



Sapienza PhD in ICT

Doctoral program in Information and Communications Technologies at Sapienza Università di Roma, Rome, Italy

First Year Doctoral Program Form

LAST NAME	Paglialunga
NAME	Daniele
CURRICULUM	Ingegneria Elettronica
DOCTORAL CYCLE	XXXIV

The Doctoral Program Form contains, year by year, the description of the PhD program of each Doctoral student. This form must be submitted to the PhD coordinator with roughly the following timing:

- by the end of February of the first year for first year students
- before the admission to the second year by perspective second year students
- before the admission to the third year by perspective third year students

The Doctoral Program Proposal is approved by the PhD board shortly after submission. The Doctoral Program requirements place formalized emphasis on methodology and mastery of fundamental and applied engineering systems concepts. A Doctoral Program Proposal should be constructed in agreement with the Faculty mentor, that is the supervisor or tutor, by complying to the requirements, described in the Tables below.

ADVANCED COURSES: 12 CREDIT FORMATION UNITS (CFU)¹

Only courses/schools providing a final verification test with pass/fail outcome certified by instructor can be included here.

Title	Type	Duration / period	CFU ²	Motivation for selection
Design of Electronic Systems for Space	Special Master of Aerospace Engineering's Degree Course	2nd Semester Oct – Dec 2019	12	The course introduces the effects of the space environment on electronic systems of space vehicles and the main design techniques for their mitigation
Total CFU			12	

SEMINARS AND LABORATORY ACTIVITIES: 6 CFU³

Activity	Type	Duration / period	CFU ⁴	Motivation for selection
High Resolution Electronic Measurement in Nano-Bio Science	PhD Course	8-12 April 2019	5	This course focuses on the method and the instrumentation to perform the electrical characterization of the matter in Nano-Bio science
Students support in bachelor's and master's thesis	Laboratory activity	6 months	2	Improvement of teaching and mentoring skills
Total CFU			7	

¹ Please insert lines as required/appropriate, and for each line complete each column of the Table.

² Indicate here the CFUs that can be accounted for as a result of the successful completion of the activity; for Master Degree courses, assume 1 CFU = 8 teaching hours + 12 homework/study hours, for a total of 20 hours. This rule can be slightly adjusted for other types of courses/activities (e.g., PhD courses may require slightly less hours per CFU)

³ Please insert lines as required/appropriate, and for each line complete each column of the Table.

⁴ Indicate here the CFUs that can be accounted for as a result of the successful completion of the activity; as a rule of thumb, assume 1 CFU = 20 working hours.

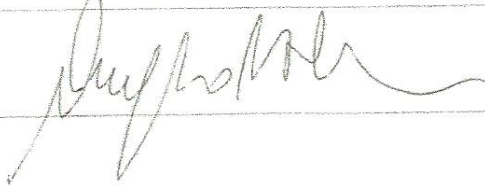
ADDITIONAL INDEPENDENT FORMATION AND RESEARCH ACTIVITIES: 6 CFU⁵
 Indicate activities that extend and complement the mandatory activities listed above

Activity	Type	Duration / period	CFU ⁶	Motivation for selection
Open DIET	Presentation	June 2018	2	Improvement of presentation and teaching skills
SIE Summer School 2019	Summer school	2 days June 2018	4	Addressing key issues in the field of electronics
Total CFU			6	

RESEARCH ACTIVITY: 36 CFU

Research area	Research and development of bio-electromechanical systems and space-ready hardware for biological experiments in the space environment
Research topic	The purpose of the research activity is to design, build, integrate, and test new space-ready hardware focusing on electronic devices for detection in the field of biology and life science
Framework of the proposed research topic	Requirements and constraints analysis, design, hardware standardization, miniaturization, automation, redundancy, manufacturing, testing, on-orbit operations, pre- and post-flight activities
Research environment	The research activity will make use of laboratories and facilities at the School of Aerospace Engineering in Rome

FACULTY MENTOR (TUTOR OR SUPERVISOR)

Prof. Dr.	Augusto Nascetti
Supervisor signature for approval	

Signature of Doctoral student



Date

01/03/2019

⁵ Please insert lines as required/appropriate, and for each line complete each column of the Table.

⁶ Indicate here the CFUs that can be accounted for as a result of the successful completion of the activity; as a rule of thumb, assume 1 CFU = 20 working hours.