

### **ASIIN Seal**

## **Accreditation Report**

Bachelor's degree programmes

Clinical Chemistry

Medicine

Provided by **Universidad Autónoma de Nuevo León** 

Version: 26 September 2025

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### **A About the Accreditation Process**

Name of the degree programme (in original language)	(Official) English translation of the name	Labels applied for <sup>1</sup>	Previous accreditation (issuing agency, validity)	Involved Technical Commit- tees (TC) <sup>2</sup>	
Licenciatura como Químico Clínico Biólogo	Bachelor's De- gree in Clinical Chemistry	ASIIN	ASIIN, 29.03.2019 – 30.09.2025	09	
Licenciatura de Médico Ciru- jano y Partero	Bachelor's De- gree in Medicine	ASIIN	ASIIN, 20.03.2020 – 30.09.2025	14	
Date of the contract: 30.06.20 Submission of the final version Date of the onsite visit: 0203	n of the self-assessm	nent repor	<b>t:</b> 15.04.2025		
Expert panel:  Prof. Dr. med. Bernhard Fleisch  Prof. Dr. Michael Keusgen, Phi	Prof. Dr. med. Bernhard Fleischer, Bernhard Nocht Institute for Tropical Medicine				
Claudia María Pérez Carranza, Universidad Juarez del Estado de Durango  Julia Herold, St. Bernward Hospital Hildesheim  Ana Lucía Martínez Rodríguez, student at Tecnológico de Monterrey					
Representative of the ASIIN headquarter: Johann Jakob Winter					
Responsible decision-making committee: Accreditation Commission					
Criteria used:  European Standards and Guidelines as of May 05, 2015  ASIIN General Criteria, as of March 28, 2023					

<sup>&</sup>lt;sup>1</sup> ASIIN Seal for degree programmes

<sup>&</sup>lt;sup>2</sup> TC: Technical Committees for the following subject areas: TC 09 – Chemistry, Pharmacy, TC 14 – Medicine

#### **A About the Accreditation Process**

Subject-specific Criteria of the Technical Committee 09 – Chemistry, Pharmacy, as of March 29, 2019

### **B** Accreditation Status

### **Result Overview**

The most recent decision for the ASIIN Seal was made by the ASIIN Accreditation Commission on 26.09.2025.

Degree Programmes	ASIIN Seal	Validity
Ba Clinical Chemistry	Accredited with requirements	27.09.2025 - 15.10.2026
Ba Medicine	Accredited with requirements	27.09.2025 - 15.10.2026

### **Fulfilment of the Accreditation Criteria**

ASIIN General Criteria / Sub- ject-Specific Criteria	Ba Clinical Chemistry	Ba Medicine			
1 Degree programme: Concept, Co	1 Degree programme: Concept, Content & Implementation				
1.1 Objectives and learning out- comes (intended qualification profile)	Fulfilled	Fulfilled			
1.2 Title of the degree pro-	Not fulfilled	Not fulfilled			
gramme	Requirement A1	Requirement A1			
1.3 Curriculum	Not fulfilled	Not fulfilled			
	Requirement A2	Requirements A2, A5, A6			
1.4 Admission requirements	Fulfilled	Fulfilled			
1.5 Workload and credits	Not fulfilled	Not fulfilled			
	Requirement A3	Requirement A3			
1.6 Didactics and teaching meth- odology	Fulfilled	Fulfilled			

2 Exams: System, Concept and Organisation					
2 Exams: System, Concept and Or-	Not fulfilled	Not fulfilled			
ganisation	Requirements A2, A4	Requirements A2, A4, A6			
3 Resources					
3.1 Staff and staff development	Fulfilled	Fulfilled			
3.2 Student support and student services	Fulfilled	Fulfilled			
3.2 Funds and equipment	Fulfilled	Fulfilled			
4 Transparency and Documentation	o <b>n</b>				
4.1 Module descriptions	Fulfilled	Not fulfilled			
		Requirement A7			
4.2 Diploma and Diploma Supple- ment	Fulfilled	Fulfilled			
4.3 Relevant rules	Fulfilled	Fulfilled			
5 Quality Management: Quality Assessment and Development					
5 Quality Management: Quality Assessment and Developmen <b>t</b>	Fulfilled	Fulfilled			

### Requirements

#### For all programmes

- A 1. (ASIIN 1.2) The updated official programme names need to be consistently used in all documents and websites.
- A 2. (ASIIN 1.3/2) Allow students to re-take modules while continuing the curriculum, especially in the pre-clinical stage.
- A 3. (ASIIN 1.5) The credit points need to be recalculated and allocated in accordance with the student workload. Subsequently, it needs to be checked whether the new curricular structures are feasible in terms of the workload per semester, and action must be taken accordingly.
- A 4. (ASIIN 2) It needs to be ensured that all final projects adequately fulfil the academic standard of a Bachelor's thesis.

#### For Ba Medicine

- A 5. (ASIIN 1.3) Rebalance the curriculum to increase the number of credits for the discipline of Neurology to adequately cover the discipline.
- A 6. (ASIIN 1.3/2) The final thesis needs to be adequately formalised as a curricular component.
- A 7. (ASIIN 4.1) Correctly document the separate part-modules in the module descriptions and the curricular overviews (Medical Sciences and Surgery 1,2,3).

### **Accreditation History**

#### **Ba Clinical Chemistry**

ASIIN Seal	Validity	Previous Report
First accreditation	29.03.2019 - 30.09.2025	<u>Link</u>

#### **Ba Medicine**

ASIIN Seal	Validity	Previous Report
First accreditation	20.03.2020 - 30.09.2025	<u>Link</u>

### **C** Characteristics of the Degree Programmes

a) Name	Final degree (original/Eng- lish translation)	b) Areas of Specialization	c) Corre- sponding level of the EQF <sup>3</sup>	d) Mode of Study	e) Dou- ble/Joint Degree	f) Duration	g) Credit points/unit	h) Intake rhythm & First time of offer
Bachelor's Degree in Clinical Chemis- try	B.Sc.	-	6	Full time	-	10 semes- ters	224 ECTS	Once per year, since 1982
Bachelor's Degree in Medicine	B.Sc.	-	6	Full time	-	12 semes- ters	339 ECTS	Twice per year, since 1859

Universidad Autónoma de Nuevo León (Autonomous University of the state of Nuevo León, UANL) was officially established in 1933 and is nowadays the largest educational institution in northern Mexico. It is considered the third most important university in the country. It is divided into 56 faculties/ schools which offer a total of 360 educational programmes and currently host about 214,000 enrolled students. The university is spread over different campuses across 30 municipalities in the state of Nuevo León. The Faculty of Medicine is located on the Health Sciences campus in the metropole city of Monterrey. It originally dates back to the year 1859 as a Civil College under the direction of its founder, Dr. José Eleuterio González, name giver of the modern university hospital which is located on campus and closely incorporated in the teaching and research activities of all programmes.

The Faculty of Medicine offers three undergraduate programmes, two of which are subject of this re-accreditation procedure. The university describes them as follows:

"The graduate [profile] of the <u>Bachelor's Degree in Clinical Chemistry (QCB</u>) plays an extremely important role in the Biomedical Sciences area, since a student graduated from this programme is a professional in the area of Health Sciences who has a solid scientific, technical and humanistic preparation; is socially responsible and of global competence; able to apply knowledge, skills and attitudes to work individually, collaboratively and interdisciplinarity in the solution of health problems.

On the other hand, the graduate [profile] of the <u>Bachelor's Degree in Medicine (MCP) programme</u> is characterized as being a competent physician able to prevent and solve main

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<sup>&</sup>lt;sup>3</sup> EQF = The European Qualifications Framework for lifelong learning

health problems in primary care, in the individual and the community, from a biopsychosocial and inclusive perspective, with high moral and ethical sense, with comprehensive training, leadership skills and ability to work in a team, willing to pursue continuing medical education and prepared to undertake graduate studies, always capable of innovating and generating knowledge within social responsibility."

Both programmes address highly demanded graduate profiles and provide a content-wise qualitative education, which is founded on the excellent integration of theory and clinical practice due to the close collaboration and joint management of the faculty and the university hospital. As all stakeholders of the university explain, this integration characterises the outstanding competence profile of these programmes' graduates. In that regard, UANL provides a very good learning environment, including well-equipped teaching laboratories, clinical facilities, and an extensive academic staff body which relies on simultaneous experience as educators, clinical professionals, and researchers. On the other hand, the most prevalent deficiency of both programmes are inaccuracies in the workload evaluation respectively the corresponding credit allocation, which contributes to the problem of prolonged study durations and high drop-out rates. Similarly, also changes in the policy regarding the re-take options for exams are required to address the same problems. For the MCP programme, also aspects of the curricular content are addressed. Furthermore, shortcomings are found regarding different aspects of the formal documentation. Recommendations are given, among others, to improve the student intake and selection system, harmonise quality assurance instruments, and improve the access to international scientific literature and databases.

### **D** Expert Report for the ASIIN Seal

# 1. The degree programme: concept, content & implementation

Criterion 1.1 Objectives and learning outcomes of a degree programme (intended qualifications profile)

#### **Evidence:**

- Self-Assessment Report
- UANL academic model
- Curricular overviews of both programmes
- Diploma Supplements of both programmes
- Competence-module matrices of both programmes
- · Graduate survey results of both programmes
- Websites of both programmes
  - https://www.uanl.mx/en/oferta/bachelor-of-clinical-biochemistry/
  - https://www.uanl.mx/en/oferta/bachelor-of-medicine-surgery-and-midwifery
- Discussions during the audit

#### Preliminary assessment and analysis of the experts:

The experts base their assessment of the learning outcomes on the information provided in the curricular overviews, on the websites, and in the Self-Assessment Report of both degree programmes under review. Besides the general accreditation criteria, the experts refer to the Subject-Specific Criteria (SSC) of the Technical Committee 09 – Chemistry, Pharmacy as a basis for judging whether the intended competence profiles of the <u>QBC and MCP programmes</u> corresponds with the competences as outlined by the SSCs.

The learning outcomes of both programmes are divided into the groups of specific skills and general skills, the latter being additionally ordered by the categories of instrumental skills, social/ interpersonal skills, as well as integrative skills. The individual modules are aligned with the learning outcomes via skills-module matrices, and the general programme learning outcomes are distinguished and specified as learning outcomes for each module.

The learning outcomes of both programmes are displayed in the appendix. The experts confirm that the defined learning outcomes of the <u>Bachelor's degree in Clinical Chemistry (QBC programme)</u> adequately cover all requirements for Bachelor's programmes in the field of Chemistry that are outlined by the applicable SSC. This also includes a sufficient coverage of basic scientific disciplines in mathematics, physics, biology, and chemistry. Moreover, the specific focus on clinical science and medical applications is clearly outlined. For the <u>Bachelor's degree in Medicine (MCP programme)</u>, the experts are also satisfied with the learning outcomes and acknowledge that, in line with the provisions of the criteria of the World Federation of Medical Education, the special competences incorporate the areas of the scientific basis of medicine, professional clinical practice, critical thinking and research, professional practice and ethics, organisational work, and communication. The experts confirm that the learning outcomes of both programmes appropriately represent the Bachelor level of EQF 6.

In terms of graduate profiles, the <u>QCB programme</u> prepares the students for work as analysts in different types of laboratories, including, foremost, clinical laboratories in hospitals, but also other kinds as outlined in the appendix. According to the graduate survey results, 67% of the graduates work as analysts, while other positions include teaching and research occupations as well as laboratory administration. As the experts acknowledge, the employment quota of respondents is above 90%, of which the large majority works in the state of Nuevo León. Only few graduates of this programme stay in academia and continue their studies.

Graduates of the MCP programme are designated for work as clinical practitioners in medical consultancies, hospitals and health centres and, according to the graduate survey results, 85% were able to find their first job within six months of their graduation. Nevertheless, almost 80% of the graduates continue their education with specialist training, e.g. in paediatrics, radiology, or gynaecology, or study for Master's degrees, among others in hospital management or occupational health. During the on-site interview, both the programme coordinators and representatives of employers explain that this is due to the comparatively uncompetitive salary of general practitioners and the better social status and recognition of specialists. This motivates almost all graduates to continue their education, although general practitioners are also urgently needed in the national healthcare system. It is explained that many graduates choose to work for one to two years as general practitioners after their graduation to gather more clinical work experience before starting their specialist degrees. The experts are satisfied to see that, despite the high share of students continuing their education, the Bachelor of Medicine nevertheless constitutes a fully recognised degree which enables the graduates to work in their profession.

For both programmes, the representatives of employers and professional associations confirm their satisfaction with the UANL graduates and stress that their good clinical experience and practice which they can gather already at early stages of their careers are outstanding characteristics that distinguish UANL from other universities and medical faculties. As there is an overall shortage of skilled medical staff in Mexico, they would appreciate if even more students would graduate from the programmes to fill all the vacancies which the employers have. Likewise, the students affirm that the integration of theory and clinical practice already in early stages of the programmes, which is enabled through the close proxemic location and institutional incorporation of the university hospital, has been the main criterion for them to choose UANL as their university.

As stipulated by the UANL academic model, the programme objectives and learning outcomes are reviewed as part of the mandatory curriculum review every five years (see also sections 1.3 and 5). This process involves both university-internal stakeholders like academic staff and students, as well as external stakeholders like, e.g., the Mexican National Council for the Evaluation of Chemical Sciences Programs (CONAECQ) and the Inter-Institutional Committees for the Evaluation of Higher Education (CI-EES).

In summary, the experts confirm that the objectives and learning outcomes of both programmes are described briefly and concisely. They are transparently anchored and published and thus are available to students, lecturers and interested third parties. The intended competence profile adequately represents the targeted academic qualification level EQF 6, corresponds to the applicable SSC of the Technical Committee 09 for the QCB programme, and enables graduates to find suitable jobs in related industries and research institutions. A structured review process ensures the learning outcomes' topicality and relevance for the labour market and society.

#### Criterion 1.2 Name of the degree programme

#### **Evidence:**

- Self-Assessment Report
- 2019 ASIIN accreditation reports for both programmes
- Samples of Diploma Certificates and Diploma Supplements of both programmes
- Discussions during the audit

#### Preliminary assessment and analysis of the experts:

During the on-site visit, the experts consider and discuss the discrepancies between the original Spanish and the English translations of the programme names. For the QCB programme, the programme coordinators explain that the original name is planned to be changed from "Químico Clínico Biólogo" to "Químico Clínico" as part of the regular programme review from the next semester. The experts acknowledge this as the updated name better complies with the international denomination standard of the respective programme, which is already correctly reflected in the English programme title of "Clinical Chemistry". The changed name needs to be harmonised and consistently used in all official documents, publications, and websites.

For the MCP programme, the experts refer to the 2019 accreditation report in which the previous expert team reasoned that the original programme name of "Licenciado de Médico Cirujano y Partero" ("Bachelor of Medical, Surgery, and Midwifery") does not adequately reflect the programme contents. The experts agree that the curriculum constitutes a general medicine programme but does not specifically focus on surgery and midwifery as implied by the name. However, as the original name has a longstanding tradition in Mexico and is well established and recognised in the country, the previous expert team proposed the compromise to keep the original name but change at least the English name to the internationally more recognised denomination of "Bachelor of Medicine". The experts acknowledge that this compromise has been implemented, and the English programme name has been changed. However, they still find the old English programme name in different places, including the programme's website and the module descriptions. As the names need to be consistently used, the experts require UANL to address this fault. Besides that, the experts consider the previous recommendation to award a "Medical Doctor" title in addition to the Bachelor's degree as this would additionally benefit the international recognition of the degree. The Diploma Supplement does contain this title, but, although explicitly looking for it, the experts could not find it initially due to its placement. In that regard, it is recommended to more prominently display the degree title "Medical Doctor" on the Diploma Certificate itself and more prominently in the Diploma Supplement (compare section 4.2).

In summary, the experts confirm that the English programme names adequately reflect the curricula and are in line with international standard denominations. Considering that, the deviations of the traditionally established original Spanish programme names are acceptable. However, it needs to be ensured that the updated names are used consistently in all documents and websites. Furthermore, the degree title of "Medical Doctor" should be displayed more prominently to facilitate the international recognition of the degree.

