CALL FOR APPLICATIONS FOR PLACES IN PH.D. COURSES
XXXII CYCLE – UNIVERSITY OF CATANIA

Having regard to the following:

- The charter of the University of Catania;
- D.P.C.M. 09/04/2001 with particular reference to art. 8, ppt. 1 and 7;
- Ministerial Decree n. 45/2013 containing the rules on the modalities of accreditation of universities and Ph.D. courses and the principles for the implantation of Ph.D. courses in the accredited universities and particularly art. 8, pt. 2, concerning the possibility of different selection procedures with references to places reserved to graduates from foreign universities;
- The current Regulation of the University of Catania on Ph.D. courses;
- The decision of the Board of Trustees of the University of Catania of April 4, 2016 concerning Ph.D. courses – XXXII cycle;
- Art. 8, pt. 1 of Ministerial Decree 45/2013 stipulates that selection procedures must be concluded by no later than September 30 of each year;
- Ministerial Decree 632/2014;
- Ministerial communication n. 15334/2016;
- Call 5/2016 concerning the funding of regional scholarships for Ph.D. courses in Sicily – 1st cycle- a.y. 2016/2017;
- Decree of General Direction n. 3511 of 30/06/2016, Regione Siciliana, including the provisional list of projects under Call 5/2016;
- The decision of the Board of Trustees of the University of Catania of July 2nd, 2016 concerning the Call for applications for Ph.D. courses – cycle XXXII;

the following Call is issued by the Rector of the University of Catania

Art. 1 - Selection procedures

1. For the academic year 2016/2017 the University of Catania officially launches the opening of the selection procedures for places in the following Ph.D. courses of cycle XXXII:

1. Agricultural, food, and environmental science (International);
2. Basic and applied biomedical sciences (International);
3. Translational biomedicine (International);
4. Physics;
5. Law (International);
6. Systems, energy, computer and telecommunications engineering;
7. Mathematics and computer science;
8. Neuroscience (International);
9. Materials science and nanotechnologies;
10. Chemistry (International);
11. Geological, biological and environmental science;
12. Political science;
13. Cultural heritage studies;
14. Evaluation and mitigation of urban and land risks.

Detailed information on each Ph.D. course, including the number of scholarships and their sources of funding, is included in the annexed information sheets which constitute an integral and substantial part of the Call (annexes 1 to 14).
Art. 2 Admission requirements

1. Applications are open to candidates who hold either a Laurea (Vecchio Ordinamento) or a Laurea specialistica /magistrale or any foreign degree suitable for access to Ph.D. courses by the deadline of the present call, without regard to nationality or age.

2. The suitability of the foreign degree is assessed by the selection committee with respect to the rules in force in Italy and in the country where the degree was issued and according to international agreements on degrees recognition.

3. Applications are also open to candidates regularly enrolled in their final year of Laurea Vecchio ordinamento, Laurea specialistica/magistrale or foreign degree course who obtain their final degree by no later than 31.10.2016. In case these candidates pass the selection, their admission to the Ph.D. course is subject to the submission of a self-certification of degree completion (for holders of Laurea Vecchio Ordinamento or Laurea Specialistica/Magistrale) or a degree certificate (for holders of a degree issued by a foreign university) by no later than 05/11/2016, under penalty of exclusion.

4. With reference to the grant of the scholarships funded by the European Social Fund as in art.4, candidates must also meet the following additional requirements:
   a. Being born or resident in Sicily;
   b. Being aged 35 or less at the moment of completion of the application procedure.

Art. 3 – Application form

1. The application form is web based and must be completed electronically through the University of Catania online application system available at http://portalstudente.unict.it/portalstudente/mapServlet described at pt. 10 of the present article by no later than September 6 2016, h.14,00 (Italian time).

2. An application fee of € 50,00 as contribution to costs for the organization of the selection is required. It must be paid according to the procedures described at pt. 10, let. g) of the present article by no later than September 6 2016, h.13,59 (Italian time).

3. The application form can be completed either in Italian or in English and must contain the following information:
   a) name and surname, fiscal code, date and place of birth, address (including postal code), telephone number and e-mail;
   b) nationality;
   c) name of the Ph.D. course in the selection of which the candidate intends to participate;
   d) name of his/her degree;
   e) disability with percentage of disability, if any;
   f) declaration of commitment to immediately communicate to dottorati@unict.it any change of address, telephone number or e-mail;
   g) express indication of candidature for a place reserved to graduates from foreign universities, for Ph.D. programmes including this type of places and for graduates meeting this requirement only;
   h) declaration of acknowledgment of the content of the present call.

4. The following annexes must be attached to application form:
   a) Curriculum vitae et studiorum, duly dated and signed, containing the authorization to the treatment of personal data (Legislative Decree n. 196/2003);
   b) One of the following documents concerning admission requirements:
      - Self-certification of successful completion of the degree course, for candidates with Laurea Vecchio Ordinamento, Laurea specialistica or Laurea magistrale issued by an Italian university;
      - Degree certificate (including transcript of records, final grade and date of the award of the degree) and request of equivalence (annex 15), for graduates from foreign universities;
      - Self-certification of enrolment in the final year of the degree course, for candidates enrolled in the last year of Laurea Vecchio Ordinamento, Laurea Specialistica and Laurea Magistrale who complete the course and obtain the degree by no later than 31.10.2016;
      - Certificate stating the status of student in the final year, for candidates from foreign university who obtain the degree by no later than 31.10.2016;
   c) Research project;
   d) List of publications with relative abstracts, if any;
   e) Documents attesting English knowledge, further linguistic skills or computer skills, if any;
   f) Documents concerning the completion of further university courses;
g) Declaration concerning the type of place for which the candidate is applying, annex 16, for candidates applying for Ph.D. courses offering reserved places only;
h) Videoconference request form (annex 16) including indication of the type of places for which the candidate is applying (ordinary or reserved);
i) Copy of a valid Identity document;
j) Copy of receipt of payment of €50,00.

5. All annexes listed in pt. 4 must be uploaded one by one onto the online application system in PDF format. No other format than PDF is accepted. If the size of the document is larger than that indicated by the system, this document must be divided into two or more parts to be uploaded separately. All annexes can be either in English or in Italian. Annexes in a language other than English or Italian must be accompanied by a legal translation in English or in Italian, under penalty of inadmissibility to evaluation.

6. Candidates who intend to apply for two or more different Ph.D. courses must complete two or more application forms separately and pay the application fee of €50,00 for each application.

7. Application forms will not be considered if either incomplete or submitted with different modalities and/or after the deadline indicated (see pt. 1). Application forms will not be considered if the application fee is paid after the deadline indicated in pt. 2 of this article.

8. Candidates are advised to complete the application procedure well in advance of the expiration date of this call in order to avoid the clogging of the online system due to the volume of applications. The University is not responsible whereas the candidate cannot complete the application procedure for unforeseeable circumstances, force majeure or any event not imputable to the administration.

9. Candidates are the only responsible for the authenticity of the information included both in the application form and in the call. The administration is entitled to check the application forms according to the legislation in force and to exclude those applications not complying with the call requirements provided a proper motivation.

10. The application procedure must be completed through the following steps:
a) Go to http://portalestudente.unict.it/portalestudente/mapServlet;
b) Complete the registration entering your personal data. On completion of the registration the online system will issue to the candidate his/her PIN code. The online system will also issue a temporary fiscal code to foreign candidates in order to let them complete the application procedure. (candidates already holding a PIN code will skip this step and will start the procedure per i soli candidati non in possesso di un codice PIN rilasciato dall’Università degli Studi di Catania);
c) Enter your fiscal and PIN codes in the login box in order to access to your personal account;
d) Once in your account click “Prove di ammissione” and select the chosen Ph.D. course through the drop-down menu;
e) Enter the data required and check their authenticity;
f) Confirm the data clicking the opposite confirmation command;
g) Print the paying-in slip related to the application fee generated by the online system after the confirmation of the application;
h) Pay the application fee in one of the following ways:
   • Payment at the counter of any bank of the UNICREDIT banking group after minimum three hours from the issuing of the paying-in slip;
   • Online payment from your personal account via credit card (VISA and MasterCard);
i) Upload all the documents required in art. 3, pt. 4, onto the online application system;
j) Print and save copy of the application form and save physical copy of the receipt of payment.

