams, the University from which the title has been released, the data, and the translation in Italian or in English (if the title is not in Italian or English), upon the responsibility of the declarant, with date and signature of declarant. These candidates will be admitted to the selection under judgment and will eventually be excluded from the selection and Ph.D. course when the title will result to be ineligible for the call;

Master thesis (or analogous thesis).

#### For the candidates who do not have the eligible title yet, but it is supposed they will have it soon:

self-certification, dated and signed, indicating the title they are going to receive; University in which
they are enrolled, type of degree, denomination, list of exams with obtained grade, when appropriate
/available;

#### Other titles to be eventually included

- scientific publications;
- former professional experience;
- any other title the candidate could have.

#### **Evaluation criteria**

#### 1.Titles

Maximum: 30/100. Suitable titles are:

- Master degree or other similar degree;
- academic carrier (exams grade, final grade);
- publications;
- professional experience and others;
- research project;
- curriculum vitae.

#### 2. Oral Exam

The maximum score achievable by the oral exam will be 70/100 points, with a pass mark of 42/100 points. The oral exam will ascertain the knowledge, ability, scientific research attitude and motivation of the candidates, and it will be finalized to establish the canditate's knowledge about subjects which relate to the educational and methodological objectives of the Programme, and will include the formal presentation of the proposed research project.

Knowledge of English language will be verified during the oral exam.

The oral exam, following a justified request, will be taken online using suitable and specific software.

Minimal total score to be considered as admissible: 60/100 points.

Only for candidates residing abroad, the payment of the contribution for the participation to selections can be paid by bank transfer on the - account IBAN:IT 16W 02008 16511 000300029177 CODICE BIC SWIFT UNCRITM1K66, beneficiary name University of Messina, specifying the reason for payment as indicated below " < full name of applicant> participation to Ph.D. call in "Cyber Physical systems".

The candidates from developing countries are exempted from the payment of the contribution mentioned above as defined in ministerial decree no 594 of August 1st, 2014.

The receipt of the bank transfer must be kept by the applicant and provided, if requested.



### PUBLIC COMPETITION, BY QUALIFICATIONS AND EXAMINATIONS, FOR ADMISSION TO THE RESEARCH DOCTORATE COURSES - 34th CYCLE

#### **ATTACHMENT N° 4**

<u>Ph.D. Course in</u> **Economics, Management and Statistics** 

Curricula In the application form the applicant should specify the curriculum of the Ph.D.

course for which he/she intends to participate:

Economics;
 Management;

3. Statistics.

<u>Coordinator</u> Prof. Edoardo Otranto

email: eotranto@unime.it

Positions with scholarship 6 UNIME

3 UNICT

Positions without scholarship 1

#### Required degree

All the Master, Specialistic or Old Order Degrees, otherwise a similar academic qualification also obtained abroad, already declared equivalent by the Italian authorities, otherwise recognized adequate, only for the purpose of the participation to the selection for the admission to the Ph.D. course, by the examination board. Successful applicants with a limited knowledge of economics could be invited by the Ph.D. committee to attend additional economic courses at Master level offered by the Department of Economics.

#### Requirements for foreign students

- Knowledge of the English language;
- Academic degree equivalent to that awarded to Italian students or a bachelor degree and a master degree, depending on the University system of the countries where the degrees have been awarded. If the degrees obtained abroad have not been declared equivalent to the degree required by Italian system to access a Ph.D. program, the student can request that his/her degrees will be declared equivalent by the examination board. Such an equivalence will be valid only to access the Ph.D. program.

#### <u>Description and objectives of the Ph.D. course</u>

The Ph.D. course aims at providing students with the necessary skills to carry out research and to compete at international level.

It offers a vibrating and stimulating environment for highly motivated students that intend to pursue a career both in the academia and in national and/or international research institutions.

The aims of the program are:

- a) To attract Italian and foreign highly motivated students wishing to undertake research activities;
- b) To train rigorously students, providing both theoretical and empirical knowledge to to carry out research at an international standard;
- c) To equip students with the necessary skills to conduct research individually and within a team.

#### Notes

The Ph.D. program is structured as follows:

- 1) Two pre-sessional introductory modules in Mathematics and Statistics for first year students;
- 2) Five compulsory (*core*) modules for each curriculum of the program for first year students. They are intended to offer the specific knowledge that are required to undertake research in Mathematics, Management and Statistics. To be admitted to the second year, students are required to sit successfully exams in the five compulsory modules. Written or oral exams will take place at the end of each module. Occasionally, exams can be an homework.
- 3) Second and third year students are required to attend seminars, which will focus on some specific topics in line with students' research interests.
- 4) Department seminar.
- 5) Summer and Winter Schools attended by international academics. Those schools are expected to focus on topics that are consistent with the most updated research in Economics, Management and Statistics.
- 6) Second and third year students are encouraged to spend visiting periods in national or international research centers for at most 18 months per student.

#### Expected career and professional opportunities

Students that successfully completed the Ph.D. program in Economics, Management and Statistics find employment both in the private and in the public sectors.

Academia or other research institutions are a possible target for our graduates. In addition, the international approach of the program (offered entirely in English) will offer an additional opportunity to spend the degree also abroad.

The Summer and Winter Schools, as well as the possibility of spending visiting periods abroad, allow students to create stable scientific relationships, that can be useful for their future careers.

Besides occupation in research centers, our graduate could exploit the opportunities offered by the private sector. Nowadays, firms and corporations require employed that are able to analyze and to understand the rapid changes in the economic systems. In particular, globalization is generating an interconnected world with several specific features that need to be deeply understood in order to exploit opportunities in globalized markets.

Finally, a third possible opportunity is represented by International Bodies, such as the European Union, ONU, FMI and the World Bank.

#### Description of the training activity

Linguistics	Lectures and seminars will be held in English. In addition, students are required to write in the same language their thesis.  The examination board will verify the knowledge of the English language during the admission interviews.
Computer Science	The program is highly quantitative-based. Therefore, additional lectures will be dedicated to the study of econometric softwares such as STATA, GRETL. Computer labs will be also used as lecture rooms.
Management of the research, of the knowledge of research systems and of the funding systems	Seminars regarding topics and procedures related to grants offered by the European Research Council or by other funding bodies will be organized.
Valorization of research results and intellectual ownership	The Ph.D. committee strongly encourages students to attend conferences and seminars to spread the results of their research. In addition, the Ph.D. committee will invite students to submit the output of their research to scientific journals. The Ph.D. committee supports a working paper series dedicated to the research of Ph.D. students.

#### Documents to be attached

List of required documents that must be included to the application (in pdf format). Failing to include the following documents will determine exclusion from the selection procedure:

- scanned copy of a valid ID with photo;
- curriculum vitae;
- research proposal (maximum 1000 words). The future research may differ from the content of the proposal. A tentatively structure of proposal should include a brief presentation of the scientific problem that the Ph.D. student intends to investigate, a concise review of the literature, a description of the methodology to be used and a summary of possible expected results.

for candidates already having the eligibility education qualification:

- self-certification, with date and signature, about the awarded degree. The document should also
  contain information about: the Italian University where previous degrees have been awarded, the
  precise denomination of the program, the date in which the degree was awarded, the final grade, the
  complete list of exams with awarded marks and CFU when available:
  Self-certifications can also be used by:
  - European Union citizens;
  - citizens of non-European Union Countries, regularly resident in Italy, limited to status, personal qualities and episodes that can be certified by public Italian subjects (more specifically an educational qualification obtained from an Italian University).

Candidates, EU citizens and non–EU citizens, with a foreign educational qualification obtained in non-EU Countries must include the certification of degree (Bachelor's and Master's degree) that reports the duration of the course, the list of exams with corresponding grades, the University that has awarded the degree, the date of achievement and the final grade with the translation in Italian or English language, written by the declarant, upon his/her responsibility, regularly dated and signed. Such candidates will be conditionally admitted to the selection. The applicant will be excluded from the selection procedure as

well as from the enrollment after a verification of the validity of his/her degree, as well as in case of ineligibility of the degree for the admission.

Master's or specialist degree dissertation (or the corresponding final year project);

for those applicants that are expected to gain their eligible degree:

self-certification, dated and signed, indicating the denomination of the expected degree; the name of
the University that they are currently attending, the list of exams taken up to the time of application
including the mark and the corresponding obtained CFU;

Further documents to be included:

- Two recommendation:
- Publications (if any);
- Other qualifications owned by the candidate (if any).

#### Selection criteria

1. Qualifications (max 30 points out of 100)

The committee will take into consideration the following qualifications:

- Master and undergraduate dissertation (final year project);
- Academic performance (exams' grades, final grade);
- Publications (if any);
- Professional experiences and other qualifications owned by the candidate (if any);
- Research proposal;
- CV.

#### 2. Oral exam (max 70 points out of 100)

The minimum score to pass the exam (held in English) is 42/100 points. It has the main purpose of highlighting the candidate's knowledge in the topics that characterize the doctoral program.

The exam, for applicants that live more than 300 Km far from the University can be done online via proper a and specific software.

Only applicants that achieve a total score (qualifications + exam) equal or above 60/100 will be considered.

Only for candidates residing abroad, the payment of the contribution for the participation to selections can be paid by bank transfer on the - account IBAN: Bank account number is: IT 16W 02008 16511 000300029177; BIC SWIFT Code: UNCRITM1K66

Account holder: Università degli Studi di Messina

Applicant should specify the following reason for the bank transfer:

"<family name and given name of the applicant> participation doctoral contribution in ECONOMICS, MANAGEMENT AND STATISTICS".

Applicants from developing countries are not required to send the participation fees. The list of developing countries is included in the ministerial decree n°594 of August 1st, 2014.

The bank transfer receipt must be carefully kept by the candidate and shown if requested.



### PUBLIC COMPETITION, BY QUALIFICATIONS AND EXAMINATIONS, FOR ADMISSION TO THE RESEARCH DOCTORATE COURSES - 34th CYCLE

#### **ATTACHMENT N°5**

Research doctorate in Physics

Coordinator Prof. Lorenzo Torrisi

email: lorenzo.torrisi@unime.it

Positions with scholarship 4 UNIME

Positions without scholarship 1

Required degrees LM-17 Physics

LM-22 Chemical Engineering

LM-53 Sciences and material engineering

LM-54 Chemical sciences

LM-74 Sciences and geological technologies

LM-75 Sciences and environmental and territory technologies

LM-79 Geophysica sciences 20/S (Specializations in Physics)

32/S (Specializations in Electronic Engineering)

61/S (Specializations in Sciences and Material Engineering)

62/S (Specializations in Chemical Sciences) 85/S (Specializations in Geophysical Sciences).

#### Requirements for foreign students

Degrees equivalent to that masterful, Specialist or Old system in the following macro-sectors:

AREA 02 – Physics Sciences AREA 03 – Chemistry Sciences AREA 04 – Earth Sciences

The suitability of the foreign degree will be determined by the Commission of the Ph.D. examination in accordance with current legislation in Italy and in the country where it was issued the same and treaties or international agreements on the recognition of further education qualifications.