#### **Criterion 1.3 Curriculum**

#### **Evidence:**

- Self-Assessment Report
- UANL academic model
- Foundation studies for curriculum design
- Objective-module matrices of both programmes
- Curricular overviews of both programmes
- Study plans of both programmes
- Revised study plans of both programmes starting August 2025
- Module descriptions of both programmes
- Cooperation agreements with partner universities
- Process description "Foundation studies for decision-making in the curriculum design"
- Websites of both study programmes
- Website of the UANL secretary of foreign relations: https://internacional.uanl.mx/en/convenios-vigentes/
- Discussions during the audit

#### Preliminary assessment and analysis of the experts:

As the experts learn during the on-site visit, both programmes have been reviewed during the past year and revised curricula are designated to be implemented from the academic year 2025/26 on. As the programme coordinators explain, these reviews are the mandatory curricular revisions taking place every five years which, however, have been delayed due to the complications and exceptional adaptations made during the times of the COVID-19 pandemic. However, the updated study plans and module descriptions were only presented during the on-site visit. The experts stress that a curricular rework of that extent is crucially important for the accreditation and needs to be considered. They therefore comparatively assess both versions of the programmes as part of this report, and the study plans are outlined in the appendix.

#### Structure and content

According to the Self-Assessment Report, the curricula of both programmes pursue a competence-based approach, focus on student learning and address the main pillars of the UANL academic model, which are flexibility, innovation, internationalisation and social responsibility. The <u>QCB programme</u> was designed for five years (ten semesters) for full-

time studies, during which a total of 224 ECTS credits need to be accomplished. The designated study period of the <u>MCP programme</u> is six years (twelve semesters) plus a year, encompassing 339 ECTS credit points. In addition, the MCP programme also requires a year of "social service" prior to graduation, which, however, is not contained in the curriculum.

The curricula of both programmes are divided into four areas: General Studies (ACFGU), Basic Professional Studies (ACFB) and Professional Studies that is subdivided into Fundamental (ACFP-F) and Integrative (ACFP-I). The structure of the revised curricula promotes a more distinct separation of the first study year from the rest of the programmes, which is reasonable as the first year constitutes a strong selection filter for the initial student intake (see section 1.4). In that regard, all modules of the general and basic professional studies, which in the current curricula are spread over the entire study period, have been centred in the first year of the programmes. Moreover, the basic professional studies of the first study year have been additionally split up into the "initial discipline formation" and the "professional introduction modules", as outlined in the study plans.

According to the Self-Assessment Report, ACFGU modules are part of all UANL degree programmes and are designed to promote comprehensive training for students and develop the general competences of the graduate profile. This includes the modules "Leadership, entrepreneurship and innovation", "Social responsibility and sustainable development", "Peace culture and human rights", and "Ethics and culture of legality". The revised curricula contain an additional general module called "Equality, sexual diversity, and inclusion". Furthermore, each programme contains multiple slots for elective modules in this area.

ACFB modules constitute the basic professional studies and promote the development of the basic intellectual competences. In the QCB programme, this includes modules like "General chemistry", "Organic analysis", "Analytical chemistry", "Molecular biology", and "Biostatistics". This area also comprises three English language modules. For the MCP programme, examples of basic professional modules are "Anatomy", "Biochemistry and molecular biology", "Microbiology", "Physiology", and "Embryology". The latter, as the programme coordinators explain, is one of the core focus points of UANL's Faculty of Medicine and therefore carries more credits than would be expected in European medical curricula. However, given Mexico's higher birth rate and increase in population, the experts consider it reasonable to give this subject a higher weight in the curriculum. In the MCP programme, English language modules are not compulsory but can be chosen as part of four elective slots.

The curricular area connecting the basic and professional studies is the ACFP-F modules in which students acquire the skills necessary for practising in a professional field. Organised interdisciplinarity is promoted for problem-solving with reference to the professional, work, and social context. Examples of the <u>QCB programme</u> are the modules "Clinical biochemistry", "Medical bacteriology", and "Forensic analysis", while typical modules of this area in the <u>MCP programme</u> are "Pathology", "Pharmacology and toxicology", as well as "Medical propaedeutics".

Finally, the area of integrative professional studies include previously acquired clinical competencies and allows students to relate their educational training to professional practice. This curricular area primarily focuses on clinical activities. In the QCB programme, this area dominates the final four semesters of the programme with two large module blocks of "Clinical pathology", three research seminars, different elective modules, and a "Social service". During the on-site visit, the experts inquire about the social service and learn that this is a supervised internship completed by most of the students in clinical laboratories of the university or partner companies and institutions. However, as the programme coordinators explain, it has nothing to do with social service in the sense of charitable work, which might be induced by the module name. In the MCP programme, the ACFP-I modules constitute the entire second half of the programme from the seventh semester on. These encompass modules of all clinical fields and an internship rotation in the university hospital, which aims to consolidate clinical competencies. The largest blocks in terms of credits are "General surgery", Gynaecology and obstetrics", as well as "Paediatrics" and "Emergency medicine".

The distribution of credits across the curricular areas is displayed in the following tables taken from the Self-Assessment Report:

#### For the QCB programme:

Curricular area	Core cred- its	Elective cred- its	Total credits	Total credits (%)
ACFGU	8	6	14	6.25
ACFB	81	0	81	36.16
ACFP-F	46	12	58	26.78
ACFP-I	39	32	71	30.8
TOTAL	174	50	224	100.00

#### For the MCP programme:

Curricular area	Credits	Percentage (%)
General Studies (ACFGU)	20	5.90%
Basic Professional Studies (ACFB)	85	25.07%
Professional Studies- Fundamental (ACFP-F)	52	15.34%

Professional Studies- Integrative (ACFP-I)	182	53.69%
TOTAL	339	100.00

Overall, the experts consider both programmes to be well designed in terms of their structure and content on the macro level. They consider the definition of the different curricular areas to be beneficial for the programme structure in terms of the continuous competence building, find them to be well interlinked and sensible in regulating the sequence of the modules. The university-wide shift of the general and basic professional modules into the first semester is generally considered sensible and understandable, considering the intended goal regarding the student selection. However, the experts deem it problematic that the first and second semesters are now packed with each seven to eight comparatively small modules, many only awarded with 2 credit points. Although, on paper, the aggregate number of credit points in these semesters is well below the university-imposed limit of 34 credits per semester and no experiences have been made with these new study plans, the experts deduct from student feedback regarding the current curriculum design that the actual workload corresponding to a module is not well-reflected in the credits (see section 1.5). Therefore, this number of modules is likely to be challenging or even problematic to deal with, especially for freshman students.

Content-wise, the <u>QCB programme</u> is confirmed to be structured in a way that allows students to successfully obtain the learning outcomes and corresponds to the provisions of the Subject-Specific Criteria of the Technical Committee 09 for Bachelor's programmes on EQF level 6. The experts positively acknowledge the multiple elective options which allow for individual specialisation of the students. One critical issue that appeared multiple times in the student and employer surveys was that subjects of pharmacology and toxicology are underrepresented. Both in the current as well as the revised curricula, this subject is only a 3-credit module which the experts deem comparatively small. However, as the programme coordinators affirm that this subject has also been included in other modules during the curriculum review, and the initial critique regarding the underrepresentation of this subject is not confirmed during the audit interviews with the students and representatives of employers, the experts are satisfied.

The experts are generally satisfied with the structure and contents of the MCP programme, especially in the pre-clinical stages. However, for the area of integrative professional studies, they wonder about the programme's partly imbalanced focus on certain topics. Most importantly, they point out that "Neurology", which is outlined as a 2-credit part-module in the revised curriculum, is a crucial subject in modern medicine and has been strongly increasing in importance over the past years. Despite the different shape of the population pyramid in Mexico from that in most European/ western countries, which shows a lower

concentration of the population in older age groups, this subject is still of high relevance and will also increase in its importance in the future. Therefore, considering the international signal of this international accreditation, the experts require the UANL to strengthen the curricular focus on the discipline of neurology. Besides this, the experts also find other subjects which they assess to be credit-wise weighted in a way that corresponds to their actual importance for the medical profession. As an example, they mention "Family medicine" (6 credits), which they find to be strongly underrepresented in relation to "Plastic surgery" (8 credits) in the tenth semester. This does not generally impact the curricula's coherence with the learning outcomes, and the experts also acknowledge that FVM is free to independently determine these individual curricular focus points. Nevertheless, they recommend FVM to reconsider and restructure the weighting of the clinical modules according to their relevance.

Besides this, the experts inquire about the split of the large module blocks "Medical sciences" and "Surgery", which was already required as part of the first accreditation and had allegedly been fulfilled in the meantime. However, when looking at the curricular overviews and module handbooks, it seems as though these very large module blocks appear to still be in place. In that regard, the programme coordinators explain that these modules have nevertheless been split up into part-modules, such as "Endocrinology", "Gastroenterology" and "Haematology" as examples for the block "Medical sciences 1". These part-modules belong together but have separate lectures and exams, which is also confirmed by the students and evidenced by the respective exams revised during the audit. The experts positively acknowledge that but point out that it is then necessary to correctly document this, foremost in the module handbooks, as well as the curricular overviews (see section 4.1). Nevertheless, also beyond "Medical sciences" and "Surgery", there are modules like "General surgery" (21 credits) and "Gynaecology and obstetrics" (18 credits) which unite more than half of the credit points of the respective semester. Therefore, failing to complete one of these modules significantly impacts the study progress of the respective student. While the experts acknowledge the challenge of splitting up these comprehensive and crucial subjects in medical education, they still recommend further partitioning the modules to allow students more flexibility in re-taking modules. For example, "Gynaecology and obstetrics" could be easily split into separate modules for "Gynaecology" and "Obstetrics".

In that regard, the experts generally note that the study times are regularly exceeded by up to two semesters, while only about 50% of the students complete the programmes in time. The programme coordinators explain that the main reason for the delay is that students fail certain modules and are therefore prohibited from advancing to the next semester due to the maximum limit of 34 credits per semester. Moreover, the very strict structure of the curricula does in many cases prohibit students to take modules in higher semesters

if certain modules have not been passed successfully, which causes delays in the study progress. These explanations are also consistent with the responses of about one-third of the students present at the on-site interview who consider re-taking examinations as a challenge (see also section 1.6). While the experts understand the compulsory linking of modules in certain cases and also acknowledge the organisational challenges of allowing students to re-take modules while already advancing to higher semesters, especially in the semesters with high clinical workload, they stress that this system needs to be adapted to improve the conditions for students to be able to graduate on time. Crucial in that regard is, as mentioned before, a realistic workload assessment and credit allocation (see section 1.5), as well as reasonable module sizes, avoiding both too many very small modules as well as excessively large modules. Moreover, the experts also opine that the decision of how many credits or modules can be taken and managed in one semester should be up to the students themselves. Therefore, they require UANL to allow students to re-take modules while continuing the curriculum, especially in the pre-clinical stage.

The second reason for study time delays in the MCP programme is that there is a one-year social service which, other than in the QCB programme, is not part of the formal curriculum and can only be started after having successfully completed all modules of the formal curriculum. Nevertheless, the completion of the social service is a requirement for graduation and a license to practice as a medical doctor, and the students therefore receive their certificates only after having completed this year. Therefore, it is technically not possible to complete the programme within the designated 12 semesters, but an additional year needs to be factored in. As the programme coordinators explain, this organisation is in accordance with Mexican national regulations. This social service is, in terms of its purpose, comparable to the one in QCB; however, for MCP, it is organised by the social service department of UANL in cooperation with the national Ministry of Health. On the other hand, in contrast to the QCB social service, students already get paid by the government for their work during this year.

While the experts generally welcome this mandatory internship year, they consider its organisational embedding to be critical, as, according to the accreditation criteria, all mandatory components of a programme need to be registered in the curriculum and appropriately credited. However, as the programme coordinators explain, Mexican national regulations state that the social service is part of the graduation requirements but not part of the official curriculum, and it is not allowed to accumulate academic credits. The experts acknowledge this explanation that the social service is not part of the educational programme under the responsibility of the university and is, therefore, not part of the curriculum and not considered in the calculation of the regular study period. However, as explained in the Self-Assessment Report, the practical experience and research conducted

during the social service are still used as a basis for the final project (Bachelor's thesis). This, as the experts point out, must necessarily be considered an academic achievement under the responsibility of the university. Therefore, in case the thesis is prepared only during or after the completion of the social service and not as part of the evaluation of other "regular" modules, a corresponding additional module needs to be included in the curriculum and credited appropriately. However, as the students are supposed to have completed all curricular components before the social service, the thesis would need to be incorporated into the curriculum in a different way (see also section 2).

In summary, the experts confirm that the curricula of both programmes generally enable the students to achieve the respective learning outcomes of the programme, which are specified at the level of the individual modules. Both programmes include multiple slots for elective programmes, which allow for individual specialisation of the students. Each module represents a well-matched unit of teaching and learning, which is outlined by course learning outcomes contained in the module descriptions. However, for the MCP programme, the experts recommend a re-evaluation of the weighting of the clinical subjects and specifically require an increase in the focus on neurology as a crucial subject which is currently underrepresented in the curriculum. Moreover, the still existing large module blocks are recommended to be further divided to improve the opportunities for students to complete respectively retake them in case of failure. This goes together with the overall requirement to allow students to retake modules while continuing the curriculum, especially in the pre-clinical stage, as a measure to reduce the exceeding of the standard period of study which is apparent in both programmes. An internship ("Social service") is reasonably integrated in the QCB programme, while, in the MCP programme, this social service is not part of the university curriculum anymore but is done only after completion of all modules. In that regard, however, the experts find this regulation inconsistent concerning the incorporation of the final thesis and require clarification and adequate inclusion of the thesis as a curricular component (see also section 2).

#### Internationalisation and student mobility

The Self-Assessment Report states that UANL provides the students with the opportunity for one or two semesters of student exchanges through collaboration agreements with international organisations and institutions at the university and faculty level. Information about the partner institutions, as well as the application processes and requirements, is outlined on the website of the UANL secretary of foreign relations. Overall, UANL currently has 240 cooperation agreements, enabling about 350 students per semester to go abroad for student exchanges. Approximately 100 incoming students are received per semester.

Currently, the QCB programme has two specific agreements with the University of Buenos Aires in Argentina and the University of San Buenaventura in Colombia, as evidenced by the respective cooperation agreements. In addition, a third agreement with the University of Chile is in planning. For the MCP programme, there are two specific agreements as well, one with the School of Medicine of the University of Cologne in Germany and the other with the School of Medicine of the University of Lille in France. As the programme coordinators explain, all exchange programmes are on a curricular basis, meaning that the curricular contents have been checked and validated by the academic committees of the respective programmes to ensure the full recognition of the credits. Credits obtained are transferred once the student has finished the academic cycle abroad. This is confirmed by the students of the MCP programme, who also report a good support system of the university for international mobility, which includes information and advisory sessions with specialised coordinators, help with organisational matters like visa applications, as well as the provision of or mediation support for scholarships. The QCP students on the other hand report that their opportunities are limited due to a fewer number of suitable cooperation partners. The experts are happy to hear about the MCP students' satisfaction and also positively note that incoming mobility is promoted. The same structural support should be given to the QCP students. As Spanish is a language that is spread worldwide and taught as a foreign language in many countries, it is no problem for international students to follow the regular classes if they have the required language competency, which is a selection requirement.

The numbers of participants in student mobility programmes are displayed in the following tables taken from the Self-Assessment Report.

#### For the QCB programme:

Period	Number of students Those that apply for exchanges	Number of outgoing students	Number of incoming students
2020	3	0	0
2021	2	0	0
2022	1	1	0
2023	4	4	0
2024	1	1	0

#### For the MCP programme:

Period	Number of students Those that apply for ex- changes	Number of outgoing students	Number of incoming students
2020	4	4	3
2021	0	0	0
2022	7	7	3
2023	18	18	17
2024	14	14	14

An additional student mobility programme for <u>MCP students</u> consists of carrying out extracurricular clinical rotations in hospitals available in more than 32 countries through the International Section of Undergraduate Students (SINESP). These activities come at the students' own cost. For incoming students of these programmes, the Faculty of Medicine provides housing. During the on-site interview, the students appreciate this programme as a great opportunity for short-term mobility activities, especially for students who cannot or do not want to participate in longer programmes, e.g, due to family reasons. As the numbers in the following table show, this programme is used by many students:

Period	Number of students that apply for exchanges	Number of outgoing students	Number of incoming students
2020	61	61	74
2021	0	0	12
2022	104	104	113
2023	60	60	115
2024	60	60	150

In summary, the experts confirm that UANL promotes international student mobility through an appropriate structural framework which includes the recognition of credits and support services for both outgoing and incoming students.