11. Candidates with disability who need assistance during the examination must submit formal request to the University’s Centre for the Integration – Assistance to people with disability (CinAP), Via A. di Sangiuliano 259, 95131 Catania, tel. 095/7307182-189-188, e-mail: personealecsd@unict.it, sito web http://www.cinap.unict.it/, quoting the name of the Ph.D. course for which they have applied. This request must be submitted by no later than September 6 2016, h. 12.30. (Italian time).
Art. 4 – Type of places

1. Each Ph.D. course includes places with scholarship and places without scholarship. The Ph.D. Academic board identifies the beneficiaries of the scholarships based on their research projects.

2. Scholarships can be funded by:
   a. the University of Catania;
   b. Italian partner universities;
   c. Foreign partner universities;
   d. Public/private institutions, highly qualified from a scientific/cultural point of view and with suitable personnel, facilities and equipment;

3. Places reserved to graduates from foreign universities (both with scholarship and without scholarship) remaining vacant can be made available for candidates to ordinary places, provided they have passed the selection procedure and comply with admission requirements, with the exception of:
   a. Ph.D. course in “Agricultural, food and environmental science” with reference to the two scholarships granted by Abu Dhabi Development Group and reserved to citizens of United Arab Emirates;
   b. Ph.D. course in “Neuroscience”, with reference to the scholarship granted by University Bordeaux Ségalen and reserved to graduates from this university.
In case they remain vacant, the aforementioned places will not be made available and relative scholarships will not be assigned. In case these places are occupied, the management of the scholarships will not be governed by art. 9, points 1-4, of Ministerial Decree 45/2013, as required by point 5 of the same article, and will be the entire responsibility of the funding institution.

4. With reference to scholarships funded by Italian partner universities (point 2, let. b) and/or by public/private institutions (point 2, let. d), they are paid to the University of Catania in three instalments:
   a. The first instalment within thirty (30) days from the communication by the University of Catania of the name of the beneficiary of the scholarship;
   b. Second and third instalments within thirty (30) days from the communication by the University of Catania of the admission of the beneficiary to academic years following the first.

5. With reference to scholarships funded by European Social Fund – Operational Program for Sicily 2014-2020, Call 5/2016, instalments will be paid to the University of Catania by the Regional Department for Education and Vocational Training for Sicily according to the following timetable and modalities:
   a. an advance payment corresponding to 30% of the approved public funding at the beginning of the project, after the signature of a specific agreement and the communication of the start of the scholarships;
   b. a further 30% of the approved public funding, possibly reformulated on the base of effectively launched scholarships, following the implementation of the program for at least 50% of the advance payment received, duly validated by the competent regional department;
   c. a further 30% of the approved public funding, possibly reformulated on the base of effectively launched scholarships, following the implementation of the program for at least 100% of the advanced payment and 50% of the second instalment received, duly validated by the competent regional department;
   d. the final balance payment on conclusion of the program, duly validated by the competent regional department.
Art. 5 – Selection procedures

1. According to specifications reported in each Ph.D. information sheet (see art. 1), candidates’ selection can be based on one of the following procedures:
   - Evaluation of qualifications;
   - Evaluation of qualifications, written and oral examinations;
   - Evaluation of qualifications and oral examination.

2. As for the evaluation of qualifications, the following documents will be assessed:
   - *Curriculum vitae et studiorum*;
   - English language certificates;
   - Publications, if any;
   - Research project.

3. In case of Ph.D. courses whose selection procedure is exclusively based on the evaluation of qualifications, pass mark is 80/120 according to the following criteria:
   - *Curriculum vitae et studiorum* 30% of 120 points – max 36 points;
   - English language certificates 10% of 120 points – max 12 points;
   - Publications, if any 10% of 120 points – max 12 points;
   - Research project 50% of 120 points – max 60 points.

4. In case of Ph.D. courses whose selection procedure is based on the evaluation of qualifications, written and oral examinations, pass mark is an aggregate 80/120.
Candidates are admitted to the written examination if they obtain minimum 40/60 in the evaluation of qualifications according to the following criteria:
   - *Curriculum vitae et studiorum* 30% of 60 points – max 18 points;
   - English language certificates 10% of 60 points – max 6 points;
   - Publications, if any 10% of 60 points – max 6 points;
   - Research project 50% of 60 points – max 30 points.
Candidates are admitted to the oral examination if they obtain minimum 20/30 in the written examination; Candidates pass the oral examination if they obtain minimum 20/30.

5. In case of Ph.D. courses whose selection procedure is based on the evaluation of qualifications and oral examination, pass mark is an aggregate 80/120.
Candidates are admitted to the oral examination if they obtain minimum 40/60 in the evaluation of qualifications according to the following criteria:
   - *Curriculum vitae et studiorum* 30% of 60 points – max 18 points;
   - English language certificates 10% of 60 points – max 6 points;
   - Publications, if any 10% of 60 points – max 6 points;
   - Research project 50% of 60 points – max 30 points.
Candidates pass the oral examination if they obtain minimum 40/60.

6. In case the selection procedure exclusively consists in the evaluation of qualifications, the selection committee shall post the results of the selection on the website of the Department offering the Ph.D. course.
In case the selection procedure includes (i) written and oral examination or (ii) oral examination, the selection procedure shall Selection committees shall assess qualifications and post the results on the website of the Department offering Ph.D. course at least one day prior to (i) written examination or (ii) oral examination. Each Ph.D. selection committee is the sole responsible for the punctual publication of the results of the evaluation of qualifications.

7. Written and oral examinations, where included, will be held in the dates, hours and places indicated in annexed information sheets for each Ph.D. course. No written notice will be sent to candidates. Candidates admitted to written and oral examinations shall bring with them an identity document.

8. Candidates living abroad who are not able to reach Catania can take the oral examination (if applicable) in the form of video conference interview, provided it is held at either a higher education institution or consulate/diplomatic mission which guarantee the identity of the candidate. The candidate is exclusively responsible for the correct indication of the video conference address to be used by the selection committee for the oral interview. The candidate must be available in the date of the oral interview according to the timetable in annex 3. The selection committee is entitled to arrange with the candidate the exact time of the oral interview. Before the oral interview, the candidate is required to exhibit his/her the same identity document uploaded onto the application system.
The candidate is excluded from the selection procedure either if he/she fails to indicate the video conference address or indicate an incorrect address. The candidate is also excluded from the selection procedure either if he/she is absent the day and time of the video conference oral interview or he/she fails to exhibit the identity document. These reasons for exclusion from the selection procedure do not apply if the candidate takes the oral exam in Catania and is present the day and time of the exam. The University of Catania is not responsible for any unpredicted technical problem impeding the oral exam.

Art. 6 – Designation and tasks of the Selection Committee

1. Each Selection Committee is composed according to the law.

2. Prior to the evaluation of qualifications, selection committees establish the criteria of assignment of points to each document to be assessed (curriculum vitae et studiorum, English language certificates, publications and research project). Selection committees can consider any further qualification issued by academic institutions.

3. Prior to written examinations or oral examinations, when included, selection committees must establish the criteria of development and evaluation of these exams and give appropriate information to candidates.

4. Upon completion of the selection procedure, each selection committee draws up the list of candidates who obtained a pass mark. The list is signed by both the President and the Secretary of the Selection committee and is affixed to the Notice board of the University’s Department where the selection takes place.

5. Upon completion of the selection procedure, the selection committee draws up the list of candidates who obtained the pass mark ranked in descending order of score. In case of candidates occupying the same position on the list (candidates with the same score), the selection committee proceeds to a comparative evaluation of these candidates.

6. In case of places reserved to graduates from foreign universities, the selection committee draws a separate list of candidates obtaining the pass mark ranked in descending order of score. In case of candidates occupying the same position on the list (candidates with the same score), the selection committee proceeds to a comparative evaluation of these candidates. Any reserved place remained vacant after the selection procedure can be made available for candidates in the list as in pt 5 of the present article.