#### Description and objectives of the course

The educational objectives are mainly related to the need to provide graduate students with the tools needed to carry out, according to high quality standards, their doctoral thesis, in close relation to research topics carried out in the Department of Mathematics and Computer Science, Physical Sciences and Earth

Sciences (MIFT), as well as to complete the training of physicists designed to fit high-level production processes and / or training in the country. The Ph.D. activities are aimed at training professionals capable of developing independently, or in groups of basic and applied research activities in Physics with the following purposes:

- -Knowledge advanced in the field of the structure of matter, soft matter physics and complex systems, particularly with regard to theoretical, computational and experimental. -Knowledge advanced in the field of nuclear physics, with regard to theoretical and experimental aspects, studies of nuclear and sub-nuclear particles, plasma physics, laser-matter interaction, accelerators and detection systems.
- -Physics applied to the environment, cultural heritage, medical physics and geophysics, spectroscopic techniques, in situ analysis, modeling, and regulatory risks.

Synthesis, diagnostics and modeling of the behavior of nanomaterials, quantum optics and non-linear phenomena in micro- and nano-structures, applications in energy, biotechnology, optoelectronics, photonics and sensor systems.

#### Employments and career opportunities provided

Scientific careers in universities, in the Higher Institutes of Education, the National Laboratories and Research Institutions (CNR, INFN, ENEA, ENI, INGV, etc.) and International with particular projection in Europe. Employment at managerial level in the Industry Paintings of electronic components, R & D sectors of advanced processes, software, telecommunications, economy, finances. Teaching in Secondary Schools. scientific career in large research facilities, material physics and physics of the nucleus and the particles. Use in health facilities requiring advanced knowledge of physics, radioactivity, medical diagnostic, imaging, environmental monitoring, particle beams in medicine. Superintendents and use in structures operating in the field of cultural heritage conservation and protection of environmental assets, characterization of artifacts of artistic, historical and archaeological. Use in structures operating in the field of control of atmospheric processes, meteorology and oceanography, including the numerical simulation of complex processes of evolution, assessment of natural and anthropogenic risks. Inclusion in the roles of fellow in the university and public research bodies, advisory activities on environmental safety issues. Use in the petrochemical industries, synthesis of polymers, colloids, pharmaceutical sector and glass industry.

#### Description of the training activities

Linguistics	It provides an advanced course in English language that will be played as part of our university by native speakers Lectures for a total period of 20 hours a year. On the occasion of the Ph.D. study day in Physics, tradition at our university, on the Annual Report (ISSN 2038-5889) students must prepare a scientific paper in English language on their research activities. Besides the elaborate final thesis it must be written in English.
Informatics	It provides for the holding of an advanced computer course that will be held at our University by colleagues of Computer for a total of 20 hours a year. Among other things He teaches to the student to write scientific papers in Latex, the use GRID architecture and the basic elements of parallel computing. In addition, graduate students will be able to make use of structures for scientific computing and applications of COMET consortium.

Research management, knowledge of research systems and funding systems	It will be made by experts a series of specialized seminars relating to the management of research at national and international level, the coordination of research teams and methods of research of national and international funding channels.
Exploitation of research results and intellectual property	There will be a series of specialized seminars relating to the exploitation of research results and intellectual property. They will be carried out by teachers involved in experiences of national and international research and scientific publications with high impact factor, as well as teaching staff and officials of the university facilities for attracting resources and the exploitation of intellectual property (CARECI).

#### Documents to be attached

#### Documentation, imposes the pdf application under penalty of exclusion:

- scanned copy of an identification card with photo, valid;
- research project developed by the candidate (which is not binding on the subsequent award of the doctoral thesis);

#### for candidates already in possession of admission:

- self-certification, provided with date and signature, indicating the title of access: Italian or foreign
  University which awarded the title, type of degree, the name of the degree course, date of attainment of
  the title, final vote, list of exams with their marks and indication of credits earned if any;
  Self-certification may also use:
  - EU citizens;
  - citizens of non-EU countries, legally residing in Italy, only for the states, personal qualities and events certified and attested by Italian public entities (specifically: degree from an Italian University).

Candidates, EU and non EU citizens, in possession of / the foreign degree /s achieved /s in non-EU countries must attach the certificate of title / the owned / (Bachelor's study and Master's degrees) that would suggest the duration of the course of study, the list of exams taken with relative grades, the university's indication that issued the license, the date of graduation and the final vote, with the translation in Italian or English written and edited under the responsibility of the registrant, duly dated and signed. These candidates will be admitted to the selection procedure with reserve and will be excluded from the selection and from the Ph.D. program if, after verification, it appears that the title does not comply with the requirements of this announcement and does not allow, therefore, enrollment in the doctorate.

Master's thesis or master or old system;

#### for candidates not yet in possession of admission (undergraduates):

self-certification, provided with date and signature, indicating the title of access: university where they
are enrolled, the type of degree, name of the degree program, list of exams taken with relative marks
and indication of acquired credits;

#### Additional titles to accompany the application if in possession of the candidate:

- publications;
- professional experiences;
- other securities held by the applicant;
- curriculum vitae.

#### **Evaluation criteria**

#### 1. Titles

The maximum score to the titles will be 30/100 points assessable qualifications are:

- Master's thesis, specialized or old system, consistent with the themes proposed by the Ph.D. in Physics, consistent with the themes proposed by the Ph.D. in Physics;
- university career (useful examinations, graduation mark);
- publications:
- any professional experience and other qualifications held by the applicant;
- research project developed by the candidate, which is not binding on the subsequent award of the Ph.D. thesis:
- curriculum vitae.

#### 2. Test exam: written test and oral exam

The written test consists of an elaborate proposed by the commission aimed to ascertain the qualifications, skills and attitudes to scientific research, as part of its themes of the Ph.D. in Physics, of the candidates. The dissertation will be held in Italian or in English. The maximum score for the written test will be to 40 points, with a minimum rating because it intends to overcome 24 points.

The oral test consists of an interview aimed at ascertaining the knowledge, skills, attitude to scientific research and the motivation of candidates. The interview also aims to verify the knowledge of the candidates on topics that relate to training and procedures for the Ph.D. and includes the formal presentation of the research project. During the oral exam will be a test of knowledge of the English language. The maximum score in the oral test will be 30 points, with a minimum rating because it intends to overcome 18 points.

The minimum overall assessment to be considered eligible: 60 points.

Only for candidates residing abroad, the payment of the contribution for the participation to selections can be paid by bank transfer on the - account IBAN: IT 16W 02008 16511 000300029177 SWIFT BIC CODE UNCRITM1K66, name of the University of Messina, specifying the reason for payment as indicated below "<full name of applicant> participation in doctoral contribution PHYSICS".

The candidates from the developing countries are exempted from the payment of the contribution mentioned above as defined in ministerial decree n°594 of August 1st, 2014.

The receipt of the transfer must be carefully preserved and exhibited by the candidate in case of request.



### PUBLIC COMPETITION, BY QUALIFICATIONS AND EXAMINATIONS, FOR ADMISSION TO THE RESEARCH DOCTORATE COURSES - 34th CYCLE

#### **ATTACHMENT N° 6**

#### Research doctorate in Civil, environmental and safety engineering

<u>Curricula</u> In the application the candidate must indicate the denomination of one of

the following the curricula:

1. Geotechnical Engineering;

2. Infrastructure and mobility engineering;

3. Hydraulic engineering, hydraulic and maritime constructions, hydrology and energy from water

4. Science and technology, materials, energy and complex systems for distributed computing and networks.

Candidates graduated abroad, participating in the selection for reserved positions, should make an explicit request in their application form.

Coordinator Prof. Gaetano Bosurgi

email: gbosurgi@unime.it

Positions with scholarship 3 UNIME

3 UNIRC

Positions without scholarship

1	
1	Reserved for graduates in foreign universities Will be valued titles and oral test

#### Required degrees LM-4 Architecture and building engineering-architecture

LM-4 c.u. Architecture and building engineering-architecture (five-year)

LM-17 Physics

LM-20 Aerospace and astronautics engineering

LM-22 Chemical Engineering LM-23 Civil Engineering

LM-24 Engineering of building systems

LM-25 Automation engineering LM-26 Safety Engineering

LM-27 Telecommunications Engineering

LM-28 Electrical Engineering LM-29 Electronic Engineering

LM-30 Energy and nuclear engineering

LM-31 Management Engineering

LM-32 Computer Engineering

LM-33 Mechanical Engineering

LM-34 Naval Engineering

LM-35 Engineering for the environment and the territory

LM-40 Mathematics

LM-53 Materials science and engineering

LM-54 Chemical Sciences

LM-56 Economics

LM-71 Sciences and technologies of industrial chemistry

LM-72 Science and technology of navigation

27 / S (specialists in chemical engineering)

28 / S (specialist in civil engineering)

30 / S (specialist in telecommunications engineering)

31 / S (specialist in electrical engineering)

32 / S (specialist in electronic engineering)

34 / S (specialists in management engineering)

35 / S (specialist in computer engineering)

37 / S (specialist in naval engineering)

38 / S (engineering specialists for the environment and the territory)

50 / S (specialists in mathematical-physical modeling for engineering)

61 / S (specialists in materials science and engineering)

#### Requirements for foreign students

Knowledge of Italian or English language.

The suitability of the foreign qualification will be ascertained by the Examining Committee of the Research Doctorate course according to the current laws in Italy and in the Country where the qualification was issued and in compliance with the treaties and international agreements concerning the recognition of qualifications for the continuation of higher education.

Candidates graduated abroad, participating in the selection for reserved positions, should make an explicit request in their application form.

#### Description and objectives of the course

This Ph.D. course, with an international vocation, in "Civil, Environmental and Safety Engineering" represents the natural completion of the study programs offered by the two offices. In particular, the training objectives are aimed at advancing knowledge: design, management, control, security and monitoring of infrastructures and civil and industrial structures that interact with the environment and the territory;— the basic sciences, technologies and complex systems serving the civil and environmental engineering sector, the production of energy from renewable sources and new materials.— The training objective is the transfer of knowledge on specific topics of Civil, Environmental and Safety Engineering to train highly specialized figures able to face complex research or applicative themes. For the interdisciplinary nature of the issues, the doctorate is organized into training courses, with general and specialized courses, aimed at transferring basic knowledge of each subject area, during the 1st year and the development of specific research topics, the subject of the theses of doctorate, during the 2nd and 3rd year. The training will be completed by experiences in the laboratories of the Departments of the convention venues and with research periods abroad at prestigious international institutions.

