



# Escola Superior de Tecnologia da Saúde de Coimbra

Instituto Politécnico de Coimbra

## Diploma Supplement

### 1. Information identifying the holder of the qualification

1.1. Family name	Domingues
1.2. Given Name	Diana Duarte
1.3. Date of birth	21-04-1997
1.4. Student identification number or code	2016005592
Number of identification card	14352507 (Portuguese Citizen card)

### 2. Information identifying the qualification

2.1. Name of qualification and (if applicable) title conferred (in original language)	Licenciatura em Imagem Médica e Radioterapia, Licenciado
2.2. Main field of study for the qualification	Imagem Médica e Radioterapia
2.3. Name and status of awarding institution (in original language)	Escola Superior de Tecnologia da Saúde de Coimbra - public institution of higher education
2.4. Name and status of institution (if different from 2.3)	Not applicable
2.5. Language of instruction / examination	Portuguese Language

### 3. Information on the level of the qualification

3.1. Level of qualification	"Licenciatura"
3.2. Official length of programme	4 Years, 160 weeks of study, 240 ECTS
3.3. Access requirements	The national contest of access to public higher education, with admission exams in the following sets: 02 Biology and Geology or 02 Biology and Geology and 07 Physics and Chemistry or 02 Biology and Geology and 16 Mathematics. For the application is required the minimum rating of 95 points, in the admission test and application note, expressed on a scale of 0 to 200 points. The formula for calculating comprises 65% of the high school average and 35% of admission test. Regional preference corresponds to 20% of the vacancies, within the area of influence of Aveiro, Castelo Branco, Coimbra, Guarda, Leiria and Viseu.

### 4. Information on the contents and results achieved

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Diploma Supplement - Instituto Politécnico de Coimbra  
Diana Duarte Domingues

Modelo 206

SISTEMA INTERNO DE GARANTIA DA QUALIDADE

Key GWMP75HWN20UJY to be checked at <https://verificacaodocumentos.ipc.pt>

### Diploma Supplement

This Supplement to the Diploma is based on the model developed by the European Commission, Council of Europe and UNESCO/CEPES. The purpose of the supplement is to provide sufficient and independent data to promote the international "transparency" and fair academic and professional recognition of qualifications (diplomas, degrees, certificates, etc.). It is designed to provide a description of the nature, level, context, content and status of the studies that were pursued and successfully completed by the individual named on the original qualification certificate to which this supplement is appended. It should be free from any value judgements, equivalency statements or suggestions about recognition. Information in all eight sections should be provided. Where information is not provided, an explanation should be given as to the reason(s) why.

## 4.1. Mode of study

Full-time

## 4.2. Programme requirements

The graduate degree in Medical Imaging and Radiotherapy will provide to the student the skills, necessary for the exercise of the professions of Nuclear Medicine Technician, Radiology Technician and Radiotherapy Technician, regulated by Decree-Law 320/99, of 11th August and in which activities are regulated by Decree-Law 261/93 of 24th July, in which:

•Nuclear Medicine: Development of actions in the clinical laboratory areas, of nuclear medicine and photographic technique with handling of equipment and radioactive products, as well as execution of morphological examinations associated with the use of radioactive agents and dynamic and kinetic studies with the same agents and with testing of radioactive products, using techniques and standards of protection and radiological safety in the handling of ionizing radiation.

•Radiology: Perform all the examinations in the area of medical diagnostic radiology; programming, execution and evaluation of all radiological techniques involved in prevention and health promotion; use of techniques and standards of protection and radiological safety when handling ionizing radiation.

•Radiotherapy: Development of therapeutic activities through the use of ionizing radiation for treatments, including the pre-diagnosis and follow-up of the patient; preparation, verification, establishing and manoeuvres of radiotherapy equipment; acting in the areas of use of techniques and standards of protection and radiological safety when handling ionizing radiation.

The profile of generic skills to acquire assumes the current international and national references, in particular the proposals of the European Federation of Radiographer Societies (EFRS) and The Quality Assurance Agency for Higher Education (QAHE). The graduate in Medical Imaging and Radiotherapy should possess the knowledge, skills and attitudes, as defined in the Ordinance 9408/2014 of 21st July published in Diário da República, 2.ª série — N.º 138 — 21 de julho de 2014.