Art. 7 – Approval of the acts of the selection

1. The acts of the selection and the list of successful candidates eligible for Ph.D. places are officially issued through a decree of the Rector of the University of Catania. The list of successful candidates eligible for places in a Ph.D. course are published on the website of the University of Catania.

Art. 8 – Admission to Ph.D. courses

1. Candidates are admitted to Ph.D. courses according to the descending order on the list of selected candidates until all the places available within each course are allocated. Successful candidates eligible for a place in two or more Ph.D. course are requested to choose the Ph.D. course in which they wish to enroll.

2. Candidates are excluded from a place in a Ph.D. course if they do not comply with enrolment procedures (see art. 9) within the deadline indicated in a following notification. Any place remained vacant after the enrolment procedure will be offered to the following candidate on the list in descending order of score.

3. If a candidate who correctly enrolls in a Ph.D. course renounces to his/her place within three months from the start of course activities, the vacant place can be offered to the following candidate on the list in descending order of score.

4. Scholarships are assigned to the first eligible candidates on the list. The last of the eligible candidates is admitted to the non-scholarship place. Candidates who are offered a place remained vacant are required to enrol according the procedure described in art. 9. Candidates are informed of this possibility by e-mail. Failure to comply with the procedures described in the mailed notification lead to the exclusion from the programme.
Candidates admitted to Ph.D. courses are required to pay enrolment fees. The amount of the enrolment fee is decided each year by the Board of Trustees of the University of Catania (see art. 9).

Candidates eligible for a place in more than one Ph.D. course must choose the Ph.D. course in which they wish to enroll. Candidates eligible in a place for a Ph.D. course who have attended a Ph.D. course with scholarship can only be enrolled as Ph.D. student in places without scholarship.

Candidates with disability corresponding to 66% who pass the selection procedure but occupy a position on the list not corresponding to a place in the Ph.D. course are admitted to the programme in supernumerary places without scholarship. Supernumerary places without scholarship reserved to candidates with disability can be up to half of the ordinary places. Candidates with disabilities are exempted from the payment of enrolment fees.

Art. 9 – Enrolment procedures

1. Candidates admitted to the Ph.D. course are officially appointed in a decree of the Rector available at the university website.

2. Admitted candidates must submit the enrolment form and pay the enrolment fee according to the procedure described in point 4 by no later than the deadline indicated in the notice published with the decree including admitted candidates. This notice represents the only official form of information. No personal notice is sent to candidates.

3. The enrolment application must include the following information:
   a) Name and surname, fiscal code, date and place of birth, address (including postal code), telephone number and e-mail;
   b) Disability with indication of percentage, if any;
   c) Declaration of commitment to attend the Ph.D. course full time according to the modalities fixed by the academic board.

4. The enrolment form is web based. Candidates must complete the enrolment through the following steps:
   a) Go to [http://portalesstudente.unict.it/portalesstudente/](http://portalesstudente.unict.it/portalesstudente/);
   b) Enter their fiscal code and PIN code in the specific login box;
   c) Click Dal proprio account personale cliccare la voce “Immatricolazione” from their personal page/profile;
   d) Enter all the details required in the various stages and confirm them;
   e) Print the paying-in slip generated by the online system after the confirmation of the details (C 322,00 tuition fee + C 140,00 national student service contribution + C 16,00 virtual fiscal stamp);
   f) Pay the enrolment fee in one of the following ways:
      • Payment at any counter of a bank of the UNICREDIT banking group at least after three hours from the omission of the paying-in slip;
      • Payment from the candidate’s online profile through credit card (VISA, Mastercard or Maestro accepted).

5. Enrolment forms submitted with modalities other than those indicated in the present article or after the deadline in the aforementioned notice (see pt.2) are not considered. Enrolment forms without the enrolment fee paid in the modalities and by the deadline indicated in the present article are not considered.
   The University of Catania is not responsible for failure to complete the enrolment procedure due to either accident or force majeure.

6. Candidates’ failure to comply with the aforementioned provisions is considered equivalent to formal renunciation to the place in the Ph.D. course. Places remained vacant are offered to the following candidates on the list in descending order of score until the complete allocation of available places. These candidates are required to enroll in the Ph.D. course by no later than the deadline included in the notice sent to the candidate via e-mail (to the e-mail address indicated in the application form).

7. Candidates renouncing to the place in the Ph.D. program are not entitled to refund of the enrolment fee even if they have not attended any of the program activities.

8. Selected candidates who intend to renounce to a Ph.D. place must give immediate written notice to the Ph.D. Students Office via dottorati@unict.it in order to allow the university’s administration to allocate places remained vacant as quickly as possible.
9. Selected candidates admitted in places with scholarship must send to dottorati@unicn.it the following documents in PDF format within the deadline in the aforementioned notice:
   a) Document from the National Institute for Social Security attesting the candidate's contributory role;
   b) Declaration concerning the candidate’s registration or not in other forms of social security;
   c) Copy of the fiscal code or health insurance card
   d) Copy of a validity identity document duly signed;
   e) Form including bank details;
   f) Declaration of acknowledgement that scholarships are exempted from income tax imposed on physical persons and that under no circumstances can they give assessments for the purpose of the career.
   g) Citizenship certificate and Certificate attesting residence permit with indication of the authority issuing the permit itself (foreign candidates only).

10. In case of scholarship funded by ESF OP 2014/2020. Call 5/2016, candidates must also send:
   a) Formal declaration concerning their commitment to mobility period abroad during the Ph.D. program and their awareness that the scholarship is revoked if they not comply with the mobility period;
   b) Formal statement where they declare not be beneficiary of further scholarships and commitment not to accept further scholarships with the exception of those allowed by the legislation in force.

Art. 10 - Scholarship

1. Candidates are granted a scholarship, if eligible, according to the law in force.

2. Each scholarship amounts to € 23,638,47 per year, after taxes charged on the scholarship holder. This amount is adjusted according to increases established by the law. The amount of the scholarship is increased up to 50% in correspondence and proportionally to study periods at foreign universities or research centres for maximum 18 months of the entire duration of the Ph.D. course.

3. The duration of each scholarship corresponds to the duration of the Ph.D. course (36 months). They are assigned to candidates according to their position on the list of candidates admitted to the Ph.D. course. The grant of the scholarship is confirmed if the candidate is admitted to the year following the first.

4. At the end of each year Ph.D. students submit a detailed record of their research activity to the academic board. The academic board assesses each doctoral student research work and admits him/her to the following year or expel from the course.

5. By no later than November 15 of each year Ph.D. students must enroll in the following year. The enrolment is subject to the decision of the academic board according to art. 15, pt. 4 of regulation of the university of Catania for Ph.D. courses. Failure to renew the enrolment leads to the exclusion from the Ph.D. course.

6. The payment of the scholarship is conditioned to the effective attendance to course activities. Any remainders will be deposited to be used in subsequent cycles of Ph.D. course.

7. The provisions concerning tax benefit included in art. 4, Law 476/1984 apply to scholarships.

8. Scholarships cannot be combined with other scholarships unless these extra scholarships are granted by national or international institutions and destined to research work abroad.

9. Candidates who have already benefit from a Ph.D. scholarship or even portion of it cannot be granted a scholarship for a second time.

Art. 11 – Rights and duties of Ph.D. Students

1. With reference to rights and duties of Ph.D. students, candidates are required to refer to chapter V of the Regulation of the University of Catania for Ph.D. courses.

Art. 12 – Personal data

1. According to law 196/2003 and the regulation on treatment of personal data of the University of Catania, each candidate's personal data are treated with exclusive reference to the management of their career as Ph.D. student.

Art. 13 – Official in charge of procedure

1. According to art.5, subparagraph 1, of Law 241/90, the official in charge of the procedure is:
- the chairperson of the selection committee with reference to the selection procedure, from the appointment of the committee members to the publication of the selection results;
- Mr Paolo Musotto (Ph.D. Students Office), with reference to the procedures connected to the present call;
- Mr Salvatore Libertini (Ph.D. Students Office), with reference to the procedures concerning foreign candidates.

Art. 14 – Final measures

1. The administration considers the possibility of modifications, updates or integrations to the present call - to be exclusively advertised through www.unict.it, in case the number of places of scholarships increases due to further funds made available after the issuing of this call and before the conclusion of selection procedures.

