



**MASTER DEGREE PROGRAMME IN BIONICS ENGINEERING
(LAUREA MAGISTRALE IN BIONICS ENGINEERING, LM-21)**

CALL FOR APPLICATIONS – A.Y. 2016 - 2017

Art. 1

**Admission to the Master Degree Programme in Bionics Engineering
(Laurea Magistrale in Bionics Engineering, LM-18)**

1. Scuola Superiore Sant'Anna (hereafter “the School”), along with the University of Pisa, announces for the Academic Year 2015-2016 a public competition for admission to the Master Degree Programme in Bionics Engineering (Laurea Magistrale in Bionics Engineering, LM-21), offered jointly by the Department of Information Engineering of the University of Pisa and the BioRobotics Institute of the School. Further information on the Master Degree Programme is available at www.bionicsengineering.com.
2. The competition aims to select at most 20 candidates, as follows:
 - a. Up to 10 positions for non-EU applicants exclusively (citizens of countries not belonging to the European Union) and not residing in Italy (hereafter “*non-EU Applicants*”)¹;
 - b. Up to 10 positions for EU applicants and non-EU applicants residing in Italy exclusively (hereafter “*EU Applicants*”).
3. If fewer than 10 non-EU selected Applicants join the Master Degree Programme, the number of positions available for the EU Applicants will be increased by the equivalent number of positions for non-EU applicants that remain vacant.
4. At the end of the selection procedures, the Selection Committee will provide a final ranking list of eligible applicants. Admitted applicants, according to the positions available, will be appointed with a School's Rector Decree.

¹ Law n. 189/2002 art. 26: "Access to university courses is allowed however - with the same conditions as Italian students - to: students with a permit of stay for dependent employment, self-employment, family reasons, political asylum, humanitarian asylum or religious reasons; all foreigners regularly living in Italy for at least one year and with a higher qualification obtained in Italy; as well as to foreigners - wherever resident - with final diplomas from Italian schools abroad or foreign or international schools - operating in Italy or abroad - and subjected to bilateral agreements or special laws for the acknowledgment of qualifications and satisfying the general conditions required for entry to study. Citizens from Norway, Iceland, Liechtenstein, Switzerland and the Republic of San Marino are admitted under the same conditions as EU citizens. For extra-EU applicants - not residing in Italy - the relevant ministry rules applies.

Art. 2
Admission Requirements

1. By the deadlines as per art. 3 and 4 applicants must hold a Laurea di I level (Bachelor of Science - First Cycle Degree) in Biomedical Engineering awarded by University of Pisa. Candidates that hold a Laurea di I level (Bachelor of Science - First Cycle Degree) in Biomedical Engineering awarded by any other University in Italy are admitted if their curriculum studiorum includes at least the following minimal qualifications in terms of gained credits (CFU):
 - At least 42 CFU in one or more of the following scientific fields: MAT/02, MAT/03, MAT/05, MAT/06, MAT/07, MAT/08, MAT/09, FIS/01, CHIM/07;
 - a. Candidates that hold a Laurea di I level (Bachelor of Science - First Cycle Degree) in Engineering belonging to class L-8 or L-9, awarded by any University in Italy, are admitted if they fulfil the following curricular requirements:
 - At least 42 CFU in one or more of the following scientific fields: MAT/02, MAT/03, MAT/05, MAT/06, MAT/07, MAT/08, MAT/09, FIS/01, CHIM/07;
 - At least 12 CFU in one or more of the following scientific fields: ING-INF/06, ING-IND/34;
 - At least 12 CFU in one or more of the following scientific fields: ING-INF/01, ING-INF/05, ING-INF/04, ING-IND/13, ING-IND/14, ING-IND/15.
 - b. Candidates that hold a Laurea di I level (Bachelor of Science - First Cycle Degree) or a Laurea di II level (Master of Science – Second Cycle Degree) in other disciplines, are admitted if they fulfil the following curricular requirements:
 - At least 42 CFU in one or more of the following scientific fields: MAT/02, MAT/03, MAT/05, MAT/06, MAT/07, MAT/08, MAT/09, FIS/01, CHIM/07;
 - At least 12 CFU in one or more of the following scientific fields: ING-INF/06, ING-IND/34;
 - At least 12 CFU in one or more of the following scientific fields: ING-INF/01, ING-INF/05, ING-INF/04, ING-IND/13, ING-IND/14, ING-IND/15;
 - At least 24 CFU in the scientific fields featuring the Classes L-8 and L-9.
 - c. Bachelor of Science or equivalent first cycle degree awarded by a foreign University after the completion of at least three-year course of study, in one of the subjects previously listed in a) and b) or equivalent will be evaluated by the Selection Committee, who decides upon degree equivalence only for this competition purposes. The admission of candidates holding a degree issued in a non-EU country will be conditional to the check and the legitimacy recognition of the degree, by the relevant Italian diplomatic authorities.
2. For non-EU Applicants, admission is extended also to applicants that have not graduated yet. In this case, a successful application will be conditional upon the subsequent awarding of a degree and the submission of adequate documentation no later than July 31, 2016.
3. For EU Applicants, admission is extended also to applicants that have not graduated yet. In this case, a successful application will be conditional upon the subsequent awarding of a degree and the submission of adequate documentation no later than November 2, 2016.