## 4.3. Programme details

Course Units	Duration	Type of Evaluation	ECTS / Credits	Local Grades	ECTS Classification
40009464 * Anatomy II	Semestrial	Normal	5	10	-
40009391 * Anatomy I	Semestrial	Normal	5	10	-
40009544 * Radiological Anatomy	Semestrial	Normal	4	13	-
40009765 * Bioethics and Deontology	Semestrial	Normal	3	14	-
40009408 * Biophysics	Semestrial	Normal	4	10	-
40009481 * Biochemistry of Medical Imaging	Semestrial	Normal	4	10	-
40009724 * Quality Control in Medical Imaging and Radiotherapy	Semestrial	Normal	3	11	-
40009522 * Patient Care in Medical Imaging and Radiotherapy	Semestrial	Normal	5	15	-
40009666 * Clinical Dosimetry	Semestrial	Normal	4	14	-
40009578 * Ultrasound I	Semestrial	Normal	4	13	-
40009640 * Ultrasound II	Semestrial	Normal	4	12	-
40009453 * Equipment and Instrumentation in Medical Imaging and Radiotherapy	Semestrial	Normal	5	14	-
40009803 * Clinical Placements in Medical Imaging and Radiotherapy I	Semestrial	Normal	5	18	-
40009814 * Clinical Placements in Medical Imaging and Radiotherapy II	Yearly	Normal	55	16	B (**)
40009730 * Statistics	Semestrial	Normal	3	10	-
40009713 * Case Studies in Central Nervous System	Semestrial	Normal	5	16	-

40009702 * Case Studies in Musculoskeletal System	Semestrial	Normal	5	15	-
40009741 * Case Studies in Thoraco-Abdominal-Pelvic CIMR system	Semestrial	Normal	5	15	-
40009759 * Case Studies in Radiotherapy	Semestrial	Normal	5	17	-
40009492 * Atomic and Nuclear Physics	Semestrial	Normal	4	10	-
40009595 * Radiation Physics and Radiation Protection	Semestrial	Normal	4	10	-
40009425 * General Physiology	Semestrial	Normal	4	12	-
40009567 * Medical Imaging I	Semestrial	Normal	5	12	-
40009612 * Medical Imaging II	Semestrial	Normal	5	14	-
40009688 * Medical Imaging III	Semestrial	Normal	5	13	-
40009447 * Introduction to Medical Imaging and Radiotherapy	Semestrial	Normal	5	14	-
40009798 * Applied Research in Medical Imaging and Radiotherapy I	Semestrial	Normal	4	16	-
40009820 * Applied Research in Medical Imaging and Radiotherapy II	Yearly	Normal	5	17	B (**)
40009556 * Advanced Methods in Diagnostic Imaging I	Semestrial	Normal	5	13	-
40009634 * Advanced Methods in Diagnostic Imaging II	Semestrial	Normal	4	15	-
40009601 * Methods and Techniques in Nuclear Medicine	Semestrial	Normal	5	12	-
40009533 * Methods and Techniques in Radiology	Semestrial	Normal	5	13	-
40009677 * Methods and Techniques in Radiotherapy	Semestrial	Normal	5	11	-
40009589 * Oncology	Semestrial	Normal	3	12	-
40009470 * General Pathology	Semestrial	Normal	3	14	-
40009623 * Clinical Practice I	Semestrial	Normal	4	15	-
40009699 * Clinical Practice II	Semestrial	Normal	4	15	-
40009776 * Clinical Practice III	Semestrial	Normal	4	16	-
40009500 * Medical Imaging Processing	Semestrial	Normal	5	11	-
40009419 * Psychology	Semestrial	Normal	3	10	-
40009511 * Radiobiology	Semestrial	Normal	4	11	-
40009655 * Radiopharmacy	Semestrial	Normal	4	12	-
40009787 * Semiotics in Medical Imaging	Semestrial	Normal	4	11	-
40009436 * Information Systems in Healthcare	Semestrial	Normal	4	13	-
Total ECTS	240.0				

#### 4.4. Grading scheme and, if available, grade distribution guidance

1. The final assessment of a module is expressed by a grade on a scale of 0 to 20, considering approval to obtain a minimum of 10 marks, as well as its European equivalent rating.
2. The final classification is expressed in the range 10-20 on a numerical scale from 0 to 20, as well as its European equivalent of comparability of classification. The final grade is calculated using the weighted average number of ECTS for each outcome eligible for approval for the determination of graduation.