#### Employment and career opportunities provided

The Ph.D. program has as main motivation the employment one providing skills for a profitable integration into the labor market or research contributing to the growth of the competitiveness of the area in which the intervention operates. The "Civil Engineering" training program provides employment opportunities in geotechnical, hydraulic, structural and civil engineering engineering, training experts in planning, planning, management, control and monitoring. The occupational fields of reference are public administrations and the world of engineering professions. The training course "Environmental Engineering" provides employment opportunities in local engineering and environmental protection and contributes to the training of experts in the design, management and control of sustainable infrastructure works and systems and materials with low environmental impact, systems for control, protection and management of the territory, to monitor and mitigate risks. The "Safety Engineering" training program foresees employment opportunities in the materials, energy, monitoring and control sectors, forming experts in the study of innovative materials, in the production of low impact energy and from renewable sources, in the planning and management of complex systems and in the design and management of environmental monitoring networks.

#### Description of the training activities

Linguistics	It is planned to organize, in agreement with the other curricula and the other University doctorates, the linguistic improvement activities required by article 4, paragraph 1, lett. f). All doctoral students will be encouraged to take exams that allow them to obtain internationally recognized certificates.
Informatics	It is planned to organize, in agreement with the other curricula and other University doctorates, computer training activities (courses and / or seminars) on operating systems, programming also for objects and advanced / integrated programming languages. The following departments of the following software packages are supplied: AnsysMechanical, Aqua, Mike21, LitPack, Bladed, Abaqus, Adama, Aztec Suite, Comsol, Ensoft, Geomarc, Flac2d, Plaxis 2d & 3d, Proshake, HEC-HMS, HEC-RAS, FLO -2D, Microwave.
Research management, knowledge of research systems and funding systems	It is planned to organize, in agreement with the other curricula and other University doctorates, training activities in the field of research management and knowledge of European and international research systems, also with the participation of external teachers (courses and / or seminars).
Exploitation of research results and intellectual property	It is planned to organize, in agreement with the other University doctorates, training activities on the exploitation of research results and intellectual property, also with the participation of external teachers (courses and / or seminars)

#### Documents to be attached

Necessary documentation to be included in pdf format, in the application under penalty of exclusion:

- a signed photocopy of a valid document of identity;
- curriculum vitae:

 research project developed by the candidate (that is not binding for the subsequent assignment of the doctoral thesis);

#### for candidates already in possession of the qualification:

Self-certification, with the date and signature, the indication for the required qualification: the Italian
University that issued it, the type of degree, the denomination of the degree course, the final
evaluation, the list of examinations with the relevant marks and the credits (CFU) acquired where
needed;

Self-certification may also use:

- European Union citizens;
- NON European Union citizens with residency permit in Italy regarding only the status, personal qualities and facts certified by Italian public bodies (specifically: a qualification obtained at an Italian University).

European Union and NON European Union citizens who are in possession of foreign qualification/s obtained in a European Union and/or Non European Union country must attach a copy of the certificate/s of academic qualifications (Bachelor's and Master's degree) obtained from which are deduced the duration of the Degree course, the list of the examinations taken with the relevant mark, the name of the University who has issued the qualification, the date of the qualification and the final evaluation, with the relevant translation in the Italian or English language, care of and under the responsibility of the declarant, regularly dated and signed;

Master or specialist or old system degree thesis.

#### for candidates not yet in possession of qualification (undergraduates):

 Self-certification, signed and dated, indicating for the qualification: the name of University, degree, designation of the degree course, list the courses attended with individual results and indication of credits earned when provided:

#### Additional titles

- Publications
- Work experiences
- Experiences in research activities
- Other relevant qualification in possession of the candidate

#### **EVALUATION CRITERIA**

#### 1. Titles

For the evaluation of qualifications, the maximum is 25/100 points

#### Suitable titles are:

- Master degree or other similar degree;
- academic carrier (exams grade, final grade);
- eventual publications;
- eventual professional experiences;
- eventual experiences in research activities:

- other relevant experiences
- · candidate research project;
- curriculum vitae.

#### 2. Examination

The examination consists of written and oral tests.

The <u>written test</u> is aimed at ascertaining the theoretical, scientific and practical knowledge of the candidate on topics relevant to the selected curricula of the Ph.D course. The written test is also aimed at ascertaining the candidate's ability to analyze, develop and describe the main problems related to the research activities in the topics that characterize the selected curricula of the Ph.D course.

The maximum score attributable the written test is **40**/100 points, with a minimum of 25/100 points required to be admitted to the oral test.

The <u>oral test</u> in an interview aimed to assess the knowledge, skills, aptitude for scientific research, and the motivations of the candidates. The interview includes also the formal presentation of the research project proposed by the candidate. During the oral examination the knowledge of the English language will be tested.

The maximum score attributable to the interview will be **35**/100 points, with a minimum of 20/100.

For students graduated in foreign universities the examination consists of an only oral test.

For foreign students, an online oral test (i.e. video-conference interview by means of a specific software) can be performed if requited, and adequately motivated, by the candidate during the submission of the application. In this case the candidate will be identified by the examination commission using the same identity document attached to the application submitted by the candidate.

Minimum overall assessment to be considered eligible: 60/100 points

Only for candidates residing abroad, the payment of the contribution for the participation to selections can be paid by bank transfer on the - account IBAN:IT 16W 02008 16511 000300029177 SWIFT BIC CODE UNCRITM1K66name of the University of Messina , specifying the reason for payment as indicated below " < full name of applicant> participation doctoral contribution in "Civil, environmental and security engineering".

The candidates from the developing countries are exempted from the payment of the contribution mentioned above as defined in ministerial decree n°594 of August 1st, 2014.

The receipt of the transfer must be carefully preserved and exhibited by the candidate in case of request.



#### PUBLIC COMPETITION, BY QUALIFICATIONS AND EXAMINATIONS, FOR ADMISSION TO THE RESEARCH DOCTORATE COURSES - 34th CYCLE

#### **ATTACHMENT N° 7**

Research doctorate in **Engineering and Chemistry of Materials and of Constructions** 

Coordinator Prof. Signorino Galvagno

Email: galvagno@unime.it

Positions with scholarship **5 UNIME** 

Positions without scholarship 1

Required degrees LM-4 Architecture and building engineering-architecture

LM-4 c.u. Architecture and building engineering-architecture (five-year)

LM-13 Pharmacy and industrial pharmacy

LM-17 Physics

LM-20 Aerospace and astronautics engineering

LM-21 Biomedical Engineering LM-22 Chemical Engineering LM-23 Civil Engineering

LM-24 Engineering of building systems

LM-25 Automation engineering LM-26 Safety Engineering

LM-27 Telecommunications Engineering

LM-28 Electrical Engineering LM-29 Electronic Engineering

LM-30 Energy and nuclear engineering LM-31 Management Engineering LM-32 Computer Engineering LM-33 Mechanical Engineering

LM-34 Naval Engineering

LM-35 Engineering for the environment and the territory

LM-40 Mathematics

LM-53 Materials science and engineering

LM-54 Chemical Sciences

LM-71 Sciences and technologies of industrial chemistry 4 / S (specialist in architecture and construction engineering)

14 / S (specialist in pharmacy and industrial pharmacy)

20 / S (specialist in physics)

26 / S (specialist in biomedical engineering) 27 / S (specialists in chemical engineering) 28 / S (specialist in civil engineering)

- 29 / S (specialist in automation engineering)
- 30 / S (specialist in telecommunications engineering)
- 31 / S (specialist in electrical engineering)
- 32 / S (specialist in electronic engineering)
- 33 / S (specialist in energy and nuclear engineering)
- 34 / S (specialists in management engineering)
- 35 / S (specialist in computer engineering)
- 36 / S (specialists in mechanical engineering)
- 37 / S (specialist in naval engineering)
- 38 / S (engineering specialists for the environment and the territory)
- 45 / S (specialist in mathematics)
- 61 / S (specialists in materials science and engineering)
- 62 / S (specialists in chemical sciences)

## Requirements for foreign students

Knowledge of Italian or English language.

The suitability of the foreign qualification will be ascertained by the Examining Committee of the Research Doctorate course according to the current laws in Italy and in the Country where the qualification was issued and in compliance with the treaties and international agreements concerning the recognition of qualifications for the continuation of higher education.

## Description and objectives of the course

This Ph.D. course represents the evolution of the previous Ph.D. course in "Engineering and Materials Chemistry" of the University of Messina. The main objective is to train qualified professionals having technical and methodological skills for sustainable innovation and competitive demands required by the manufacturing system. The objective is pursued through an education covering the strategic fields of engineering and chemistry together with a multi-disciplinary research on innovation and development of new products and processes.

The research areas are concentrated in key enabling technologies combining theoretical, scientific and design aspects, in particular:

- a) advanced materials and technologies for industrial, environmental and energetic fields. Development of advanced materials with best performance and innovative applications. Design and development of technologies for energy and environmental control.
- b) Advanced experimental methods useful to production systems and processes. Supporting technologies (such as characterization and non-destructive testing) for the development of materials, components and advanced and smart embedded systems.
- c) Numerical modeling of functional devices and structures. Predictive modeling applied to engineering and materials sciences.

## Employment and career opportunities provided

Ph.D. students will become experts of high level with wide technical, scientific and methodological skills able to bring innovation in the manufacturing and construction field. The professional will be able to lead research groups working in the public or private sector as well as to hold highly professional positions in many productive sectors with high technological level such as manufacturing, processing, mechanical, electronics, energy production and conversion, construction industries. Ph.D. students reaching research

results with a high degree of innovation will also be strongly encouraged towards entrepreneurial activity through academic spin-offs.

Ph.D. graduate will possess professional characteristics of Production Manager, R&D Manager, Maintenance Manager, Specialist in new materials development, Specialist in structures control.

## <u>Description of the training activities</u>

Linguistics	It is planned to organize language improvement activities in agreement with the other doctorates of the University. All doctoral students will be encouraged to take exams that allow them to obtain internationally recognized certificates. The doctoral students will also be able to perform research and in-depth studies on bibliographic sources in English, to express themselves in international conferences and to write reports and technical-scientific works in English.				
Informatics	It is planned to organize, in agreement with the other University doctorates, computer training activities (courses and / or seminars) on operating systems, programming also to objects and advanced / integrated programming languages.  Ph.D. students will also have the opportunity to participate in seminars and refresher / training courses organized by companies supplying scientific equipment and computer support to research activities.				
Research management, knowledge of research systems and funding systems	It is planned to organize, in agreement with the other University doctorates, training activities in the field of research management and knowledge of European and international research systems, also with the participation of external teachers (courses and / or seminars) and / or using the skills present within the CARECI.  Ph.D. students will also be involved in research projects, sharing methodologies, objectives, results and methods of access to funding.				
Exploitation of research results and intellectual property	It is planned to organize, in agreement with the other University doctorates, training activities on the exploitation of research results and intellectual property, also with the participation of external teachers (courses and / or seminars). Ph.D. students will be encouraged to enhance the results of their research in the form of presentations in seminars, workshops, both national and international conferences and publication in international journals.				