4. In addition to the academic degree, applicants must also have a good knowledge of the English language, corresponding to at least an intermediate level (B1 Level according to the Common European Framework of Reference for Languages). The Selection Committee will verify the level of knowledge of the English language during the interview.

Art. 3 **Non-EU Candidates Applications**

1. Applicants are requested to apply online at: www.bionicsengineering.com by April 11, 2016 at 11 am (GMT). In case of any problem with the online application, please contact the Master Degree Secretary's Office (+39.050883420, +39.050883136, e-mail: istitutobiorobotica@sssup.it).
2. In the application form candidates will state (self declaration):
 - a) family name, first name, place and date of birth, nationality, gender, marital status;
 - b) declaration that the candidate has never been convicted for a criminal offence or that she/he has no pending criminal proceedings;
 - c) declaration that the candidate holds an academic degree, as per Article 2. Applicants must specify the degree title, the University or University institute which awarded the degree, the degree course duration, the mark achieved (if applicable), the academic year in which the candidate started his/her undergraduate studies, the date of graduation. Candidates who have not graduated yet shall state the expected date of graduation (no later than July 31, 2016);
 - d) Cumulative Grade Point Average;
 - e) declaration of knowledge of the English language (and other foreign languages) specifying duration of studies and certification obtained;
 - f) permanent address and the mailing address (if different), where applicants wish to receive paper communications concerning their application. Applicants shall immediately contact the School if these addresses change as for the e-mail address, that is compulsory for the purposes of the application;
 - g) valid e-mail address to receive all communications related to the application purposes, as well as a telephone number and a skype id.
3. Non-EU Applicants shall also specify in which Italian Embassy or Consulate they intend to submit their pre-enrolment application in case of admission to the Course.
4. Applicants shall include in the application (all materials shall be in the Adobe pdf format and must use the file name shown):
 - a) **Cv_Surname_Name.pdf**: a copy of their complete *Curriculum Vitae et Studiorum* (in English) covering their education programme, cultural and professional experiences, prizes, publications, achievements and all other information that might help in the evaluation of the candidate;
 - b) **Certificate_Surname_Name.pdf**: copy of Degree Certificate (if applicable) and its translation if written in language other than English or Italian;
 - c) **Transcripts_Surname_Name.pdf**: the academic transcripts with the full list of courses and grades (in English or Italian). This list shall contain information regarding credits, units (or equivalent) received, the grades received for each class taken, and the date when the final examination (if applicable) was taken, provided by attaching the copy of the University Transcripts;
 - d) **Courses_Surname_Name** (not mandatory): a list of technical courses taken, specifying for each subject, according to the template provided in the application form: course name, hours, list of topics, hours per topic. Even if this attachment is not mandatory, it is highly

recommended to attach it to the online application. The evaluation committee will assess the document along with the other titles submitted by the candidates;

- e) **Thesis_Surname_Name**: short resume (5 pages max) of the Bachelor Thesis, or short resumen (5 pages max) of the ongoing Thesis activity, if this has been not completed, yet;
- f) **Passport_Surname_Name.pdf**: copy of valid passport or any other international ID;
- g) **English_Surname_Name.pdf** (not mandatory): if available, a copy of an English Language knowledge certification (at least intermediate B1 level);
- h) **Other_Surname_Name.pdf** (not mandatory): a copy of any other document or information that they deem suitable (works written in languages other than Italian and English must be accompanied by a summary in one of the above languages).

