

# REE

## Residency in Critical Care Medicine

(Edition 2023)

### First Semester

Code	Name	CL	L	U	CA	HT	UDC
ME4277	Medical Bioethics	1.5	0	6	1.5	6	1.8
ME4288	Cardiovascular and Respiratory Critical Medicine	3	0	12	3	12	3.5
ME4289	Cardiovascular and Respiratory Clinic in Critical Medicine	0	60	12	3	60	3.5
ME5341	Advanced Statistics	1.5	0	6	1.5	6	1.8
		6	60	36	9	84	10.6

### Second Semester

Code	Name	CL	L	U	CA	HT	UDC
ME4290	Metabolic, Neurological and Infectious Critical Medicine	3	0	12	3	12	3.5
ME4291	Metabolic, Neurological and Infectious Clinic in Critical Medicine	0	60	12	3	60	3.5
ME5342	Advanced Research I	1.5	0	6	1.5	6	1.8
		4.5	60	30	7.5	78	8.8

### Third Semester

Code	Name	CL	L	U	CA	HT	UDC
ME5333	Elective for Attention and Rotation in Subspecialty I	0	30	6	1.5	30	1.8
ME5343	Hematology, Nutrition and Polytrauma in Critical Medicine	3	0	12	3	12	3.5
ME5344	Nutrition, Hematology and Polytrauma Clinic in Critical Medicine	0	30	6	1.5	30	1.8
ME5345	Advanced Scientific Writing and Analysis Workshop	1.5	0	6	1.5	6	1.8
OP5099	Innovation and Health Education Elective	1.5	0	6	1.5	6	0
		6	60	36	9	84	8.9

### Fourth Semester

Code	Name	CL	L	U	CA	HT	UDC
ME5336	Elective for Attention and Rotation in Subspecialty II	0	30	6	1.5	30	1.8
ME5346	Ginecoobstetric Critical Medicine, Transplants and Administrative Processes	3	0	12	3	12	3.5
ME5347	Ginecoobstetric, Transplant Clinic and Administrative Processes in Critical Medicine	0	30	6	1.5	30	1.8
ME5348	Advanced Research II	1.5	0	6	1.5	6	1.8
OP4047	Quality Development Course	3	0	12	3	12	0
		7.5	60	42	10.5	90	8.9

#### Academic credits

- CL** The letter "CL" indicates the number of class-hours per week.
- L** The letter "L" indicates the number of laboratory-hours per week.
- U** The letter "U" represents the equivalent time in courses lasting 15 weeks (semester) and 12 weeks (trimester), of weekly work that the student dedicates to the course to meet its objectives. They include the "class hours", as well as the time dedicated to the student's independent work.

**CA** The letters "CA" represents the number of semester credit hour of the course.  
**HT** Total hours  
**UDC** Load Units

## **Program Outcomes**

### **Justification**

The human being has an enormous capacity of development and growth. It is necessary to generate tools to achieve the harmonious development of the person in all its dimensions.

It is in this sense that one of the priority areas established by the Tecnológico de Monterrey in its mission is the subject of health and the impact that medicine has on it. Therefore, the Specialty of Medicine of the Critically Ill is perfectly related to the strengthening of this area, since the program seeks to contribute to society by offering the best possible care at the right time to achieve a change in the prognosis of seriously ill patients, impacting positively both personally and socially and economically on a large scale.

### **Program Objective**

The Specialty in Medicine of the Critically Ill of the Tecnológico de Monterrey aims to train excellent medical specialists, who attend with quality and safety the health needs of critically ill patients, in public and private settings. Likewise, to train people of integrity, who exercise their clinical, teaching and research practice with human sense and strict adherence to ethical principles and professionalism. Specialists in Critical Care Medicine who graduate from this institution are outstanding leaders at the local and international level, who generate innovation with new diagnostic and therapeutic methodologies and technologies and programs for the timely detection of diseases in the population under their competence.

### **Target audience**

The Multicentric Program of Medicine of the Critically Ill of the Tecnológico de Monterrey is aimed for graduates of Medical Specialties in Internal Medicine, Anesthesiology or Medical and Surgical Emergencies with excellent academic performance, with dedication and expressed interest in the discipline, with innovative spirit committed to continuous learning, with genuine interest in research and teaching.

To enter the program, applicants must satisfactorily meet the requirements established by the Tecnológico de Monterrey and the Secretary of Health of Nuevo León for postgraduate admission.