## Documents to be attached

Necessary documentation to be included in pdf format, in the application under penalty of exclusion:

- a signed photocopy of a valid document of identity;
- curriculum vitae;
- research project developed by the candidate (that is not binding for the subsequent assignment of the doctoral thesis);

## for candidates already in possession of the qualification:

Self-certification, with the date and signature, the indication for the required qualification: the Italian
University that issued it, the type of degree, the denomination of the degree course, the final
evaluation, the list of examinations with the relevant marks and the credits (CFU) acquired where
needed:

Self-certification may also use:

- European Union citizens;
- NON European Union citizens with residency permit in Italy regarding only the status, personal qualities and facts certified by Italian public bodies (specifically: a qualification obtained at an Italian University).

European Union and NON European Union citizens who are in possession of foreign qualification/s obtained in a European Union and/or Non European Union country must attach a copy of the certificate/s of academic qualifications (Bachelor's and Master's degree) obtained from which are deduced the duration of the Degree course, the list of the examinations taken with the relevant mark, the name of the University who has issued the qualification, the date of the qualification and the final evaluation, with the relevant translation in the Italian or English language, care of and under the responsibility of the declarant, regularly dated and signed;

Master or specialist or old system degree thesis.

## for candidates not yet in possession of qualification (undergraduates):

 Self-certification, signed and dated, indicating for the qualification: the name of University, degree, designation of the degree course, list the courses attended with individual results and indication of credits earned when provided;

## Additional titles

- Publications
- Work experience
- Other qualification in possession of the candidate

## **Evaluation criteria**

## 1. Titles

For the evaluation of qualifications the maximum is 30/100 points

## Suitable titles are:

- Master degree or other similar degree;
- academic carrier (exams grade, final grade);
- eventual publications:
- eventual professional experience and others;
- candidate research project;
- curriculum vitae.

## 2. Oral Exam

The oral exam consists in an interview designed to assess the knowledge, skills, aptitude for scientific research, and the motivations of the candidates.

The interview is designed to test the candidates' knowledge on topics relating to the educational and methodological trends of the Doctoral course and includes the formal presentation of the proposed research project. During the oral examination the knowledge of the English language will be tested Foreign students are required to have a good knowledge of Italian or the English language Maximum overall grade for the oral examination is 70/100 points, with the minimum evaluation for a pass in the examination of 42/100 points. Candidates, who have a valid and motivated request, can do the oral examination via video-conference by means of specific software.

## Minimum overall assessment to be considered eligible: 60/100 points

Only for candidates residing abroad, the payment of the contribution for the participation to selections can be paid by bank transfer on the - account IBAN: IT 16W 02008 16511 000300029177 SWIFT BIC CODE UNCRITM1K66name of the University of Messina , specifying the reason for payment as indicated below " < full name of applicant> participation doctoral contribution in "Engineering and Chemistry of Materials and of Constructions".

The candidates from the developing countries are exempted from the payment of the contribution mentioned above as defined in ministerial decree n°594 of August 1st, 2014.

The receipt of the transfer must be carefully preserved and exhibited by the candidate in case of request.



## PUBLIC COMPETITION, BY QUALIFICATIONS AND EXAMINATIONS, FOR ADMISSION TO THE RESEARCH DOCTORATE COURSES - 34th CYCLE

## **ATTACHMENT N° 8**

<u>Research doctorate in</u> Clinical and Experimental Biomedical Sciences

<u>Coordinator</u> Prof. Edoardo Spina

email: <a href="mailto:espina@unime.it">espina@unime.it</a>

Positions with scholarship

1 AOU Policlinico

4 UNIME

<u>Positions without</u> scholarship **1** 

Required degrees LM-6 Biology;

LM- 9 Medical, Veterinary and Pharmaceutical Biotechnology;

LM- 13 Pharmacy and industrial pharmacy

LM-21 Biomedical Engineering LM-41 Medicine and Surgery; LM-42 Veterinary Medicine:

LM-46 Dentistry and Dental Implants;

LM-51 Psychology

## Requirements for foreign students

The appropriateness of degrees and other certifications will be validated by an examination commission for the doctoral course with respect to the related norms in Italy and the countries where such certification was issued, in accordance with International agreements or conventions.

## Description and objectives of the course

The research Ph.D. programme in Biomedical, Clinical and Experimental Medicine will offer training in advanced scientific research and in methods used in the biomedical field. The main obejctive of this course involves the integration of scientific knowledge of biology with the scientific aspect of clinical medicine. The discoveries made in the biomedical field in the last years highlight the importance of a multidisciplinary approach that allows the direct translation for molecular and experimental medicine to the clinical setting. In

this context, it is necessary to guarantee the chance of a learning translational and interdisciplinary approaches to young doctors and new graduates in the field of biomedicine, with particular focus on aetiology of disease with the aim of improving diagnosis and therapy.

## Employment and career opportunities provided

The training course will allow the student to acquire the professional skills and the ability to perform autonomous and critical issues integrated into the field of biomedical research, both basic and applied to the clinic, to be carried out in the university or within other institutions research, both public and private. Therefore, possible professional outlets of the doctorate are placed in various areas of scientific research: University, for basic and applied experimental research; Hospital companies, for purposes of applied research in the health field and specialized laboratory diagnostics; Institutes of Hospitalization and Care with Scientific Character (IRCCS) and biomedical research centers, engaged in the realization of projects that make use of the most advanced technologies; Public bodies of applied research (es C.N.R.); Pharmaceutical companies that invest in the innovation of new technologies; Private laboratories performing applied research; Neuropsychological rehabilitation centers and social and health services.

## Description of training activities

Language	During the course, English will gradually become the main language used. Seminars, journal clubs and thesis discussion will take place in English. Foreign students are expected to enroll in this doctoral programme; this should encourage the use of the English language further.			
Informatics	The availability of indiviudal personal computers with internet connection will promote better acquaintance with informatics tools. In addition, bioinformatics will be an essential part of the training provided.			
Research, research systems and financial management and the related financial systems will be taught students on site, since the training will be based on individual projects projects must have a clear definition and objective in line with a resources. These resources will be available from lecturers/researche are grant-winners and who ensure the financial feasibility of research are				
Maximal use of research results and intellectual property	The exploitation of research results and intellectual properties can be achieved through the presentation of patent applications on the projects carried out.			

## Documents to be attached

Necessary documentation to be included in pdf format, in the application under penalty of exclusion:

- a signed photocopy of a valid document of identity;
- curriculum vitae;
- research project–proposal written by the applicant in English language (that is not binding for the subsequent assignment of the doctoral thesis).

The research project proposal has to have the following information:

- Title (The title must be no longer that 250 characters);

- Description (The description must be no longer than 1000 words);
- Background
- Aim
- Materials and Methods
- Expected results and publications

## for candidates already in possession of the qualification:

- Self-certification, with the date and signature, the indication for the required qualification: the Italian University that issued it, the type of degree, the denomination of the degree course, the final evaluation, the list of examinations with the relevant marks and the credits (CFU) acquired where needed; Self-certification may also use:
  - European Union citizens;
  - NON European Union citizens with residency permit in Italy regarding only the status, personal qualities and facts certified by Italian public bodies (specifically: a qualification obtained at an Italian University).

European Union and NON European Union citizens who are in possession of foreign qualification/s obtained in a European Union and/or Non European Union country must attach a copy of the certificate/s of academic qualifications (Bachelor's and Master's degree) obtained from which are deduced the duration of the Degree course, the list of the examinations taken with the relevant mark, the name of the University who has issued the qualification, the date of the qualification and the final evaluation, with the relevant translation in the Italian or English language, care of and under the responsibility of the declarant, regularly dated and signed;

Master or specialist or old system degree thesis.

## for candidates not yet in possession of qualification (undergraduates):

 Self-certification, signed and dated, indicating for the qualification: the name of University, degree, designation of the degree course, list the courses attended with individual results and indication of credits earned when provided;

## Additional titles:

- Publications
- Work experience
- Other qualification in possession of the candidate

#### **Evaluation criteria**

## 1. Titles

For the evaluation of qualifications the maximum is 30/100 points

#### Suitable titles are:

- Master degree or other similar degree;
- academic carrier (exams grade, final grade);
- eventual publications;
- eventual professional experience and others;

- candidate research project;
- curriculum vitae.

## 2. Oral Exam

The oral exam consists in an interview designed to assess the knowledge, skills, aptitude for scientific research, and the motivations of the candidates. The interview is designed to test the candidates' knowledge on topics relating to the educational and methodological trends of the Doctoral course and includes the formal presentation of the proposed research project. During the oral examination the knowledge of the English language will be tested .

Maximum overall grade for the oral examination is 70/100 points, with the minimum evaluation for a pass in the examination of 42/100 points.

Candidates, who have a valid and motivated request, can do the oral examination via video-conference by means of specific software.

## Minimum overall assessment to be considered eligible: 60/100 points

Only for candidates residing abroad, the payment of the contribution for the participation to selections can be paid by bank transfer on the - account IBAN: IT 16W 02008 16511 000300029177 SWIFT BIC CODE UNCRITM1K66name of the University of Messina , specifying the reason for payment as indicated below " < full name of applicant> participation doctoral contribution in "Biomedical, Clinical and Experimental Medicine".

The candidates from the developing countries are exempted from the payment of the contribution mentioned above as defined in ministerial decree n°594 of August 1st, 2014.

The receipt of the transfer must be carefully preserved and exhibited by the candidate in case of request.



# PUBLIC COMPETITION, BY QUALIFICATIONS AND EXAMINATIONS, FOR ADMISSION TO THE RESEARCH DOCTORATE COURSES - 34th CYCLE

## **ATTACHMENT N° 9**

Research doctorate in Chemical Sciences

<u>Curricula</u> Two curricula are available.

The candidate has to indicate the curriculum he/she is applying for .

1. Design, synthesis, analysis and properties of functional molecular systems:

2. Pharmaceutical, nutraceutical and food chemistry and chemical technologies.

Coordinator Prof. Sebastiano Campagna,

email: campagna@unime.it

<u>Positions with scholarship</u> **5 UNIME** 

Positions without scholarship 1

<u>Required degrees</u> All Master's, Specialist and Old Order degrees.

## Requirements for foreign students

To know italian or english

The elegibility of the title (Master degree or other) will be checked by the Commission within the rules of the Italian law and of the law of the Country in which the title has been released. It will also be considered the international agreements as far as the academic titles are concerned.

## Description and objectives of the course

The aim of the Ph.D. course in Chemical Sciences is to prepare Ph.D. laureates capable to work at the top level in industries, academic institutes, and public or private agencies and companies. The three year course foresees a high standard level both from theoretical and experimental viewpoints. The main field of research (topics) are innovative materials and chemical systems, nanotechnologies, food chemistry, nutraceutical science, energy conversion, information technology, pharmaceutical chemistry, analytical determination of natural and artificial products, supramolecular chemistry, structural chemistry, solution thermodynamics, environmental chemistry.

