PhD Program in Electrical, Electronics and Communications Engineering (EECE)

Internal Rules and Regulations

This document lists the current internal rules and regulations of the Electrical, Electronics and Communications Engineering (EECE) Doctorate. These regulations are applied on top of all existing ScuDo regulations, and not as a substitution. The following topics are covered in this document:

- 1. Management and Committees
- 2. Student Evaluation
- 3. Admission Requirements
- 4. Awards
- 5. Training and External Activities

1. Management and Committees

The EECE Doctorate management is supported by a number of committees and/or individuals, who specialize on specific topics. These committees are listed below, with a short description of each committee, and the list of members (as of November 2018).

Coordinator

Stefano Grivet-Talocia, email: stefano.grivet@polito.it

The Coordinator is delegated by the Academic Board for approving the external referees (for thesis assessment) and the examination board (for thesis defense and final exam).

Vice-Coordinator

Roberto Gaudino, email: roberto.gaudino@polito.it

The Vice-Coordinator is delegated by the Academic Board for approving the external training activities and the external research activities.

Secretary

Emilio Leonardi, email: emilio.leonardi@polito.it

Administration

Vanna Leoncini, email: vannamaria.leoncini@polito.it

Student Representative

Vincenzo Randazzo, email: vincenzo.randazzo@polito.it

Executive Board

Stefano Grivet-Talocia Roberto Gaudino Maurizio Zamboni Michele Goano Radu Bojoi Giuseppe Vecchi

The Executive Board supports the Coordinator in those strategic activities that require significant preparation and discussion before submission for approval to the Academic Board.

Teaching Activities Committee

Franco Fiori Stefano Grivet-Talocia Michele Goano Emilio Leonardi Carlo Ragusa Giuseppe Vecchi

The Teaching Activities Committee maintains and updates the list of PhD courses offered by the Doctorate.

Awards Committee

Fabrizio Bonani Gianfranco Chicco Gabriella Bosco

The Awards Committee is responsible for the Students' evaluation in view of the assignment of the Awards during each Academic Year.

Poster Day Committee

Paolo Bardella Paolo Giaccone Patrizia Savi

The Poster Day Committee takes care of all activities related to the organization of the annual Poster Day, including logistics, web site maintenance, poster collection, handling of reviewer reports and collection of poster evaluations. Finally, the Committee prepares and publishes the Annual Report.

2. Student evaluation

The EECE Doctorate adopts the official point system provided and managed by ScuDo for the evaluation of Students. Evaluations are necessary for admission to second and third year, for admission to the final exam, and for the assignment of PhD Awards. Below, we describe the various indicators that are currently in use (please note that these definitions are consistent with the official ScuDo definitions, they are reviewed here just for convenience). All these indicators are clearly visible for both Students and Tutors on their "cruscotto" (the personal page on the didattica.polito.it website).

Training activities

- $H_{s.i}$, $H_{h.i}$: hours of course i (s: soft, h: hard)
 - Hours of Phd hard skill courses are counted in full
 - Hours of M.Sc. hard skill courses count only 1/2
 - Hours of B.Sc. hard skill courses count only 1/3
- $E_{s,i}$, $E_{h,i}$: weight that accounts for examination result. Hours are multiplied by the following factors
 - 1 if the student did not participate in the exam (i.e., only a participation certificate)
 - 4/3 if «pass» (equivalent to 18-24 over 30 points)
 - 5/3 if «pass with merit» (equivalent to 25-30 over 30 points)
- D_s , D_h and H_s , H_h : Total training **points** and **hours** that are computed from the above as

$$D_h = \sum_i E_{h,i} \cdot H_{h,i}$$
, $H_h = \sum_i H_{h,i}$, $D_s = \sum_i E_{s,i} \cdot H_{s,i}$, $H_s = \sum_i H_{s,i}$

Publications

- N: total number of exclusive journal publications
 - $-N = \sum_{i} N_{i}$
 - Only indexed journals (VQR-approved) in SCOPUS (www.scopus.com) or WOS (www.webofknowledge.com)
 - If k authors of publication i are Polito PhD students, then $N_i = 1/k$ (other non-PhD-Student Authors do not count)
- R: cumulative indicator of all publications including also conference publications
 - $-R = 50N + \alpha \sum_{i} P_{i} f_{i}$
 - For the EECE Doctorate: $\alpha = 60$
 - P_i: score of i-th publication according to Polito rules
 - · Journals are classified in 4 quartiles

- A:
$$P_i = 1.0$$
, B: $P_i = 0.8$, C: $P_i = 0.5$, D: $P_i = 0.0$

- For conferences, a standard score $P_i = 0.5$ is used
- f_i : weight accounting for the number of authors n

$$f_i = \left(\frac{1}{n}\right)^{\left(\frac{n-1}{n}\right)}$$
 if $n \le 10$, $f_i = 0.1$ if $n > 10$

