

## Universidade de Évora Edital

Applications for Admission to the Master Program in Mechatronics Engineering Academic year 2020/2021

## 1. The program is promoted by:

Universidade de Évora - Escola de Ciências e Tecnologia

## 2. Executive Monitoring Committee:

Fernando Manuel Tim Tim Janeiro (fmtj@uevora.pt) Mouhaydine Tlemcani (tlem@uevora.pt) Rui Melicio (ruimelicio@uevora.pt)

## 3. Program description:

The second cycle in Mechatronics Engineering has the objective of providing its students with 3 competence levels: 1. General competences - Professionalism in Engineering, ability to work in a team, and leadership; Ability to read and understand scientific and technical articles; Ability to analyze results; Ability to propose new solutions in the context of research and development; Ability to use the knowledge acquired to solve complex and unfamiliar problems in multidisciplinary contexts; 2. Specific competences - ability to use advanced mathematical methods in the design of new Mechatronics equipment; Ability for the development of Mechatronics equipment; Ability to create and modify Simulation software; Ability to develop and implement automatisms for manufacturing or testing industrial products (integration of different technologies, pneumatics, electronics, artificial vision); Capacity to elaborate the planning for the manufacture of new products. 3. Professional competences - Development of professional activity in the design, manufacturing and assembly industries, of mechanical and electronic products and components, namely in the automotive industry and its subcontractors, automation companies, maintenance companies, consulting companies and service providers for certification and inspection, technical-commercial activities and research and development activity in research laboratories.

## 4. Career opportunities:

Automated Industries (Automotive, Food, Components, Renewable Energy); Metalworks Industry (Mechanical production, Construction of Mechanical and Mechatronic Systems); Technical / Scientific Consultancy for industrial companies; Software industry for automation and simulation; Research and development units (R & D) on mechatronic equipment.

## 5. Number of registration at DGES:

R/A-Ef 1725/2011

## 6. Number of accreditation process by A3ES:

ACEF/1819/0205957

## 7. Program Creation Norm:

Diário da República n.º 39 de 25 de fevereiro de 2010, Despacho n.º 3550/2010

## 8. General conditions of access and admission:

i Legal conditions for access to the cycle of studies leading to the master degree The following individuals can apply for a cycle of studies leading to the master degree:

- holders of a Portuguese Licenciado degree or legal equivalent;
- holders of a foreign higher education undergraduate degree, which is recognized as satisfying the objectives of the degree of Licenciado by the competent scientific committee of the higher education institution where they wish to be admitted;
- holders of an academic, scientific or professional curriculum which 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 Conditions of access to the cycle of studies at the University of Evora

On the application date, the undergraduate students must satisfy conditions that guarantee the conclusion of their undergraduate degree until the 30th of October of the admission year. The admission and enrollment of these students is conditioned on the conclusion of the degree until this date, and the enrollment is canceled if the student does not complete the degree within that period.

During the first application phase, students who have a maximum of 6 curricular units or 36 ECTS missing for conclusion of their degree can apply for the 2nd cycle; in the 2nd application phase students can apply if they have at most 3 curricular units missing and in the 3rd application phase if they have at most one curricular unit missing.

The previous condition does not apply to students with a curriculum that reveals professional or scientific experience, which can be recognized by the competent scientific body, as attesting the student's ability to carry out the master's degree/post-graduation, provided that the student required that recognition in the application process.

#### iii Specific admission conditions

To compensate for differences in training, candidates who have a background (understood in this context as a first cycle of studies) with a content distinct from that of Mechatronics Engineering, will need to complete complementary curricular units of the first cycle of studies in Mechatronics Engineering. Candidates will be classified into 3 groups according to their original field of studies: - Physics - Mechanical Engineering - Electrical Engineering. The candidate must have completed a first cycle course in the mentioned study areas.

## 9. Selection Process:

- Academic qualifications: 40%
  - Area of qualifications: 40%
  - Level of qualifications: 40%
  - Average grade in the highest qualification: 20%
- Curriculum analysis: 45%
  - Scientific and technical activities and publications: 30%
  - Participation in research projects: 10%
  - Professional Experience in the area of the program or related fields: 40%
  - Professional Training in the area of the program or related fields: 10%
  - Importance of positions held: 10%
- Interview: 15%
  - Motivation and commitment: 20%
  - Availability: 20%
  - Ability to understand: 30%
  - Understanding the objectives and professional exits of the program: 30%

#### Observations regarding the selection process:

#### 10. Maximum number of admissions

- Maximum number of admissions for candidates with nationality of European Union countries: 11
- 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.

## 11. Minimum number of students: 8

#### 12. Tuition fee

- Candidates with nationality of European Union countries: 1050.00  $\in$
- Candidates without nationality of countries of the European Union: 2500.00  $\in$ 
  - Annual Tuition fee for international students with merit scholarship: 1050.00  $\in$
  - Annual Tuition fee for international students with cooperation and development scholarship: 1250.00  $\in$

All students with international student status who have an undergraduate degree grade which is equal to or higher than 15 (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: 4 semesters
- b. Number of ECTS to obtain the degree: 120
- c. Number of ECTS to obtain the master's course (conclusion of the curricular part): 78

# 14. Recognition of the course for progression in the teaching career of child educators and teachers in basic and high schools

According to article 54 of the Statute of the Teaching Career and the Ministerial Order no. 344/2008, of April 30th, this Master's degree is recognized by the Ministry of Education for career progression of:

Grupo de recrutamento 510 (Física e Química), 530 (Educação Tecnológica) e 540 (Electrotecnia) do 3.º Ciclo do Ensino Básico e Ensino Secundário

## **15.** Language (s) of teaching:

- Portuguese
- English

Portuguese Language will be employed in classes except in the presence of students who do not speak the language. In that case, English is selected. Some invited lecturers may opt for English.

## 16. Learning Type: Presential

## 17. Schedule type: Post-labor hours

## 18. Classes schedule (week days and schedule)

Monday through Friday, after labour hours and Saturday morning.

## **19.** Program starting date: September of 2020

January 28, 2020 The Rector

Ana Costa Freitas