TEACHING REGULATIONS OF THE BSc RADIOLOGY, DIAGNOSTIC IMAGING AND RADIOTHERAPY TECHNIQUES ACADEMIC YEAR 2024-2025

Approved by Rector's Decree No. 229 of 31/05/2024 (Ref. 128/2024)

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Article 1 Introduction

The Saint Camillus International University of Health Sciences, hereinafter referred to as UniCamillus, offers a three-year BSc in 'Radiology, Diagnostic Imaging and Radiotherapy Techniques' (qualifying for the medical profession of Radiologist), class L/SNT3. The programme lasts 3 years and ends with a qualifying examination and the award of BSc in Radiology, Diagnostic Imaging and Radiotherapy Techniques.
These Regulations govern the content, organisation and operation of the BSc in 'Radiology, Diagnostic Imaging and Radiotherapy Techniques', class L/SNT3, in accordance with Ministerial Decree No. 270 of 22nd October 2004.
The degree course aims to provide the knowledge and skills necessary to practise the profession of radiologist, as regulated by the profile of Ministerial Decree 746 of 26 September 1994.
The above-mentioned MSc belongs to the Departmental Faculty of Medicine.

Article 2 Course-specific learning objectives

The programme belongs to the degree classification of 'Technical health professions' (L/STN-3). The graduate in Radiology, Diagnostic Imaging and Radiotherapy Techniques is the health professional who has the knowledge and skills necessary to carry out radiological examinations and services in accordance with the standards laid down in Ministerial Decree No. 746 of the Ministry of Health of 26th September 1994.
The graduate is responsible for all procedures and interventions requiring the use of artificial and natural sources of ionising radiation, thermal and ultrasound energy, magnetic resonance imaging, nuclear medicine and radiotherapy, as well as interventions for physical or dosimetric protection. Their tasks are:

1. maintain, activate and operate equipment;
2. record examination data and write diagnostic reports;
3. manage patient relations;
4. manage procedures related to the safety of examinations;
5. perform radiological examinations and radiotherapy treatments, ensuring the radiation protection of patients and operators;
6. participate, within the limits of their competence, in the proper management and updating of radiological records;
7. manage and transmit the radiological image, taking into account the security and confidentiality of the information, throughout the diagnostic process;
8. carry out self-education and training activities for students, auxiliaries and new staff;
9. develop research activities aimed at generating new knowledge for continuous quality improvement;
10. promote professional integration activities and participate in interdisciplinary working groups for the care of people.

The curriculum of the programme includes training activities aimed at the acquisition of specific knowledge and skills related to the functions envisaged by the professional profile of the radiologist.
Graduates in "Radiology, Diagnostic Imaging and Radiotherapy Techniques" will be adequately prepared in the basic disciplines to enable them to integrate with other professions and to better understand the basic elements of physiological and pathological processes.
The acquisition of professional competences is carried out through theoretical and practical training (internship and laboratory), which includes the acquisition of behavioural competences and is carried out in the specific work context, so as to guarantee, at the end of the course, the full mastery of all the necessary competences and their immediate application in the work environment.

In particular, the practical training activity and the internship under the supervision and guidance of assigned tutors, coordinated by a lecturer having the highest training level of education for the radiological profession and in accordance with the standards defined in Europe, are integral and qualifying parts of the professional training.

Article 3 Career opportunities and admission to further programmes

Graduates in 'Radiology, Diagnostic Imaging and Radiotherapy Techniques' can carry out their professional activities at

- public healthcare facilities
- private healthcare facilities
- research institutes in diagnostic imaging, neuroradiology, nuclear medicine, radiotherapy and health physics
- industries producing electromedical equipment dedicated to radiodiagnostics, radiotherapy, nuclear medicine.

The graduate will have access to post-graduate education:

Types of courses after completion of a BSc	ECTS CREDITS	Duration (years)
• MSc in Science of Health Professions Diagnostic Techniques	120	2
• CPD first-level course	60	1 or 2

- After obtaining an MSc in Science of Health Professions Diagnostic Techniques, graduates can access:

Types of courses after completion of an MSc	ECTS CREDITS	Duration (years)
• PhD programme	180	3
• CPD second-level course	60	1 or 2

