

Application and Regulation of the International Education Standards

Graciela Enríquez Guadarrama
National Autonomous University of Mexico

The new reality demands a change in the professional profile in order to meet the challenges and requirements of the accounting profession; education plays a very important role in the formation and dissemination of the International Education Standards (IES), since the quality of a profession cannot be maintained and improved if those who enter the profession are not prepared to meet the established standards. Therefore, this chapter analyzes IES 1 Admission Requirements for Professional Accounting Education Programs and IES 2 Initial Professional Development, in their scope, objective and requirements of the normative standards published by the International Federation of Accountants (IFAC) in the professional field and their impact on the design of curricula in Higher Education Institutions.

Keywords: International Education Standards, professional competence, admission profile, learning outcome

INTRODUCTION

While globalization is present in all parts of the world, the issue of convergence of national and international standards is becoming increasingly relevant. The analogy towards a set of generally accepted accounting and auditing standards is actively debated in almost all financial markets. The contribution of these standards will be to reduce vulnerability and strengthen the accountability environment of all accounting information systems, especially in the stock markets where public companies are listed.

Some research has established the International Accounting Education Standards as a relevant topic at the international level. Some authors analyze the importance of accounting education within a global outline, so it is important that there is a general consensus on how accounting information should be presented to the different stakeholders (shareholders, CEOs, the State, financial institutions, among others).

For Cardona and Zapata (2004) international accounting and auditing standards and pronouncements, as well as the delivery of international education guides are intended for universal adoption and adaptation by IFAC members. The universalization of accounting and the aforementioned standards are enough forces to influence the change of paradigms derived from the globalization of business.

Kostadinovski (2013) states that improving education through the development and implementation of international educational standards should improve the competence of the global accounting profession and help build public confidence. In order to meet the current challenges of the global economy, the accounting profession must ensure that individuals who become professional accountants achieve an agreed level of competence, which is then maintained.

In another study, Zepeda, Aguilar and Salazar (2014) stated the relevance of Universities in educational models and the innovations they present in the incorporation and promotion of new fiscal systems. Also,

the inclusion of accounting subjects such as accounting amortization is being sought in order to provide students with new actions, techniques and tools for acquiring knowledge that will strengthen their competence in the work environment.

Rufino, Payabyab, and Lim (2018) discussed the role of accounting education today and concluded that interest should be shown in the development of accounting skills. To achieve this, consideration should be given to the methods of academics, which should include the promotion of teamwork and leadership. However, the authors comment that the ethical part must be present for students to appreciate the responsibilities they will have in the professional field.

García (2019) conducted an explanatory and interpretative type study, where several teachers were consulted about their experience when carrying out teaching practices in accounting education. They concluded that the professional field and the research world must be related.

Regulatory Development of International Education Standards

The International Federation of Accountants (IFAC) is the global organization whose objective is to promote the public interest so that the accounting profession is consolidated at the international level. It also investigates the development of stronger international economies so that standards of the highest quality are established and promoted, and the promotion of international convergence of standards considering the experience of the accounting profession.

The 2022 strategic plan states that in order to anticipate developments, as a society and as a profession, we need to see them as the effects of simultaneous and dynamic trends. The climate crisis and digitalization are speeding up at the same time; the effects of each trend will influence the other and, in turn, shape and reshape our lives, as well as livelihoods and environment. The same could be said for the COVID-19 pandemic and the next public health emergency, and the one after that. This plan is designed as a timeless strategic framework outlined to drive our strategic actions (IFAC, 2022).

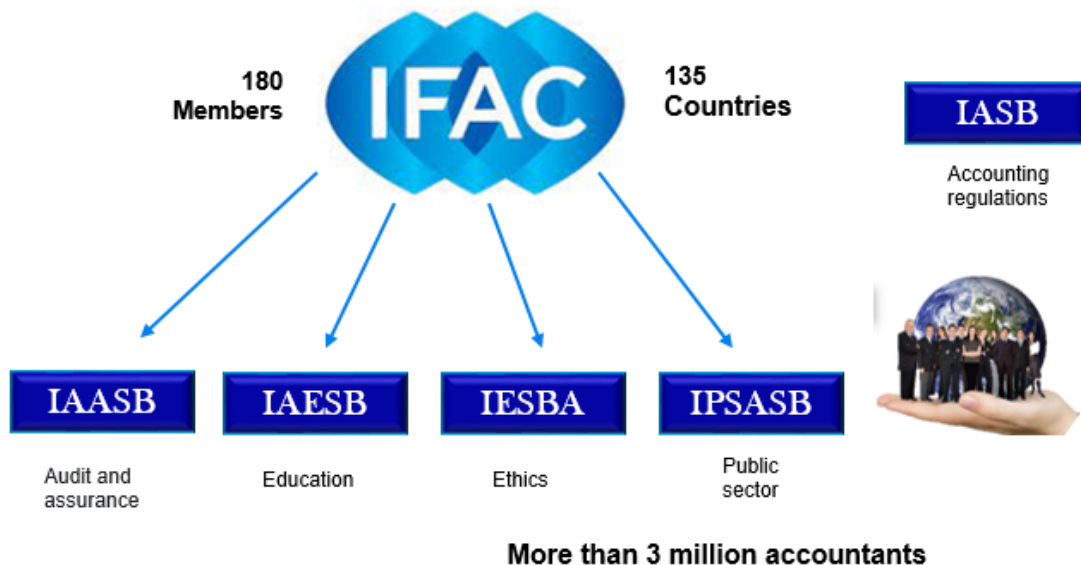
IFAC is mainly composed of 180 associate members in 135 countries. According to IFAC, around 3 million accountants are represented in different groups such as education, industry and commerce, the public sector and professional practice serving the primary, secondary and tertiary economic sectors.