#### Curriculum Review

According to the university's provisions of the academic model, the curricula have to be reviewed at least every five years. As explained above, the past curriculum review had been postponed due to the challenges of the COVID-19 pandemic, but revised curricula will be put into effect from the next academic year on. As confirmed during the on-site visit, both

the students as well as external stakeholders are also involved in the review process through their involvement in the respective committees as well as the student council. However, due to the uneven distribution of the student numbers between the programmes of the faculty (about 20 times more MCP students than QCB students), there appear to be certain limitations regarding the representation of QCB students, as elaborated in more detail in section 5. The experts further confirm that curricular changes are documented in detail in the respective working documents presented during the audit.

While the experts find the new structure of the programmes suitable in terms of the content, they point towards the inconsistencies in the credit allocation and require UANL to revise these new curricula with respect to their feasibility in terms of workload respectively credits.

#### **Criterion 1.4 Admission requirements**

#### **Evidence:**

- Self-Assessment Report
- Regulations for Admission, Permanence and Graduation of UANL students
- UANL admission website: https://www.uanl.mx/en/admissions/
- Website of the secretary for equality and inclusion: https://www.uanl.mx/dependencias/secretaria-de-igualdad-e-inclusion/
- UANL code of ethics
- Discussions during the audit

#### Preliminary assessment and analysis of the peers:

The admission requirements and procedures for all Bachelor's degree programmes at UANL are regulated in the university-wide "Regulations for Admission, Permanence and Graduation of UANL students". According to the Self-Assessment Report and the regulations, the admission capacities are based on several criteria, including the applicants' academic preparation and available resources. As a baseline requirement for admission to university studies in Mexico, all students need to have successfully completed high school or equivalent studies. The relevant criterion for the student selection is the result of a central, standardised admission test (EXANI II), which is designed and administered by the National Centre for Evaluation in Higher Education. This test is mandatory for all applicants and is intended to evaluate the candidates' potential for successful graduation by assessing their aptitude and disciplinary competencies relevant to their studies. The test evaluates core areas such as mathematical thinking, analytical skills, language structure, and reading comprehension.

For applicants to the QCB and MCP programmes, the Faculty of Medicine has additionally included a section that deals with chemistry, biology, academic writing and English as a foreign language.

The numbers of applications, admissions, and enrolments are displayed in the following tables taken from the Self-Assessment Report.

#### For the QCB programme:

Term	Applicants	Admitted students	Enrolled students	Minimum score
August 2020	173	85	80	1316
August 2021	190	86	85	1366
August 2022	175	85	79	1362
August 2023	169	87	80	1035
August 2024	139	89	86	1063

#### For the MCP programme:

Term	Applicants	Admitted students	Enrolled students
AugDec. 2022	4879	1198	1113
JanJul. 2023	2444	1064	1018
AugDec. 2023	4660	1217	1108
JanJul. 2024	2878	1081	993
AugDec. 2024	5139	1209	1106

For the <u>QCB programme</u>, the data from the last five years indicates a stable and consistent demand. The number of applicants has fluctuated between 139 and 190 per year for an average of 85 enrolled students, which suggests a competitive but manageable admission landscape with an admission rate of approximately 45-50%. The cohort size is well-defined and uses the full capacity of the programme. The <u>MCP programme</u> takes in students twice a year with a designated cohort size of 1126 students. With applicant numbers ranging from 2,444 to 5,139 per admission term, the admission rate here is significantly lower, highlighting the high level of competition for the available places.

Looking at the development of the student numbers throughout the programmes, the experts notice that, depending on the cohort, only 30-50% of the students who initially start the programmes graduate from them. The experts consider this very critical and inquire about the reasons for such high drop-out rates. The programme coordinators explain that the entrance exam is comparatively easy and not adapted to determine the subject-specific attributes of applicants for the programmes. Moreover, despite the test, students enter the programmes with very different pre-qualifications, which is due to the school system, which does not distinguish the education level of different secondary school types. This,

however, is part of a current government strategy that aims to bring as many students as possible into universities, which puts constant pressure on the programmes to increase intake numbers without adequately considering the effects on intake quality. Because of that, the teaching staff find it a challenge to manage the different knowledge levels, especially in the first semesters. Accordingly, the dropout rates in the early semesters are the highest. Also, as the students confirm, most of the students enter the university at a very young age (usually 16-18 years) and therefore, often change their mind about their chosen studies and career paths. Additionally, underestimating the workload of the study programmes as well as false expectations regarding the medical professions play a considerable role. Therefore, the actual subject-specific student selection only happens during the first study year instead of before.

In an attempt to accommodate this problem of high drop-out rates, the Faculty of Medicine is now offering a propaedeutic course which potential applicants can take to familiarise themselves with the particularity of medical studies and increase their overall pre-qualification or respectively compensate for potentially missing specific competencies. The teaching staff reports that the pre-course helps to raise the overall level but is too short to adequately cover what would be needed for some students.

In addition, the university-wide restructuring of the curriculum which places all general education modules in the first years aims to reduce overall dropout rates. This approach is intended to help students become familiar with university processes, adapt to academic expectations, and make it easier to transfer between programmes by increasing the number of credits that can be recognized. The experts acknowledge that UANL has recognised this problem and has already implemented measures to address it. However, as explained by the programme coordinators, the government currently requests the intake of as many students as possible to increase numbers of students which challenges UANL's ambitions to streamline the process. Still, in terms of an efficient use of both human and material resources, the experts urge to increase the focus on successful study careers in terms of higher graduation numbers instead of student intake numbers. They acknowledge the huge challenge of student selection for programmes in the medical field but, nevertheless, stress the importance of improving this situation. Therefore, in accordance with the needs of the society, which are in part articulated by the representatives of potential employers, they recommend to further support pre-qualification of the students and refine the selection pathways on the faculty level to lower the drop-out rates.

For the recognition of externally achieved qualifications, including students who have previously studied in different programmes or at different universities, a university-wide regulation is in place. The procedure requires students to submit a formal application, and the university then checks, based on the submitted documents, whether the qualifications are

a substantial match in terms of content. At the level of the Faculty of Medicine, this process is carried out by the responsible academic committee. The university-wide regulations limit the maximum scope of recognition to 50% of the credits required for the degree, excluding the social service.

The Self-Assessment Report further stresses UANL's commitment to inclusion and diversity, which is prescribed in the university's code of ethics. There is a designated division that provides guidance and assistance to the entire university community on issues related to people with disabilities and the elderly. It advises and accompanies people with disabilities and older students during admission, permanence and graduation from the UANL. Furthermore, it promotes awareness of inclusion, as well as teaching techniques and materials that allow the development of teaching-learning processes for people with disabilities and older adults. It encourages workplaces to have access and adequate mobility for people with disabilities and older adults within university campuses, virtual spaces, trips, events, social and/or training activities related to education. During the on-site visit, the programme coordinators explain that the faculty currently hosts multiple students with both permanent and non-permanent disabilities, who are well integrated into the studies. The experts are highly satisfied with this institutional endowment and inclusive culture at UANL.

In summary, the experts confirm that the admission requirements and procedures of UANL are binding and transparently regulated. Rules for the recognition of qualifications achieved externally are clearly defined and facilitate the transition between higher education institutions. However, it is recommended to further support pre-qualification of the students and refine the selection pathways to lower the drop-out rates, increase the efficiency of the education process, and ultimately increase the number of graduates.

#### **Criterion 1.5 Workload and Credits**

#### **Evidence:**

- UANL academic model
- Curricular overviews of both programmes
- Study plans of both programmes
- Revised study plans of both programmes starting August 2025
- Module descriptions of both programmes
- Examples of Diploma Supplements of both programmes
- Student survey and stylised results of both programmes
- Discussions during the audit

#### Preliminary assessment and analysis of the experts:

According to the UANL academic model, the study organisation and workload management are based on a credit system that captures "the volume of work translated into time, which the student must dedicate to achieve the learning goals established in the educational program, specified in terms of learning outcomes and competences." The credits measure a full-time student's workload during a 20-week semester, including two weeks for final examinations, considering that the maximum time dedicated by a Bachelor's degree student for the development of the competences established in the learning units is 45 hours per week. Thus, a full-time student may cover up to 900 hours per semester. Equivalent to the ECTS system, one UANL credit is defined as 30 hours of student work "in any place where the educational action is carried out". Thus, the designated credit load is 30 credits per semester. Because of the corresponding hourly definition, ECTS and UANL credits are converted 1:1. To graduate from the QCB programme, students have to earn 224 credits over ten semesters, while, in the MCP programme, 339 credits need to be completed over twelve semesters. As the experts note, both programmes thus notably exceed the minimum requirements for Bachelor's degrees which constitute a workload of 180 credits over a regular duration of three years.

While the experts are generally satisfied with UANL's credit system and confirm that the accounted workload includes contact hours and self-study time, they wonder why the total workload of both programmes is notably below the regular workload of 30 credits per semester which is stated both by the academic model of UANL and the ECTS user guide as full-time study load. Based on the number of semesters, the expected credit number would be 300 credits in the QCB programme and 360 credits in the MCP programme. The experts point out that this allows for two conclusions:

- 1. The programmes do not work efficiently in the sense that it might be possible and adequate for students to complete the designated workload in a shorter period of time.
- 2. The credit allocation and verification do not realistically and correctly capture the student workload.

Given the demanding structure and contents of the programme in the medical domain, the experts suspect the second conclusion which is confirmed by the students who report an overall high workload across all semesters. In that regard, the experts also inquire about the strong variation of the designated workload per semester ranging between 21 and 34 credits . For the MCP programme, the students explain that the workload is equally high but manageable in all semesters. For the QCB programme, the students report that the workload of the fifth and sixth semesters (23 credits each) is notably higher than in the first

two semesters (21, respectively 22 credits) and that many students fail modules in the fifth semester. They feel that the true workload during this semester far exceeds the 23 credits allocated to the semester. Along with the experts, the students also deduce that the workload is not adequately reflected by the allocated credits, as the number of modules appears to strongly affect the workload. Looking at the module descriptions, this is not surprising, as most modules—regardless of the number of allocated credits—rely on multiple forms of continuous assessment, such as essays, short tests, calculations and presentations. These tasks must be completed or prepared in addition to the regular in-class workload. Thus, it appears that especially within the multitude of small modules that only award two or three credit points the actual workload is not adequately accounted for. In that regard, the experts have particular doubts regarding the feasibility of the first semester in the redesigned curricula, which now contain up to eight small modules.

Therefore, the experts also inquire about the workload verification in the <u>QCB programme</u> which, according to the Self-Assessment Report and the explanations of the programme coordinators, is done by means of an online student survey in the academic information and administration system (SIASE). Reviewing the student survey questionnaire and stylised results, the experts acknowledge that adequate questions on the student workload are contained. Referring again to an example of the fifth semester in the <u>QCB programme</u>, the statistics show that more than 50% of the students responded to having spent more than 3-4 hours per week studying outside classes for the module of "Hematology" (3 credits). In contrast, the module description prescribes only 10 out of the total 90 hours accounted for by this module for independent student workload. Similar discrepancies, always underrepresenting the independent student workload, are also found for many other modules.

For the MCP programme, a similar analysis is not possible as, other than for the QCB programme, the surveys are designed differently, and the workload is evaluated only on the basis of the entire semester, but not for each module. These discrepancies also become apparent in other surveys and quality assurance instruments. As outlined in more detail in section 1.5, the survey instruments, especially the workload evaluations of the MCP programme should equal the more comprehensive and detailed ones already employed for the QCB programme. Despite the inability to retrace the weekly student workload per module in the MCP programme, the experts nevertheless conclude based on the variation of allocated credit points per semester, prescribed module contents, and student feedback, that there are discrepancies in this programme as well. Therefore, they require UANL to recalculate and reallocate the credit points in accordance with the actual student workload. Subsequently, it is necessary to assess whether the new curricular structures are feasible

with regard to the semester workload, and to take appropriate action based on the findings. The workload needs to be balanced to avoid structural workload peaks that would negatively impact the students' chances to successfully complete all designated modules of a semester. For the MCP programme, a consequent workload evaluation for each module needs to be implemented. Based on that, the experts suppose that the overall number of credit points will need to be increased to realistically capture the total student workload. In that regard, they generally recommend aligning the workload with the standard of 30 credits per semester, or 60 credits per academic year, as defined by the ECTS system. This would also enhance the international recognition of the degrees.

In summary, the experts confirm that a credit system based on the student workload is implemented, which accounts for both contact hours and self-study times. They further confirm that, in the <u>QCB programme</u>, the workload per module is adequately evaluated based on respective student surveys. In the <u>MCP programme</u>, however, this evaluation is only done on an aggregate level, which does not allow for a distinctive analysis and verification of the credit allocation per module. This needs to be corrected. Moreover, the credit system is not always implemented correctly, as the independent student workload is not adequately represented in the credit numbers. The credit points need to be recalculated and allocated in accordance with the student workload. Subsequently, it needs to be checked whether the new curricular structures are feasible in terms of the workload per semester, and action must be taken accordingly to balance the number of credits per semester and ensure that students can successfully complete them without excessive workload.

#### **Criterion 1.6 Didactic and Teaching Methodology**

#### **Evidence:**

- Self-Assessment Report
- Module descriptions of both programmes
- Student survey results of both programmes
- List of QCB students involved in research projects
- Discussion during the audit

#### Preliminary assessment and analysis of the experts:

According to the Self-Assessment Report, teaching in both programmes employs a broad variety of didactical instruments and methods to achieve the intended learning outcomes. Teaching methods are decided by the professor(s) responsible for each module and are

outlined in detail in the module descriptions. In general, every module encompasses elements of supervised teaching at the university as well as independent learning. However, as outlined in detail in section 1.5, the number of independent learning hours seems to be underrepresented in regards to the allocated credit points in many modules and needs to be revised to balance it.

The types of classes at the university include lectures, seminar teaching, and laboratory classes. During the "Social Service Year", the practical application of these acquired skills is tested. Besides lectures, student-centred, interactive teaching methods like oral presentations, clinical case discussion and reports, integrative projects, team problem solving, laboratory experiments, and independent research projects are used. For laboratory classes, the large cohorts are split into groups of about 25 students to allow them to get hands-on experience with lab experiments, which is positively regarded by the experts. The students also express a very positive view of the inclusion of laboratory classes starting from the first semester. Moreover, the university encourages students to participate in local, national or international conferences. In the MCP programme, clinical case discussions, simulation activities with robotic mannequins in clinical skills laboratories, clinical history taking, and physical examination of patients are also part of the set of teaching methods. The experts positively acknowledge that real cadavers are used in anatomy classes, which is the best way to prepare students for later work. However, as the capacities in that regard are limited, body painting among the students is also used to learn the anatomy, which the experts highlight as a modern and sensible alternative. Moreover, the programme coordinators explain that, in response to the recommendations of the last accreditation, basic clinical cases have also been introduced into basic subjects. In addition, clinical practice seminars were introduced to facilitate the transition from the theoretical into the clinical courses.

In higher semesters, both programmes include a clinical rotation as an applied practical part of the integrated professional studies. The campus of the Faculty of Medicine integrates the university buildings and the hospital which, according to university representatives, is a unique concept in Mexico, enables both programmes to offer highly practice-integrated modules. Both the representatives of potential employers as well as the active students highlight this as one of the best and most important characteristics of the programmes at UANL. As an example of the QCB programme, the students process the samples under the supervision of a chemist. They prepare real experiments, make the sampling and analysis, and have the opportunity to learn to manage the automated equipment, its maintenance and quality control. In the MCP programme, the students at different stages of the studies can do observation, consultation, and treatments in real clinical settings under the supervision of clinical staff. The experts positively highlight this integrated practical teaching approach.