Article 4 Admission requirements

The programme is open on a national basis (ex art. 1, paragraph 1, letter a), L. n. 264/1999) and the maximum number of students who can be admitted to the first year of the course is set each year by Ministerial Decree.
In order to be admitted to the course, students must pass an entrance test consisting of a written multiple-choice test of their knowledge and skills in general culture, logical reasoning, chemistry, physics, mathematics and biology, based on the ministerial programmes for secondary education. The test is organised annually by the University according to the procedures and timetables established by the competent bodies in accordance with the regulations in force.
Candidates may be admitted to the programme if they have a secondary school leaving certificate or any other foreign qualification recognised as equivalent by the legislation in force. Candidates who, despite their position in the ranking list, do not have an adequate knowledge of chemistry, biology and physics, will be assigned additional training obligations to be fulfilled by attending remedial courses organised by the University. Students are therefore admitted with an additional training obligation limited to the subject(s) in question and the passing of the specific additional training obligation is certified by the teacher in charge of the subject by means of a written or oral examination, issuing a specific aptitude, to be obtained before the first examination of the first year of the programme.
Admission to the programme will also require a medical examination, in accordance with the procedures laid down by the regulations in force, in order to assess the candidate's suitability to carry out the duties associated with the specific

professional profile.

Article 5 Teaching Regulations

The Departmental Faculty of Medicine and Surgery, in accordance with the regulations in force, draws up the Teaching Regulations which, for each degree course, define the structure of the basic, characterising, related and optional training activities leading up to the final examination. Each degree course is divided into disciplinary areas, which are made up of the subject courses to which the relevant scientific and disciplinary areas refer.

All syllabi, as well as a timetable of all the lectures, are published on the UniCamillus website, www.unicamillus.org, in the section dedicated to the degree programme.

Article 6 Types of training activities and preliminary requirements

The programme may use the following types of teaching activities:

- Face-to-face lectures: presentations of specific topics, identified by a title, by one or more lecturers in the classroom, addressed to all students;
- Seminars: classroom presentations of clinical cases developed by the students themselves with the assistance of the lecturers;
- Exercises: hands-on workshops to develop technical skills, including advanced skills, through simulations on manikins or directly between students;
- Professional training: direct patient care in a highly complex and multidisciplinary clinical care environment under the direct supervision of tutors.

For students enrolled in the first year from the academic year 2022/2023, the following pre-requisites for the examinations of the following integrated courses and rules for participation in the internship are applicable:

In order to pass the following exams:	**students must have passed these other exams:**
Integrated course: Medical and Clinical Sciences I	Integrated course: Anatomy, Histology and Human Physiology
Integrated course: Techniques of Diagnostic Imaging II	Integrated course: Diagnostic Imaging Techniques I
Integrated course: Medical and Clinical Sciences II	Integrated course: Medical and Clinical Sciences I
Annual Clinical Practice (second year)	Annual Clinical Practice (first year)
Annual Clinical Practice (third year)	Annual Clinical Practice (second year)

Article 7 ECTS credits

The European Credit Transfer and Accumulation System (ECTS) credit shall be used as the unit of measurement of the workload required of the student for the completion of each educational activity provided for in the educational regulations in order to obtain the degree.

The BSc programme consists of a total of 180 ECTS credits, divided into 3 years, including training activities aimed at developing specific professional skills (internship - 60 ECTS credits).

Each ECTS credit, which corresponds to 25 hours of study for the student, includes the hours of lectures, tutorials, laboratory work, seminars and other educational activities required by the Teaching Regulations, as well as the hours of study and personal commitment required to complete the training in order to pass the examination, or to carry out

training activities not directly subordinated to university teaching (dissertations, projects, internships, language and IT skills, etc.).
The ECTS credits corresponding to each training activity are acquired by the student by passing the examination or other form of assessment.
Examination marks are expressed in thirtieths and, in the case of the final examination, expressed in one hundred and ten (110), with honours if applicable.
Vocational training activities include internships, laboratory work and practical activities carried out in facilities whose size and technical characteristics are appropriate to the activity planned and the number of students.

Article 8 Internship

The structure and organisation of the professional activities shall be organised by the Programme Director, who shall draw up a detailed plan for their conduct.
The internship is carried out under the supervision and responsibility of the tutors.
The internship is the irreplaceable way of learning professional skills through practical experimentation and integration of theoretical-scientific knowledge with professional and organisational business practice.
The student's attendance, which is compulsory and non-replaceable, is certified by the tutor, who assesses and documents the level of competence progressively achieved by the student.
For each individual student, the Programme Director monitors the achievement of the planned number of internship hours. At the end of each year of the course, the student must sit the annual placement examination. This examination results in an evaluation expressed in thirtieths.
The activities carried out by the student during the placement cannot and should not be seen as a substitute for the work of the staff.

