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

CALL FOR APPLICATIONS

ACADEMIC YEAR: 2015- 2016 (start of the courses: September 2015, end of the courses: May 2016)

Art. 1

Admission

Scuola Superiore Sant'Anna (hereafter "the School"), together 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 are available at http://www.unipi.it/index.php/lauree/corso/10970.

The competition aims to select a maximum of 20 candidates, as follows:

- **a.** Up to 10 positions reserved to non-EU Applicants (citizens from countries that do not belong to the European Union and not living in Italy, hereafter "*non-EU Applicants*")¹;
- **b.** Up to 10 positions reserved to EU Applicants and non-EU Applicants living in Italy (hereafter "*EU Applicants*").
- **2.** If less than 10 non-EU Applicants will be selected for 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.
- **3.** At the end of the selection procedures, the Selection Committee will provide a final ranking list of eligible Applicants. The admitted Applicants, according to the positions available, will be appointed by means of a School's Rector Decree.

¹Law n. 189/2002 art. 26: "Access to university courses is allowed however - with the same conditions offered to 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 that are regularly living in Italy from at least one year and with a higher qualification obtained in Italy; 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 enter the courses. Citizens from Norway, Iceland, Liechtenstein, Switzerland and the Republic of San Marino are admitted under the same conditions offered to EU citizens. For extra-EU Applicants - not living in Italy - the relevant ministerial rules apply.

Art. 2 Admission Requirements

- **1.** By the deadlines as per Art. 3 and 4, Applicants must hold a *Laurea di I livello* (Bachelor of Science First Cycle Degree) in Biomedical Engineering, awarded by the University of Pisa.
- **2.** Candidates may also take part in the selection process if they hold the following degrees, awarded by an Italian University:
 - **a.** *Laurea di I livello* (Bachelor of Science First Cycle Degree) in Biomedical Engineering if the *curriculum studiorum* includes:
 - at least 42 credits (CFU, *Crediti Formativi Universitari*) in one or more of the following scientific-disciplinary sectors: MAT/02, MAT/03, MAT/05, MAT/06, MAT/07, MAT/08, MAT/09, FIS/01, CHIM/07;
 - **b**. *Laurea di I livello* (Bachelor of Science First Cycle Degree) in Engineering belonging to class L-8 or Class L-9, if the *curriculum studiorum* includes: :
 - at least 42 CFU in one or more of the following scientific-disciplinary sectors: 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-disciplinary sectors: ING-INF/06, ING-IND/34;
 - at least 12 CFU in one or more of the following scientific-disciplinary sectors: ING-INF/01, ING-INF/05, ING-INF/04, ING-IND/13, ING-IND/14, ING-IND/15.
 - **c.** Laurea di I livello (Bachelor of Science First Cycle Degree) or a Laurea di II livello (Master of Science Second Cycle Degree) in other disciplines if the *curriculum* studiorum includes:
 - at least 42 CFU in one or more of the following scientific-disciplinary sectors: 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-disciplinary sectors: ING-INF/06, ING-IND/34;
 - at least 12 CFU in one or more of the following scientific-disciplinary sectors: 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-disciplinary sectors featuring the Classes L-8 and L-9.
- **3.** Bachelor of Science or equivalent first cycle degree awarded by a foreign University after having completed a (at least) three-year programme, in one of the categories previously listed in a), b) and c) or equivalent will be evaluated by the Selection Committee, who decides upon degree equivalence, only for the purposes of this selection. The admission of candidates holding a degree issued in a non-EU country will be conditional to the check and the degree legitimacy recognition by the relevant Italian diplomatic authorities.
- **4.** For both EU Applicants and non-EU Applicants, admission is extended also to Applicants that have not graduated yet. In this case, it will be mandatory for the Applicants to obtain the degree and to provide the correspondent documentation by November 2, 2015, at the latest.

- **5.** In addition, Applicants must demonstrate to sufficiently master the English language (at least B1 Level, according to the Common European Framework of Reference for Languages). The Selection Committee will verify the English knowledge level of the candidate, during the interview.
- 6. Candidates are in any case asked to take into account the Annex 1 (Candidate's Profile).