The research activity encompassed the following italian SSD, according to MIUR: CHIM/01, CHIM/02, CHIM/03, CHIM/06, BIO/10, CHIM/08, CHIM/09, CHIM/10, CHIM/12.

## Employments and career opportunities provided

The course is aimed to prepare Ph.D. laureates with high level of autonomy and research ability, even at the organization level, within several chemical research and work fields. The Ph.D. laureate will have experience on a large range of work activities: basic and applied research, industrial activities, teaching at high level, etc.

## Description of the training activities

Linguistics	Research time spent abroad (typically, four months on average for each Ph.D. student out of the overall 36 months)			
Informatics	The aquisition of informatic skills is inherent to the course, as it is needed for the research activity.			
Research management, knowledge of research systems and funding systems	The students will be given suitable protocols for research design and activity, as well as on the writing and management of research projects.			
Exploitation of research results and intellectual property	Students will have to report on their scientific results at conferences and seminars. The results will be also published in international perrreviewed scientific journals.			

## Documents to be attached

# Compulsory Documents to be included as pdf files. The absence of any of the following documents will be reason for exclusion:

- scanned copy of an ID (or passport) with photo, valid according to expiration data reported on it;
- curriculum vitae:

## for the candidates already having the eligibility title:

- self-certification, including date and signature, stating the title grade. The self-certification should also state the University (or other) that released the degree, the degree denomination, degree date, final comprehensive grade, and grade for any of the exams, when available;
   Self-certifications can used also by:
  - European Union citizens:
  - citizens of non-European Union Countries, regularly resident in Italy, for titles obtained according to Italian law (specifically for eligible titles obtained from an Italian University).

The candidates, EU citizens and non–EU citizens, with a title obtained not in Italy and obtained in non-EU Countries must include the title (Bachelor's and Master's degree) from which the duration of the course can be understood, plus the final comprehensive grade, and grade for any of the exams, the University from which the title has been released, the data, and the translation in Italian or in English (if the title is not in Italian or English), upon the responsability of the declarant, with date and signature of declarant.

These candidates will be admitted to the selection under judgment and will eventually be excluded from the selection and Ph.D. course when the title will result to be uneligible for the call.

Master thesis (or analogous thesis);

## for the candidates who do not have the eligible title yet, but it is supposed they will have it soon:

• self-certification, dated and signed, indicating the title they are going to receive; University in which they are enrolled, type of degree, denomination, list of exams with obtained grade, when appropriate /available;

## Other titles to be eventually included

- scientific publications;
- former professional experience;
- any other title the candidate could have;

## **Evaluation criteria**

#### 1.Titles

Maximum: 30/100. Suitable titles are:

- Master degree or other similar degree;
- academic carrier (final grade));
- publications;
- professional experience and others;
- curriculum vitae.

#### 2. Exams: written and oral tests

## Written:

<u>The written test</u> consists in a composition whose topic is proposed by the Commission, aimed to evaluate the preparation, the ability and attitude to scientific research. The composition can be made in italian or in english.

Maximum: 40/100. It is also required a minimum evaluation of 24/100, for considering the exam passed. If an evaluation lower than 24/100 is obtained, the candidate is not eligible for the Ph.D. course.

## Oral

 $\underline{\phantom{a}}$ 

<u>The oral test</u> – in italian or in english, upon candidate request – is a colloquium aimed to evaluate the preparation, the ability and attitude to scientific research of the candidate, with particular regard to the Ph.D. topics.

During the oral test the level of understanding of the english language (if the oral test is not made in english) will be tested.

Maximum: 30/100. It is also required a minimum evaluation of 18/100, for considering the exam passed. If an evaluation lower than 18/100 is obtained, the candidate is not eligible for the Ph.D. course **For foreign students the knowledge of Italian or English is requested.** 

The oral exam, upon motivated request, can be made telematically, using suitable specific softwares.

There is a mimimum evaluation required for titles+exams, that is 60/100. If a candidate does not obtain at least 60/100 as the sum of his/her title+exams, he/she is not eligible for the Ph.D. course.

Only for the candidates having legal residence abroad, it is compulsory to pay the participation fee by bank transfer to the account IT 16W 02008 16511 000300029177; BIC SWIFT Code: UNCRITM1K66, name of the University of Messina, specifying the reason for payment as indicated below " < full name of applicant> participation doctoral contribution in Chemical Sciences. The candidates from the developing countries are exempted from the payment of the contribution mentioned above as defined in ministerial decree n°594 of August 1st, 2014.

The receipt of the transfer must be carefully preserved and exhibited by the candidate in case of request.



# PUBLIC COMPETITION, BY QUALIFICATIONS AND EXAMINATIONS, FOR ADMISSION TO THE RESEARCH DOCTORATE COURSES - 34th CYCLE

## **ATTACHMENT 10**

<u>Research doctorate in</u> Cognitive Sciences

<u>Curricula</u> In the application form the candidate must indicate the curriculum of the

course for which he/she intends to participate

1. Philosophy of Language and of the Mind, Psychology and Science of

Evolution;

2. Theories and Technologies of Social and Territorial media and the

Performing Arts;

<u>Coordinator</u> Prof. Antonino Pennisi

email antonio.pennisi@unime.it

<u>Positions with scholarship</u> **8 UNIME** 

<u>Positions without scholarship</u> **2** 

Required degree All Master's, Specialist and Old Order degrees.

## Requirements for foreign students

Knowledge of the Italian or English language.

The suitability of the foreign educational qualification will be verified by the Examining Committee of the Ph.D. course according to the current laws in Italy and in the Country where the educational qualification was issued and in compliance with the Treaties and International Agreements concerning the recognition of qualifications for the continuation of higher education.

## Description and objectives of the Ph.D. course

The Ph.D. Course has been activated since the XVIII cycle and proposes a wide variety education and training starting from the "cognitive turn". Cognitive sciences represent in fact a field of studies that is not referred to specific sectors but to research contexts corresponding to complex and intrinsically multidisciplinary problems. The common object of study is the nature and the functioning of the mind in whatever either natural or artificial system, but it is here investigated by means of multiple approaches. Philosophy, psychology, neurosciences, linguistics and computer science make up the foundations of the classic cognitivism. More recently, it has been extended to social and evolutionary sciences, producing new disciplines such as bioethics, biogeography and cultural geography, biopolitics, neuroeconomics, neuroesthetics, cognitive ethology, neuropedagogy: all objectives of the Ph.D. education here proposed. More than a set of contents, neurosciences can be recognized in an interdisciplinary method founded on

the integration among the rigour of the natural and technological sciences and the interpretative spectrum of the human sciences, adopted as fundamental educational objective of the Ph.D. course. The subdivision of the two curricula (naturalistic-philosophic and social-technological) that are coherent for the contextualistic and methodological horizon, sketches an educational picture completely coherent with the ERC SH4 sector "The Human Mind and its complexity: cognition, psychology, linguistics, philosophy and education".

## Expected career and professional opportunities

Ph.D.s in cognitive sciences find employment both in the fields of theoretical and applied research in each of the contexts in which the cognitive sciences are constituted, including neurosciences, linguistics, artificial intelligence, philosophy and psychology, both in the context of rehabilitation and healthcare as well as in the field of the "cognitive artifacts" technology, including all devices that aim to enhance the human cognitive capabilities. The aforementioned research areas are among the most convenient ones considering the opportunities of today's panorama. Although the neurosciences, bioengineering and robotics and other experiences of a certain social recognition are more practised abroad, they also represent in Italy real job opportunities.

The cognitive rehabilitation field has already been developed and probably it will do more in the future, more and more that the social awareness toward the disability and methods for its treatment will increase. In the end, the use of technologies of "cognitive artifacts" is appearing as one of high technology sectors more capable to guarantee job opportunities: the establishment of web ontologies, the simulation of the markets' behaviour, the designing of ergonomic artifacts are some examples. To launch Ph.D. students to take an employment way towards the described directions, the Ph.D. course has undertaken collaboration protocols, internships and stages with some companies.

## Description of the training activity

Linguistics	<ul> <li>English laboratories with 3 native speakers with different levels of advancement</li> <li>Specific scientific English training and its use in SBA's bibliographic databases</li> <li>Abroad period for research and linguistics improvement</li> </ul>					
Computer Science	<ul> <li>Overview on the utilization of computer sciences as vehicle of knowledge, starting from relational databases, through logic knowledge-base, and concluding with web oriented systems of ontology and semantic organization</li> <li>Introduction to the Python language and its data structures, classes and main methods, hints on modules that are more relevant in the cognitive field</li> <li>Course of statistic for the experimental research</li> </ul>					
Management of the research, of the knowledge of research systems and of the funding systems	research, of the nowledge of research restems and of the stages on contents and the procedures to get Grants from the Europe Research Council, specifically related to the multidisciplinary research EF SH4 "The Human Mind and its complexity: cognition, psychology, linguistic philosophy and education"					

Valorization of			
research results and			
intellectual ownership			

The Ph.D. course has specific forms for the valorization of research results:

- 1) International journal published by "Il Mulino" (Bologna): Networks, Knowledges, Languages: Italian Journal of Cognitive Sciences;
- 2) International series of monographs "Perspectives in Pragmatics, Philosophy and Psychology", Springer (Dordrecht-Heidelberg-New York-London)
- Specialized publisher CoRiSco (Italian coordination of the research in cognitive sciences) and Annual meeting of CoDiSco (Italian coordination of Ph.D. Courses in cognitive sciences)
- 4) International Center for Applied and Theoretical Research in Cognitive Sciences (CRISCAT)

## Documents to be attached

# Documents that must be mandatory attached to the application form in pdf format, penalty the exclusion:

- scanned copy of a valid identity document with photo;
- curriculum vitae:
- research project written by the candidate, maximum 2 A4 pages (that does not represent a constraint for the following assignment of the Ph.D. thesis).

## for candidates already having the eligibility educational qualification:

- self-certification, including date and signature, stating the educational qualification: the Italian University that has released the degree, degree denomination, degree date, final grade, list of exams with corresponding grades and CFU when available: Self-certifications can be also used by:
  - European Union citizens:
  - citizens of non-European Union Countries, regularly resident in Italy, limited to status, personal qualities and episodes that can be certified by public Italian subjects (more specifically an educational qualification obtained from an Italian University).

Candidates, EU citizens and non–EU citizens, with a foreign educational qualification obtained in non-EU Countries must attach the certification of degree (Bachelor's and Master's degree) that reports the duration of the course, the list of exams with corresponding grades, the University that has released the educational qualification, the date of achievement and the final grade with the translation in the Italian or English language, written by the declarant, upon his/her responsibility, regularly dated and signed. Such candidates will be conditionally admitted to the selection and they will be excluded from the selection of the Ph.D. course, after verification, in the case the educational qualification results ineligible for the call and it does not allows, therefore, the enrollment to the Ph.D. course.