According to art. 46 and 47 of D.P.R. n. 445/2000, Italian citizens and EU citizens are allowed to submit self-declarations. Non-EU citizens legally residing in Italy are allowed as well, only with reference to information and facts which can be certified or attested by Italian public bodies.

- 5. **Applications with missing information will not be considered valid**. Integrations to the application after the call deadline will not be accepted in whatsoever circumstance.
- 6. The School and the University of Pisa are entitled to check the truthfulness of the declarations and the documentation submitted by the candidates, and may require the submission of original documents. In case of false statements the School can decide at any time, by justified Rector Decree, the exclusion of the candidate from the selection procedure without prejudice to the resulting criminal law liability.

Art. 4

EU Candidates Applications

- 1. Applicants are requested to apply online at: www.bionicsengineering.com by August 1, 2016 at 11 am (GMT). In case of any problem with the online application, please contact the Master Degree Secretary's Office (+39.050883420; 39.050883136, e-mail: istitutobiorobotica@sssup.it).
- 2. In the application form candidates will state (self declaration):
 - a) family name, first name, place and date of birth, nationality, gender, marital status;
 - b) declaration that the candidate has never been convicted for a criminal offence or that she/he has no pending criminal proceedings;
 - c) declaration that the candidate holds an academic degree, as per Article 2. Applicants must specify the degree title, the University or University institute which awarded the degree, the degree course duration, the mark achieved (if applicable), the academic year in which the candidate started his/her undergraduate studies, the date of graduation. Candidates who have not graduated yet shall state the expected date of graduation (no later than November 2, 2016);
 - d) Cumulative Grade Point Average;
 - e) declaration of knowledge of the English language (and other foreign languages) specifying duration of studies and certification obtained;
 - f) permanent address and the mailing address (if different), where applicants wish to receive paper communications concerning their application. Applicants shall immediately contact

the School if these addresses change as for the e-mail address, that is compulsory for the purposes of the application;

g) valid e-mail address to receive all communications related to the application purposes, as well as a telephone number and a skype id.

Applicants shall include in the application (all materials shall be in the Adobe pdf format and must use the file name shown):

a) **Cv_Surname_Name.pdf**: a copy of their complete Curriculum Vitae et Studiorum (in English) covering their education programme, cultural and professional experiences, prizes, publications, achievements and all other information that might help in the evaluation of the candidate;

b) **Certificate_Surname_Name.pdf**: copy of Degree Certificate (if applicable) and its translation if written in language other than English or Italian;

c) **Transcripts_Surname_Name.pdf**: the academic transcripts with the full list of courses and grades (in English or Italian). This list shall contain information regarding credits, units (or equivalent) received, the grades received for each class taken, and the date when the final examination (if applicable) was taken, provided by attaching the copy of the University Transcripts;

d) **Courses_Surname_Name.pdf (not mandatory)**: a list of technical courses taken, specifying for each subject, according to the template provided in the application form: course name, hours, list of topics, hours per topic. Even if this attachment is not mandatory, it is highly recommended to attach it to the online application. The evaluation committee will assess the document along with the other titles submitted by the candidates;

e) **Thesis_Surname_Name.pdf**: short resume (5 pages max) of the Bachelor Thesis, or short resumen (5 pages max) of the ongoing Thesis activity, if this has been not completed, yet;

f) **Passport_Surname_Name.pdf**: copy of valid passport or any other international ID;

g) **English_Surname_Name.pdf (not mandatory)**: if available, a copy of an English Language knowledge certification (at least intermediate B1 level);

h) **Other_Surname_Name.pdf (not mandatory)**: a copy of any other document or information that they deem suitable (works written in languages other than Italian and English must be accompanied by a summary in one of the above languages).According to art. 46 and 47 of D.P.R. n. 445/2000, Italian citizens and EU citizens are allowed to submit self-declarations. Non-EU citizens legally residing in Italy are allowed as well, only with reference to information and facts which can be certified or attested by Italian public bodies.