3. The final classification can be accompanied by a qualitative definition on the following scale: Sufficient (10-11), Satisfactory (12-13), Good (14-15), Very Good (16 and 17), Excellent (18-20).
4. The scale is based on the ECTS association of a numerical definition (percentile) with the levels A, B, C, D and E, according to the following table.

Classification ECTS	Students within the range of the exposed classification (%)
A	10
B	25
C	30
D	25
E	10

The classification scale ECTS is based on the distribution of results obtained in the range 10-20 for all students in a course or in the final course corresponding to the three academic years prior to the result given a minimum of 30 successful students or graduates. Where it is not possible to obtain the minimum number of elements in the distribution are considered the four, or five school years prior to distribution to complete at least 30 elements. In distribution of results are only considered grades for evaluation.

Whenever credits are awarded, or when it is not possible to obtain the minimum number of elements for the ranking, the grade is assigned according to the following table, contained in official dispatch no. 11196 from the Directorate General of Higher Education.

Classification ECTS	E	D	C	B	A
Definition	Sufficient	Satisfactory	Good	Very Good	Excellent
Grade (10-20)	10-11	12-13	14-15	16-17	18-20

Where the ECTS has been obtained based on the previous table, it shows the characters (\*\*) next to their classification.

- 4.5. Final classification (in the original grading system) 14 (fourteen), Good / European equivalent of comparability of classification: C(\*\*)

## 5. Information on the function of the qualification

### 5.1. Access to further studies

The graduate degree allows the application to postgraduate studies.

### 5.2. Professional status / Professional Goals (if applicable)

The completion of the degree's syllabus on Medical Imaging and Radiotherapy entitles the admission to the professions of Medical Imaging and Radiotherapy, nuclear medicine technician, radiology technician and radiotherapy technician regulated by Decree-Laws 261/93 of 24 July, and 564/1999, of december 21, under the Dispatch 9408/2014 of 21st July. The professional card shall be required to the Ministry of Health through the CAHS (Central Administration of the Health System).

## 6. Additional information

### 6.1. Other sources of information

<http://www.lpc.pt>  
<http://www.estescoimbra.pt>

## 7. Certification of the supplement

7.1. Date

28th October 2020

7.2. Signature

António Manuel Rodrigues Carvalho dos Santos

7.3. Title

Vice-President

## 8. Information on the Portuguese Higher Education System

The Framework Law on the Education System (Law no. 46/86 of 14 October, amended by Law no. 115/97, dated 19 September and Law no. 49/2005, dated 30 August, republished and renumbered in annex to the latter) establishes the general legal framework of the Education System.

The **educational system** comprises three levels: basic, secondary and higher education.

Pre-school education is for children aged between 3 and the age of entering basic education, and is universal for children from the age of 5.

**Basic education** is universal, compulsory and free and comprises three sequential cycles, the 1st lasting four years, the 2nd lasting two years, and the 3rd lasting three years.

**Secondary education** comprises a three-year cycle (corresponding to the 10th, 11th and 12th years of schooling) and must be completed by schoolaged young people, an obligation that ceases at the age of 18.

### National Qualifications Framework

The National Qualifications Framework (QNQ) was adopted in 2009. It comprises the formal qualifications of all education and training subsystems as well as the non-formal qualifications derived from professional experience within the framework of the National Qualifications System. It includes eight levels of qualification, following the levels and descriptors of the European Qualifications Framework (EQF). The QNQ is referenced to the EQF.

### Higher Education Structure

Portuguese higher education includes university and polytechnic education. University education is provided by public and private university institutions while polytechnic education is provided by public and private non-university institutions.

Private higher education institutions are subject to prior recognition by the competent Ministry.

### Licenciado degree

Both university and polytechnic education institutions award the degree of *licenciado*. In polytechnic education, the cycle of studies leading to the degree of *licenciado* normally lasts six curricular semesters corresponding to 180 ECTS credits. In exceptional cases covered by national or European Union legislation, it may last up to seven or eight curricular semesters with up to 240 ECTS credits of student work.

In university education, the cycle of studies leading to the degree of *licenciado* ranges from 180 to 240 ECTS credits, and normally lasts from six to eight curricular semesters.

In the 1st cycle of studies the degree of *licenciado* is awarded to those who pass all the course units of the *licenciatura* study programme, therefore obtaining the required number of credits. The degree of *licenciado* corresponds to the level 6 of the QNQ and EQF.