In terms of the use of digital facilities, the teachers and programme coordinators explain that the educational module generally relies on face-to-face teaching, but that digitalisation of teaching and learning has been fostered during the times of the COVID-19 pandemic. This includes, among others, the introduction of MS Teams and other digital collaboration systems, which are still in use, staff training in that regard, as well as the establishment of asynchronous communication channels and online learning options.

Both programmes introduce students to scientific research, which culminates in the thesis project that has been implemented as a mandatory examination form after the last accreditation. Especially in the QCB programme, a particular research focus is also fostered by the curriculum, which includes multiple research seminars. Correspondingly, many students are also actively engaged in research projects of the academic staff, as a respective list documents. For the MCP programme, the curricular focus on research is smaller as there are no specific research-oriented modules but research and research methods are included as part of certain modules. Moreover, students participate in research projects of the faculty on a voluntary basis. In this regard, the experts suggest to use this active participation as basis for the final theses which would raise the qualitative level of the theses (see section 2) and recognise the students efforts in that regard. Overall, the experts positively comment on the incorporation of research into teaching.

As evidenced by the student surveys and results, the teaching methodology is regularly evaluated and, with rare exceptions, the evaluations are positive. In case of negative evaluation results, action is taken based on individual strategies, usually with a personal feedback talk with the programme coordinator and respective professor as the first step, as the teaching staff explains.

In summary, the experts confirm that a variety of teaching methods and didactic means are used to promote achieving the learning outcomes and support student-centred learning and teaching. Most importantly, this encompasses a high share of practical teaching and the integration of real work in laboratories and with patients in the university hospital. Digital teaching is integrated into the compound of teaching methodology to a reasonable extent, which supports students in their learning process. Both programmes contain contact hours and self-study time, but the distribution needs to be balanced (see section 1.5). The experts further confirm that the students receive a thorough introduction to independent scientific work and that the teaching methodology is adequately reviewed on a regular basis.

## Final assessment of the experts after the comment of the Higher Education Institution regarding criterion 1:

#### Criterion 1.2:

In its statement, UANL explains that the degree titles have been harmonised on the programmes' websites as well as in the module descriptions. While the experts appreciate this, they still notice that, on the university's website (see links mentioned as evidence in the report) still the old titles are used. It needs to be ensured that the titles in original and English language are used consistently in all documents and information sources. Therefore, the experts sustain their initial requirement.

#### Criterion 1.3:

Concerning the flexibility of the curricula for both programmes as well as the experts' considerations to increase the topic of neurology and reconsider the weighting of clinical modules, as well as the integration of the thesis in the MCP curriculum, UANL explains that the Curriculum Committee will address these matters in due time. The experts appreciate the responsiveness of UANL but sustain their requirements and recommendations until action is taken.

For the QCB programme, the department additionally explains their strategies regarding student mobility, which are positively acknowledged by the experts.

#### Criterion 1.4:

In terms of the students' prequalification, UANL explains multiple measures that have already been implemented to better inform and prepare potential students for their study careers at the Faculty of Medicine. For the MCP programme, this includes the MEDCAMP initiative that offers high school students "a unique educational experience that allows them to explore firsthand what it means to pursue a degree in Medicine" as well as the PREMED programme that offers specialized preparation courses for the admission exam. As similar offers for the QCB programme, there is the annual "Chem Day". However, the experts find information online that the preparatory programmes come at a significant financial cost which is likely to exclude many interested potential students and diminishes the overall value of this pre-qualification instrument. They therefore suggest finding ways of making these courses accessible to anyone independently from the financial solvency.

Besides that, looking at the mentioned drop-out rates, the experts find that there is still huge potential for the improvement of this system. Nevertheless, they understand the regulatory governmental constraints regarding the admission system which force an as high as possible student intake but does not consider the system's effectiveness and efficiency. The experts positively acknowledge that the Faculty of Medicine actively seeks to increase

the pre-qualification of the freshman students. In conclusion, they abstain from formalising a recommendation in that regard but still suggest to continue refining the intake system for the benefit of the education system's effectiveness and efficiency.

#### Criterion 1.5:

According to UANL's statement, a review, re-calculation and, if necessary, re-allocation of the credit points and their accordance with the designated structured coursework and independent workload in both programmes will be part of the review procedures described under criterion 1.3. The experts stress the importance of this matter and sustain their initial requirement until action has been taken.

#### Final assessment:

Overall, the experts positively comment on the high quality of the education in the programmes, which is reflected in the skilled graduates and the demanded competence profile. Nevertheless, there are issues concerning the structural design of the curricula, the study organisation, and workload allocation which need to be resolved to comply with the accreditation criteria. For the MCP programme in particular, the experts comment on the weighting of different subjects within the curriculum which should be revised to better represent the modern needs to today's medical profession.

In summary, the experts consider this criterion to be **partly fulfilled**.

### 2. Exams: System, Concept and Organisation

Criterion 2 Exams: System, concept and organisation

#### **Evidence:**

- Self-Assessment Report
- UANL academic model
- Regulations for Admission, Permanence and Graduation of UANL students (exam regulations)
- Module handbooks of both programmes
- Exemplary exam schedules of both programmes
- UANL thesis guidelines
- Samples of students' work (projects, exams and thesis)
- Discussions during the audit

#### Preliminary assessment and analysis of the experts:

According to the exam regulations, "the evaluation of the student shall be carried out by means of methods and instruments capable of producing evidence that proves the learning results". In this regard, the grade of the module is not based on only one assessment instrument, but on a range of different evaluation methods that combine the assessment of the students' competence in terms of knowledge, skills, attitudes and ethical principles. Most of the modules in both programmes therefore contain a final, usually written or multiple-choice based examination, which is held in the exam period after the end of the 18-week lecturing period of each semester. In addition, multiple continuous assessment forms and instruments are applied over the lecturing term, including, e.g. student portfolios, laboratory performance assessments, protocols, case analyses, presentations, and an integrative project report. The types of examinations, as well as their weight for the overall grade, are listed and explained in the module descriptions.

The grading employs a scale from 0 to 100, and the students must obtain a minimum of 70 points as a passing grade. All partial examination components of a module are summed up according to their weights. Thus, it is possible to fail one of the examination components if this is sufficiently compensated by the other parts of the examination. Special provisions for the case that a student misses certain exam components through no fault of their own are in place. All exam results are published in the SIASE academic information system within five days of the respective examination, and the students have the right to request a review

of the evaluation process and the final grade for 48 hours from the date of publication. The exam feedback, transparency, and appeals system are considered to be good by the students, which is positively noted by the experts. However, some complaints are voiced regarding the overall high exam load due to continuous assessments and multiple final exams in the short exam period. In that regard, the experts point to their previous comments that a reasonable design of the modules in terms of their credit points based on a corresponding verification of the workload is necessary.

During the on-site visit, the experts review provided examples of project works and examinations and consider both their formats, question types, contents, and grading to be adequate for the respective modules. They positively note that the exams reflect the structural competence development that is induced by the curricula.

In case students fail a module only due to a low performance in the final exam, this exam can be taken for a second time in the same semester again. Retake exams are usually organised immediately in the second week of the exam period. If still not passed, the student can take the final exam up to four more times in the subsequent semesters. Every final exam is offered twice per semester. The continuous assessment grades are "stored" in this case. However, if a module is not passed also due to the continuous assessment components, the entire module has to be taken again. Whether students can advance to higher semesters depends on the number of credits a module is awarded with. As the programme coordinators explain, the university system allows only for a maximum of 34 credits to be completed per semester. Thus, if the total credit load of the subsequent semester plus the credit load of the failed module(s) exceeds this cap, the student cannot advance and is kept in the semester until the respective module is completed.

The experts consider this a critical point as this system, as already explained in sections 1.3 and 1.5, constitutes a serious factor in the high percentage of students not finishing the course within the planned 10 or 12 semesters. With the exception of modules that directly build on each other, the experts point out that a modular curriculum has to enable students to also complete subjects even if certain subjects have not been completed before. Thus, it should also be possible to also take at least some of the modules of the following semester, even if a module needs to be taken again. This would not affect the designated module sequence but still allow students to advance in their study career. In that regard, the credit load to be taken per semester should not be limited but determined by each student according to their own ability. Especially if all continuous assessments of a module have been successfully completed already but a student needs to repeat only the final exam, the credit number does not correctly represent the associated workload of the module anymore. Consequently, the experts require to change the system and allow students to retake modules while continuing the curriculum, especially in the pre-clinical

stages, to better support students to complete the programmes within the standard period of study and reduce delays.

To demonstrate their ability to independently work on a scientific project, students of both programmes need to develop a final research project under the supervision of at least one professor, which encompasses a written thesis report and an oral defence. In response to the last accreditation result, this was mandatorily implemented for all students, which the experts positively acknowledge. The thesis is not a singular module but is spread and accordingly credited in different components of the programmes, including the research seminars and the practical social service. While the experts are satisfied with this structure for the QCB programme, they point out that the social service in MCP is not part of the university-mandated curriculum and, therefore, it is not feasible to complete a curricular requirement as the Bachelor's thesis (see also section 1.3). Thus, the thesis needs to be completed before the social service or needs to be formalised as an additional module.

Content-wise, students can decide to do the thesis as a descriptive research work, mostly in form of literature reviews, or as more experimentally oriented research projects. Formal as well as content-related guidelines and provisions are documented in the thesis guidelines. During the on-site visit, the experts review examples of final theses and notice substantial differences in the quality of the two different thesis types: While the experimental theses are comprehensive research works on a qualitatively high standard both in terms of content, methodology, and formalities, the descriptive theses are in many cases too short (some only around 10 pages), show poor methodology and insufficient work with scientific sources. This is particularly apparent for the MCP programme. Therefore, these do not adequately fulfil the requirements of a Bachelor's thesis. In that regard, the experts suggest that descriptive theses should be generally abandoned and experimental projects and, especially for the MCP programme, case studies should be required instead to strengthen the independent, research-oriented focus of the thesis. It needs to be ensured that all final projects fulfil the academic standard of a Bachelor's thesis.

Part of the graduation requirements of the <u>MCP programme</u> is a multi-stage clinical competence examination which includes an OSCE assessment, which is conducted with simulation patient actors and is video-supervised by at least two examiners. The experts positively acknowledge this setup and highlight the OSCE as very important examination element to determine the clinical competence of the students respectively graduates.

The curriculum committees periodically review whether the evaluation methods can adequately determine the learning objectives of the modules.

In summary, the experts confirm that there are module-specific exams that assess the extent to which the defined learning outcomes have been achieved. The types of exams are specified for each module, and students are informed about the conditions for completing the module through the module descriptions. Both programmes include a final thesis in which the students have to demonstrate that they are able to work independently on a task at the intended level of the degree. However, the two types of theses differ significantly in quality. The experts therefore require ensuring that all final projects meet the academic standards of a Bachelor's thesis. In this context, the thesis should also be formally integrated into the curriculum of the MCP programme. The experts further confirm that there are transparent rules for remedial exams, non-attendance, cases of illness, and that compensation measures for disadvantages of students with disabilities or special needs are in place if necessary. Examinations are marked according to transparent criteria, and a structure of committees ensures fairness and the opportunity for appeal. Students have the opportunity to consult their lecturers about the results of their exams. It is regularly reviewed that the exams can adequately determine the achievement of the learning objectives and that the requirements are appropriate to the level of the degree programmes.

# Final assessment of the experts after the comment of the Higher Education Institution regarding criterion 2:

UANL explains that it plans to phase out the opportunity of students to write descriptive theses, and that case studies and research projects will be fostered instead, which is positively acknowledged by the experts. The administrative implementation of these measures goes together with the measures to be implemented by the Curriculum Committee. Until then, the experts sustain their initial requirement.

Specifically for the MCP programme, the requirement for a structural and formal integration of the thesis into the programme remains.

#### Final assessment:

Overall, the experts consider UANL's exam system well-suited for evaluating the extent to which the learning outcomes have been achieved, and qualitatively feasible for programmes at the respective levels. The only concern is the quality of parts of the final theses in both programmes and, for the MCP programme, also the structural and formal integration of the thesis into the programme.

In summary, the experts consider this criterion to be **partly fulfilled**.

#### 3. Resources

#### **Criterion 3.1 Staff and Staff Development**

#### **Evidence:**

- Self-Assessment Report
- UANL academic staff regulations
- Lists of professors of both programmes
- Staff handbooks of both programmes
- Lists of staff training measures
- Examples of staff feedback letters
- Website of staff development courses: https://www.uanl.mx/cursos\_diplomados/
- Discussion during the audit

#### Preliminary assessment and analysis of the experts:

As explained in the Self-Assessment Report, the academic staff of the Faculty of Medicine is classified into different categories of full professors and associate professors. Furthermore, there are assistants who are mainly involved in supporting students in laboratory courses or form part of the administration and support staff. The UANL academic staff regulations specify the different characteristics, experience, and achievements in terms of teaching, professional practice, and research that are required for each staff category. Most of the staff members have at least a PhD degree, respectively a Medical Doctor degree. Furthermore, the staff body is divided into staff who are exclusively teaching in one of the programmes, and professors who are involved in different programmes of the faculty. As the staff list shows, 124 academic staff members are involved in the teaching activities of the QCB programme, 30 of whom are professors who are exclusive to the programme. The MCP programme relies on 407 professors who work exclusively in the programme and 202 part-time professors respectively assistants. All staff members are also practitioners in the university hospital, which ensures their topicality with respect to their disciplines and professional/ clinical practice and benefits the integration of theory and clinical teaching.

Staff handbooks document every staff member with a short CV, records of academic achievements, publications, industry collaboration projects, patents, as well as their university positions and potential involvement in different committees. Based on these documents and the on-site interview sessions, the experts conclude that both programmes rely on a sufficiently large, adequately qualified, and highly motivated staff body, which is suitable for successfully delivering the programmes.

Besides their teaching and practice duties, the staff members are also actively engaged in research and report good research conditions provided by the university, mainly the university hospital. Moreover, the university supports research projects and publications both administratively and financially, and, if necessary, also assists with the application for external research funds. This strong research environment is reflected in the numerous national and international awards received by the staff. Moreover, UNAL participates in different programmes that recognise academic excellence, such as the National System of Researchers (SNI) and the Program for Professors' Professional Development (PRODEP).

In terms of continuous development, the university encourages staff training through the "Teacher Updating Programme". This programme focuses on the reflection of didactic processes, the exchange of teaching experiences and the systematisation of teaching practice. Examples include courses in foreign languages, tutoring classes, teaching methodology workshops, and administrative courses. Also, the university provides grants and scholarships for staff members to pursue further studies. Achievements both in terms of research, continuous development, and student tutoring are recognised and financially incentivised by the university through the academic incentive programme.

The adequacy of the staff body and their performance are regularly reviewed, among others based on the student surveys. The directors of the programmes regularly provide feedback letters to their staff.

In summary, the experts confirm that the composition, professional orientation and qualification of the teaching staff are suitable for successfully delivering the degree programmes. The staff members are actively engaged in scientific research, which contributes to the level of the degree programmes and the education of the students. The further confirm that the staff members have the opportunity to further develop their professional and didactic skills and are supported in using the corresponding offers. The adequacy of the staff body and their performances are monitored and reviewed on a regular basis.

#### **Criterion 3.2 Student Support and Student Services**

#### **Evidence:**

- Self-Assessment Report
- UANL student services website section: https://www.uanl.mx/dependencias/direccion-de-actividades-estudiantiles/
- UANL FAQ website: https://www.uanl.mx/preguntas-frecuentes/

Discussion during the audit

#### Preliminary assessment and analysis of the experts:

According to the Self-Assessment Report, the Faculty of Medicine relies on its administrative staff body that supports all programmes, including assistants of the management, computing services staff, library personnel, laboratory technicians, and a maintenance crew. There are several academic and administrative offices that support students both in terms of academic and non-academic as well as extra-curricular affairs. UANL's website contains a section about frequently asked questions, which provides guidance for the students on where to find information or seek help.