3. **Applications with missing information will not be considered valid.** Integrations to the application after the call deadline will not be accepted in whatsoever circumstance
4. The School and the University of Pisa are entitled to check the truthfulness of the declarations and the documentation submitted by the candidates, and may require the submission of original documents. In case of false statements the School can decide at any time, by justified Rector Decree, the exclusion of the candidate from the selection procedure without prejudice to the resulting criminal law liability.

Art. 5
Selection of Applicants

1. Applicant selection will involve, in both sessions, the assessment of all submitted documents and an interview. The selection process aims to evaluate each applicant's background and education, assessing those potential skills required when attending an interdisciplinary and innovative educational programme.
2. The Selection Committee is jointly nominated by the Director of the Department of Information Engineering of the University of Pisa and the Director of the BioRobotics Institute, and appointed with a School's Rector decree.
3. The final assessment will be on a hundred-point scale:
 - a. up to 70 points for titles evaluation;
 - b. the remaining 30 points for the interview.
4. The titles evaluation will be focused on the curriculum vitae et studiorum of the candidates, titles submitted, attended courses and the other documents submitted by the candidate. Admission to the interview is granted with a score of at least 49/70 points.
5. For non-EU applicants, the interviews will be held via videoconference (using Skype software or similar tools at the Selection Committee's discretion) at Italian Embassies, Consulates or other locations identified by the Selection Committee in order to assure the fulfilment of the applicants' identification procedures. If the interview is not attended at Embassies or Consulates, the candidate must exhibit, before starting the interview, the ID submitted in the online application.
6. For EU applicants, the interviews will be held in Pisa at the School premises. Candidates may ask the Selection Committee, due to proper and justified reasons, to hold the interview through videoconference (using Skype software or similar tools at the Selection Committee's discretion). In this case, the candidate must exhibit, before starting the interview, the ID submitted in the online application.
7. A candidate not attending the interview within the scheduled slot assigned will be excluded from the final ranking list.

If the interview is held through videoconference, the candidate is in charge of ensuring the availability of the required hardware (PC, webcam) and software, and a reliable internet connection.
8. During the interview, the Selection Committee will examine the candidates' profiles on the basis of submitted titles, and will verify the existence of a solid background knowledge as per Annex 1, as well as the candidate English knowledge level.

Applicants shall obtain at least 21/30 points in order to be included in the final ranking.
9. A final minimum score of 70/100 is therefore necessary to successfully pass the examination and be eligible for admission to the Master Degree Programme.

Art. 6
Selection schedule and results

1. Selections will be held according to the following schedule,

- a) **Non-UE Candidates**
assessment of submitted documentation: within April, 18, 2016
Interview: April, 26 and 27, 2016
final ranking list of eligible applicants: within April, 29, 2016
- b) **UE Candidates**
assessment of submitted documentation: within September, 5, 2016
Interview: September, 12 and 13, 2016
final ranking list of eligible applicants: within September 16, 2016

2. The results of the assessment of submitted documentation will be published on www.bionicsengineering.com, with the list of the applicants admitted to the interview and all information regarding the place, time and date of the interview. The final ranking lists will be published on the same website.

Art. 7

Ranking Lists and Admitted Applicants

1. Admitted applicants are nominated with a School's Rector Decree according to the selection ranking, covering all available positions for each session of the competition.
2. If a candidate renounces the position offered, the next eligible candidate in the ranking list will be called.
3. Non-EU admitted candidates will be requested to send their written assent to the Master Secretary's Office and they must contact the relevant Italian Embassy or Consulate in order to pre-enroll in the "Laurea Magistrale in Bionics Engineering (LM-21)" programme offered by the University of Pisa. Pre-enrolment terms and conditions are reported on the website: <http://www.studiare-in-italia.it/studentistranieri/>.
4. Applicants that have not graduated yet, as referred on art. 2, point 2, are admitted under condition. Their matriculation is conditional upon the awarding of a degree and the submission of the achievement documentation no later than the given deadlines.