### Mestre degree

Both university and polytechnic education institutions award the degree of *mestre*. The cycle of studies leading to the degree of *mestre* ranges from 90 to 120 credits, and normally lasts from three to four curricular semesters. In exceptional circumstances resulting from a stable and consolidated practice in that specific field at international level, it may amount to 60 ECTS credits and last two semesters.

In polytechnic education, the cycle of studies leading to the *mestre* degree must ensure predominantly that the student acquires a professional specialization. In university education, the cycle of studies leading to the *mestre* degree must ensure mainly that the student acquires an academic specialization through research, innovation or development of professional competences.

In university education, the *mestre* degree may also be awarded upon completion of an integrated cycle of studies, ranging from 300 to 360 ECTS credits and usually lasting 10 to 12 curricular semesters, in cases where the access to the practice of a certain professional activity depends on that length of time in accordance with European Union legal standards or results from a regular practice consolidated within the European Union. Within this cycle of studies, the degree of *licenciado* is awarded to those who have obtained 180 ECTS credits corresponding to the first six curricular semesters. In the 2nd cycle of studies, the degree of *mestre* is awarded to those who have passed all the course units of the *mestrado* study programme, and who have publicly defended an original dissertation, project work or traineeship report, therefore obtaining the required number of credits. The *mestre* degree corresponds to the level 7 of the QNQ and EQF.

### Doutor degree

The *Doutor* degree is awarded by universities and university institutes to those who have passed all the course units of the *Doutoramento* study programme, when applicable, and who have publicly defended an original thesis. It may also be awarded on account of a coherent and relevant set of research works or, in the field of the arts, on a work or a set of works or achievements. The *doutor* degree corresponds to the level 8 of the QNQ and EQF.



### **Cursos Técnicos Superiores Profissionais**

The *técnico superior profissional* diploma is awarded upon completion of a non-degree higher education cycle of studies entitled *curso técnico superior profissional* (CTeSP). It corresponds to a short cycle of studies within the cycle of the *licenciado* degree. The CTeSP are provided by polytechnic higher education institutions as well as polytechnic organic units integrated in universities. The CTeSP have 120 ECTS credits and normally last four curricular semesters including general, scientific and technical subjects, as well as a training period at the workplace.

### **Other diplomas**

Higher education diplomas may also be awarded following the partial completion of a cycle of studies. In such cases, the chosen title must differ from the title of the final award of the applicable degree. Diplomas may also be awarded for non-degree courses, some of which are regulated, e.g. postgraduate specialization courses in Nursing or Teaching.

### **Access conditions**

Admission to higher education institutions is subject to *numerus clausus*.

### **Admission to the first cycle of studies**

#### **General regime**

National and foreign students wishing to apply to the 1st cycle of studies leading to the *licenciado* degree through the general regime must fulfil the following conditions:

- Have successfully completed a secondary education course or a national or foreign qualification legally equivalent;
  - Have taken the entrance exams required for the programme the student wishes to attend with a mark equal or higher than the minimum required (there are higher education institutions that accept foreign tests or exams);
  - Have fulfilled the prerequisites (when applicable) of the programme the student wishes to attend. An annual competition is held by the Directorate-General for Education for admission to public higher education through the general regime.
- Institutional competitions are held for admission to private higher education through the general regime.

#### **Special conditions**

Besides the *regime geral* (general regime), there are special conditions that apply to top-level athletes, Portuguese citizens on an official mission abroad, national or foreign diplomatic staff, permanent staff of the Portuguese Armed Forces, and scholarship holders within the framework of cooperation agreements agreed by Portugal.

An annual competition is held by the Directorate-General for Higher Education for admission to public higher education through the special conditions.

#### **Special competitions**

Besides the general regime and the special conditions, there are special competitions for applicants holding specific qualifications, thus opening higher education to new publics in a lifelong learning perspective, namely:

- Applicants over 23 years old who have passed special exams for assessing their capacity to accede to higher education;
- Holders of other higher education courses, *técnico superior profissional* diplomas, and *diploma de especialização tecnológica* (a postsecondary course certificate);
- Holders of the *licenciado* degree wishing to apply to Medicine;
- International students.

In addition, students who have been or are registered and enrolled in higher education are allowed to apply for readmission or to opt for another institution/programme pairing. The special competitions for applying to higher education are held by higher education institutions.