2. Any aspect(s) related to Ph.D. course and not expressly covered in the present call is governed by Ministerial Decree 45/2013, International cooperation agreements and other legislation in force concerning Ph.D. course.

CATANIA, ........................

THE RECTOR
(G.Pignatari)
### Annex 1

<table>
<thead>
<tr>
<th>Name of Ph.D. course</th>
<th>AGRICULTURAL, FOOD AND ENVIRONMENTAL SCIENCE (INTERNATIONAL)</th>
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<table>
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<tr>
<th>Scientific field</th>
<th>Agricultural science</th>
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<tr>
<td>Department</td>
<td>Department of Agriculture, Food and Environment</td>
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<td>Department website</td>
<td><a href="http://www.dga.unical.it/">http://www.dga.unical.it/</a></td>
</tr>
<tr>
<td>Ph.D. Coordinator</td>
<td>Prof. Cherubino Leonardi</td>
</tr>
<tr>
<td>Partner institution(s)</td>
<td>Technical University of Lisbon (Portugal)</td>
</tr>
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#### Brief description

Due to its interdisciplinary nature covering all sectors of the Area 07, the Ph.D. course aims at training professional figures qualified for pure or applied research in the domain of agriculture, food and environment, capable of:

- organizing and conducting experiments in the diverse phases of the agricultural activities, interpreting results by means of suitable statistical methodologies;
- making choices allowing to obtain programmed production in terms of quality, quantity and time and without negative impact on the environment and the healthiness of products;
- managing agri-food and environmental systems for the production of land and water resources;
- managing machinery and products utilized in agriculture and agri-food industry;
- checking, also by means of innovative, eco-compatible technologies, adversities, both biotic and abiotic, threatening agricultural and food production and agricultural and forest ecosystems;
- analyzing agri-food systems in order to intervene on the planning and management of the diverse industries and to know economic instruments to protect and manage the environment;
- transferring advanced, innovative technologies to agricultural and food processes and products, with respect to eco-sustainability;
- training experts on rural development through interdisciplinary research, joint supervision of the research and international mobility (EIMA-AgTrain).

#### Places

**Ordinary Places**

1. Places with scholarship funded by the University of Catania: 3
3. Places without scholarship: 1

**Reserved Places**

1. Places with scholarship funded by Abu Dhabi Development Group to graduates from United Arab Emirates: 2
2. Places without scholarship: 1

**Total**: 7

### Selection

**Ordinary places**

1. Evaluation of qualifications
2. Oral examination

Candidates in a position as in art. 5, pt.8, can take the oral exam in the form of videoconference.

**Reserved places**

1. Evaluation of qualifications
2. Oral examination

Candidates in a position as in art. 5, pt.8, can take the oral exam in the form of videoconference.

**Date and place of oral examination**

- Date: September 27, 2016, h. 9:00
- Place: Via Valdisavoia n. 5 - Dga - Aula "A. Jannaccone" (1st floor)
### Annex 2

<table>
<thead>
<tr>
<th>Name of Ph.D. course</th>
<th>BASIC AND APPLIED BIOMEDICAL SCIENCES (INTERNATIONAL)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Scientific field</td>
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<tr>
<td>Department</td>
<td>Department of Biomedical Science and Biotechnologies</td>
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<td>Department website</td>
<td><a href="http://biomecc.unict.it/">http://biomecc.unict.it/</a></td>
</tr>
<tr>
<td>Ph.D. coordinator</td>
<td>Prof. Ferdinando Nicoletti</td>
</tr>
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<td>Partnership institution</td>
<td>University of Creta (Greece)</td>
</tr>
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<tr>
<th>Brief description</th>
</tr>
</thead>
<tbody>
<tr>
<td>The Ph.D. course is aimed at training young researchers with interdisciplinary skill in the domain of basic and applied biomedical sciences enabling them to carry out highly qualified research activity integrating the knowledge acquired in various vocational courses. Research topics efficiently respond efficiently and productively to the promotion of significant advancements in the understanding of biological phenomena object of research, also thanks to the use of internationally recognized innovative technologies. Learning outcomes are achieved through the assistance of professors and supervisors who commit themselves to transfer technical and cultural knowledge necessary to the research activity the doctoral student is assigned. Doctoral students must achieve in-depth knowledge of scientific literature concerning their research project and critical skills with reference to the interpretation of experimental results such as they can culturally organize and technically develop their own research project. At the end of the Ph.D. course the doctoral student is expected to plan a research project, carry out the project, if necessary in collaboration with other researchers, write results for publication on indexed journals.</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Places</th>
</tr>
</thead>
<tbody>
<tr>
<td>1) Places with scholarship funded by the University of Creta: 2</td>
</tr>
<tr>
<td>2) Places with scholarship funded through FSE OP Sicily 2014/2020, Call 5/2016: 3</td>
</tr>
<tr>
<td>3) Places without scholarship: 1</td>
</tr>
<tr>
<td><strong>TOTALE: 6</strong></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Selection</th>
</tr>
</thead>
<tbody>
<tr>
<td>1) Evaluation of qualifications</td>
</tr>
</tbody>
</table>
### Annex 3

<table>
<thead>
<tr>
<th>Name of Ph.D. course</th>
<th>TRASLATIONAL BIOMEDICINE (INTERNATIONAL)</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Scientific field</strong></td>
<td>Medicine and Surgery</td>
</tr>
<tr>
<td><strong>Department</strong></td>
<td>Department of Clinical and Experimental Medicine</td>
</tr>
<tr>
<td><strong>Department website</strong></td>
<td><a href="http://www.medclin.unict.it/">http://www.medclin.unict.it/</a></td>
</tr>
<tr>
<td><strong>Ph.D. Coordinator</strong></td>
<td>Prof. Lorenzo Malatino</td>
</tr>
<tr>
<td><strong>Partner Institution</strong></td>
<td>University of Granada (Spain)</td>
</tr>
</tbody>
</table>

#### Brief description

The Ph.D. course consists in the detailed analysis of introductory subjects followed by a scientific project within one of the following curricula:

1. **CLINICAL-EXPERIMENTAL MEDICINE AND CELLULAR PHYSIOPATHOLOGY:** biomarkers of cardiovascular and kidney diseases; therapeutic innovations of cardiovascular diseases; biomarker of cellular damage;
2. **GENOMIC MEDICINE:** identification of biomolecular markers for in vitro diagnosis, follow-up and anticipation of therapeutic answer; Health Technology Assessment (HTA) for the evaluation and transfer of biotechnologies;
3. **TECHNOLOGICAL MICROBIOLOGICAL AND THERAPEUTIC INNOVATIONS APPLIED TO TRANSPLANT AND VASCULAR SURGERY:** new surgical procedures in organ, transplant and vascular surgery; identification of new diagnostic tools in bacterial, fungal and viral infections;
4. **MOLECULAR MEDICINE:** molecular mechanisms of endocrine, respiratory, hematological and oncological diseases, bioinformatics applied to medical science;
5. **GENOMIC AND COMPLEX SYSTEMS MOLECULAR BIOMEDICINE: CELLULAR AND MOLECULAR BASIS OF THE PHENOTYPE:** genomic, computational analysis and biomolecular profiling of complex, neoplastic and degenerative diseases.
6. **ADVANCED TECHNOLOGICAL PLATFORMS FOR DIAGNOSIS AND THERAPY:** development of new diagnostic technologies, genomic, transcriptomic and proteomic platforms, cardiovascular imaging and plating of devices.

#### Places

1. Places with scholarship funded by the University of Catania: 2
2. Places with scholarship funded through ESF OP Sicily 2014/2020: 3
3. Places without scholarship: 1
   **TOTAL:** 6

#### Selection

1. Evaluation of qualifications
2. Oral examination
   Candidates meeting the requirements as in art. 5, pt. 8, can take the oral examination in the form of video conference interview.