In terms of academic support, there are the university office for general studies (FOGU), the self-access language centre (CAADI) which offers both curricular and extra-curricular foreign language courses, and the tutoring system. Upon enrolment, each admitted student is assigned a tutor who is a member of the academic staff. The tutor is responsible for guiding the student through their academic career at the university, monitoring the academic performance, advising on study planning, and serving as the first contact person in case of any problems. Per semester, four one-on-one meetings are regularly offered for each student, although these meetings are scheduled on a voluntary basis. Both the students as well as the academic staff members confirm their satisfaction with this system.

Examples of non-academic support features are the psychological and pedagogical support teams, medical brigades, and the research and health promotion office. Administrative support is offered by the registration office, which, among others, deals with course registrations, transcript requests, add/drop deadlines, course calendars, class attendance records, schedule of classes, room assignment, deadlines and important academic events. The UANL scholarship programme provides financial support for economically disadvantaged students. The UANL department of student affairs deals with the organisation of student activities and the support of the organisation of different clubs and student associations, e.g., in the fields of sports, culture, arts and social engagement. A similar office at the faculty level is the student affairs office (CeDe). Several sports facilities are provided by the university.

As a service for recent graduates, the "Unibolsa" programme is a job board that offers vacancies from different employers through notices on their websites. Specifically for the QCB programme, there is also a so-called "alumni society" which was created in 2011 to promote the updating of the graduates with respect to this degree. It has four annual sessions, two of which are social and two are cultural or academic. Up to now, 561 alumni are incorporated.

Support for students also encompasses the provision of free food for students during their hospital shifts in the clinical modules. While the experts highlight this as a very beneficial service to ease the high workload and pressure in the clinical environment, they learn during the on-site visit that this is offered only for MCP students. However, as students report, the integrative QCB modules also require equally long days of laboratory work in similarly protected and sterile environments that do not allow for flexible lunch breaks, even though no direct patient contact is involved. In that regard, equal treatment of students of both programmes should be ensured.

As no further critique is voiced regarding the student support system, and the experts also get a very positive impression of the campus life at the Faculty of Medicine, they conclude that the student services are adequate and help students to successfully manage and conclude their studies.

In summary, the experts confirm that the university provides sufficient human resources and organisational structures for individual subject-specific and general counselling, supervision and support of students, as well as administrative and technical tasks. The allocated advice and guidance on offer assist the students in achieving the learning outcomes and, within the limitations mentioned in this report, in successfully completing the programmes. However, the experts recommend ensuring equal treatment of students of both programmes, e.g., with respect to the provision of meals during hospital shifts.

#### **Criterion 3.3 Funds and equipment**

#### **Evidence:**

- Self-Assessment Report
- UANL general income and expenditure regulations
- Annular report of the Dean of the Faculty of Medicine 2024
- UANL tuition fee website: https://www.uanl.mx/tramites/costos-de-serviciosacademicos-y-escolares-licenciatura/
- UANL digital library catalogue: https://recursos.db.uanl.mx/
- Discussion during the audit

#### Preliminary assessment and analysis of the experts:

According to the Dean's annual report, the budget of the Faculty of Medicine is about MXP 1.69 billion (EUR 76.9 million) per year. The faculty is largely autonomous in the management of its financial resources, which are the responsibility of the Dean. Every year, there is an audit by the university's financial commission to ensure the proper and sustainable

management of funds. Main regular income sources are the budget allocated to the faculty by the university, which, according to the programme coordinators, is done based on the merit of the programmes, and students' tuition fees, which, for regular UANL students, amount to MXP 2,981 (approximately EUR 137) per semester. Besides that, the faculty actively participates in different grant lotteries and third-party funding initiatives, which are mostly specific funds for research projects, equipment, or buildings. More than MXP 58 million (approximately EUR 2.7 million) in research grants were collected over the past five years. Examples of funding institutions are the National Council on Humanities, Sciences and Technology (CONAHCyT), the Science, Technology and Innovation Support Program (ProACTI), and the Program for Professors' Professional Development (PRODEP). Moreover, the university issues a series of different funding calls for projects, which the faculties or individual research groups can apply for. Although the university coordinators explain that funding is a limiting factor for many projects and investments, the experts get the impression that this does not negatively impact the high quality of the delivery of both programmes.

In terms of infrastructure, the Faculty of Medicine has its own campus in the centre of Monterrey on which both academic buildings as well as the university hospital "Dr. Jose Eleuterio Gonzáles" are located. The faculty building has 67 general and specialised (e.g. pharmacology, physiology, informatics) classrooms of different capacities up to 284 students, which are equipped with classroom chairs, school desks, three-panel white boards, air conditioning, projectors and corresponding screens. In addition, there are eight large auditoriums with capacity for 180-370, as well as a multi-purpose hall which offers space for up to 750 people. For laboratory classes, there are two embryology labs, three histology labs, three anatomy labs, three biochemistry labs, three analytical chemistry labs, a microbiology lab, a physiology lab, a clinical pathology lab, and the hematology centre. In addition, there is the Centre for Medical Simulation (CEVAM) and the Clinical and Surgical Training Laboratory (LACEQ). CEVAM offers courses such as CPR, first aid and emergency cardiovascular assistance, and can be used by MCP students to practice various clinical procedures. On the other hand, LACEQ is a designated laboratory for research and training regarding safe surgery through minimal invasion. It includes a virtual training room, the microsurgery and arthroscopy room, a room for fluoroscopy, arthroscopy and ultrasound, a space for ultrasound implementation with real-time visualisation, and the anatomy research laboratory. During the on-site visits, the experts exemplary visit a microbiology lab, a pharmacology lab, an anatomy lab, and the dissection rooms than host cadavers for learning purposes, and confirm that they are in good condition, well-equipped for the teaching of students, and adhere

to international safety standards with respect to the handling of materials and people. Moreover, the extensive embryology exhibition, which is one of its kind in Mexico, is positively acknowledged by the experts.

As described extensively in this report, the university hospital, which offers 747 beds for inpatient services, 15 surgery rooms, 26 rooms for ambulatory care, a medical imaging area, an emergency area, and central and specialised labs, is closely integrated into the regular teaching activities of both programmes. According to the Self-Assessment Report, more than 500,000 patients are treated per year. During the on-site visit, the experts visit different hospital facilities and meet students in a specialised QCB lab. They are convinced that these facilities provide an excellent environment for students to get first-hand insights and practical experience relevant to education in all the subjects. They positively highlight that, in that way, students can get to learn the handling of real technical equipment and how to deal with real patients.

In terms of general facilities, the library of the Faculty of Medicine provides access to both print and digital books and journals, as well as reading rooms, computer rooms, and support services for the handling of these resources. While the experts are generally satisfied with the library, the students criticise a lack of group working spaces, as the library facilities are usually silent facilities. This situation is recommended to be improved. Moreover, the experts learn from the teaching staff that access to international journals and databases has been limited due to a cut in funding for a national university collaboration to jointly subscribe to these digital resources by the Mexican government. Therefore, the university currently needs to register for different subscriptions on its own, which is limited due to the monetary budget. The teachers report that, therefore, currently only a general basis of databases is accessible, and staff members need to find other ways to access certain specialised resources, e.g., by individual collaborations with staff of different universities. The experts acknowledge that this problem is not directly due to the university, but, given the leading role of UANL's Faculty of Medicine for medical research and education in the country, they consider this restriction of literature access still problematic. Therefore, they recommend finding institutional solutions to improve access to international journals and databases.

Besides the digital library catalogue which allows to access the resources anywhere within the campus network, the Faculty of Medicine employs a Moodle-based learning management system for the study administration, provision of materials, interaction among and between students and lecturers, as well as for quizzes and online learning resources. Additionally, MS Teams is available for each faculty member and student. As all participants of the on-site interviews confirm, the digital infrastructure has been significantly improved over the past years, which is positively acknowledged by the experts.

In summary, the experts confirm that the financial resources and the available equipment constitute a sustainable basis for delivering the degree programme. This includes secure funding, reliable financial planning, and the provision of sufficient infrastructure and equipment in terms of both quantity and quality. The integration of the university hospital and faculty ensures excellent conditions for the practical training of students. However, regarding the library, the access to international databases and journals should be improved and, furthermore, it is also recommended to create group working spaces for the students.

## Final assessment of the experts after the comment of the Higher Education Institution regarding criterion 3:

#### Criterion 3.2:

In response to the experts' concern that QCB students do not have equal student support opportunities as MCP students, UANL explains the "Food Scholarship Programme" for students of both programmes. The experts positively highlight this institutional support offer and see their initial recommendation as fulfilled. Nevertheless, they suggest UANL to closely monitor the access to student support services and ensure equal opportunities for students of both programmes despite the significantly lower number of students in the QCB programme.

#### Criterion 3.3:

Regarding the library and journal access, UANL lists different databases which university members have access to. While the experts confirm that this is generally sufficient for ensuring the research access and topicality of the programmes, they still consider the teaching staffs' comments during the audit that the access has been limited since the previous accreditation visit due to a change in the national funding structure for libraries. Therefore, the experts decide to sustain the initial recommendation.

In terms of the improvement of group working spaces for students, UANL explains that a new student space with different kinds of individual and group workplaces is about to be completed ("CeDe"). Based on the provided plans and photographs of the already completed rooms, the experts consider these facilities well-suited to fulfil the students' needs.

#### Final assessment:

Overall, the experts positively highlight the quality of the programmes' human resources, physical facilities, equipment, and student services which are core to the high education level at the Faculty of Medicine.

In summary, the experts consider this criterion to be **fulfilled**.

### 4. Transparency and documentation

#### **Criterion 4.1 Module descriptions**

#### **Evidence:**

- Self-Assessment Report
- Module descriptions of both programmes
- Websites of both programmes
- Discussions during the audit

#### Preliminary assessment and analysis of the experts:

For both programmes, there are two kinds of module descriptions: The analytical documents which are extensive outlines of each modules, which are internally provided to students and teaching staff via MS Teams and the Moodle platforms, and the synthetic documents, which are shortened versions of the analytical descriptions, which are published on the programmes' websites for transparency towards external stakeholders and interested parties. These module descriptions, which complement the curricular overviews, contain the necessary content-related and practical information for all modules. This includes the course name, semester (course study time), name of the course coordinator, language of instruction, curriculum alignment, teaching methods, workload, credit points, course type, required and recommended prerequisites for module enrolment, module objectives/intended learning outcomes, a content outline, examination formats and weighting, and a reading list. However, as previously mentioned, the documentation still presents the large module blocks of "Medical Sciences" and "Surgery" which, in practice, have already been appropriately divided into part-modules. The experts require that this is accurately reflected in the curricular overviews and module descriptions by providing separate descriptions for each part-module.

Although the experts find the system of two different kinds of module descriptions confusing, they confirm that all required information is contained. However, the split of large module blocks into separate part-modules needs to be correctly documented.

#### Criterion 4.2 Diploma and Diploma Supplement

#### **Evidence:**

- Self-Assessment Report
- Sample Transcript of Records of both degree programmes
- Sample Diploma Certificate of both degree programmes

- Sample Diploma Supplements of both degree programme
- Discussions during the audit

#### Preliminary assessment and analysis of the experts:

According to the Self-Assessment Report, students are awarded a Diploma Certificate, a Diploma Supplement, as well as a Transcript of Records (Kardex). All documents are originally in Spanish language. While the experts generally recommend adding official English translations in the documents or issuing separate English versions to support and ease international recognition, for the Diploma Supplements, this is not only recommended but required according to the ASIIN accreditation criteria. Besides that, the university documentation indicates that the Diploma Supplement template is currently being reworked based on the Europass example, which the experts approve of.

With respect to the Kardex, the experts note that it does not fulfil the purpose of a Transcript of Records, as it only lists all completed modules and the respective examination date, but does not contain information about the credit points and grades. Moreover, the thesis title is not provided. As this information is crucial for the assessment of the student performance and the completed programme, the experts require the university to rework the Kardex with respect to the mentioned critiques.

Moreover, as mentioned in section 1.1, the experts strongly recommend that the degree title *Medical Doctor* be more prominently displayed on both the Diploma Certificate and the Diploma Supplement of the MCP programme, as this can be crucial for the recognition of the degree in foreign countries. In summary, the experts point out that multiple formalities of the official graduation documents need to be addressed for them to comply with the accreditation criteria.

#### **Criterion 4.3 Relevant rules**

#### **Evidence:**

- Self-Assessment Report
- UANL general statute
- UANL academic model
- All relevant regulations as published on the university's and faculty's websites

#### Preliminary assessment and analysis of the experts:

According to the Self-Assessment Report, all relevant administrative and academic regulations are published on the university's and faculty's websites, which the experts

verify exemplarily. Based on that, the experts confirm that the rights and duties of both UANL respectively the Faculty of Medicine and the students are clearly defined and binding. All rules and regulations are published openly and are thus available to all relevant stakeholders. In addition, the students receive all relevant materials in the language of the degree programmes at the beginning of each semester via the learning management system.

# Final assessment of the experts after the comment of the Higher Education Institution regarding criterion 4:

#### Criterion 4.1:

With its statement, UANL has provided revised module descriptions. Upon review, the experts point out that the part-modules of the MCP programme are still not adequately documented as separate entities with their respective contents, credits, exams, etc.. Therefore, they sustain the initial requirement to correctly document these modules.

#### Criterion 4.2:

UANL explains that, as evidenced by respective meeting minutes, a process has been initiated to revise the Diploma Supplement and Kardex. The new draft of the Diploma Supplement follows the EUROPASS model developed by the European Commission, contains a Transcript of Records, and therefore fulfils the requirement of English-language final documents.

#### Final assessment:

The experts positively acknowledge that the final documents are being revised and provided also in English to improve international recognition. In that regard, they again highlight the importance of prominently displaying the title of "Medical Doctor" for the MCP graduates. However, the incorrect documentation of part-modules in the MCP programme which are still presented as aggregate modules in the module descriptions needs to be corrected.

In summary, the experts consider this criterion to be almost fulfilled.

### 5. Quality management: quality assessment and development

#### Criterion 5 Quality management: quality assessment and development

#### **Evidence:**

- Self-Assessment Report
- Questionnaires and stylised results of the employer surveys
- Questionnaires and stylised results of the student surveys
- Discussions during the audit

#### Preliminary assessment and analysis of the experts:

According to the Self-Assessment Report, UANL's Faculty of Medicine has implemented comprehensive quality assurance mechanisms both in terms of its academic and administrative operations. The system incorporates both internal and external quality assurance instruments.

In terms of internal quality assurance, the main actors are multiple councils on different structural levels of the university, mainly the university council and the academic committee at the faculty level. The experts positively acknowledge that all kinds of internal university stakeholders, especially students, are involved in these committees and that, in addition, there is also a separate student council. The students report that, through these councils, they are actively involved in the development of the programmes, including also the design of the new curricula. However, students of the QCB programme explain that they are underrepresented in these councils as the council is organised at the faculty level and, therefore, the MCP students are in a large majority when it comes to the election of student representatives. Thus, the student work in the councils focuses mainly on the MCP programme while programme-specific concerns of QCB students are apparently not adequately considered. To solve this problem, the experts recommend that UANL improve the representation of QCB students in the decision-making bodies, e.g. by establishing a separate programme-level council and determining quotas for QCB students in the faculty-level councils.

As the main instruments of internal quality assurance, UANL employs different surveys among relevant stakeholders. Multiple representatives of the employers confirm that they give regular feedback to the university via respective surveys. Moreover, they confirm that they are being contacted and interviewed for comments regarding planned major changes of the programmes, such as curriculum reviews—a practice the experts positively acknowledge. The same applies also to the students, who are required to complete an

online survey via the SIASE online administration system at the end of each semester. The results are anonymously provided to the programme coordinators. Each lecturer also has access to their personal student feedback evaluation. The experts acknowledge the students' confirmation that the feedback cycle is closed as they are informed about the evaluation results in respective feedback meetings. Likewise, a follow-up survey is implemented to evaluate the feedback and monitor the career progress of alumni to verify the graduate profiles and learning outcomes. Lecturers themselves do not have surveys for feedback but are invited to group meetings with the programme coordinators as well as individual interviews where they can voice their needs. In case of specific problems, they can refer to the respective university offices outlined in section 3.2. While the experts are generally satisfied with the implementation of the surveys and the preparation of the results, they wonder why the surveys are not the same for both programmes. For the QCB programme, all results contain much more detailed and comprehensive information than for the MCP programme. This constitutes a significant qualitative difference in the significance and validity of the results and is especially notable with respect to the evaluation of single modules in comparison to an overall evaluation of the programme or one semester as a whole, as outlined in section 1.5. The experts therefore point again to the importance and requirement to adequately monitor the student workload per module also in the MCP programme. They generally recommend harmonising the survey instruments of this programme with the very elaborate ones that are already applied in the QCB programme.