Art. 8

Matriculation

1. Admitted applicants shall matriculate at the University of Pisa according to the terms and conditions which will be communicated after the publication of the ranking list on the reported on the website. Admitted applicants holding a non-Italian degree shall enclose, with the matriculation application, the original academic title, the official translation of the degree into Italian, the relevant consular legalisation of the foreign title, along with the "Dichiarazione di Valore" (Declaration of Value) issued by the Italian diplomatic representative in the country to which the educational system of the university issuing the diploma belongs.
As an alternative, if the degree was issued along with a Diploma Supplement, it will be possible to submit this document, legalised by the relevant authorities, instead of the "Dichiarazione di Valore".

Art. 9
Tuition fee and Contributions

1. Tuition fee depends on family income and country of provenience of the students, according to the rules of the University of Pisa (please consult the webpage: www.unipi.it/tuition-fees).
2. Students may apply for the contributions provided by the the “Azienda della Regione Toscana per il Diritto allo Studio Universitario” (DSU - Student’s Support Office). The annual call for contributions is published in the month of July at <http://www.dsu.toscana.it>.
3. In order to encourage the participation of foreign applicants, the University of Pisa offers n. 10 packages of services for foreign students, mainly non-EU, which consist of an initial standing temporary (three months in a shared room), and an Italian course of 40 hours to be performed at the University Language Centre
(<https://www.unipi.it/index.php/students/item/2274-extraordinary-contributions>)
4. In order to facilitate the participation of foreign applicants, the University of Pisa, through an academic committee, provides the value of 10,000 Euros, the best candidate admitted. The winning student will also be exempted from paying tuition fees, with the exception of € 140 which covers regional taxes. The scholarship of 10,000 Euros will be divided into two rates: the first 5,000 Euros at the beginning of the semester and, in any case, after the enrollment; the second, of 5,000 Euros in early March 2017
(<https://www.unipi.it/index.php/students/item/2274-extraordinary-contributions>).
5. For other subsidies on the basis of international agreements of the University of Pisa please log onto <https://www.unipi.it/index.php/internazionalizzazione>

Person in charge of the Procedure:

Dr. Silvia Marcacci, Responsible of the U.O. Ph.D-Lauree Magistrali of Scuola Superiore Sant'Anna – Palazzo Toscanelli, Via Santa Cecilia, 3 – 56127 Pisa – tel. 050/883528 - fax 050/883519 - e-mail: s.marcacci@sssup.it.

Treatment of Personal Data

The personal data supplied by the applicants will be mainly processed automatically by the Scuola Superiore Sant'Anna and in accordance with Art. 11 of the Legislative Decree No. 196/2003 (“Code Concerning the Protection of Personal Data”) for the management of the competition procedure. The data may also be used in anonymous form for statistical purposes. Personal data supply is essential for the participation to the selection. Anyone interested can, at any time, exercise the rights provided by Art. 7 of the above-mentioned Legislative Decree, by writing to the Scuola Superiore Sant'Anna, U.O. Ph.D-Lauree Magistrali, Via Santa Cecilia, 3, 56127 Pisa (Italy).

Measures of Prevention of Corruption

The Scuola Superiore Sant'Anna operates in compliance with Law No. 190/2012 concerning the prevention of corruption by implementing measures identified in the “Three-year anti-corruption plan” published in the section “Transparency in Administration” of the School website at: <http://www.sssup.it/amministrazione-trasparente/altri-contenuti/corruzione>.

REGULATORY REFERENCES:

Equivalence and recognition of foreign degrees: art. 2, L. 148/2002; art. 6, DM 270/2004

Self-declarations: DPR no. 445/2000 and subsequent modifications and supplements

ANNEX 1 TO THE CALL FOR APPLICATION FOR THE ADMISSION TO THE MASTER DEGREE PROGRAMME IN BIONICS ENGINEERING, A.Y. 2016-17

Candidate's Profile: requested capabilities and background

The courses of the Master Degree Programme in Bionics Engineering assume the existence of a solid background knowledge at the methodological and technological level, that typically characterizes the Bachelor Programmes in Biomedical Engineering.

The applicants are strongly recommended to verify their background level with respect to the topics and subjects reported below. The teachers of both University of Pisa and Scuola Superiore Sant'Anna can be contacted for advising the applicants and the selected students.

It is required that the students in Bionics Engineering possess good abilities of analysis and synthesis, as well as problem solving capabilities.

The basic concepts and principles of bioengineering are necessary, in particular concerning:

- mathematics and physics;
- basic mechanics,
- basic electronics;
- basic knowledge of computer science