

REN

Residency in Pediatrics

(Edition 2023)

First Semester

| Code | Name | CL | L | U | CA | HT | UDC |
|--------|--|-----|----|----|-----|----|------|
| ME4274 | Ambulatory and Hospitalary Pediatrics I | 3 | 0 | 12 | 3 | 12 | 3.5 |
| ME4275 | Hospitalization and Emergency Pediatrics I | 0 | 60 | 12 | 3 | 60 | 3.5 |
| ME4276 | Research and Innovation Methodology | 1.5 | 0 | 6 | 1.5 | 6 | 1.8 |
| ME4277 | Medical Bioethics | 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 |
|--------|---|-----|----|----|-----|----|-----|
| ME4278 | Ambulatory and Hospitalary Pediatrics II | 3 | 0 | 12 | 3 | 12 | 3.5 |
| ME4279 | Hospitalization and Emergency Pediatrics II | 0 | 60 | 12 | 3 | 60 | 3.5 |
| ME4280 | Applied Research Project 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 |
|--------|---|-----|----|----|-----|----|-----|
| ME4281 | Ambulatory Pediatrics, Neurology and Cardiology | 3 | 0 | 12 | 3 | 12 | 3.5 |
| ME4282 | Pediatric Critical Patient Clinic I | 0 | 60 | 12 | 3 | 60 | 3.5 |
| ME4283 | Applied Statistics | 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 | 8.8 |

Fourth Semester

| Code | Name | CL | L | U | CA | HT | UDC |
|--------|---|----|----|----|----|----|-----|
| ME4284 | Gastroenterology and Pediatric Psychology | 3 | 0 | 12 | 3 | 12 | 3.5 |
| ME4285 | Pediatric Critical Patient Clinic II | 0 | 60 | 12 | 3 | 60 | 3.5 |
| | | 3 | 60 | 24 | 6 | 72 | 7 |

Fifth Semester

| Code | Name | CL | L | U | CA | HT | UDC |
|--------|--|-----|----|----|-----|----|-----|
| ME4286 | Scientific Writing and Analysis Workshop | 1.5 | 0 | 6 | 1.5 | 6 | 1.8 |
| ME5327 | Pediatric Endocrinology and Nefrology | 3 | 0 | 12 | 3 | 12 | 3.5 |
| ME5328 | Consultation and Subspecialty Care I | 0 | 60 | 12 | 3 | 60 | 3.5 |
| | | 4.5 | 60 | 30 | 7.5 | 78 | 8.8 |

Sixth Semester

| Code | Name | CL | L | U | CA | HT | UDC |
|--------|--|-----|----|----|-----|----|-----|
| ME4287 | Applied Research Project II | 1.5 | 0 | 6 | 1.5 | 6 | 1.8 |
| ME5329 | Pediatric Oncology and Palliative Care | 3 | 0 | 12 | 3 | 12 | 3.5 |
| ME5330 | Consultation and Subspecialty Care II | 0 | 60 | 12 | 3 | 60 | 3.5 |
| | | 4.5 | 60 | 30 | 7.5 | 78 | 8.8 |

Seventh Semester

| Code | Name | CL | L | U | CA | HT | UDC |
|-------------|---|-----------|----------|----------|-----------|-----------|------------|
| ME5331 | Pediatric Rheumatology and Immunology | 3 | 0 | 12 | 3 | 12 | 3.5 |
| ME5332 | Pediatric Medical Clinic I | 0 | 30 | 6 | 1.5 | 30 | 1.8 |
| ME5333 | Elective for Attention and Rotation in Subspecialty I | 0 | 30 | 6 | 1.5 | 30 | 1.8 |
| OP4047 | Quality Development Course | 3 | 0 | 12 | 3 | 12 | 0 |
| | | 6 | 60 | 36 | 9 | 84 | 7.1 |

Eighth Semester

| Code | Name | CL | L | U | CA | HT | UDC |
|-------------|--|-----------|----------|----------|-----------|-----------|------------|
| ME5334 | Genetics in Pediatrics | 3 | 0 | 12 | 3 | 12 | 3.5 |
| ME5335 | Pediatric Medical Clinic II | 0 | 30 | 6 | 1.5 | 30 | 1.8 |
| ME5336 | Elective for Attention and Rotation in Subspecialty II | 0 | 30 | 6 | 1.5 | 30 | 1.8 |
| | | 3 | 60 | 24 | 6 | 72 | 7.1 |