Article 9 Schedule of educational activities and compulsory attendance

The student shall attend the teaching activities set out in the study plan. The timetable is based on the University's organisational requirements and cannot be changed at the request of individual students for any reason (health, religious or otherwise).
In order to be admitted to the relevant examination, the student must have attended at least 75% of the teaching hours scheduled for each integrated module. Failure to attend 75% of the course module hours will result in the student not being admitted to the examination. The 25% tolerance margin for non-attendance is intended to cover, in addition to non-attendance due to force majeure caused by illness or any other reason, all the individual needs of students, including religious holidays that may fall within the timetable of lectures, since the University is open to young people of all faiths and believes that they should be allowed to fully profess their faith within the limits of compatibility with the inescapable need to attend at least three quarters of the scheduled lectures.
Attendance will be verified by lecturers using the assessment methods established by the University.
At the end of each teaching period, lecturers must inform the Registrars' Office, also via email, of the names of the students whose attendance has not been recognised. In the absence of such notification, students must fulfil their attendance obligations.

Article 10 Activities chosen by the student

The teaching staff organises activities that the students can choose, which may take the form of lectures, seminars, interactive courses in small groups, up to a total of 6 ECTS credits.
The timetable of activities is published before the beginning of the academic year, and in any case at the beginning of each term, together with the timetable of compulsory courses.
Optional teaching is an official activity of the lecturers and as such is recorded in the teaching register.
The evaluation of the activities carried out by the student is taken into account in the awarding of the grade for the final examination of the course.

Article 11 Programme Director

The three-year office can only be held by experienced professionals. The Programme Director is selected from among the lecturers who hold an MSc in Science of Health Professions Diagnostic Techniques and who have at least five years' experience in education.
The responsibilities of the Programme Director include:

- planning and organising of the internships and the supervision of the suitability of the institutions accredited for theoretical and practical training,
- Implementing the training programme,
- coordinating the professional teaching activities between the lecturers of the theoretical courses and the lecturers of the clinical courses,
- managing the placement and professional development of programme tutors, Coordination of tutoring activities

Article 12 Assessment of learning

The total number of exams to obtain the ECTS credits may not exceed the number of official courses stipulated in the regulations and may in no case exceed 20 exams over the three years of the course.
The programme is divided into two semesters. There are normally:

- 2 exam sessions (winter and summer):
- 2 resit exam sessions (September graduation and January graduation).

In order to sit the exams and other tests, students must have paid tuition fees, have passed any preparatory exams and be in possession of all attendance certificates.
Exams will be organised by the lecturers before the start of the course and the procedures will be communicated to the students. A student who has failed an exam may retake it, even in the same exam session, provided that at least two weeks have elapsed since the failed exam.
A minimum mark of 18/30 is required to pass the exam.

Article 13 Self-directed learning

Teaching staff shall ensure that students are able to engage in self-directed learning completely independent of teaching activities:

- the use, individually or in small groups, autonomously or under the guidance of the teachers, of the teaching resources made available by the programme for self-directed learning and self-assessment, in order to achieve the learning objectives set; teaching aids (texts, simulators, medical mannequins, audiovisual media, computer programmes, etc.) will be placed, as far as possible, in areas managed by University staff;
- self-study to prepare for exams.

Article 14 Final examination and award of degree

In order to be admitted to the final examination, it is necessary to have obtained all the ECTS credits in the educational activities provided for in the study plan, including those related to internships and seminars.

The final examination of the BSc programme has the value of a State examination qualifying for professional practice and consists of

a) A practical examination in which students must demonstrate that they have acquired the theoretical, practical, technical and operational knowledge and skills required for their professional profile;

b) The writing and defence of a dissertation.

A total of 6 credits may be obtained for the final examination.
The following parameters contribute to the determination of the final mark, expressed in one hundred and ten (110)

a) the average marks obtained in the exams, expressed in one hundred and ten (110),
b) the marks awarded by the Final Examination Board during the defence of the dissertation,
c) the marks obtained in the practical test.

Article 15 Academic disqualification

Students who have not completed a course for more than four academic years cannot be enrolled; after this period, the enrolled student is disqualified.
The student may therefore not exceed seven academic years to obtain a degree, otherwise they will be disqualified. Disqualification does not apply to those who have passed all exams for course credit and are only required to sit the final examination.
The disqualified student may, after passing the admission test, re-register for the programme. For this purpose, upon request of the interested party, the teaching staff will proceed to recognise the credits acquired in the previous university studies after checking that they are not obsolete.

Article 16 Incoming transfers from another university

Applications for transfer from other programmes in Radiology, Diagnostic Imaging and Radiotherapy Techniques at other universities must be complete and include all the documentation necessary to assess the ECTS credits already acquired by the student. These applications will be considered by a special Committee for transfers and previous qualifications, on the basis of available spots.