#### Date and place of the oral examination

- **Date:** September 27, 2016, h. 9:00
- **Place:** Aula Endocrinologia Ospedale Caribaldi Nofima Superiore Piano – L, Catania
<table>
<thead>
<tr>
<th>Name of the Ph.D. course</th>
<th>PHYSICS</th>
</tr>
</thead>
<tbody>
<tr>
<td>Scientific field</td>
<td>Mathematics, Physics and Natural Science</td>
</tr>
<tr>
<td>Department</td>
<td>Department of Physics and Astronomy</td>
</tr>
<tr>
<td>Department website</td>
<td><a href="http://www.dfa.unict.it/">http://www.dfa.unict.it/</a></td>
</tr>
<tr>
<td>Ph.D. Coordinator</td>
<td>Prof. Vincenzo Bellini</td>
</tr>
<tr>
<td>Partner Institution</td>
<td>None</td>
</tr>
</tbody>
</table>

**Brief description**

The Ph.D. course in Physics is aimed at training young researchers, with a wide basic knowledge and expert in advanced sectors of Physics and its applications, to be involved in highly qualified research actions at Universities, research centers, public bodies, private bodies and advanced productive sectors. Consequently, the primary aim of the course is to develop the analytical skills enabling to tackle and solve open problems of research in fundamental and applied physics, problems concerning industry, etc., with a correct approach. To this purpose diverse paths with specific learning outcomes are implemented, ranging from paths concerning basic research, both experimental and theoretical (in nuclear/sub-nuclear physics, matter physics, nuclear and particle astrophysics) to those connected to applied research (applied physics), with implications in the following sectors: electronics, energetics, environmental physics and medical physics.

**Places**

<table>
<thead>
<tr>
<th>Ordinary places:</th>
<th>Reserved places:</th>
</tr>
</thead>
<tbody>
<tr>
<td>1) Places with scholarship funded by INFN - LNS: 1</td>
<td>1) Places with scholarship funded by the University of Catania, reserved to graduates from foreign universities: 1</td>
</tr>
<tr>
<td>2) Places with scholarship funded by INFN-CT: 1</td>
<td>2) Places with scholarship funded by INFN-LNS reserved to graduates from foreign universities: 1</td>
</tr>
<tr>
<td>4) Places without scholarship: 2</td>
<td></td>
</tr>
</tbody>
</table>

**TOTAL: 7**

**TOTAL: 2**

**Selection**

<table>
<thead>
<tr>
<th>Ordinary Places:</th>
<th>Reserved Places:</th>
</tr>
</thead>
<tbody>
<tr>
<td>1) Evaluation of qualifications;</td>
<td>1) Evaluation of qualifications;</td>
</tr>
<tr>
<td>2) Written examination</td>
<td>2) Oral examination</td>
</tr>
<tr>
<td>3) Oral examination</td>
<td></td>
</tr>
</tbody>
</table>

Candidates meeting the requirements as in art. 5, pt. 8, can take the oral examination in the form of video conference interview.

**Date and place of Written examination**

Date: September 19, 2016 – h. 9.00
Place: Dipartimento di Fisica ed Astronomia, via Santa Sofia 64 – 95123 Catania

**Date and place of Oral examination**

Date: September 26, 2016 – h. 9.00
Place: Dipartimento di Fisica ed Astronomia, via Santa Sofia 64 – 95123 Catania
Annex 5

<table>
<thead>
<tr>
<th>Name of Ph.D. course</th>
<th>LAW (INTERNATIONAL)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Scientific field</td>
<td>Law</td>
</tr>
<tr>
<td>Department</td>
<td>Department of Law</td>
</tr>
<tr>
<td>Department website</td>
<td><a href="http://www.lex.unict.it/">http://www.lex.unict.it/</a></td>
</tr>
<tr>
<td>Ph.D. Coordinator</td>
<td>Prof. Anna Maria Maggeri</td>
</tr>
<tr>
<td>Partner University</td>
<td>University of Castilla – La Mancha (Spagna)</td>
</tr>
</tbody>
</table>

**Brief description**
The Ph.D. course is aimed at training expert lawyers in techniques and methodologies of legal research, providing them with tools suitable for the identification of solutions to interest conflicts in a globalised reality. To this purpose, the structure of the course will consist, on one hand, in an in-depth analysis of interdisciplinary and general topics connected to legal studies (not only related to positive law, but also involving historical and philosophical aspects), and in the study of argumentation techniques and legal research methodology, including comparison to foreign systems and confrontation to European Union law and international law; on the other, in specific study related to scientific sectors on which the final thesis is focused. The course is aimed at teaching research methods through a constitutionally oriented approach in the domain of the so-called multilevel constitutionalism, featuring all branches of law and proceeding from the European Convention of Human Rights according to the interpretation of the Court of Strasbourg to the fundamental principles of the EU – enshrined in the Charter of Fundamental Rights – according to the decisions of the Court of Justice to national constitutions as interpreted by constitutional courts.

**Places**
1) Places with Scholarship funded by the University of Catania: 2
2) Places with scholarship funded by ESF OP Sicily 2014/2020, Call 5/2016: 2
3) Places without scholarship: 1

**Selection**
1) Evaluation of Qualifications
2) Written examination
3) Oral examination

**Date and place of written examination**
Date: September 19 2016, h. 8.30
Place: Dipartimento di Giurisprudenza – Via Gallo 24, 95124 Catania

**Date and place of oral examination**
Date: September 27 2016, h. 8.30
Place: Dipartimento di Giurisprudenza – Via Gallo 24, 95124 Catania
<table>
<thead>
<tr>
<th>Name of Ph.D. course</th>
<th>SYSTEMS, ENERGY, COMPUTER AND TELECOMMUNICATIONS ENGINEERING</th>
</tr>
</thead>
<tbody>
<tr>
<td>Scientific field</td>
<td>Engineering</td>
</tr>
<tr>
<td>Department</td>
<td>Department of Electric, electronics and computer engineering</td>
</tr>
<tr>
<td>Department website</td>
<td><a href="https://151.97.56.80/dieitk">https://151.97.56.80/dieitk</a></td>
</tr>
<tr>
<td>Ph.D. Coordinator</td>
<td>Prof. Paolo Arena</td>
</tr>
<tr>
<td>Partner university</td>
<td>None</td>
</tr>
</tbody>
</table>

**Brief description**

The Ph.D. course is the natural continuation of cycles XXIX, XXX and XXXI, result of the aggregation of Ph.D. courses in Systems Engineering, Energy and Computer and Telecommunication Engineering. The course considers historical learning paths developed and evolved during the history of the same course offered since 1996 with different denominations, however combined with a local and global view.

Learning paths concern specific themes such as Electronics, Automation, Complex Systems Engineering and Control, Instrumentation, Sensors and Wireless nets of sensors, Mechanics, Materials, Bio-engineering and Bio-robotics, Microsystems, Production, Transmission, Use, Management and Control of energy, Information Systems, of telecommunications and electromagnetic fields, with reference to topics related to Smart Systems, Cities and Environment.

The course provides a skill portfolio associating techno-scientific preparation with the development of a research project to be carried out also at highly qualified research centres, either national or international, or enterprises.

The Ph.D. academic board is integrated with foreign academics who have high supported doctoral students in their course activities and individual research.

**Places**

1) Places with scholarship funded by the University of Catania: 2
2) Places with scholarship funded by RIF OP Sicily 2014/2020, Call 5/2016: 3
3) Places without scholarship: 1

**TOTAL: 6**

**Selection**

1) Evaluation of qualifications
Annex 7

<table>
<thead>
<tr>
<th>Name of Ph.D. course</th>
<th>MATHEMATICS AND COMPUTER SCIENCE</th>
</tr>
</thead>
<tbody>
<tr>
<td>Scientific field</td>
<td>Mathematics, Physics and Natural science</td>
</tr>
<tr>
<td>Department</td>
<td>Department of Mathematics and Computer Science</td>
</tr>
<tr>
<td>Department</td>
<td><a href="http://we3.dimi.unict.it/">http://we3.dimi.unict.it/</a></td>
</tr>
<tr>
<td>Ph.D. Coordinator</td>
<td>Prof. Giovanni Russo</td>
</tr>
</tbody>
</table>
| Partner University   | 1) University of Palermo  
                      | 2) University of Messina |

**Brief description**

Primary aim of the Ph.D. course is the training of young researchers in the domains of pure and applied mathematics and computer science, and professionals who can be employed in academic research or in the industry. Doctoral students are expected to attain skills in:

- a) Autonomous research with scientific results internationally valid and technologically transferable;
- b) Coordination with other experts with reference to research development projects on either strictly mathematical/computer topics or multidisciplinary themes;
- c) Coordination of small research and development teams within either academic or enterprise world;
- d) Communication of projects and results at international level;
- e) Evaluation of results and scientific literature at least in one sector of specialization.