Besides these internal quality assurance procedures, external quality assurance is conducted through programme accreditation by the national accreditation bodies like the Inter-Institutional Committees for the Evaluation of Higher Education (CIEES), National Council for the Evaluation of Chemical Sciences Programs (CONAECQ), and the Mexican Board for Accreditation of Medical Education (COMAEM). Moreover, processes are also evaluated and certified, e.g. according to ISO norms, as well as buildings like the Centre for Evaluation of Medical and Surgical Training, which is authorised by the American Heart Association. Internationally, both programmes have already been accredited by ASIIN once in 2019 (QCB) respectively 2020 (MCP), and are now subject to re-accreditation.

In summary, the experts confirm that the study programmes are subject to periodical internal as well as external quality assurance in a process that includes all relevant stakeholders. The results of these processes are incorporated into the continuous development of the programmes. To strengthen student participation, the experts recommend improving the representation of QCB students in decision-making bodies. To further improve the quality assurance system, the more advanced and detailed survey instruments of the QCB pro-

gramme should also be applied to the MCP programme. Nevertheless, the experts are satisfied with UANL's quality assurance system and encourage the university to continue its path of international benchmarking for enhancing the programmes' quality.

## Final assessment of the experts after the comment of the Higher Education Institution regarding criterion 5:

Concerning the quality assurance mechanisms of the MCP programme, UANL comments that the student survey used in the QCB programme will also be used for the MCP evaluation, which includes a workload evaluation on the module level. The experts positively acknowledge this but point out that the quality assurance system goes further than only the module surveys for students, and therefore also the other more detailed and comprehensive features of the QCB quality assurance mechanisms and tools should be adapted.

Regarding the representation of QCB students within the university's and faculty's decision-making bodies, UANL explains that university regulations foresee one council per faculty. This body composed of members of all programmes according to fixed quotas. Equivalent to their share of students, 15% are designated for the QCB programme, which appears a generally logical approach. The experts acknowledge the difficulty of ensuring fair student representation given the high difference of of the student numbers between the programmes. However, as the student feedback during the audit suggested that QCB students are not able to voice their critical concerns equally, they suggest find new ways to improve this situation and sustain their recommendation.

#### Final assessment:

Overall, the experts are satisfied with the quality assurance system in both programmes, although qualitative differences between the programmes still prevail. A harmonised and standardised faculty-wide (or even university-wide) approach would certainly benefit the efficiency and comprehensiveness of the quality assurance system. Moreover, the experts are still of the opinion that the student representation of the QCB programme should be improved.

In summary, the experts consider this criterion as **fulfilled**.

## **E Additional Documents**

Before preparing their final assessment, the panel asks that the following missing or unclear information be provided together with the comment of the Higher Education Institution on the previous chapters of this report:

• English versions of the curricular overviews and module descriptions for the revised curricula

# F Comment of the Higher Education Institution (27.08.2025)

The institution provided the following additional information for the QCB programme:

#### Requirements

A1 (ASIIN 1.3) The experts point towards the inconsistencies in the credit allocation and require UANL to revise these new curricula with respect to their feasibility in terms of workload respectively credits.

A2 (ASIIN 1.6) Both programmes contain contact hours and self-study time, but the distribution needs to be balanced.

Regarding the workload reported by students, which in some cases exceeds the credit value assigned to the modules (Learning Units), the Curriculum Committee meets at the end of each semester to analyze the surveys administered to students, as well as the evidence submitted by faculty members, including the corresponding grade records.

Based on this analysis, the Committee issues recommendations regarding the alignment between the academic activities carried out and the credits assigned to each Learning Unit (LU). In cases where inconsistencies or overload are identified, the Head of the corresponding Department, as well as the lead instructor, are asked to submit an improvement proposal addressing the observations made. These proposals are implemented and monitored during the following semester with the aim of evaluating their impact on students' academic performance and fostering continuous improvement.

Additionally, as part of the recent curricular redesign process, the quantity and relevance of activities assigned to each Learning Unit will continue to be monitored in accordance with the credits allocated to each unit. Emphasis will be placed on ensuring that both in-class and out-of-class work are aligned with the corresponding credit value, thereby guaranteeing a balanced and fair academic workload for students.

A3 (ASIIN 4.2) The experts point out that multiple formalities of the official graduation documents need to be addressed for them to comply with the accreditation criteria.

A3.1 (ASIIN 4.2) While the experts generally recommend adding official English translations in the documents or issuing separate English versions to support and ease international recognition, for the Diploma Supplements, this is not only recommended but required according to the ASIIN accreditation criteria.

Besides that, the university documentation indicates that the Diploma Supplement template is currently being reworked based on the Europass example, which the experts approve of.

A3.2 (ASIIN 4.2) The experts note that the Kardex does not fulfil the purpose of a Transcript of Records, as it only lists all completed modules and the respective examination date, but does not contain information about the credit points and grades. Moreover, the thesis title is not provided. As this information is crucial for the assessment of the student performance and the completed programme. The experts require the university to rework the Kardex with respect to the mentioned critiques.

As stated by the experts, at the present time, the School of Medicine issue separate English versions of the Diploma Supplement and the Kardex in the documents in order to support and ease international recognition. However, in order to ensure consistency in student records, the UANL is in the process of developing a Diploma Supplement and a Kardex (see Appendix 1. 'Meeting minutes\_ Diploma Supplement' & Appendix 2. 'Diploma Supplement V1').

#### With respect to the recommendations

A3 (ASIIN 1.3) The experts confirm that UANL promotes international student mobility through an appropriate structural framework which includes the recognition of credits and support services for both outgoing and incoming students. However, due to the uneven distribution of the student numbers between the programmes of the faculty (about 20 times more MCP students than QCB students), there appear to be certain limitations regarding the representation of QCB students.

Currently, the Bachelor's degree in Clinical Chemistry has two specific agreements, one with the University of Buenos Aires in Argentina and the other with the University of San Buenaventura in Colombia. At the moment, we are in the process of signing another agreement with the University of Chile. Moreover, through its mobility program, UANL students have the opportunity to continue their studies abroad, through a stay of one semester to one year (as the case may be), through joint collaboration agreements between UANL and international organizations and institutions (https://internacional.uanl.mx/en/convenios-vigentes/).

From the beginning of the degree program, this information is communicated to all students, and they are encouraged to undertake an academic or summer stay, particularly during the ninth semester. However, it is important to note that due to the pandemic, these programs were suspended for two years. Subsequently, a low level of interest in participating in exchange programs was observed among students, as recorded during the informational sessions organized by the Degree Program's Coordination Office for Outreach and Exchanges. However, this situation has begun to reverse. As of now, four students are participating in an academic exchange at the University of Buenos Aires during the August–December semester, and one student recently completed a summer research stay at Rockefeller University (see Appendix 3. 'Student mobility').

In addition, opportunities are being arranged for students to participate in the SINESP (International Section for Undergraduate Student) mobility program, which offers one-month academic rotations during school breaks at various universities around the world.

Finally, the ongoing institutional support provided to students is highlighted, enabling them to participate in national and international academic events where they have had the opportunity to present their research projects and have been recognized with various distinctions (https://www.facebook.com/photo/?fbid=1099303542242830&set=a.496600262513164).

E1 (ASIIN 1.4) It is recommended to further support pre-qualification of the students and refine the selection pathways to lower the drop-out rates, increase the efficiency of the education process, and ultimately increase the number of graduates.

In accordance with federal regulations for admission to public universities, the Autonomous University of Nuevo León (UANL) complies with these guidelines by administering the National Higher Education Entrance Exam (EXANI II) across all its schools. In the case of the School of Medicine, this exam is specifically tailored to the health sciences area, and admission places are allocated based on the exam results, aligned with the school's capacity and available infrastructure (<a href="https://www.facebook.com/photo/?fbid=1118251277014723&set=pcb.1118251403681377">https://www.facebook.com/photo/?fbid=1118251277014723&set=pcb.1118251403681377</a>). See Appendix 4. 'University entrance exam administration'.

However, the Office of the Associate Dean for Academic Affairs in Clinical Chemistry actively collaborates with both public and private high schools in order to promote the entry and graduation profile of this academic program. As part of these efforts, interested students are invited to participate in the event called *Chem Day* held at the faculty's facilities. During this event, attendees have the opportunity to explore the academic and professional environment of clinical chemistry through guided tours of the School of Medicine and the University Hospital laboratories. This experience enables them to make an informed decision about their interest in taking the entrance exam for this field of study (<a href="https://www.facebook.com/share/p/1F4xHBNmAF/?mibextid=wwXlfr">https://www.facebook.com/share/p/1F4xHBNmAF/?mibextid=wwXlfr</a>). See Appendix 5. 'Chem Day'.

Additionally, the UANL organizes the *Digital Vocational Guidance Fair*, which takes place over the course of a week in October. This event showcases the academic offerings of each undergraduate program and addresses specific questions through an interactive chat with interested students (<a href="https://www.uanl.mx/feria-digital-orientacion-vocacional/">https://www.uanl.mx/feria-digital-orientacion-vocacional/</a>).

E2 (ASIIN) 3.2) The experts recommend ensuring equal treatment of students of both programmes, e.g., with respect to the provision of meals during hospital shifts.

Regarding the support offered by the School of Medicine to students in the Bachelor's Degree in Clinical Chemistry, there is currently a total enrollment of 339 students. Starting from the second semester, students are given the opportunity to participate in the food scholarship program.

Additionally, students in the ninth and tenth semesters who are completing their professional internships are granted a supplementary food scholarship, as well as a medical lab coat. In terms of coverage, this program benefits approximately 15–20% of the total enrollment and reaches 100% of students in their final year. These support mechanisms represent a sustained institutional effort, driven by the institution's own initiative, aimed at assisting students facing adverse economic conditions, thereby promoting their retention, well-being, and academic performance (<a href="https://www.facebook.com/photo/?fbid=1198200598775816&set=a.113249267270960&locale=es\_LA">https://www.facebook.com/photo/?fbid=1198200598775816&set=a.113249267270960&locale=es\_LA</a>) (<a href="https://www.facebook.com/share/p/19v2NY2PfR/?mibextid=wwXlfr">https://www.facebook.com/share/p/19v2NY2PfR/?mibextid=wwXlfr</a>). See Appendix 6. Food scholarship program'.

## E3 (ASIIN 3.3) Regarding the library, the access to international databases and journals should be improved.

Concerning access to international databases and journals, a review was conducted in collaboration with the Library Services of the School of Medicine and of the UANL. It is noteworthy that access to the Web of Science database is currently available, which includes over 14,000 indexed journals, many of them offering full-text articles across various fields of scientific knowledge. This access is available to UANL students and faculty through their institutional email accounts at <a href="https://recursos.db.uanl.mx/">https://recursos.db.uanl.mx/</a>.

In addition, students have access to the UpToDate platform, which specializes in retrieving articles in the medical field (<a href="https://www.medicina.uanl.mx/evento/incorporan-la-plataforma-digital-uptodate-para-estudiantes/">https://www.medicina.uanl.mx/evento/incorporan-la-plataforma-digital-uptodate-para-estudiantes/</a>).

It is appropriate to point out that, in this month, as part of the information skills development program, the School of Medicine will start offering a training course on how to use the EBSCO database which includes a wide variety of indexed Latin American journals covering different fields of knowledge (<a href="https://www.ebsco.com/es">https://www.ebsco.com/es</a>).

Finally, the School of Medicine has the highest number of members in the National System of Researchers (SNI) within the UANL. Many of them actively participate in national and international networks, which facilitates access to additional bibliographic resources through these collaborations (<a href="https://investigacion.uanl.mx/inicio/investigadores-sni-uanl/">https://investigacion.uanl.mx/inicio/investigadores-sni-uanl/</a>).

#### E4 (ASIIN 3.3) It is also recommended to create group working spaces for the students.

The School of Medicine at the Autonomous University of Nuevo León (UANL), through the Division of Student Affairs (CeDE), is nearing completion of the remodeling work for a new area exclusively dedicated to the student community. This project encompasses a 527 m² space, designed to meet the academic, social, and wellness needs of students and student groups, featuring modern, climate-controlled facilities equipped with amenities that support studying, collaborative work, and holistic development. The new CeDE space includes versatile areas that encourage both individual learning and teamwork.

Highlights of this space include:

- Coworking zones with comfortable, flexible furniture—ideal for collaborative work and diverse project development.
- Relaxation areas with sofas, beanbags, and a bright atmosphere that fosters social interaction and rest between activities.
- A small auditorium equipped for conferences, workshops, and presentations, designed for academic and cultural activities.
- Offices and workrooms that provide support for student services and guidance.
- Innovative spaces such as informal meeting areas and soundproof rooms that enable creative activities, recordings, or group dynamics.

In addition to its modern architectural design, the area stands out for its well-balanced natural and artificial lighting, climate-controlled environment, and the use of warm materials that create a welcoming atmosphere. All of this was conceived to offer students a space that enhances academic productivity, encourages collaboration, strengthens university identity, and supports personal well-being.

With this new space, the School of Medicine reaffirms its commitment to the comprehensive education of its students, providing a supportive environment that brings together study, innovation, and community in one place (see Appendix 7. 'New group working spaces for students').

## E5 (ASIIN 5) To strengthen student participation, the experts recommend improving the representation of QCB students in decision-making bodies.

Regarding student representation in the faculty-level council, it is distributed equitably based on the enrollment of each undergraduate program offered by the School of Medicine. For the Bachelor's Degree in Clinical Chemistry, 15% of the student body is selected to serve as representatives on the faculty-level council, ensuring fair distribution among students from first to fifth year.

On the other hand, student participation in activities such as the Student Governing Board is regulated by UANL's institutional guidelines, which state that each School may have only one governing board, composed of representatives from the various undergraduate programs offered within that School. Joining these slates is up to each student, who may apply and participate actively if they wish. Nevertheless, efforts are made to encourage students from the Clinical Chemistry program to join these slates in order to ensure representation of their student community.

It is important to emphasize that, each year, during the last week of November, the Chemist Week is celebrated—an event organized by students and faculty, featuring academic, cultural, and sports activities. The celebration concludes with the commemoration of the Chemist's Day on December 1st.

The institution provided the following additional information for the QCB programme:

#### Requirements

A1 (ASIIN 1.2) It needs to be ensured that the updated names are used consistently in all documents and websites.

The observation made by the experts is highly appreciated. As required, the English program name has already been updated in different places, including the program's website and the module descriptions (<a href="https://www.medicina.uanl.mx/en/alumnos/mcp/perfilmcp/">https://www.medicina.uanl.mx/en/alumnos/mcp/perfilmcp/</a>). See Appendix 10 'Module descriptions'.

A2 (ASIIN 1.3) The experts point out the overall requirement to allow students to retake modules while continuing the curriculum, especially in the pre-clinical stage, as a measure to reduce the exceeding of the standard period of study which is apparent in both programmes. An internship ("Social service") is not part of the university curriculum anymore but is done only after completion of all modules. The experts find this regulation inconsistent concerning the incorporation of the final thesis and require clarification and adequate inclusion of the thesis as a curricular component. While the experts find the new structure of the programmes suitable in terms of the content, they point towards the inconsistencies in the credit allocation and require UANL to revise these new curricula with respect to their feasibility in terms of workload respectively credits.

We extend our sincere appreciation for the valuable feedback provided by the experts. Given that the request encompasses processes pertaining to both academic and administrative domains, our Curriculum Committee will undertake the responsibility of addressing this matter, taking into consideration the appropriate timeframes and the most effective strategies to ensure its proper management.

Thus, the Curriculum Committee will convene periodically in order to work on credit allocation, contact hours, self-study time, module retakes, the integration of the thesis as a curricular component, and the structuring of module blocks, as required.