Entry requirements:

Candidates must meet the requirements for admission to master's studies at Tecnológico de Monterrey, which are:

- Logical reasoning exam PAEP (Postgraduate Studies Admission Test).
- TOEFL English exam (test of English as a foreign language).
- Psychometric exam, which demonstrates characteristics of the student's profile suitable for the specialty and emotional stability.

The applicant must also have passed the ENARM (national exam for medical residency applicants) and undergo an interview with the academic faculty. During the latter, the applicant's curriculum is evaluated, giving higher scores to those who have participated as authors or co-authors of published works, presentation of works in congresses, leadership activities and social participation. All these are characteristics that candidates to enter the specialty must meet.

### **Admission profile**

The Multicentric Program of Medicine of the Critically Ill of the Tecnológico de Monterrey is aimed at graduates of Medical Specialties in Internal Medicine, Anesthesiology or Medical-Surgical Emergencies with excellent academic performance, with a vocation and express interest in the discipline, with an innovative spirit committed to continuous learning, with a genuine interest in research and teaching.

To enter the program, applicants must satisfactorily meet the requirements established by the Tecnológico de Monterrey and the Secretary of Health of Nuevo León for postgraduate admission.

### **Graduate profile**

The profile of the critical medicine graduate includes three aspects of educational achievements that are expected as effects of the formal education process, that is: the professional-humanistic orientation (the being), the intellectual formation (the knowledge) and the operational performance of the specialist doctor (know-how).

The specialist physician graduated from the Medicine of the Critically Ill program will be able to:

Knowledge

- Make medical decisions applying clinical reasoning, evidence-based medicine, the use of critical thinking, research methodology and the comprehensive use of statistics.
- Prevent, diagnose, treat, and rehabilitate health problems in critical care medicine.

Skills

- Interact effectively in multidisciplinary teams, in teaching, research and comprehensive management of an intensive care unit.
- Exercise the clinical practice of critical care medicine in a wide variety of contexts with different available resources, including public and private health systems.

#### Aptitudes

- Practice as a specialist in critical care medicine within the framework of medical ethics, with responsibility and respect for the dignity of the human being and the community that provides services.
- Be creative, innovative and manage uncertainty.

#### **Research area**

The specialty of medicine of the critically ill offers students a solid theoretical training, with the possibility of developing multiple skills in both private and public settings, with a multidisciplinary and integrative approach to the role of intensive care in the critically ill patient.

Considering the demands of the environment, the objectives of the academic program and the academic trajectory of the professors that make up the basic academic core), a research area was defined to meet the priority needs in the health of the population. This research area is the following: epidemiological studies and evaluatio

Campus that offer this program

<b>Campus</b>	<b>Number of periods offered</b>	<b>From</b>	<b>Closed for new students</b>
<b>Monterrey</b>	Complete	Resid Espec Mar-Aug 2023	

**Last update:** 08/April/2022

## Graduate Requirements

To obtain a specialty degree, a master's degree or Ph. D. degree at Tecnológico de Monterrey, students are required to:

1. Have completely finished the undergraduate cycle prior to passing the first course in the curriculum of the specialty, master program, medical residency, or doctoral program.
2. Have fulfilled, in compliance with existing standards, the academic prerequisites of the corresponding program, through proficiency tests or the corresponding remedial courses.
3. Have obtained a bachelor degree—with the antecedent of high school or its equivalent—that is equivalent to those offered by Tecnológico de Monterrey.
4. Have covered all the courses in the given curriculum, either by passing the courses at Tecnológico de Monterrey or by obtaining revalidation or equivalence agreements—in compliance with the standards—corresponding to part of the courses taken at other institutions, and passed the remaining courses at Tecnológico de Monterrey. Courses taken at foreign universities with which there are agreements are considered, for the effects of this article, as courses taken at Tecnológico de Monterrey, as long as they do not exceed a set percentage of the curriculum established by each graduate program.
5. In those curricula that so specify, to have prepared a research project or thesis that, having been defended before an academic committee, has been approved by said committee.
6. Have taken at least the equivalent of the second half of the corresponding curriculum at Tecnológico de Monterrey, in the case of students with revalidation or equivalence agreements at this level. Flexibility may be exercised in this standard in graduate programs that, under agreement, may be established jointly with other universities.