The course is structured on three levels: attendance to lessons (mainly in the first two years), both basic and focused on the doctoral course research themes, assignment of research projects which enable doctoral students to improve their research skills; drawing up of the doctoral thesis under the supervision of academics specialized in the research domain chosen by the students (third year). Students will participate in specific seminars, can carry out part of their research at universities provided they have availability to host them, or carry out internships/traineeships at enterprises or public/private research bodies.

**Places**

<table>
<thead>
<tr>
<th>Ordinary places</th>
<th>Reserved places</th>
</tr>
</thead>
<tbody>
<tr>
<td>1) Places with scholarship funded by the University of Catania: 2</td>
<td>1) Places without scholarship reserved to graduates from foreign universities: 2</td>
</tr>
<tr>
<td>2) Places with scholarship funded by the University of Palermo: 3</td>
<td></td>
</tr>
<tr>
<td>3) Places with scholarship from the University of Messina: 2</td>
<td></td>
</tr>
<tr>
<td>4) Place with scholarship funded by ST Microelectronics S.r.l.: 1</td>
<td></td>
</tr>
<tr>
<td>Research theme: Multi-sensor data fusion</td>
<td></td>
</tr>
<tr>
<td>5) Place with scholarship funded by OSRAM: 1</td>
<td></td>
</tr>
<tr>
<td>Research theme connected to design and develop of a low-cost and non-invasive fall detection system based on imaging sensors and computer vision algorithms</td>
<td></td>
</tr>
<tr>
<td>6) Place with scholarship funded through ESFPO of Sicily 2014/2020, Call 5/2016: 3</td>
<td></td>
</tr>
<tr>
<td>7) Places without scholarship: 2</td>
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**TOTAL: 15**

**Selection**

<table>
<thead>
<tr>
<th>Ordinary Places</th>
<th>Reserved Places</th>
</tr>
</thead>
<tbody>
<tr>
<td>1) Evaluation of qualifications</td>
<td>1) Evaluation of Qualifications</td>
</tr>
<tr>
<td>2) Written examination</td>
<td>2) Written examination</td>
</tr>
<tr>
<td>3) Oral examination</td>
<td>3) Oral Examination</td>
</tr>
</tbody>
</table>

Candidates meeting the requirements as in art. 5, pt. 8, can take the oral examination in the form of video conference interview.

**Date and place of written examination**

Date: September 20 2016, h. 15:30  
Place: Dipartimento di Matematica e Informatica, Università di Catania, Viale Andrea Doria 6, 95125, Catania

**Date and place of oral examination**

Date: September 27 2016, h. 15:30  
Place: Dipartimento di Matematica e Informatica, Università di Catania, Viale Andrea Doria 6, 95125, Catania
### Annex 8

<table>
<thead>
<tr>
<th>Name of Ph.D. course</th>
<th>NEUROSCIENCE (INTERNATIONAL)</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Scientific field</strong></td>
<td>Medicine and Surgery</td>
</tr>
<tr>
<td><strong>Department</strong></td>
<td>Department of Biomedical Science and Biotechnologies</td>
</tr>
<tr>
<td><strong>Department Website</strong></td>
<td><a href="http://biomter.unict.it/">http://biomter.unict.it/</a></td>
</tr>
<tr>
<td><strong>Ph.D. Coordinator</strong></td>
<td>Prof. Salvatore Salamone</td>
</tr>
<tr>
<td><strong>Partner University</strong></td>
<td>Università Bordeaux-Ségalen (France)</td>
</tr>
</tbody>
</table>

#### Brief Description
The curriculum in Neuropharmacology and ocular pharmacology provides students with the skills to study the interaction between drug and receptor, in silico, in vitro and in vivo and to study molecular and cellular mechanisms of neurotransmission and neuromodulation, pharmacologically subject to modulation for the therapy.

The curriculum in Neurophysiology focuses on nervous function, from molecular to cellular processes, from neural nets to behaviour and related neuro-psychologic. It comprises the study of sensorial systems, of motor activity, of learning and recalling, of attentive processes, of emotions and integrated systems and of diagnostic functional methodologies of normal or pathologic cognitive process. The curriculum in clinical neuroscience analyses neurologic pathologies in the interaction with the patient. It includes protocols of clinical-epidemiologic, meta-analysis, drawing up of guidelines, instrumental diagnostics, biologic and genetic research, also applicable in neurosurgery, and protocols of analysis of images with advanced technologies. The curriculum in Pharmaceutical Sciences includes on one hand the Medicinal Chemistry of SNC pathologies, on the other the pharmacokinetics and characterization of innovative technological systems for protected and controlled drug delivery and for controlled drug delivery targeted at SNC.

#### Places

<table>
<thead>
<tr>
<th>Ordinary Places</th>
<th>Reserved places</th>
</tr>
</thead>
<tbody>
<tr>
<td>1) Places with scholarship funded by the University of Catania: 3</td>
<td>1) Places with scholarship funded by University Bordeaux-Ségalen to graduates from University Bordeaux-Ségalen (France): 1</td>
</tr>
<tr>
<td>2) Places with scholarship funded through ESF OP Sicily 2014/2020, Call 5/2016: 3</td>
<td></td>
</tr>
<tr>
<td>3) Places without scholarship: 1</td>
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</tr>
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</table>

Total: 7

#### Selection

<table>
<thead>
<tr>
<th>Ordinary places:</th>
<th>Places reserved to graduates from University Bordeaux-Ségalen:</th>
</tr>
</thead>
<tbody>
<tr>
<td>1) Evaluation of qualifications; Oral Examination</td>
<td>1) Evaluation of Qualifications; Oral Examination</td>
</tr>
</tbody>
</table>

Candidates meeting the requirements as in art. 5, pt. 8, can take the oral examination in the form of video conference interview.

#### Date and place of oral examination

Date: September 26, 2016, h. 9:00
Place: Cittadella Universitaria, Via S. Sofia 64, Catania, Edificio II, piano terzo, Sala riunioni
## Annex 9

<table>
<thead>
<tr>
<th>Name of Ph.D. Course</th>
<th>MATERIALS SCIENCE AND NANOTECHNOLOGIES</th>
</tr>
</thead>
<tbody>
<tr>
<td>Scientific Field</td>
<td>Science matematiche, fisiche e naturali</td>
</tr>
<tr>
<td>Department</td>
<td>Department of Physics and Astronomy</td>
</tr>
<tr>
<td>Department website</td>
<td><a href="http://www.dfa.unict.it/">http://www.dfa.unict.it/</a></td>
</tr>
<tr>
<td>Ph.D. Coordinator</td>
<td>Prof. Maria Grazia Grimaldi</td>
</tr>
<tr>
<td>Partner University</td>
<td>University of Palermo</td>
</tr>
</tbody>
</table>

**Brief Description**

The Ph.D. is aimed at providing the doctoral student with comprehensive basic scientific knowledge, autonomous ability of planning and implementation of research and possible technological application. Doctoral students will attain interdisciplinary training in the domain of Materials Science and Technology through additional course activity in comparison to course activity provided to related degree courses (Chemistry, Physics and Engineering) and above all through training in research in cutting edge topics within groups with internationally recognised scientific knowledge. Nanotechnologies require more attention to problems of interdisciplinary training. The doctoral student will be directed towards the study of fundamental phenomena relevant to nanoscale, to manufacture techniques and analysis of nanostructures, and to advanced applications in nanotechnology so as to attain transversal knowledge necessary to actively interact in different disciplinary fields.

Research themes for the Ph.D. course in Materials Science and Nanotechnologies:
- Materials and nanotechnologies for the environment;
- Materials and nanotechnologies for energy;
- Materials and nanotechnologies for healthiness;
- Materials and nanotechnologies for electronics and photonics.