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

In Mexico there is a continuous demand for comprehensive care for pediatric patients. The country presents a wide social inequality that generates pediatric diseases that require the intervention of highly trained professionals to treat them. There are girls and boys who suffer from obesity, malnutrition, who die of infectious and preventable diseases, and live in adverse circumstances of primary services and housing; on the other hand, we have a more favored population that mostly faces chronic degenerative diseases such as obesity, cancer, heart disease, kidney disease, genetic diseases, among others, which without the care of trained doctors would perhaps have a shorter life expectancy. We encourage and generate collaborative work in our pediatricians, putting the human being at the center, showing compassion for the different groups in our society, always seeing them with integrity and equality.

Program Objective

In the Multicentric Program of Pediatrics of the SSNL-Tec de Monterrey, based on the stipulated with the Vision of Tecnológico de Monterrey, its purpose is the "training of professionals who transform lives" by training them with a high level of knowledge in the area, capable of early detection of childhood problems and work to prevent them. Our vision is to awaken in our graduates the ability to be "leaders, who are capable of innovating and be entrepreneurs to achieve human flourishing."

Strengthening the skills that allow to detect developmental disorders, prevention of obesity and its comorbidities and, of course, solving age-related diseases, through daily clinical exposure in hospitals, public and private consultation areas, monitoring of the academic program and participation in the generation of knowledge in the lines of research that are aimed at solving the problems that our childhood presents, applying technology and scientific advances in private hospitals, all of this favoring the generation of updated knowledge. We train professionals capable of solving the wide range of problems of our population in different social strata and we seek to distribute them in the coming years in different parts of the country, in order to bring better pediatric medical care to our compatriots.

Target Audience:

We search for general practitioners who wish to be trained in the area of pediatrics and who are willing to complete four years of full-time postgraduate studies, showing interest in research and knowledge generation with publications in high-impact journals.

Doctors with a humanitarian sense and concern to work and to be trained to solve health problems of the different population groups of the country. It is required to seek internationalization by increasing the exchange of knowledge with partner universities from different parts of the world.

Graduate Profile

The medical specialist graduated from the program of medical specialists in Pediatrics will be able to:

Knowledge

- Apply their knowledge and skills in health care, prevention and promotion in children and adolescents.

Skills

- Participate in the development of medical practices through teaching aimed at patients, students and colleagues.
- Communicate the results of projects or investigations to provide possible solutions to cases of the specialty.
- Perform clinical practices in medical groups of their specialty and multidisciplinary to share medical experiences.
- Solve pediatric health problems of the different sociocultural groups in the country.
- Carry out outpatient and inpatient pediatric consultations.

Aptitudes

- Exercise medical practice with professionalism, ethics and responsibility, committing to the continuous improvement of Pediatrics in all areas of society, both in private and public medicine, placing the human being at the center of their work.

Research Areas

The program has research areas of knowledge generation whose objective is to answer research questions in relation to health problems of the first order in our country, aligned with the study plan and profile of the graduate. It seeks to obtain research results with critical scientific reasoning, clearly establishing their potential application, as well as each of their limitations and areas of opportunity. Based on these research areas, residents develop their thesis and other scientific products of the program. Currently, the research areas are:

Nutrition and Metabolism. Research related to the study of the pathophysiology, metabolic processes and/or genetic diagnosis of diseases.

Public Health. Research related to priority problems in child health due to their impact on nutritional status, neurodevelopment, mental health and breastfeeding

Internal Medicine. Research in the diagnosis and treatment of diseases in the hospital setting, with an evidence-based approach and knowledge transfer in the different subspecialties such as Infectious Diseases, Surgery, Critical Medicine, Dermatology, Neonatology, Palliative Care, Oncology.

Campus that offer this program

| Campus | Number of periods offered | From | Closed for new students |
|------------------|----------------------------------|--------------------------|--------------------------------|
| Monterrey | Complete | Resid Espec Mar-Aug 2023 | |

Last update: 05/April/2022

Graduate Requirements

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.