Additionally, as part of the recent curricular redesign process, the quantity and relevance of activities assigned to each module (Learning Unit) will be monitored to ensure alignment with the designated credit value. Emphasis will be given to balancing in-class instruction and independent study, thereby promoting a fair and manageable academic workload for students.

A3 (ASIIN 1.5) The workload for per module is not adequately evaluated based on respective student survey since this evaluation is only done on an aggregate level, which does not allow for a distinctive analysis and verification of the credit allocation per module. This needs to be corrected.

It is already answered in E8 (ASIIN 5).

A4 (ASIIN 1.5) The credit system is not always implemented correctly, as the independent student workload is not adequately represented in the credit numbers. The credit points need to be recalculated and allocated in accordance with the student workload. Subsequently, it needs to be checked whether the new curricular structures are feasible in terms of the workload per semester, and action must be taken accordingly to balance the number of credits per semester and ensure that students can successfully complete them without excessive workload.

It is already answered in A2 (ASIIN 1.3).

A5 (ASIIN 1.6) Both programmes contain contact hours and self-study time, but the distribution needs to be balanced.

It is already answered in A2 (ASIIN 1.3).

A6 (ASIIN 2) The experts require ensuring that all final projects meet the academic standards of a Bachelor's thesis.

As required by the experts, descriptive theses will be phased out in favor of research projects and case studies, which better support the thesis's independent and research-driven objectives. Currently, the Office of the Associate Dean for Academic Affairs in Medicine, in collaboration with the Coordinator of Final Degree Projects, is reviewing the guidelines (e.g., position within the curriculum as well as the allocated time to

complete it) for project development to uphold the academic rigor expected of a Bachelor's thesis.

A7 (ASIIN 2) The thesis should also be formally integrated into the curriculum of the MCP programme.

It is already answered in A2 (ASIIN 1.3).

#### With respect to the recommendations

E1 (ASIIN 1.2) The degree title of "Medical Doctor" should be displayed more prominently to facilitate the international recognition of the degree.

It is already answered in E6. 3 (ASIIN 4.2).

E2 (ASIIN 1.3) The experts recommend a re-evaluation of the weighting of the clinical subjects and specifically require an increase in the focus on neurology as a crucial subject which is currently underrepresented in the curriculum. The still existing large module blocks are recommended to be further divided to improve the opportunities for students to complete respectively retake them in case of failure. It is already answered in A2 (ASIIN 1.3).

E3 (ASIIN 1.4) It is recommended to further support pre-qualification of the students and refine the selection pathways to lower the drop-out rates, increase the efficiency of the education process, and ultimately increase the number of graduates.

In accordance with federal regulations for admission to public universities, the Autonomous University of Nuevo León (UANL) complies with these guidelines by administering the National Higher Education Entrance Exam (EXANI II) across all its schools. In the case of the School of Medicine, this exam is specifically tailored to the health sciences area, and admission places are allocated based on the exam results, aligned with the school's capacity and available infrastructure (<a href="https://www.facebook.com/photo/?fbid=1118251277014723&set=pcb.1118251403681377">https://www.facebook.com/photo/?fbid=1118251277014723&set=pcb.1118251403681377</a>). See Appendix 4. 'University entrance exam administration'.

Notwithstanding our status as a public sector institution, particularly with respect to the enrollment criteria that must be fulfilled, the Office of the Associate Dean for Academic Affairs in Medicine actively collaborates with both public and private high schools in order to promote the entry and graduation profile of this academic program.

As part of these efforts, interested students are invited to participate in the event called *MEDCAMP* held at the faculty's facilities. During this event, attendees have the opportunity to explore not only introductory theoretical content, but also the practical activities inherent to the field of medicine. This experience enables them to make an informed decision about their interest in taking the entrance exam for this field of study (see Appendix X. 'MEDCAMP'). On the other hand, we have *PREMED* which is an academic initiative promoted by the School of Medicine, through the Office of Continuing Education, aimed at providing applicants with targeted and specialized preparation for the admission exam to the Bachelor's degree in Medicine (https://www.facebook.com/premeduanl/)

(<a href="https://www.facebook.com/share/r/1BF6cpLBnR/">https://www.facebook.com/share/r/1BF6cpLBnR/</a>). See Appendix 12. 'MEDCAMP' & Appendix 13. 'PREMED'.

Additionally, the UANL organizes the *Digital Vocational Guidance Fair*, which takes place over the course of a week in October. This event showcases the academic offerings of each undergraduate program and addresses specific questions through an interactive chat with interested students (<a href="https://www.uanl.mx/feria-digital-orientacion-vocacional/">https://www.uanl.mx/feria-digital-orientacion-vocacional/</a>).

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Concerning access to international databases and journals, a review was conducted in collaboration with the Library Services of the School of Medicine and of the UANL. It is noteworthy that access to the Web of Science database is currently available, which includes over 14,000 indexed journals, many of them offering full-text articles across various fields of scientific knowledge. This access is available to UANL students and faculty through their institutional email accounts at <a href="https://recursos.db.uanl.mx/">https://recursos.db.uanl.mx/</a>.

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## E5 (ASIIN 3.3) It is also recommended to create group working spaces for the students.

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#### Highlights of this space include:

- Coworking zones with comfortable, flexible furniture—ideal for collaborative work and diverse project development.
- Relaxation areas with sofas, beanbags, and a bright atmosphere that fosters social interaction and rest between activities.
- A small auditorium equipped for conferences, workshops, and presentations, designed for academic and cultural activities.
- Offices and workrooms that provide support for student services and guidance.
- Innovative spaces such as informal meeting areas and soundproof rooms that enable creative activities, recordings, or group dynamics.

In addition to its modern architectural design, the area stands out for its well-balanced natural and artificial lighting, climate-controlled environment, and the use of warm materials that create a welcoming atmosphere. All of this was conceived to offer students a space that enhances academic productivity, encourages collaboration, strengthens university identity, and supports personal well-being.

With this new space, the School of Medicine reaffirms its commitment to the comprehensive education of its students, providing a supportive environment that

brings together study, innovation, and community in one place (see Appendix 7. 'New group working spaces for students').

E6 (ASIIN 4.2) The experts point out that multiple formalities of the official graduation documents need to be addressed for them to comply with the accreditation criteria.

E6.1 (ASIIN 4.2) While the experts generally recommend adding official English translations in the documents or issuing separate English versions to support and ease international recognition, for the Diploma Supplements, this is not only recommended but required according to the ASIIN accreditation criteria. Besides that, the university documentation indicates that the Diploma Supplement template is currently being reworked based on the Europass example, which the experts approve of.

E6.2 (ASIIN 4.2) The experts note that the Kardex does not fulfil the purpose of a Transcript of Records, as it only lists all completed modules and the respective examination date, but does not contain information about the credit points and grades. Moreover, the thesis title is not provided. As this information is crucial for the assessment of the student performance and the completed programme. The experts require the university to rework the Kardex with respect to the mentioned critiques.

E6.3 (ASIIN 4.2) The experts strongly recommend that the degree title *Medical Doctor* be more prominently displayed on both the Diploma Certificate and the Diploma Supplement of the MCP programme, as this can be crucial for the recognition of the degree in foreign countries.

As stated by the experts, at the present time, the School of Medicine issue separate English versions of the Diploma Supplement and the Kardex in the documents in order to support and ease international recognition. However, in order to ensure consistency in student records, the UANL is in the process of developing a Diploma Supplement and a Kardex (see Appendix 1. 'Meeting minutes\_ Diploma Supplement' & Appendix 2. 'Diploma Supplement V1').

E7 (ASIIN 5) To further improve the quality assurance system, the more advanced and detailed survey instruments of the QCB programme should also be applied to the MCP programme.

As suggested, the survey used by the QCB program to evaluate the modules within its academic curriculum will also be administered by the MCP program (see Appendix 11. 'Student survey'). The following links show the online survey:

https://forms.office.com/pages/responsepage.aspx?id=EZDKymp73kSGHwlaLKiDtxbowj7r6u9Cg7 SGBh0351UMURIM1dZUTBYSU1JMUVPWFBXOUdJU0VVRi4u&route=shorturl

https://forms.office.com/pages/responsepage.aspx?id=EZDKymp73kSGHwlaLKiDtxbowj7r6u9Cg7 SGBh0351UMlk4RUo3V1RPSTNJV1hTNzhUU1FIRFFDNy4u&route=shorturl

https://forms.office.com/pages/responsepage.aspx?id=EZDKymp73kSGHwlaLKiDtxbowj7r6u9Cg7\_SGBh0351UMFpMWkVSRU5GUzBSMkMwQjhaOVhLVERSSy4u&route=shorturl

D. Additional Documents: English versions of the curricular overview and module descriptions for the revised curricula are included in Appendix 9 'Curricular overview' & Appendix 10. 'Module descriptions'.

### **G** Summary: Expert recommendations (08.09.2025)

Taking into account the additional information and the comments provided by UANL, the experts summarise their analysis and **final assessment** for the award of the seals as follows:

Degree Programme	ASIIN Seal	Maximum duration of accreditation
Ba Clinical Chemistry	With requirements for one year	30.09.2031
Ba Medicine	With requirements for one year	30.09.2032

#### Requirements

#### For all programmes

- A 1. (ASIIN 1.2) The updated official programme names need to be consistently used in all documents and websites.
- A 2. (ASIIN 1.3/2) Allow students to re-take modules while continuing the curriculum, especially in the pre-clinical stage.
- A 3. (ASIIN 1.5) The credit points need to be recalculated and allocated in accordance with the student workload. Subsequently, it needs to be checked whether the new curricular structures are feasible in terms of the workload per semester, and action must be taken accordingly.
- A 4. (ASIIN 2) It needs to be ensured that all final projects adequately fulfil the academic standard of a Bachelor's thesis.

#### For Ba Medicine

- A 5. A 5. Increase the curricular focus on the discipline of Neurology.
- A 6. (ASIIN 1.3/2) The final thesis needs to be adequately formalised as a curricular component.
- A 7. (ASIIN 4.1) Correctly document the separate part-modules in the module descriptions and the curricular overviews (Medical Sciences and Surgery 1,2,3).

#### Recommendations

#### For all programmes

E 1. N 3.3) It is recommended to improve access to international journals and databases.

#### For Ba Clinical Chemistry

E 2. (ASIIN 5) It is recommended to better represent this programme's students in the decision-making bodies, e.g. by establishing a programme-level council.

#### For Ba Medicine

- E 3. (ASIIN 1.2/4.2) It is recommended to prominently display the degree title Medical Doctor on the Diploma and Diploma Supplement.
- E 4. (ASIIN 1.3) Restructure the weighting of the clinical modules according to their relevance (e.g. plastic surgery compared to family medicine).
- E 5. (ASIIN 1.3) It is recommended to split large modules (e.g. Gynaecology and Obstetrics) into parts to allow students for more flexibility in retaking modules.
- E 6. (ASIIN 5) It is recommended to harmonise this programme's quality assurance instruments with the surveys of the QCB programme.

## **H** Comments of the Technical Committees

# Technical Committee 08 – Chemistry, Pharmacy (17.09.2025)

Assessment and analysis for the award of the ASIIN seal:

The TC discusses the requirements and recommendations proposed by the expert group for the Clinical Chemistry programme. These relate to the credit points awarded, the names of the programmes, course repetition and the quality of the final theses. Overall, the TC agrees with the proposed requirements and recommendations.

The Technical Committee 09 – Chemistry, Pharmacy recommends the award of the seals as follows:

Degree Programme	ASIIN Seal	Maximum duration of accreditation
Ba Clinical Chemistry	With requirements for one year	30.09.2031

### **Technical Committee 14 – Medicine (16.09.2025)**

Assessment and analysis for the award of the ASIIN seal:

The TC discusses the procedure with a focus on the specific requirements and recommendations for the Ba Medicine programme. The TC agrees with the expert panel that 2 credits are too few to adequately cover the important subject of neurology but deems the formulation of the respective requirement misunderstandable (A5). Therefore, it proposes a more concise formulation and also adds the need of an overall balancing of the curriculum, as, given that the curriculum is already hardly manageable in the designated study period, it sees the danger of requiring an increase of the credits without considering the curriculum

as a whole. Particular emphasis is therefore posed on A3 as well as E4. Besides this, the TC agrees with the recommendation of the expert team.

The Technical Committee 14 – Medicine recommends the award of the seals as follows:

Degree Programme	ASIIN Seal	Maximum duration of accreditation
Ba Medicine	With requirements for one year	30.09.2032

#### Requirements

#### For all programmes

- A 1. (ASIIN 1.2) The updated official programme names need to be consistently used in all documents and websites.
- A 2. (ASIIN 1.3/2) Allow students to re-take modules while continuing the curriculum, especially in the pre-clinical stage.
- A 3. (ASIIN 1.5) The credit points need to be recalculated and allocated in accordance with the student workload. Subsequently, it needs to be checked whether the new curricular structures are feasible in terms of the workload per semester, and action must be taken accordingly.
- A 4. (ASIIN 2) It needs to be ensured that all final projects adequately fulfil the academic standard of a Bachelor's thesis.

#### For Ba Medicine

- A 5. (ASIIN 1.3) Rebalance the curriculum to increase the number of credits for the discipline of Neurology to adequately cover the discipline.
- A 6. (ASIIN 1.3/2) The final thesis needs to be adequately formalised as a curricular component.
- A 7. (ASIIN 4.1) Correctly document the separate part-modules in the module descriptions and the curricular overviews (Medical Sciences and Surgery 1,2,3).

#### Recommendations

#### For all programmes

E 1. (ASIIN 3.3) It is recommended to improve access to international journals and databases.

#### For Ba Clinical Chemistry

E 2. (ASIIN 5) It is recommended to better represent this programme's students in the decision-making bodies, e.g. by establishing a programme-level council.

#### For Ba Medicine

- E 3. (ASIIN 1.2/4.2) It is recommended to prominently display the degree title Medical Doctor on the Diploma and Diploma Supplement.
- E 4. (ASIIN 1.3) Restructure the weighting of the clinical modules according to their relevance (e.g. plastic surgery compared to family medicine).
- E 5. (ASIIN 1.3) It is recommended to split large modules (e.g. Gynaecology and Obstetrics) into parts to allow students for more flexibility in retaking modules.
- E 6. (ASIIN 5) It is recommended to harmonise this programme's quality assurance instruments with the surveys of the QCB programme.

# I Decision of the Accreditation Commission (26.09.2025)

Assessment and analysis for the award of the subject-specific ASIIN seal:

The Accreditation Commission discusses the procedure and recognises the high quality of the delivery of the education in these programmes. However, the need for adjustments and improvements regarding the organisational component of the programmes, e.g. regarding the workload and credit points, thesis projects, harmonisation of names and module descriptions is confirmed. Concerning the curricular requirement for the Ba Medicine programme, the Accreditation follows the proposal of the Technical Committee 14.

The Accreditation Commission decides to award the following seals:

Degree Programme	ASIIN Seal	Maximum duration of accreditation
Ba Clinical Chemistry	With requirements for one year	30.09.2031
Ba Medicine	With requirements for one year	30.09.2032

#### Requirements

#### For all programmes

- A 1. (ASIIN 1.2) The updated official programme names need to be consistently used in all documents and websites.
- A 2. (ASIIN 1.3/2) Allow students to re-take modules while continuing the curriculum, especially in the pre-clinical stage.
- A 3. (ASIIN 1.5) The credit points need to be recalculated and allocated in accordance with the student workload. Subsequently, it needs to be checked whether the new curricular structures are feasible in terms of the workload per semester, and action must be taken accordingly.
- A 4. (ASIIN 2) It needs to be ensured that all final projects adequately fulfil the academic standard of a Bachelor's thesis.

#### For Ba Medicine

- A 5. (ASIIN 1.3) Rebalance the curriculum to increase the number of credits for the discipline of Neurology to adequately cover the discipline.
- A 6. (ASIIN 1.3/2) The final thesis needs to be adequately formalised as a curricular component.
- A 7. (ASIIN 4.1) Correctly document the separate part-modules in the module descriptions and the curricular overviews (Medical Sciences and Surgery 1,2,3).