### **Admission to the second cycle of studies**

Those who meet the following conditions may apply to the 2nd cycle of studies leading to the *mestre* degree:

- Holders of the *licenciado* degree or legal equivalent;
- Holders of a foreign academic degree duly recognised as satisfying the objectives identical to the *licenciado* degree by the relevant scientific body of the higher education institution they wish to be admitted to;
- Holders of an academic, scientific or professional *curriculum vitae* that is recognised as attesting to the capacity to carry out this cycle of studies by the relevant scientific body of the higher education institution they wish to be admitted to.

The relevant bodies of each higher education institution are responsible for the regulations, application requirements and selection criteria for admission to this cycle of studies.

The access and admission to the integrated cycle of studies leading to the *mestre* degree are governed the norms applicable to the access and admission to the 1st cycle of studies leading to the *licenciado* degree.

### **Admission to the third cycle of studies**

Those who meet the following conditions may apply to the 3rd cycle of studies leading to the *doutor* (doctor) degree:

- Holders of a *mestre* (master) degree or legal equivalent;
  - Holders of a *licenciado* degree who have a particularly relevant academic or scientific curriculum vitae that is recognised as attesting the capacity to carry out this cycle of studies by the relevant scientific body of the higher education institution they wish to be admitted to;
  - Holders of an academic, scientific or professional curriculum vitae that is recognised as attesting the capacity to carry out this cycle of studies by the relevant scientific body of the higher education institution they wish to be admitted to.
- The relevant bodies of each higher university or university institute are responsible for the regulations, application requirements and selection criteria for admission to this cycle of studies.

#### Admission to CTeSP

Those who meet the following conditions may apply to a CTeSP:

- Holders of a secondary education course or legal equivalent;
  - Applicants aged over 23 who have passed the special exams for assessing their capacity to attend higher education required for a particular course;
  - Holders of diploma de especialização tecnológica, técnico superior profissional diploma or of a degree wishing to undergo reskilling.
- The specific conditions to apply for a técnico superior profissional course are set by higher education institutions, according to the field of the course.
- The competitions are held by higher education institutions.

#### Classification system

The técnico superior profissional diploma, as well as the *licenciado* and *mestre* degrees are assigned a 10-20 final classification on a numerical scale from 0 to 20, as well as its equivalent in the European scale of comparability of classifications.

The academic degree of *doutor* is assigned a final classification pursuant to the regulating standards approved by the awarding university or university institute.

#### WHERE APPLICABLE

##### Former higher education structure

##### Degree programmes

Prior to Law no. 49/2005, dated 30 August, and ensuing adoption of the regulatory principles for the creation of the European Higher Education Area:

- The degrees of *bacharel*, *licenciado*, *mestre* and *doutor* were awarded in university education;
- The degrees of *bacharel* and *licenciado* were awarded in polytechnic education;
- Diploma to licenciatura programmes, organised in two stages, the first leading to the *bacharel* degree and the second to the *licenciado* degree, could be provided in polytechnic education. The first stage lasted six semesters and the second lasted two to four semesters;
- The programmes leading to the *bacharel* degree usually lasted three years, but under certain conditions could be one or two semesters shorter;
- The programmes leading to the *licenciado* degree usually lasted four years, but under certain conditions could one to four semesters longer;
- The programmes leading to the *mestre* degree had a maximum length of four semesters;
- Degree programmes were not assigned a given range of ECTS credits.

The former degrees remain valid as there is no matching mechanism or automatic conversion from the former to the current degrees.

The degrees and diplomas prior to the Bologna Process implementation were given the following correspondences within the framework of the QNQ:

- The *bacharel* and *licenciado* degrees correspond to level 6;
- The *mestre* degree corresponds to level 7;
- The *doutor* degree corresponds to level 8.

##### Cursos de Especialização Tecnológica

Higher education institutions were given the deadline of 31 December 2016 to conclude the provision of post-secondary courses aimed at specialized professional training, entitled *Cursos de Especialização Tecnológica* (CET).

The CET range from 60 to 90 ECTS credits and include subjects in general, scientific and technical areas, as well as a training period at the workplace.

The completion of a CET implies a technological specialization certificate providing a level 4 professional qualification, in accordance with Council Decision 85/368/CEE of 15 July, which corresponds to a level 5 qualification within the framework of the QNQ.