External research activities

 $-R_e=d/5$, where d is the number of days of your stay

3. Admission Requirements

Official ScuDo requirements

- Admission to final exam at the end of the 3rd year
 - $-N\geq 1, R\geq 50, H_s\geq 40, H_h\geq 100$ (note: constraint is on **hours**, not points)
- Admission to second and third year
 - No specific requirement: each board decides

EECE Doctorate: all above SCUDO requirements, plus:

- Admission to final exam
 - $N \ge 1$, $R \ge 100$, $D_s \ge 40$, $D_h \ge 200$ (note: based on **points** and not **hours**)
- Admission to 3° year:
 - $-T = R + R_e + D_s + D_h \ge 220 + \text{good marks at poster day}$
- Admission to 2° year:
 - $-T = R + R_e + D_s + D_h \ge 100 + \text{good marks at poster day}$

4. Awards

The Students that are eligible for the yearly Awards are those that have already completed their 2nd and 3rd year ("junior" and "senior", respectively). The Students' evaluation for the assignment of the Awards is based on a two-step process, according to the following procedure:

- 1. Around the month of June, ScuDo initiates the Award assignment process. Students are notified and are requested to update their status on the "cruscotto". It is strongly recommended that the "cruscotto" is kept up to date at any time, by logging all activities (training, research, publications, ...) right after they are effectively earned.
- 2. The EECE Coordinator communicates to the Students the day in which all indicators will be frozen and downloaded by the Awards Committee. Later updates will not count for the Award evaluation in process.
- 3. A first ranking of all Students (separate rankings for "junior" and "senior" Students) is generated, based on a cumulative indicator that accounts for Research activities (indicator R), Training activities (measured in points exceeding the threshold $D_s + D_h = 240$), Awards and other titles. The weights associated to each of these indicators is discussed and voted during a dedicated Academic Board meeting. Based on the above ranking, selected Students (twice the number of available awards for both "junior" and "senior") are admitted to the second step of evaluation.
- 4. Shortlisted Students are requested to prepare and submit a 5-minute video presenting their research activity (guidelines and detailed instructions are provided at due time). Each video receives an evaluation from 5 different Reviewers.
- 5. A final ranking is prepared by assembling the results of both evaluation steps. The results are submitted to the Academic Board, which votes and approves the Awards assignment.

5. Training and External Activities

Official training activities

The EECE Doctorate maintains its own list of official PhD courses, which are communicated yearly to ScuDo, who approves and publishes the list on the official web site. However, the EECE course list includes some additional details. For instance, several courses are activated every two years, in order to provide a rich catalogue without compromising the possibility of any Student to attend these courses (preferably during the first two PhD years). A two-year course planning is made available in a dedicated page of the ScuDo web site in the EECE Doctorate section. Please refer to that page for additional information.

External training activities

ScuDo allows attending external (non-Polito) courses and including them in the study plan. These courses must be approved by the Coordinator or his delegate. The EECE Doctorate has defined some guidelines for the eligibility of these courses, in particular:

- Official courses offered from Universities or Research Institutions (YES)
- Participation to conferences or workshops (NO)
- Tutorials and short courses at conferences (YES)
- Software training (NO, except if explicitly requested by Tutor, see below)
- Seminars at prestigious Universities/institutions (YES)
- Online courses (NO, except if explicitly requested by Tutor, see below)

In order to approve an external training activity, appropriate documentation must be provided. Students are required to provide a certificate of attendance reporting their name and the exact number of course hours. No approval is possible without this documentation. For all those external training activities that by default are not eligible, Tutors are supposed to send an official request for approval (via an E-mail to the Board Delegate, currently the Vice-Coordinator, Prof. Gaudino).

After attending each course, the Students should upload all relevant information in the dedicated section of their "cruscotto" (course title, name, dates) including the certificates (in a single PDF file, to be uploaded directly in the "cruscotto" before closing submission). This is a new procedure in effect starting Nov 2018.

External research activities

Research stays abroad should be previously inserted in the "cruscotto" and approved by the Coordinator or his Delegate. Full accounting of each stay is however granted only after a final report is uploaded to the "cruscotto", soon after returning to Polito. The final report (a single PDF file) must include a confirmation of the dates of stay abroad. Usually, a letter from the host that certifies the period is sufficient. Any documentation that does not include the name of the Candidate or which does not report the exact starting and ending date is not sufficient and will be rejected. All Students are kindly requested to ask their host for such document while abroad, in order to avoid delays.