**Places**

<table>
<thead>
<tr>
<th>Ordinary places:</th>
<th>Reserved places:</th>
</tr>
</thead>
<tbody>
<tr>
<td>1) Places with scholarship funded by the University of Catania: 1</td>
<td>1) Places without scholarship reserved to graduates from foreign universities: 1</td>
</tr>
<tr>
<td>2) Places with scholarship funded by the University of Palermo: 3</td>
<td></td>
</tr>
<tr>
<td>3) Places with scholarship funded by IMM-CNR: 4</td>
<td></td>
</tr>
<tr>
<td>Research themes:</td>
<td></td>
</tr>
<tr>
<td>- Analysis of photodetectors and photovoltaic cells of next generation silicon;</td>
<td></td>
</tr>
<tr>
<td>- Synthesis of quantum dot nanostructures of silicon and their functionalization for application of lithium batteries;</td>
<td></td>
</tr>
<tr>
<td>- Processes and characterization of devices based on broadband gap semiconductors;</td>
<td></td>
</tr>
<tr>
<td>- Synthesis of polymer nanocomposites for processes of purification of water and air.</td>
<td></td>
</tr>
<tr>
<td>4) Places with scholarship funded by FSE OP Sicily 2014/2020, Call 5/2016: 3</td>
<td></td>
</tr>
<tr>
<td>5) Places without scholarship: 1</td>
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</table>

**Selection**

<table>
<thead>
<tr>
<th>Ordinary places:</th>
<th>Places reserved to graduates from foreign universities:</th>
</tr>
</thead>
<tbody>
<tr>
<td>1) Evaluation of qualifications;</td>
<td>1) Evaluation of Qualifications;</td>
</tr>
<tr>
<td>2) Oral examination</td>
<td>2) Oral Examination</td>
</tr>
</tbody>
</table>

Candidates meeting the requirements as in art. 4, pt. 8, can take the oral examination in the form of video conference interview. Candidates meeting the requirements as in art. 4, pt. 8, can take the oral examination in the form of video conference interview.

**Date and place of oral examination**

- Date: September 27, 2016, h. 9:00
- Place: Dipartimento di Fisica e Astronomia, via Santa Sofia 64, sala A (1° piano)
### Annex 10

<table>
<thead>
<tr>
<th>Name of Ph.D. Course</th>
<th>CHEMISTRY (INTERNATIONAL)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Scientific field</td>
<td>Mathematics, Physics and Natural Science</td>
</tr>
<tr>
<td>Department</td>
<td>Department of Chemical Science/Dipartimento di Scienze Chimiche</td>
</tr>
<tr>
<td>Department website</td>
<td><a href="http://www.dipchi.unict.it/">http://www.dipchi.unict.it/</a></td>
</tr>
<tr>
<td>Ph.D. Coordinator</td>
<td>Prof. Salvatore Sortino</td>
</tr>
<tr>
<td>Partner University</td>
<td>University of Gothenburg (Sweden)</td>
</tr>
</tbody>
</table>

### Brief Description

The Ph.D. is aimed at further study and consolidation of acquired knowledge and to the attainment of new ones, broader scientific spectrum connected to the implementation of advanced research projects. The course must train Ph.D. with sound, advanced, prospectively open culture so as to be able to answer, with due flexibility, to subsequent challenges in a work environment within both academic institution and industry. Particularly, in our territory there are pharmaceutical factories, microelectronics factories, solar plants, and petrochemical pole in addition to small enterprises. Such articulate request can be exclusively satisfied by a Ph.D. course providing a training enabling the future Ph.D. to carry out their research activity in all fields where Chemistry, central and interdisciplinary science, is applied. Particular attention is reserved to international training of doctoral students. In addition to manifold possibilities related to the already existing international collaborations between Department members and foreign researchers, the internationalisation of the Ph.D. course has been implemented. Doctoral student will be encouraged to personally contribute to the lines of research in which they are involved and to present their results at National and International Congresses.

### Places

1) Places with scholarship funded by the University of Catania: 1  
2) Places with scholarship funded through FSE OP Sicily 2014/2020, Call 2016: 3  
3) Places without scholarships: 1  
**TOTAL: 5**

### Selection

1) Evaluation of qualifications  
2) Oral examination  
Candidates meeting the requirements as in art. 5, pt. 8, can take the oral examination in the form of video conference interview.

### Date and place of oral examination

**Date:** September 27 2016, h. 9.00  
**Place:** Dipartimento di Scienze Chimiche, Viale Andrea Doria 6, Catania
<table>
<thead>
<tr>
<th>Name of Ph.D. Course</th>
<th>GEOLOGICAL, BIOLOGICAL AND ENVIRONMENTAL SCIENCE</th>
</tr>
</thead>
<tbody>
<tr>
<td>Scientific field</td>
<td>Mathematics, Physics and Natural Science</td>
</tr>
<tr>
<td>Department</td>
<td>Department of Biological, Geological and Environmental Science</td>
</tr>
<tr>
<td>Department website</td>
<td><a href="http://www.dipbiogeo.unict.it/">http://www.dipbiogeo.unict.it/</a></td>
</tr>
<tr>
<td>Ph.D. Coordinator</td>
<td>Prof. Agata Di Stefano</td>
</tr>
<tr>
<td>Partner University</td>
<td>None</td>
</tr>
</tbody>
</table>

**Brief description**

The Ph.D. course proposes an advanced educational system in order to tackle complex, interdisciplinary research topics connected to different aspects concerning land and environment, also in relation to the life of organisms living on them. Particularly, training and research activity are aimed at identifying the connection within natural processes and between these and organisms activity, both animal and plant, in order to provide the skills in the management of environmental risks and natural resources.

The Ph.D. course is structured in two curricula: "Earth Science" and "Environmental Biology and Biotechnologies".

As for the first curriculum, learning outcomes consist in:

1. Achievement of skills in geologic, petrographic and geophysical research methodologies;
2. Analysis of sedimentary, volcanic and tectonic processes;
3. Monitoring of parameters useful for prevention and mitigation of geological risks;
4. Finding of georesources;
5. Analysis of lytic materials and lichens.

As for the second:

1. Achievement of skills in genetic, molecular and cellular research;
2. Conservation of biodiversity and management of natural resources;
3. Monitoring and prevention of environmental risk;
4. Use of biotechnologies and molecular methods applicable to biomedical sector;
5. Development of proteomic and genomic investigations;
6. Identification of food and environmental pollutants.

**Places**

1. Places with scholarship funded by the University of Catania: 2
2. Places with scholarship funded by ISAFOM-CNR: 1
   Research theme: Analysis of biosynthetic processes of bioactive molecules of Mediterranean cultivated species and their wild ancestors.
4. Places without scholarship: 1

**TOTAL: 6**

**Selection**

1. Evaluation of Qualifications
2. Oral Examination

Candidates meeting the requirements as in art. 5, pt. 8, can take the oral examination in the form of video conference interview.

**Date and place of oral examination**

- Date: September 27, 2016, h. 9.00
- Place: Catania (cat 95120) – Corso Italia 57 – Dipartimento di Scienze Biologiche, Geologiche e Ambientali, Sezione di Scienze della Terra
## Annex 12

<table>
<thead>
<tr>
<th>Name of Ph.D. Course</th>
<th>POLITICAL SCIENCE</th>
</tr>
</thead>
<tbody>
<tr>
<td>Scientific Field</td>
<td>Political Science</td>
</tr>
<tr>
<td>Department</td>
<td>Department of Chemical Science</td>
</tr>
<tr>
<td>Department website</td>
<td><a href="http://www.deps.unict.it/">http://www.deps.unict.it/</a></td>
</tr>
<tr>
<td>Ph.D. Coordinator</td>
<td>Prof. Fabrizio Sciare</td>
</tr>
<tr>
<td>Partner Institution</td>
<td>None</td>
</tr>
</tbody>
</table>

### Brief description

The Ph.D. course in Political Science is aimed at enabling students to acquire research tools necessary to learn methodologies of each disciplinary sectors in an interdisciplinary cultural environment organized by themes, according to the institutional design proposed by the Ph.D. Academic Board.