UniCamillus may, on its own initiative, request confirmation from the previously attended university of the certificates or declarations submitted by the student for the purpose of recognising the examinations.

Article 17 Recognition of previous studies completed in other university programmes

The recognition of ECTS credits earned by students in other degree programmes is assessed by a special board of lecturers appointed by the Rector. ECTS credits may be recognised on the basis of an assessment of their conformity with the educational objectives of one or more subjects of the Course Regulations of the Degree Programme, in accordance with the provisions of the regulations in force and the University's Teaching Regulations.

UniCamillus may, on its own initiative, request confirmation from the previously attended university of the certificates or declarations submitted by the student for the purpose of recognising the ECTS credits.

Article 18 Final provisions

For legal and interpretation purposes, the document written in Italian and deposited at the University's Teaching Offices shall prevail. For all matters not covered by these Regulations, reference is made to the Statute, the University's Teaching Regulations and the Regulations governing the functioning of the University's activities.

BSc RADIOLOGY, DIAGNOSTIC IMAGING AND RADIOTHERAPY TECHNIQUES STUDY PLAN

FIRST YEAR

1st YEAR — 1st SEM.	COURSE CODE		ECTS
Integrated course: Biological and biochemical principles of life			**9**
	BIO/13	Applied Biology	2
	MED/36	Radiobiology	1
	BIO/10	Biochemistry	2
	BIO/12	Clinical biochemistry and molecular biology	2
	MED/03	Genetics	1
	MED/07	Microbiology	1
Integrated course: Human anatomy, histology and physiology			**8**
	BIO/16	Human anatomy and radiological anatomy	4
	MED/36	Radiological anatomy	1
	BIO/17	Hystology	1
	BIO/9	Human physiology	2
Integrated course: Informatics, statistics and physics applied to radiological sciences			**8**
	MED/01	Medical statistics applied to radiological sciences	1
	INF/01	Informatics applied to radiological sciences	2
	ING-INF/05	Data processing and archiving	2
	FIS/07	Basic and radiation physics	3
1st YEAR — 2nd SEM.			
Techniques and Diagnostic Imaging 1			**8**
	MED/36	Diagnostic imaging and radiotherapy	2
	MED/50	Medical sciences and techniques	6
Integrated course: General hygiene, Radiological equipment and radioprotection			**7**
	ING-INF/07	Electronics and Informatics	2
	MED/36	Radioprotection	2
	MED/44	Safety in the workplace	3
Seminar/informatics			2
Professional workshops			1
Annual internship	MED/50		17
TOTAL ECTS CREDITS 1st YEAR			**60**

SECOND YEAR

2nd YEAR — 1st SEM.	COURSE CODE		ECTS
Integrated course: Medical and clinical sciences 1			**7**
	MED/33	Musculoskeletal System Diseases	2
	MED/06	Medical Oncology	3
	MED/28	Principles of diseases of the odontostomatological system	2
Integrated course: Economics and International Social Politics			**9**
	MED/42	General and Applied Hygiene	3
	SECS/P2	Political Economy	4
	SECS - P/07	Business Administration	2
Integrated course: Pharmacology			**6**
	BIO/14	Radiopharmaceuticals	3
	MED/36	Safety in the preparation of radiopharmaceuticals	3
2nd YEAR — 2nd SEM.			
Integrated course: Techniques and Diagnostic Imaging 2			**12**
	MED/36	Diagnostic imaging and radiotherapy	6
	MED 50	Medical sciences and techniques	6
Professional workshops			1
Seminar/informatics			2
Electives			3
Internship 2nd year (annual)	MED 50		20
TOTAL ECTS CREDITS 2nd YEAR			**60**

THIRD YEAR

3rd YEAR — 1st SEM.	COURSE CODE		ECTS
Integrated course: Professional ethics			**4**
	M-PSI/01	Clinical psychology, group dynamics	2
	MED/50	Medical sciences and techniques (ethics and communication)	2
Integrated course: Medical and clinical sciences 2			**6**
	MED/10	Principles of diseases of the respiratory system	2
	MED/11	Principles of diseases of the cardiovascular system	2
	MED/12	Principles of gastroenterological diseases	2
Integrated course: Techniques and Diagnostic Imaging 3			**12**
	MED/36	Diagnostic imaging and radiotherapy	6
	MED 50	Medical sciences and techniques	6
3rd YEAR — 2nd SEM.			
Electives			3
English language			3
Professional workshops			1
Internship 3rd year (annual)	MED 50		23
Seminar/informatics			2
Final Exam			6
TOTAL ECTS CREDITS 3rd YEAR			**60**
TOTAL ECTS CREDITS			**180**