#### Recommendations

#### For all programmes

E 1. (ASIIN 3.3) It is recommended to improve access to international journals and databases.

#### For Ba Clinical Chemistry

E 2. (ASIIN 5) It is recommended to better represent this programme's students in the decision-making bodies, e.g. by establishing a programme-level council.

#### For Ba Medicine

- E 3. (ASIIN 1.2/4.2) It is recommended to prominently display the degree title Medical Doctor on the Diploma and Diploma Supplement.
- E 4. (ASIIN 1.3) Restructure the weighting of the clinical modules according to their relevance (e.g. plastic surgery compared to family medicine).
- E 5. (ASIIN 1.3) It is recommended to split large modules (e.g. Gynaecology and Obstetrics) into parts to allow students for more flexibility in retaking modules.
- E 6. (ASIIN 5) It is recommended to harmonise this programme's quality assurance instruments with the surveys of the QCB programme.

# Appendix: Programme Learning Outcomes and Curricula

The following **objectives** and **learning outcomes** (intended qualifications profile) shall be achieved by the <u>QCB programme</u>:

#### General skills

#### Instrumental

- 1. Apply autonomous learning strategies across different levels and fields of knowledge to make timely and relevant decisions in personal, academic, and professional contexts.
- 2. Use logical, formal, mathematical, iconic, verbal, and non-verbal communication effectively, according to their stage of life, to understand, interpret, and express ideas, emotions, theories, and perspectives with an inclusive approach.
- 3. Manage information and communication technologies to access, process, and transform information into knowledge, facilitating learning and collaborative work through advanced techniques that promote constructive societal participation.
- 4. Demonstrate proficiency in their native language, both orally and in writing, with accuracy, relevance, timeliness, and ethical considerations, adapting their message to the context to communicate ideas and scientific findings effectively.
- 5. Employ logical, critical, creative, and proactive thinking to analyze natural and social phenomena, enabling responsible and well-informed decision-making within their sphere of influence.
- 6. Communicate clearly and accurately in a second language, preferably English, in everyday, academic, professional, and scientific contexts.
- Develop interdisciplinary, multidisciplinary, and transdisciplinary academic and professional proposals based on global best practices to foster and strengthen collaborative work.
- 8. Apply both traditional and cutting-edge research methods and techniques to enhance academic work, professional practice, and knowledge generation.

#### Personal and interpersonal skills

- 9. Demonstrate commitment and respect for diverse social and cultural practices, fostering inclusion at local, national, and international levels to promote peaceful coexistence.
- 10. Address contemporary societal challenges with a critical mindset and a strong human, academic, and professional commitment, contributing to general well-being and sustainable development.
- 11. Uphold the values promoted by UANL—truth, equity, honesty, freedom, solidarity, respect for life and others, peace, environmental responsibility, integrity, ethical behavior, and justice—in both personal and professional settings to help build a sustainable society.

#### **Comprehensive Competencies**

- 12. Develop innovative proposals based on a holistic understanding of reality to help address the challenges of an interconnected global environment.
- 13. Exercise leadership that is responsive to social and professional needs, driving meaningful and relevant social change.
- 14. Effectively resolve personal and social conflicts using appropriate academic and professional techniques to support sound decision-making.
- 15. Adapt to the uncertainties of today's social and professional landscapes, contributing to improved living conditions.

#### Specific skills

- Apply knowledge of the chemical composition and physicochemical properties of matter to analyze biological, environmental, and food matrices and determine analytes.
- 2. Perform physical, chemical, and biological procedures for the collection, handling, storage, and analysis of samples, ensuring reliable clinical, toxicological, chemical, food, forensic, and environmental diagnoses.
- 3. Handle chemical and biological materials in compliance with Mexican and international regulations to ensure proper use and disposal, protecting both health and the environment.

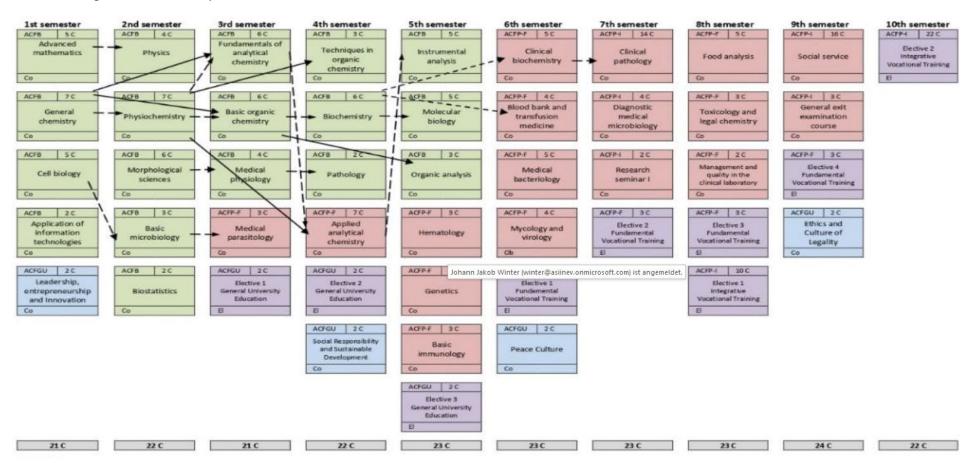
- 4. Validate bioanalytical methods based on established performance criteria to ensure the reliability of results in chemical-biological samples.
- 5. Integrate new analytical methodologies that enhance the functionality, efficiency, and environmental sustainability of laboratory processes to address health sector needs.
- 6. Interpret analysis results based on established criteria to support timely and informed decision-making in clinical, toxicological, chemical, food, forensic, and environmental diagnostics.
- 7. Ensure the reliability of analytical results by applying quality control guidelines in accordance with laboratory policies, enabling accurate decision-making.
- 8. Manage resources effectively by implementing quality management systems to ensure proper laboratory functioning and continuous improvement.

#### The **graduate profile/ labour market** includes the following occupations:

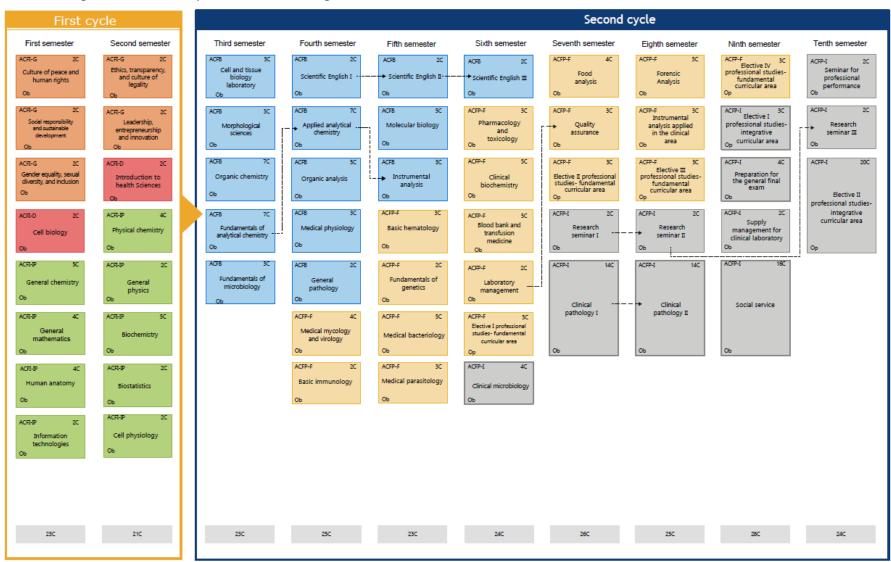
Job market	Task description
Clinical Laboratory	<ul> <li>Performs sample collection and processing.</li> <li>Performs the validation and issuance of results.</li> <li>Performs process quality control activities.</li> <li>Participates in courses and workshops of continuous updating.</li> <li>Manages and ensures the quality of processes in the laboratory.</li> <li>Serves as the laboratory's health manager.</li> <li>Observes the rules and procedures that apply to the Clinical Laboratory.</li> </ul>
Blood Bank	<ul> <li>Sampling.</li> <li>Selects and performs blood collection from donors.</li> <li>Tests blood according to the normative procedure.</li> <li>Determines the compatibility of blood and blood derivatives.</li> <li>Safeguards and handles blood units and their derivatives according to the regulatory procedure.</li> <li>Performs quality control activities.</li> <li>Participates in courses and workshops of continuous updating.</li> <li>Administers the Blood Bank.</li> <li>Observes the Official Mexican Standards applied to the Blood Bank</li> </ul>
Toxicological analysis labor- atory	<ul> <li>Develops and validates methods for sample preparation and analysis of toxic elements and compounds in different matrices.</li> <li>Performs analytical procedures for the determination of metals, drugs of abuse and other substances of toxicological interest.</li> <li>Observes the safety standards and procedures that apply to toxicological analysis laboratories.</li> </ul>

Bioequivalence Laboratory	<ul> <li>Develops and validates methods for sample preparation and drug analysis in biological matrices.</li> <li>Uses state-of-the-art analytical instrumentation for analyte quantification in bioequivalence studies.</li> <li>Applies official Mexican standards for bioequivalence studies and good laboratory practices.</li> </ul>
Forensic Laboratory	<ul> <li>Performs the chain of custody of samples and files.</li> <li>Implements and applies analytical and extraction methods according to each type of sample.</li> <li>Qualitative and quantitative identification of substances present in forensic samples.</li> <li>Prepares opinions with the interpretation of analytical findings.</li> <li>Observes the safety standards and procedures that apply to forensic analysis laboratories.</li> </ul>
Food Laboratory	<ul> <li>Performs appropriate sampling procedures for food analysis.</li> <li>Implements analytical and extraction methods according to each type of sample.</li> <li>Performs chemical composition analysis of food.</li> </ul>
Analytical Laboratory	<ul> <li>Development, validation and application of spectroscopic and chromatographic extraction and analysis procedures.</li> </ul>

#### The following **curriculum** is in place since 2017:







The following **learning outcomes (intended qualifications profile)** shall be achieved by the MCP programme:

#### General skills

#### Instrumental skills

- Following self-learning strategies at the different levels and fields of knowledge, which enables effective decision-making in personal, academic, and professional areas.
- 2. Using logical, mathematical, iconographic, verbal, and non-verbal language for the ecumenical interpretation and expression of ideas, feelings, and theories.
- 3. Employing information and communication technologies for accessing information that eventually becomes knowledge as well as promoting learning and collaborative work through innovative techniques, having a constructive involvement in society.
- 4. Mastering the mother language in spoken and written form, learning to communicate correctly and adapt messages to specific contexts in order to disseminate ideas and scientific knowledge.
- Analyzing natural events and social movements through creative logical thinking in order to propose relevant decisions according to social responsibility and the graduate's own professional field.
- 6. Speaking a second language, especially English, for proper communication in common, academic, professional, and scientific settings.
- 7. Making academic and professional proposals based on the best global practices in different disciplines to encourage collaborative work.
- 8. Applying new and traditional research methodologies for personal development and knowledge generation.

#### Personal and interpersonal skills

- 9. Committing to cultural and social diversity while complying with the integration principle to promote spaces of harmonious coexistence for local, national, and international contexts.
- 10. Facing emerging social challenges with a critical approach and academic-professional commitment in order to consolidate the general wellbeing as well as sustainable development.

11. Practicing UANL values in personal and professional settings: truth, equity, honesty, freedom, solidarity, respect for life and others, peace, respect for nature, integrity, ethics, and justice, contributing to a sustainable society.

#### Consolidating skills

- 12. Making innovative proposals based on a holistic understanding of reality to help overcome global challenges.
- 13. Taking a dedicated leadership in encouraging significant changes to fulfill social and professional needs.
- 14. Solving problems in academic and professional areas through specific techniques for proper decision-making.
- 15. Adapting easily to uncertain social and professional environments to have better living conditions.

#### Specific skills

#### Scientific Basis of Medicine

 Applying the scientific principles of medicine to make decisions, taking into account the economic, social, cultural, psychological, and environmental factors involved in the development of diseases.

#### **Professional Clinical Practice**

- 2. Solving clinical problems through deduction and interpretation in order to take responsible medical action.
- 3. Evaluating the development of diseases by analyzing biomedical data as well as social, cultural, and physical factors.
- 4. Following a biopsychosocial model to provide people with professional care by means of diagnosis, specialized knowledge, technical procedures, clinical practice guidelines, and patient care protocols.
- Responding to common medical emergencies with appropriate management or timely transfer if needed.
- Managing healthcare, human resources, diagnostic interventions, and therapeutic modalities according to national standards in order to ensure service quality and patient safety.

7. Manage human resources, diagnosis activities, therapeutic modalities, and health care options according to national standards, while promoting a culture of quality care and ensuring patient safety.

#### Critical Thinking and Research

8. Applying the scientific method to solve medical problems with innovation, analysis, and self-criticism, contributing to the prevention, diagnosis, and treatment of diseases.

#### **Professional Values and Ethics**

- 9. Integrating ethics and values to medical practice regardless of gender, race, sexual orientation, political beliefs, religion, profession, physical condition, or socioeconomic status.
- 10. Respecting the patient's integrity and medical data by complying with the doctorpatient privilege.

#### Organizational Work

11. Promoting teamwork, multidisciplinary work, institutional policies, and internal guidelines within the organization.

#### Communication

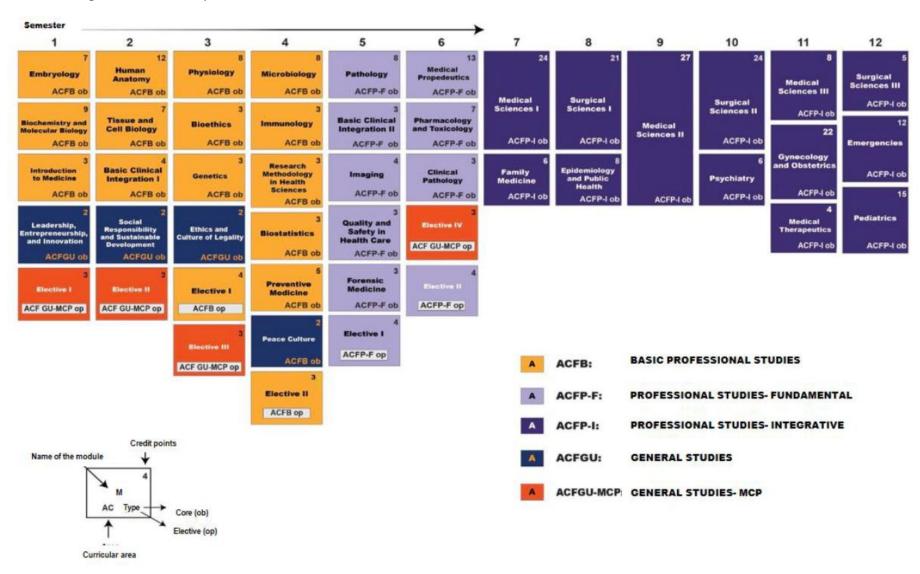
12. Applying the principles of effective communication to treat patients, families, and other health professionals with empathy and respect.

#### The **graduate profile/ labour market** includes the following occupations:

Job market	Task description
Medical Consultation Office	<ol> <li>Provides primary health care services.</li> <li>Diagnoses and prescribes medical treatments to the patients.</li> </ol>
	3. Refers patients to medical specialists' offices when ever the case requires or deserves it.
	4. Keeps statistical records of consultations, illnesses and ailments.
	5. Provides follow-up medical treatments prescribed to patients by having subsequent consultations.
	6. Assists during emergency cases.
	7. Handles wound-dressing and minor surgical procedures.
	8. Administers medicines and carries out medical treatments.
	9. Elaborates patients' medical records.
	10. Elaborates and signs medical certificates.
Public and Private Health In-	11. Plans meetings for health education.
stitutions	12. Evaluates laboratory tests, x-rays, treatments and medical

directions.
13. Participates in medical assistance brigades.
14. Analyzes cases assisted by a medical team.
15. Manages the correct use of resources for medical services.
16. Knows and applies regulations and procedures related to security
and comprehensive care in health care contexts.
17. Establishes primary care prevention measures.

The following **curriculum** is in place since 2015:



The following **curriculum** is implemented from August 2025 on:

