

SAPIENZA UNIVERSITÀ DI ROMA

**DOCTORATE IN
MATHEMATICAL MODELS FOR ENGINEERING
ELECTROMAGNETICS AND NANOSCIENCES
XXIX CYCLE**

**PLAN OF STUDY AND RESEARCH
CURRICULUM IN MATHEMATICS FOR
ENGINEERING**

1. SECOND YEAR

The curriculum requires all second-year students to follow two general advanced courses, depending on the student's previous experience and research plans. As a general rule these courses are worth 3 CFU each.

Seminars are organized every year by the Faculty and are usually given by professors and researchers of other Italian or foreign Universities. Seminars are not quantified in terms of CFU.

Other information:

- (1) The student should develop the research required by the subject of the thesis, working full-time in the laboratories of the Departments involved in the Doctorate or possibly in other Italian or foreign institutions. The results of the student's research are expected to be published in international scientific journals or proceedings.
- (2) At the end of the second year students are required to present to the Board a statement accounting for their activity in the year. The Board, by October 31, evaluates the activity and may approve the admission to the following year.
- (3) Laboratory and research activity is quantified as 1 CFU for 20 hours of work. Students are expected to perform their activity on a daily basis.

Summary of second year activity:

Activity	CFU
General advanced courses	6
Seminars or laboratory	24
Research and related to research	18
Other activities proposed by the student and approved by the Board	12

2. THIRD YEAR

The curriculum does not require third-year students to follow courses. Seminars are organized every year by the Faculty and are usually given by professors and researchers of other Italian or foreign Universities. Seminars are not quantified in terms of CFU.

Other information:

- (1) The third year is entirely devoted to the preparation of the final dissertation. The dissertation may be devoted to the development of theoretical and methodological devices related to real world applications, or to the implementation of such methods.
- (2) By October 31 the student must send a copy of the dissertation to the referees, who are chosen by the Faculty. The referees must turn in their report by December 15; if the Dissertation is not considered complete, they can recommend a further period of work on it, not longer than six months.
- (3) At the end of the third year the student must write under the tutor's guidance a final statement on the work done in the three years of Doctorate. This statement is sent to the Coordinator and made available to the Board, together with the referees' reports.

The students are also required to give to the Board a presentation, about 30 minutes long, about their thesis. After the presentation the Board evaluates the student's activity and may approve the admission to the final exam. The admission must take place at least one month before the Final Exam.

- (4) The Final Exam must be held by February 28: the students present the results they obtained to the Examination Committee, in about 30 minutes, answering the questions of the Committee. After the presentation the Committee produces a final statement and may propose the awarding of the title. The Final Exam can be taken only once.

Students who obtained a suspension not longer than six months, or whose thesis was found not complete by the referees, must take the Final Exam by September 30.

Summary of third year activity:

Activity	CFU
General advanced courses	0
Seminars or laboratory	24
Research and related to research	24
Other activities proposed by the student and approved by the Board	12