Art. 3

EU Candidates and non-EU Candidates Applications

- Applicants are requested to apply online at: www.bionicsengineering.it by August 31, 2015 at 11 AM (GMT). In case of any issue with the online application, please contact the Master Degree Secretary's Office (+39.050883136 or +39.340.3383261, e-mail: PhDBiorobotics@sssup.it).
- **2.** In the application form, candidates must 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 Art. 2. Applicants must specify the degree title, the University or Institute which awarded the degree, the degree course duration, the mark achieved (if applicable), the date in which the candidate started his/her undergraduate studies and the graduation date. Candidates who have not graduated yet, shall declare the expected graduation date (November 2, 2015, at the latest);

d) the Cumulative Grade Point Average;

e) declaration of knowledge of the English language (and other foreign languages, if applicable), specifying the studies duration and the certification obtained;

f) the 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 will change. This also concerns the e-mail address, which is compulsory for the application;

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

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

b) **Surname_Name_Certificate.pdf**: copy of Degree Certificate (if applicable) and its translation if it is written in languages different from English or Italian;

c) **Surname_Name_Transcripts.pdf**: the academic transcripts with the full list of courses and grades (in English or Italian). This list shall contain information regarding credits (CFU), units (or equivalent) received, the grades received for each class taken, and the date when the final examination was taken (if applicable), provided by attaching the copy of the University Transcripts; d) **Surname_Name_Thesis**: short resume (5 pages max, in English or Italian) of the Bachelor Thesis, or short resume (5 pages max, in English or Italian) of the ongoing Thesis activity, if this has been not completed yet;

e) **Surname_Name_Passport.pdf**: copy of a valid passport or any other national or international ID;

f) **Surname_Name_Courses** (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 in the online application. The evaluation committee will assess the document along with the other qualifications submitted by the candidates;

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

h) **Surname_Name_Other.pdf** (not mandatory): a copy of any other document or information that the Applicant considers relevant for his/her application (documents 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. <u>Applications with missing information will not be considered</u>. 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 a justified Rector Decree, the exclusion of the candidate from the selection procedure without prejudice to the resulting criminal law liability.

Art. 4

Selection of Applicants

- **1.** Applicant selection will involve, in both sessions, the assessment of all the submitted documents and an interview. The selection process aims to evaluate each Applicant's background and education, by considering the skills required to attend an interdisciplinary and innovative educational programme.
- **2.** The Selection Committee is jointly proposed 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 the evaluation of qualifications;
 - **b.** the remaining 30 points for the interview.
- **4.** The evaluation of qualifications will be focused on the *curriculum vitae et studiorum* of the candidates, the qualifications submitted, the attended courses and the other documents submitted by the Applicant. Admission to the interview is granted with a score of at least 49 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 held at Italian 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 the submitted qualifications, and will verify the existence of a proper background knowledge as per Annex1, 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. 5 Selection schedule and results

1. Selections will be held according to the following schedule, for both non-EU Applicants and EU Applicants:

assessment of submitted documentation:	within September 7, 2015
interview:	September 14 and 15, 2015
final ranking list of eligible Applicants:	within September 21, 2015

2. The qualification evaluation results will be published on **www.bionicsengineering.it**, 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. 6 Ranking Lists and Admitted Applicants

- **1.** The 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 declines 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: <u>http://www.studiare-in-italia.it/studentistranieri/</u>.

4. Applicants that have not graduated yet, as referred on Art. 2, point 4, 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. 7 *Matriculation*

1. The 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 mentioned website. Admitted Applicants holding a non-Italian degree shall enclose, with the matriculation application, the original academic degree, the official translation of the degree into Italian, the relevant consular legalisation of the foreign degree, 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. 8 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 visit 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)². The annual call for contributions is published in July at: <u>http://www.dsu.toscana.it</u>.

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: <u>s.marcacci@sssup.it</u>.

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. PhD-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-

²DSU contributions consist of scholarships, lodging grants, meals at the University canteen and tuition waivers.

corruption plan" published in the section "Transparency in Administration" of the School website at: <u>http://www.sssup.it/amministrazione-trasparente/altri-contenuti/corruzione</u>.

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

ACADEMIC YEAR: 2015-16 (start of the courses: September 2015, end of the courses: May 2016)

Candidate's Profile: expected capabilities and background

The applicants to the *Master Degree Programme in Bionics Engineering* must possess an interdisciplinary and solid background and a consolidated methodology, which typically characterize the Bachelor Programmes in Biomedical Engineering.

The applicants are strongly recommended to verify their background level with respect to the topics reported below. Professors of both University of Pisa and Scuola Superiore Sant'Anna (contacts are given in the Course website) can be contacted for advising both the applicants and the selected students.

It is expected that the students in Bionics Engineering possess good problem solving capabilities, as well as good analysis and synthesis skills. Knowledge of basic subjects and principles of bioengineering is necessary, in particular concerning:

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