Universidade de Évora

Edital

Applications for Admission to the Ph.D. Program in
Mathematics
Academic year 2020/2021

1. The program is promoted by:

Universidade de Évora - Instituto de Investigação e Formação Avançada

2. Program Coordination:

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3. Program description:

Advanced training in theoretical and applied mathematics with emphasis on Algebra and Logic (logic, non-standard analysis, algebra, number theory, cryptography), Analysis (differential equations, calculation of variations and optimal control, optimization, dynamical systems, numerical applications) and Statistics (statistics, operational research, probabilities). During the thesis, an in-depth study of a part of mathematics and / or its applications is required in order to overcome the frontier of mathematical knowledge in solving the unsolved problem and / or in initiating a new theory. Ability to formulate new mathematical concepts and / or mathematical modeling in one of several application contexts, in-depth knowledge and assimilation of parts of advanced mathematical theory, to successfully use computerized means, to interpret and transmit mathematical results of scientific texts, to present results of own research, write scientific articles published in prestigious scientific journals.

4. Specialization areas:

- Algebra and Logic (**not available**)
- Analysis (**not available**)
- Statistics (**not available**)
- Mathematics and Applications (**available**)

5. Career opportunities:

Teaching in national or international higher education institutions; scientific research career in national or international centers; senior executives of companies or public institutions in the sphere of Mathematical applications such as: Banks, Insurance, Consultants, Data Analysis, Statistical Analysis.

6. Number of registration at DGES:

R/A Ef 1804/2011/AL01

7. Number of accreditation process by A3ES:

ACEF/1314/13217

8. Program Creation Norm:

Diário da República n.º 62 de 30 de março de 2016, Aviso n.º 4328

9. General conditions of access and admission:

i **Legal conditions for access to the cycle of studies leading to the ≪Doutor≫ degree (Ph.D. degree)**
The following individuals can apply for a cycle of studies to the ≪Doutor≫ degree (Ph.D. degree):

- holders of a Portuguese Mestre degree (Master degree) or legal equivalent;;
- holders of an undergraduate degree holding a specially relevant academic or scientific curriculum, which is recognized as attesting capacity to carry out this cycle by the competent scientific committee of the higher education institution where they wish to be admitted;
- holders of an academic, scientific or professional curriculum that is recognized as attesting the ability to carry out this cycle of studies by the competent scientific committee of the higher education institution where they wish to be admitted.

ii **Specific admission conditions**
- Masters degree in mathematics or in a scientific area with strong mathematical content.
- Degree in mathematics, with a particularly relevant academic or scientific curriculum in the area of mathematics.
- Other applicants may be admitted, in cases duly justified by academic, scientific and professional curricula in the area of mathematics.

10. Selection Process:

- Academic qualifications: 40%

  - Training in Mathematics: 50%
  - Area of qualifications: 30%
  - Level of qualifications: 20%

- Curriculum analysis: 40%

  - Scientific publications: 40%
  - Conference Communications: 30%
  - Participation in research projects: 20%
  - Professional Training in the area of the program or related fields: 10%

- Interview: 20%

- Motivation and commitment: 40%
- Specific vocational aptitude: 30%
- Availability: 20%
- Understanding the objectives and professional exits of the program: 10%

11. Maximum number of admissions

- Maximum number of admissions for candidates with nationality of European Union countries: 6

- Maximum number of admissions for candidates without nationality of countries of the European Union: 4

Depending on the number of applications, there may be transfer of vacancies from the international students applications to the European Union students applications or vice-versa.

12. Tuition fee

- Candidates with nationality of European Union countries: 1250.00 €

- Candidates without nationality of countries of the European Union: 2500.00 €
    - Annual Tuition fee for international students with merit scholarship: 1250.00 €
    - Annual Tuition fee for international students with cooperation and development scholarship: 1450.00 €

All students with international student status who have a weighted average grade with a weight of 60% to the undergraduate degree grade and a weight of 40% to the master degree grade, which is equal to or higher than 16 (in a scale of 0-20), will have a reduced tuition fee in the first year of the program due to the merit scholarship. To maintain this reduced tuition fee in the following years, the student has to pass all curricular units and have an average grade equal or above the minimum merit grade. All students with international student status from PALOP countries, will have a reduced tuition fee in the first year of the program due to the cooperation and development scholarship. To maintain this reduced tuition fee in the remaining years the student has obtain a minimum academic performance.

13. Organization / duration:

a. **Duration of the program:** 8 semesters

b. **Number of ECTS to obtain the degree:** 240

c. **Number of ECTS to obtain the doctorate course (conclusion of the curricular part):** 72

d. **Double degree:** The students of this PhD program can obtain a double degree, obtaining a PhD in Mathematics from the University of Évora and a PhD in Modeling and Experimentation in Science and Technology at the University of Extremadura. To do this they will have to carry out at least 3 months of research at the University of Extremadura, have supervisors from the Department of Mathematics and the University of Extremadura and write their thesis in English. It is also necessary to pass in the curricular units of the study plan of the doctorate of the University of Évora and the public discussion of the thesis takes place at the University of Évora. Students who want to get the double degree must submit a request to do so, via Gesdoc, until November 30 of the year of admission. The thesis project, should mention the research to be carried out at the University of Extremadura and the proposed specific agreement.

14. Language (s) of teaching:

- Portuguese
- English

15. Learning Type: Presential

16. Schedule type: Mixed

17. Program starting date: September of 2020

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January 29, 2020
The Rector

Ana Costa Freitas

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