Master's or specialist degree thesis (or analogous thesis);

## for the candidates who have not achieved the eligible educational course yet (undergraduates):

self-certification, dated and signed, indicating for the educational qualification; University in which they
are enrolled, type of degree, denomination of the degree course, list of exams with obtained grade and
corresponding obtained CFU;

## Further qualifications that have to be attached to the application form if owned by the candidate:

- Publications:
- Work experiences;
- other qualifications owned by the candidate.

## **Evaluation criteria of qualifications and exams**

## 1. Qualifications

The maximum score attributable to qualifications will be 30/100 points.

Assessable qualifications are:

- Master's, Specialist, Old Order degree thesis;
- academic carrier (exams' grades, final grade);
- possible publications;
- possible professional experiences and other qualifications owned by the candidate;
- research project elaborated by the candidate, that does not represent a constraint for the following assignment of the Ph.D. thesis.
- curriculum vitae.

## 2. Exams: oral examination

It consists in an interview intended to verify preparation, ability, aptitude for scientific research, a complete mastery of bibliographic tools specific to cognitive sciences and the professional motivation of candidates. The interview is aimed at verifying the knowledges of candidates in the one or more areas of cognitive sciences (language sciences, philosophical sciences, neuro-pedagogy; neurosciences and sciences of the mind; information sciences; I.A. and media technologies; cognitive oriented social and territorial sciences, biopolitics) with particular regard to the theoretical and/or experimental methodologies of the two curricula of the Ph.D. course: (1) Philosophy of Language and of the Mind, Psychology and Science of Evolution; (2) Theories and Technologies of Social and Territorial media and the Performing Arts. It will also be evaluated the candidate's general methodological ability, and, in particular, his/her aptitude towards experimental methodologies connected with the proposed research project.

During the oral examination, the knowledge of the **English** language will be verified. **For foreign students the knowledge of the Italian or English language is required.** The maximum score that can be assigned to the oral examination is 70/100 points and it will considered passed with a minimum assessment of 42/100 points.

Minimal final assessment in order to be considered admissible: 60/100 points.

Only for candidates having legal residence abroad, it is compulsory to pay the participation fee by bank transfer to the account number: IT 16W 02008 16511 000300029177; BIC SWIFT Code: UNCRITM1K66, named to Università degli Studi di Messina, specifying the reason as following: "<family name and given name of the candidate> Contributo partecipazione dottorato in SCIENZE COGNITIVE". The candidates from the developing countries are exempted from the payment of the contribution mentioned above as defined in ministerial decree n°594 of August 1st, 2014.

The bank transfer receipt must be carefully kept by the candidate and shown if requested.



# PUBLIC COMPETITION, BY QUALIFICATIONS AND EXAMINATIONS, FOR ADMISSION TO THE RESEARCH DOCTORATE COURSES - 34th CYCLE

## **ATTACHMENT N° 11**

Curricula In the application form the candidate will have to specify the curriculum and topics

of the Ph.D. course for which he/she intends to participate:

1. Organization of the dominance and safeguard of the fundamental rights in the constitutional and historical-philosophic perspective;

Topics: 1.a) Codification and Constitution between tradition and innovation;

1.b) Human Righs and "ius migrandi";

1.c) New technologies and rights of individuals.

2. Civil Law. People and market on the internal and European legal rights;

Topics: 2.a) Protection of fundamental human values in private property law;

2.b) New technologies and rights of individuals.

3. Penal safeguard and person guarantee in internal, compared, European and international jurisprudence: substantial and processual profiles;

Topics: 3.a) Globalization and protection of fundamental rights: principles of substantive and procedural law;

3.b) Human Righs and "ius migrandi";

3.c) New technologies and rights of individuals.

4. Enterprise, transports and public administration.

Topics: 4.a) Management of essential public services: public,

contractual, corporate, fiscal and transport aspects;

<u>Coordinator</u> Prof.ssa Maria Piera Rizzo

Legal Sciences

email: mprizzo@unime.it

Positions with scholarship 5

Ph.D. Course in

Positions without scholarship 1

Required degree LMG/01 Class of master degrees in jurisprudence

LMG/01 Jurisprudence

22/S (specialistic in jurisprudence)

Degrees in jurisprudence (Old Regulation)

## Requirements for foreigner students

The suitability of the foreign educational qualification will be verified by the assessment Commission of the Ph.D. course in accordance with the regulations in force on the subject in Italy and in the country where the educational qualification itself has been granted and of the international treaties and agreements regarding the recognition of educational qualification for the continuations of studies.

## Description and objective of the Ph.D. cours

The Ph.D. course aims at providing to Ph.D. students a high specialistic education of interdisciplinary nature, within the reference area. The curricula aim to offer a global vision of the most evolved jurisprudential and doctrinal elaborations in the respective subject areas. Such a concern will require, as it has already been highlighted, a multidisciplinary approach, that is not limited to a single prospective (private, commercial, constitutional, penal, international, administrative, historical-philosophic) but that will aim to integrate different aspects in order to build Ph.D. culturally ready to accomplish further in-depth scientific studies and who are also able to undertake the freelance and to assume a commitment in national and supranational institutions.

The focus on the methodology represents a moment of special cohesiveness and, at the same time, of valorization of the respective peculiarities of the various sectors that are object of the research. Beyond of the same contexts, it is therefore prospected the acquisition of a rigorous legal method for the purpose of the identification of right ways for the interpretation and application of legal regulations.

## Expected career and professional opportunities

Academic career; forensic activity in all fields and <u>specifically</u> in civil, penal and administrative ones; preparation to open competitions for positions as functionary in EU and International bodies and Organizations; access to open competition for magistrature and notarial positions; employment in enterprises and bodies that operate in the specific sectors; employment in the public administration; In order to achieve such objectives, the Ph.D. student will accomplish also collaboration protocols with professional orders, public administrations and enterprises.

## Description of the training activity

Linguistic Didactic and seminary activities, which the Ph.D. students at attend, may be in English. Ph.D. program offers opportuniti linguistic proficiency.				
Computers science	Computer skills will be improved through the use of databases and computer sources. The Ph.D. program offers opportunities for computer literacy with dedicated training activities			
Management of the research, of the knowledge of research systems and of the funding systems	Research, carried out with the use of the Law department's library and, in general, with University libraries and structures, as well as computer science tools, aims to fulfill objectives, also of practical relevance in the logic of the safeguard of the territorial needs.  Moreover, Ph.D. program will aims to provide the knowledges required for the presentation of research projects in national, international and EU			
Valorization of research results and intellectual ownership	The results of the research will be leveraged by means of the publication in important national and international journals.			

## Documents to be attached:

# Documents that have to be mandatory attached to the application form in pdf format, penalty the exclusion:

- scanned copy of a valid identity document with photo;
- research project written by the candidate (that does not represent a constraint for the following assignment of the Ph.D. thesis);

## for candidates already having the eligibility education qualification:

- self-certification, including date and signature, stating the educational qualification: Italian University that has released the degree, degree denomination, degree date, final grade, list of exams with corresponding grades and CFU when available:
  - Self-certifications can be used also by:
  - European Union citizens;
  - citizens of non-European Union Countries, regularly resident in Italy, limited to status, personal
    qualities and episodes that can be certified by public Italian subjects (more specifically an
    educational qualification obtained from an Italian University).

The candidates, EU citizens and non–EU citizens, with a foreign educational qualification obtained in non-EU Countries must attach the certification of degree (Bachelor's and Master's degree) that reports the duration of the course, the list of exams with corresponding grade, the University that has released the educational qualification, the date of achievement and the final grade with the translation in the Italian or English language, written by the declarant, upon his/her responsibility, regularly dated and signed. Such candidates will be conditionally admitted to the selection and they will be excluded from the selection and Ph.D. course, after verification, in the case the educational qualification results ineligible for the call and it does not allows, therefore, the enrollment to the Ph.D. course.

Master's or specialist degree thesis (or analogous thesis);

## for the candidates who do not have achieved the eligible educational course yet (graduand):

• self-certification, dated and signed, indicating for the educational qualification; University in which they are enrolled, type of degree, denomination of the degree course, list of exams with obtained grade and corresponding obtained CFU;

## Other qualifications that can be included

- scientific publications;
- professional experiences;
- any other qualification owned by the candidate;
- curriculum vitae.

## **Evaluation criteria**

## 1. Qualifications

Maximum: 30/100.

Assessable qualifications are:

- research project elaborated by the candidate on a chosen topic, that does not represent a constraint for the following assignment of the Ph.D. thesis.
- Master's degree, Specialist degree or other similar degree;
- academic carrier (exams' grades, final grade);
- publications;
- professional experiences and other qualifications owned by the candidate;
- curriculum vitae.

## 2. Exams: written and oral examinations

## Written

It consists in a composition aimed at verifying the preparation, ability and attitude to the scientific research of candidates, taking into account the chosen topic and curriculum.

The maximum grade attributable to the written examination will be 40/100 points, and it will be passed with a minimal assessment of 24/100 points.

## Oral

It consists in a discussion - that can be done in English, French, German or Spanish upon a request by the candidate - that aims to assess the preparation, ability and attitude to the scientific research and motivations of candidates, relatively to the chosen Ph.D. curriculum. Furthermore, the discussion aims at verifying the knowledges of the candidates on the topics concerning the educational and methodological orientations of the Ph.D. student and it requires the formal presentation of the proposed research project. During the oral examination the knowledge of the language chosen by the candidate (**English, French, German or Spanish**), will be verified in case the examination will be held in Italian.

The maximum grade attributable to the oral examination will be 30/100 points, and it will be passed with a minimal assessment of 18/100 points. The oral examination, upon motivated request from the candidate, will be done in telematic mode by means of specific and adequate software.

Minimal final assessment in order to be considered admissible: 60/100 points.

Only for candidates residing abroad, the payment of the contribution for the participation to selections can be paid by bank transfer on the - account IBAN: IT 16W 02008 16511 000300029177; BIC SWIFT Code: UNCRITM1K66, name of the University of Messina, specifying the reason for payment as indicated below " < full name of applicant> participation doctoral contribution in LEGAL SCIENCES". The candidates from the developing countries are exempted from the payment of the contribution mentioned above as defined in the Ministerial Decree n° 594 of August 1st, 2014.

The receipt of the transfer must be carefully preserved and exhibited by the candidate in case of request.