- Particularly, the aims of the Ph.D. course are:
  - a. Training of qualified scholars in the domain of politological, philosophic, sociologic, historic, legal research with particular reference to problems of political dimension;
  - b. Training of highly skilled professionals for a) advice and management of national and international public institutions in political and administrative sectors; b) social activity and activity in citizenship building;
  - c. Cultural training of professionals interested in specialization activities within international organizations.

### Places

1) Places with scholarship funded by the University of Catania: 5
2) Places without scholarship: 1

TOTAL: 6

### Selection

1) Evaluation of Qualifications
2) Oral Examination

Candidates meeting the requirements as in art. 5, pt. 8, can take the oral examination in the form of video conference interview.

### Date and place of oral examination

Date: September 27 2016, h. 0,30
Place: Dipartimento di Scienze Politiche e Sociali, Via Vittorio Emanuele II, 49 – 95121 – Catania
<table>
<thead>
<tr>
<th>Name of Ph.D. Course</th>
<th>CULTURAL HERITAGE STUDIES</th>
</tr>
</thead>
<tbody>
<tr>
<td>Scientific Field</td>
<td>Humanities and Foreign languages</td>
</tr>
<tr>
<td>Department</td>
<td>Department of Humanistic Studies</td>
</tr>
<tr>
<td>Department website</td>
<td><a href="http://www.disma.unict.it/">http://www.disma.unict.it/</a></td>
</tr>
<tr>
<td>Ph.D. Coordinator</td>
<td>Prof. Grazia Pulvirenti</td>
</tr>
<tr>
<td>Partner Institution</td>
<td>N/A</td>
</tr>
</tbody>
</table>

**Brief Description**

The Ph.D. course is aimed at analysing, understanding and enhancing, from different perspectives and diverse methodologies, the manifold aspects of cultural heritage, both material and immaterial; from archaeological finds to urban monuments, from historic and archival documents to philosophic and literary documents. Methodologic and operative concentration on the territory to which the course is related – Sicily, land rich of peculiarities and unique resources in the national and international landscape – gives the course unity in the field of doctoral training on cultural heritage offered by universities of central and southern Italy.

Historically contextualized in a Mediterranean and European perspective, the course makes use of the “support” of almost all major European and extra-European cultural languages (English, German, Arabic) and is structured, on one hand, on research and archaeological and historiographic studies; on the other on the definition, classification, filing and interpretation of immaterial heritage in its different forms (historic document, literary, philosophic and music manuscripts, private collections and family registers, etc.).

The course encourages and permits high profile general education on all fronts of knowledge and practice of cultural heritage while theory and the practice of inter and multidisciplinary didactics offer integrated and global education in the field of cultural heritage and cultural tourism.

**Places**

1. Places with scholarship funded by the University of Catania: 2
3. Places without scholarship: 1
Total: 5

**Selection**

1. Evaluation of Qualifications;
2. Written examination
3. Oral examination
Candidates meeting the requirements as in art. 5, pt. 8, can take the oral examination in the form of video conference interview.

**Date and place of written examination**

Date: September 19, 2016, h. 9.00
Place: Sala Rettagolare del Coro di notte – Dipartimento di Scienze Umanistiche, Piazza Dante 32, 95124 Catania

**Date and place of written examination**

Date: September 26, 2016, h. 9.00
Place: Sala Rettagolare del Coro di notte – Dipartimento di Scienze Umanistiche, Piazza Dante 32, 95124 Catania
**Annex 14**

<table>
<thead>
<tr>
<th>Name of Ph.D. Course</th>
<th>EVALUATION AND MITIGATION OF URBAN AND LAND RISKS</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Scientific field</strong></td>
<td>Engineering and Architecture</td>
</tr>
<tr>
<td><strong>Department</strong></td>
<td>Department of Civil Engineering and Architecture</td>
</tr>
<tr>
<td><strong>Department website</strong></td>
<td><a href="http://www.dis.unict.it/">http://www.dis.unict.it/</a></td>
</tr>
<tr>
<td><strong>Ph.D. Coordinator</strong></td>
<td>Prof. Massimo Cuomo</td>
</tr>
<tr>
<td><strong>Partner Institution</strong></td>
<td>None</td>
</tr>
</tbody>
</table>

**Brief Description**

The Ph.D. course is aimed at training a highly qualified professional capable of using, autonomously and creatively, advanced technologies for solving community problems due to urban and land risks highly present in Eastern Sicily: seismic risks, road risks, water risk, defense of the environment with particular reference to waste management, energy requalification, etc. The doctoral student is expected to develop communication skills in order to efficiently communicate research results to an international audience and to design and manage research projects at both national and international level.

The Ph.D. research themes are developed in curricula and concern the planning and analysis of earthquake-resistant structures; requalification of existing buildings and monuments heritage; requalification of urban fabric; development and protection of architectural and historic heritage; planning, design, construction and management of road, water, health and environmental infrastructures and land interfaces of different infrastructural systems; land defense from a geotechnical and water point of view.

In accordance with the Horizon 2020 strategy, research themes of defense from environmental risks will complement the planning of efficient intervention in terms of energy and social usability.

**Places**

| 1) Places with scholarship funded by the University of Catania: 2 |
| 3) Places without scholarship: 1 |

**Selection**

1) Evaluation of Qualifications:
2) Written examination
3) Oral examination

Candidates meeting the requirements as in art. 5, pt. 8, can take the oral examination in the form of video conference interview.

**Date and place of Written Examination**

Date: September 20 2016, h. 9.00
Place: Aula D02, Via A. Doria 6, Edificio 14, Catania

**Date and place of Oral Examination**

Date: September 27 2016, h. 9.00
Place: Aula D02, Via A. Doria 6, Edificio 14, Catania
Annex 15

REQUEST OF EQUIVALENCE

The undersigned...........................................................................................................(name and surname)
born in .........................................................................................................................(place of birth)
on...............................................................................................................................(date of birth)
nationality ...................................................................................................................(nationality)
requests to the selection committee for the Ph.D. course in
........................................................................................................................................XXXII cycle
the recognition of equivalence to Laurea Magistrale of the following diploma:

Name of the master degree: .........................................................................................

Awarding university: .................................................................................................

Country: .....................................................................................................................

Date of awarded diploma ..........................................................................................

Place and date,

................................................

Signature

................................................
Annex 16

Declaration concerning the type of place
(for candidates applying for Ph.D. courses offering reserved places only)

1. the undersigned

<table>
<thead>
<tr>
<th>Surname:</th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Name:</td>
<td></td>
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<tr>
<td>Gender:</td>
<td>M</td>
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<tr>
<td>Date:</td>
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</tr>
<tr>
<td>Birth:</td>
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<tr>
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<tr>
<td>City:</td>
<td></td>
</tr>
<tr>
<td>Residence:</td>
<td>Country</td>
</tr>
<tr>
<td>e-mail:</td>
<td></td>
</tr>
</tbody>
</table>

DECLARE (Please tick one of the following)

- for ordinary places [ ]
- for reserved places [ ]

Ph.D. course in:

________________________________________

(PLACE)   /  /   (DATE)   (APPLICANTS SIGNATURE)
Annex 17

VIDEO CONFERENCE INTERVIEW FORM

(art. 5 Call for applications)

WARNING: to be filled in as part of the application process where applicable and to be uploaded (through the procedure available at the link http://portalestudenti.unict.it/portalestudenti/manServlet) by the deadline for submitting the admission application with a copy of a valid ID document.

I, the undersigned

<table>
<thead>
<tr>
<th>Surname:</th>
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<tbody>
<tr>
<td>Name:</td>
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<tr>
<td>City</td>
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<tr>
<td>Residence:</td>
</tr>
<tr>
<td>e-mail</td>
</tr>
</tbody>
</table>

REQUEST

to take the interview for the admission to the Ph.D. in ____________________________
in video conference, as specified in the relevant attachment to the Admission Announcement and therefore provide the technical details required:

Video conference software:

__________________________________________

Personal account for the remote connection:

I ALSO DECLARE

to be aware of the provisions of the Admission Announcement, particularly art. 3 and 5

(PLACE) / (DATE) / (APPLICANT'S SIGNATURE)