# PUBLIC COMPETITION, BY QUALIFICATIONS AND EXAMINATIONS, FOR ADMISSION TO THE RESEARCH DOCTORATE COURSES - 34th CYCLE

## **ATTACHMENT N° 12**

Research doctorate in Historical, Archaeological and Philological Sciences

<u>Curricula</u> In the application form the candidate must indicate the curriculum of the

course for which he/she intends to participate

1. Ancient and Modern Philology

2. History and geography from the Middle Ages to the Contemporary Era;

3. Archaeology and Ancient History

<u>Coordinator</u> Prof. Vincenzo Fera,

email: fera@unime.it

Places granted with scholarship 7 UNIME

Research without scholarship 2

<u>Required degrees</u> LM-1 Cultural anthropology and ethnology

LM-2 Archeology

LM-5 Archiving and librarianship

LM-11 Sciences for the conservation of cultural heritage

LM-14 Modern Philology

LM-15 Philology, literature and history of antiquity

LM-19 Information and publishing systems

LM-39 Linguistics

LM-52 International relations

LM-62 Political Sciences

LM-64 Sciences of religions

LM-80 Geographical Sciences

LM-84 Historical Sciences

LM-14. Modern Philology (enabling A043)

LM-37. European modern languages and literatures e American (enabling A045)

1 / S (specialist in cultural anthropology ed ethnology)

2 / S (specialist in archeology)

5 / S (specialist in archival and librarianship)

13 / S (specialist in publishing, communication multimedia and journalism)

15 / S (specialist in philology and literature antiquity)

16 / S (specialists in modern philology)

22 / S (specialists in jurisprudence)

24 / S (specialist in computer science for the disciplines humanities)

40 / S (specialist in Italian language and culture)

44 / S (specialist in linguistics)

70 / S (specialists in political science)

72 / S (specialists in religious sciences)

93 / S (specialists in ancient history)

94 / S (specialists in contemporary history)

97 / S (specialists in medieval history)

98 / S (specialists in modern history)

99 / S (specialist in European studies)

102 / S (specialists in theory and techniques of the standardization and legal information)

LMG / 01 JURISPRUDENCE)

## Requirements for foreign students

- Knowledge of Italian language.
- Knowledge of English or French or German or Spanish language.

The suitability of the foreign qualification will be ascertained by the Examining Committee of the Research Doctorate course according to the current laws in Italy and in the Country where the qualification was issued and in compliance with the treaties and international agreements concerning the recognition of qualifications for the continuation of higher education.

## Description and objectives of the course

The Ph.D. course aims at training scholars for highly qualified specialist research, according to the state-of-the-art methodologies. The educational programme is wide and synergetic, thus offering substantial job prospects as well.

- The Ancient and Modern Philology course, which is focused on Old Greek, Latin and Italian languages and literatures, provides strong expertise in linguistics, prosody and metres, palaeography, textual criticism and more side-disciplines which are naturally needed by a correct research in the fields of philology, history of Italian (or Greek or Latin) language, literary criticism, within a well-built relationship between Ancient and Modern;
- the HISTORY AND GEOGRAPHY course deals with the period from Middle Ages to present-day, covering Europe history and geography, history of religions and political thought, thus ensuring a competitive training for both research and teaching (major subjects: the territory with its physiognomy and its transformation due to social-cultural dynamics, European historical roots between West and East and in relation to the Mediterranean sea; the impact of political-religious factors on modernity; interculturality and identity in the narratives of social groups);
- the ARCHAEOLOGY AND ANCIENT HISTORY course aims at training qualified and up-to-date archaeologists and historians who can effectively work as managers or researchers in the whole region of the Mediterranean sea: thanks to the expertise in Greek and Roman archaeology, methodologies of archaeological research, numismatics, Greek and Roman history and epigraphy, they will be able to handle knowledge, preservation and promotion of the local cultural heritage.

## Employment and career opportunities provided

The Doctorate provides employment opportunities and professional activities in public and private bodies in the field of humanistic scientific research, in schools, in institutions that promote and organize cultural activities, in human resources training services, with particular reference to integration and mediation processes. cultural, in institutions responsible for the enhancement of regional identity, which conserve and manage Cultural Heritage (libraries, archeology, museum), in Institutes of industrial history, in the field of international cultural cooperation, in publishing and in public relations. Matching professional opportunities: University researcher; School teaching in super schools; Conservative of mss. in bibl.; Archive manager; Conservator of artistic heritage books in museums and foundations; Assignments in theaters and art galleries; technical and managerial roles in the Superintendencies, Museums, Parks, Bibles, Archives, Local Authorities of the National Administration. and Regional Heritage and Cultural Activities and the corresponding bodies of EU countries; Didactic assignments at the Provveditorati to the studies and didactic directions; Roles of responsibility in the design of collaboration policies at the national level and internaz. (Ministries, cultural foundations, diplomatic and consular representations, sectors related to cultural exchanges, communications, international relations); assignments to organizations to enhance regional identity, editorial activity.

## Description of the training activities

Linguistics	The linguistic training (which can also make use of the specialists in French studies belonging to the Teaching Body) will be strengthened through the numerous connections with foreign scholars, who will also give lectures in their own languages. The Ph.D. course will develop all of the cooperation channels inherited from the former Ph.D. courses now merging with it. During the writing of the doctoral dissertation a month's stay abroad will be scheduled (libraries or suitable institutions will be eligible): this period can be easily used to attend language courses.			
Informatics	In the Teaching Body there is a Professor of Informatics, who will train individually the Ph.D. students: he will introduce them to the most relevant software packages, to electronic resources for historical and philological research, to digital databases, to internet utilities.			
Handling research and sources of finance	Lectures and workshops will be given by specialists from various disciplines (extramural specialists as well) according to the features and the objectives of each curriculum. Long experienced Professors will help in organizing and developing the research of every Ph.D. student, who will be given an outline of the main methodologies in palaeography, archive studies, history and informatics.			
Optimization and promotion of thescientific results and of the intellectual property	There is a close cooperation with prestigious institutions - such as CISU (Centro Internazionale di Studi Umanistici) and "Istituto di studi storici Salvemini" – as well as a whole publishing platform inside the Department of Studies (DICAM): e.g. "Peloro" (the Ph.D. biannual journal open access), "Quaderni di Archeologia", "Humanities", "Pelorias", "Semata e Signa". This will enable the Ph.D. students from the 3 curricula to publicize their individual scientific results through the most suitable channels (conferences, publications, etc.).			

## Notes

The great extent of the research areas covered by the 3 curricula implies a wide-ranging set of themes: as a consequence, they will be kept separate, with specialized teachings, but at the same time they will be held together through the recurrent organization of shared lectures, conferences and workshop. In order to write their doctoral dissertation, the Ph.D. students will be encouraged to spend some time away (libraries, archives, etc.; internships at museums and suitable institutions are eligible; for the Archaeological curriculum a period of excavations can also be scheduled). Each course will organize one monthly meeting, where every Ph.D. student will report the progress of his work. At the end of every year a plenary meeting is scheduled, where every Ph.D. student will share the progress of his work

## Documents to be attached

## Documentation, imposes the pdf application under penalty of exclusion

- A scanned copy of a valid document of identity with a photo;
- Curriculum vitae
- Research project drawn up by the candidate, of not more than 4000 words (that is not binding for the subsequent assignment of the doctoral thesis)

## for candidates already in possession of the qualification:

Self-certification, with the date and signature, the indication for the required qualification: the Italian
University that issued it, the type of degree, the denomination of the degree course, the final
evaluation, the list of examinations with the relevant marks and the credits (CFU) acquired where
needed:

Self-certification may also use:

- European Union citizens;
- NON European Union citizens with residency permit in Italy regarding only the status, personal qualities and facts certified by Italian public bodies (specifically: a qualification obtained at an Italian University).

European Union and NON European Union citizens who are in possession of foreign qualification/s obtained in a European Union and/or Non European Union country must attach a copy of the certificate/s of academic qualifications (Bachelor's and Master's degree) obtained from which are deduced the duration of the Degree course, the list of the examinations taken with the relevant mark, the name of the University who has issued the qualification, the date of the qualification and the final evaluation, with the relevant translation in the Italian or English language, care of and under the responsibility of the declarant, regularly dated and signed;

Master or specialist or old system degree thesis.

## for candidates not yet in possession of qualification (undergraduates):

 Self-certification, signed and dated, indicating for the qualification: the name of University, degree, designation of the degree course, list the courses attended with individual results and indication of credits earned when provided;

## Additional titles:

- Publications
- Work experience
- Other qualification in possession of the candidate

## **Evaluation criteria**

## 1. Titles

For the evaluation of qualifications the maximum is 20/100 points:

- Master, specialist or old system degree thesis: max 5 points
- university career (for graduates: it will be considered only graduation mark; for undergraduates: it will be considered only examinations): max 6 points
- research project prepared by the candidate of not more than 4000 words (which is not binding for the award of the Doctoral thesis in the case in which the candidate is admitted to the course): max 5 points
- publications: max 2 points
- any professional experience and other qualifications held by the applicant: max 2 points. The
  professional experiences considered are those research activities that are congruent to the curriculum
  chosen by the candidate.

## 2. Exams: Written and oral examination

For foreign students is required Knowledge of Italian language.

<u>Written exam</u>. It consists of an examination paper (extract on three topics) directed to ascertain the knowledge, skills and aptitude for scientific research of the candidates. Different examination papers will be given in relation to the various curricula:

- 'Ancient and Modern Philology': the candidates of Ancient Philology should translate and analyze a
  greek or latin passage, choosing among two proposals; the candidates of Modern Philology should write
  an essay or analyze a philological topic;
- 'Archaeology and Ancient History': the same examination paper will be given to the candidates of Archaeology and of Ancient History, which should be developed by the candidate according to his competence and specialty;
- 'History and Geography from the Middle Ages to the Contemporary Era': the same examination paper will be given to the candidates of History, of Geography and of Anthropology, which should be developed by the candidate according to his competence and specialty.

The maximum amount of points assigned to the written examination is **40** with a minimum pass grade of 24 points.

<u>Oral Exam</u>. It consists of an interview to ascertain the knowledge, skills, aptitude for scientific research and the motivations of the candidates. The interview is designed to test the candidates' knowledge on topics relating to the educational and methodological trends of the Doctoral course and includes the formal presentation of the proposed research project (max 30 points).

During the oral examination the knowledge of a foreign language indicated by the applicant in the application (to be chosen among: English, French, German, Spanish) will be tested (max **10** points).

Minimum overall assessment to be considered eligible: 60/100 points

Only for candidates residing abroad, the payment of the contribution for the participation to selections can be paid by bank transfer on the - account IBAN: IT 16W 02008 16511 000300029177 SWIFT BIC CODE UNCRITM1K66name of the University of Messina , specifying the reason for payment as indicated below " < full name of applicant> participation doctoral contribution in Historical, Archaeological and Philological Sciences".

The candidates from the developing countries are exempted from the payment of the contribution mentioned above as defined in ministerial decree n°594 of August 1st, 2014.

The receipt of the transfer must be carefully preserved and exhibited by the candidate in case of request.



# PUBLIC COMPETITION, BY QUALIFICATIONS AND EXAMINATIONS, FOR ADMISSION TO THE RESEARCH DOCTORATE COURSES - 34th CYCLE

## Attachment n. 13

Research doctorate in Veterinary Sciences

Curricula In the application form the Candidates have to indicate the Curriculum of the Ph.D.

Course in which they intend to participate:

1. Morpho-Physiology and Applied Biotechnologies;

2. Public Veterinary Health and Food Safety;

3. Clinical Veterinary Sciences.

<u>Coordinator</u> Prof.ssa Adriana Ferlazzo,

email: adriana.ferlazzo@unime.it

<u>Positions with scholarship</u> **5 UNIME** 

Positions without scholarship 1

Required degree LM-6 Biology

LM-9 Medical, Veterinary and Pharmaceutical Biotechnology

LM-42 Veterinary Medicine

LM-69 Agricultural Science and Technology

LM-70 Food science and technology

LM-86 Animal husbandry science and technology

6/S Specialist in Biology)

7/S (Specialist in Agricultural Biotechnology

9/S (Specialist in Medical, Veterinary and Pharmaceutical Biotechnology)

47/S (Specialist in Veterinary Medicine)

77/S (Specialist in Agricultural Science and Technology) 78/S (Specialist in Agri-food science and technologies)

79/S (Specialist in Agro-zootechnical Sciences and technologies)

## Requirements for foreign students

Degrees related to the formative Ph.D. program, of same value and acknowledged by the applicable international agreements.

The validity of the foreign qualification will be established by the Ph.D. Exam Commission following the relevant italian law, the law of the country awarding the qualification and the relevant international agreements about acknowledgment of foreign qualifications.

## Description and objectives of the course

The course is finalized to train researchers with an integrated cultural background of professional skills and basic knowledge of Veterinary Sciences.

They will need to have the ability to formalize problems in various applicative contexts, to acquire experimental techniques (traditional and innovative) in basic, special and applied Veterinary Sciences.

The Course includes a basic education, followed by a progressive development of autonomous propositional capabilities, which will end with the proposal of a thesis work in one of the subjects of the formative program.

The course will be organized in 3 Curricula:

- 1. **Morpho-Physiology and Applied Biotechnologies:** it will produce highly trained specialists in the autonomous research in basic and applied veterinary biotechnologies, in experimental techniques with animal models and in the application of biochemical and functional principles for the optimal productive, reproductive, sport and therapeutic utilization of animal species.
- Public Veterinary Health and Food Safety: it will produce highly trained specialists in the fields of
  infectious and parasite diseases, in spontaneous or not-spontaneous pathologies, in the animal
  production linked to the support of zootechnical companies, of food security and inspection of animal
  origin's products.
- 3. **Clinical Veterinary Sciences**: it will produce highly trained specialists in the fields of medical, surgical and obstetrical methodologies, and in the national and EU legislative knowledge applicable to the professional veterinary activity.

## Employment and career opportunities provided

Ph.D.s will achieve a professional qualification for the free-lance activity, National Health Service, public and private industry, local government, international organizations and cooperation and research agencies, facilities related to sport, rehabilitation, productive and reproductive increment.

The types of studies, organized on the basis of the EU directives (the primary role in the services offered to the community and to the veterinary profession, relationships with foreign universities, projects related to animal welfare and to public veterinary health and cooperation with foreign countries etc.) offer employment in the EU.

The acquired capabilities will insure employment and specialized management consultancies in:

- accredited livestock farms, racecourses, stables and rehabilitation structures, faunistic structures, fish farms and aquaculture facilities; animal pounds.
- control of animal health and welfare in breeding farms, recovery structures and research establishments:
- evaluation of health (medical, surgical, obstetrical) interventions;
- application of laboratory biomedical techniques and of specific biotechnical techniques which are functional in the veterinary area;
- management and control of animal productions' quality and safety;
- planning, supervision, assistance and quality assurance of animal origin's products and derivates.

## Description of the training activities

# Linguistics The course will take place in Italian and English languages. English language knowledge (B1 level) and specific scientific English language is required. Through the CLAM, learning of a second language (French, German or Spanish) will be encouraged, to facilitate a period abroad. The Ph.D. students will need to improve their communication skills through english seminars, contact with foreign researchers and attending international conferences.

Computer Science	Ph.D. students will be encouraged to the full use of the available digital supports, to the knowledge of main applicative programs (Windows, Word, Excel, Power Point) and to their optimal use for evaluation and presentation of research results. In order to expand the multidisciplinary aspects, collaborations in the fields of bioinformatics and statistics will be solicited; in the second year of the course, a specific Biostatistics module will take place.		
Management of research systems' knowledge and of funding systems	The Ph.D. student's research activity will be supervised by a senior tutor and, possibly, by a co-tutor.  The training will be implemented in a Career Development Plan (scientific and complementary knowledge acquisition; development of networking capability in order to acquire EU and national funds; acquisition of professional maturity and scientific independence). During the third year of the Course, a specific module on 'Scientific project-making, networking development and fund raising' will take place.		
Promotion of research results and of intellectual property	Ph.D. students will be encouraged to write personally the scientific papers emanating from their experimental activity, and to use journals in ISI and Scopus with I.F. indexes; together with their tutors, they will follow the publication process. Ph.D. students will be invited to take advantage of available placements in foreign research laboratories. The Ph.D. achievement will help the students to acquire scientific authority and to compete successfully for international post-doc and research positions.		

## Documents to be attached

## Documentation, imposes the pdf application under penalty of exclusion:

- scanned copy of a valid identity document with photograph;
- curriculum vitae;
- research project, coherent with the Ph.D. course interests, developed by the candidate (which does not
  constitute a commitment with respect to the following thesis assignation)

## for candidates already in possess of entry qualifications:

 self-certification, dated and signed, listing the followings: Italian University which awarded the degree, date and final grade, list of exams performed with awarded marks and list of the acquired CFU where required:

The following subjects too can use self-certification:

- EU citizens;
- Citizens of countries outside the EU, who are residents in Italy, certified by an Italian public body (in particular, a degree obtained by an Italian institution).

Candidates (from both inside and outside the EU) holding degrees awarded by non-EU countries must attach the relevant certificate (Bachelor and Master degree) detailing the duration of the course, the list of exams performed with marks, the name of the institution awarding the degree, the date and final mark of the award, with an Italian or English translation under the responsibility of the applicant, duly dated and signed. Such candidates will be admitted to the selection process with reservation and will be excluded if, following checks, the degree should not comply with the requirements listed above and consequently they should not allow the enrollment in the Ph.D. program.

thesis 'magistrale' or 'specialistic' from the previous academic order;

## for candidates who are in the process of obtaining the necessary degree:

 self-certification, dated and signed, indicating the degree title: the university at which they are enrolled; the official name of the degree course; list of exams performed with marks and indication of CFU acquired;

Further documents which the candidate may attach to the application, if relevant to the Ph.D. course:

- publications:
- professional experiences;
- other qualifications obtained by the candidate;

#### **Evaluation criteria**

## 1. Qualifications

The maximum score achievable due to qualifications will be 30/100 points.

Scoring qualifications are:

- master, specialistic or 'old order' thesis;
- university career (exams performed with marks, final degree mark);
- publications;
- professional experience and other qualifications;
- research project relevant to the Ph.D. course' scientific interests, developed by the candidate, which does not create an obligation in view of the following assignation of the Ph.D. thesis;
- Curriculum vitae.

## 2. Oral Exam

The oral exam will ascertain the knowledge, ability, scientific research attitude and motivation of the candidates, and it will be finalized to establish the canditate's knowledge about subjects which relate to the educational and methodological objectives of the Course, and will include the formal presentation of the proposed research project.

Knowledge of English or French language will be established during the oral exam.

The maximum score achievable by the oral exam will be 70/100 points, with a pass mark of 42/100 points.

The oral exam, following a justified request, will be taken online using suitable and specific software.

Minimal total score to be considered as admissible: 60/100 points.

Candidates resident abroad are required to pay a participation fee, using an bank transfer on the account number IT 16W 02008 16511 000300029177 CODICE BIC SWIFT UNCRITM1K66, name of the University of Messina, specifying the reason for payment as indicated below " < full name of applicant> participation doctoral contribution in *Veterinary Sciences*".

The receipt of the transfer must be kept by the candidate and shown if required.



# PUBLIC COMPETITION, BY QUALIFICATIONS AND EXAMINATIONS, FOR ADMISSION TO THE RESEARCH DOCTORATE COURSES - 34th CICLO

## Attachment n. 14

Bands	Income bands related to ISEEU declaration	Full tax contribution 2016/2017 excluding regional tax and tax stamp € 156,00	Regional tax and stamp duty to be paid upon enrollment 2017/2018	Full tax contribution 2017/2018	variable %	Payment fee full tax contribution 2017/18
1	€ 0 € 6.000	€ 324,17	€ 156,00	€ 324,17	0%	108,06
2	€ 6.001 € 7.000	€ 379,17	€ 156,00	€ 379,17	0%	126,39
3	€ 7.001 € 8.000	€ 436,17	€ 156,00	€ 436,17	0%	145,39
4	€ 8.001 € 9.000	€ 493,17	€ 156,00	€ 493,17	0%	164,39
5	€ 9.001 € 10.000	€ 553,17	€ 156,00	€ 553,17	0%	184,39
6	€ 10.001 € 11.000	€ 592,17	€ 156,00	€ 592,17	0%	197,39
7	€ 11.001 € 12.000	€ 646,17	€ 156,00	€ 646,17	0%	215,39
8	€ 12.001 € 13.000	€ 700,17	€ 156,00	€ 700,17	0%	233,39
9	€ 13.001 € 14.000	€ 757,17	€ 156,00	€ 795,03	5%	265,01
10	€ 14.001 € 15.000	€ 811,17	€ 156,00	€ 851,73	5%	283,91
11	€ 15.001 € 16.000	€ 865,17	€ 156,00	€ 908,43	5%	302,81
12	€ 16.001 € 17.000	€ 922,17	€ 156,00	€ 968,28	5%	322,76
13	€ 17.001 € 18.000	€ 976,17	€ 156,00	€ 1.024,98	5%	341,66
14	€ 18.001 € 19.500	€ 1.030,17	€ 156,00	€ 1.081,68	5%	360,56
15	€ 19.501 € 21.000	€ 1.090,17	€ 156,00	€ 1.144,68	5%	381,56
16	€ 21.001 € 22.500	€ 1.150,17	€ 156,00	€ 1.207,68	5%	402,56
17	€ 22.501 € 24.000	€ 1.207,17	€ 156,00	€ 1.267,53	5%	422,51
18	€ 24.001 € 26.500	€ 1.267,17	€ 156,00	€ 1.330,53	5%	443,51
19	€ 26.501 € 30.000	€ 1.327,17	€ 156,00	€ 1.393,53	5%	464,51
20	€ 30.001 € 34.000	€ 1.387,17	€ 156,00	€ 1.498,14	8%	499,38
21	€ 34.001 € 40.000	€ 1.588,17	€ 156,00	€ 1.746,99	10%	582,33
22	€ 40.001 € 50.000	€ 1.663,17	€ 156,00	€ 1.829,49	10%	609,83
23	€ 50.001 € 60.000	€ 1.738,17	€ 156,00	€ 1.911,99	10%	637,33
24	Da 60mila in su e redditi non dichiarati	€ 1.994,17	€ 156,00	€ 2.193,59	10%	731,20