IFAC's mission is to serve the public interest by contributing to the development, adoption, and implementation of high quality international standards and guidance; by contributing to the development of strong professional accounting organizations and accounting firms, and high quality practices by professional accountants; by promoting the value of professional accountants around the world; and by talking about issues of public interest where the expertise of the accounting profession is most relevant (IFAC, 2022).

The following are the boards established with their specific area and the standards issued (IFAC, 2022).

- The International Auditing and Assurance Standards Board (IAASB), International Standards on Auditing, Review, Other Assurance and Related Services, as well as the Quality Management Standards.
- The International Accounting Education Standards Board (IAESB), International Education Standards.
- The International Ethics Standards Board for Accountants (IESBA) Code of Ethics for Accounting Professionals.
- The International Public Sector Accounting Standards Board (IPSASB), International Public Sector Accounting Standards.

**FIGURE 1
INTERNATIONAL STANDARDS COUNCILS**



Source: Developed by the author with data from IFAC 2022.

In compliance with the objective of maintaining the public interest, IFAC must establish globally recognized standards to ensure the reliability of information. The most important agencies have a process in place to develop standards in a transparent, effective and efficient manner. Each council has an advisory group composed of independent members who provide public interest perspectives.

The International Accounting Education Standards Board (IAESB) has played an essential role in driving accounting education internationally, as the independent body responsible for setting high quality standards, with the purpose of establishing the public interest in the area of accounting education, acts to increase the level of confidence of stakeholders such as: universities and education providers, employers, regulators, government authorities, accountants and potential accountants, in the work of accounting professionals. The IAESB is an independent body that develops educational standards, guidelines and information documents for use by IFAC member bodies and other interested parties in professional accounting education.

The functions of the IAESB to fulfill its mission are:

- ❖ Liaises with other Independent Standards Boards and Committees of IFAC.
- ❖ Participates in outreach activities with users.
- ❖ Acts as a facilitator for novel topics in accounting education.
- ❖ Brings together the perspectives of academics, IFAC member bodies, government accountants and employers.

IAESB focuses on accounting education certification, training, evaluation, work experience and continuing professional education for accounting professionals. The Public Interest Oversight Board is primarily responsible for overseeing the activities of the IAESB.

The 2019 establishment of the International Panel on Accounting Education is a key feature of IFAC's approach to promoting accounting education globally. The Panel is essential in advising IFAC on how best to assist professional accounting organizations in preparing future-ready accountants.

The Panel members have a threefold mandate to:

- Act as strategic advisors for IFAC's accounting education work plan;
- Advocate for high quality accounting education globally and in their home jurisdictions and

regions; and

- Serve as access points to accounting education resources.

The standards issued by the IAESB are eight International Education Standards (IES) developed between 2005 and 2019 in the field of education:

1. IES 1: Admission requirements for professional training programs in accounting.
2. IES 2: Initial Professional Development - Technical Competence.
3. IES 3: Initial Professional Development - Professional Skills.
4. IES 4: Initial Professional Development - Professional Values, Ethics and Attitudes.
5. IES 5: Initial Professional Development - Practical Experience.
6. IES 6: Initial Professional Development - Assessment of Professional Competence.
7. IES 7: Continuing Professional Development.
8. IES 8: Competence Requirements for Audit Professionals.

In Mexico, the Mexican Institute of Public Accountants, A.C. (IMCP by its Spanish acronym) is a federation founded in 1923, which is made up of 60 professional associations that bring together more than 22,000 associated public accountants throughout the country, with the purpose of meeting the professional and human needs of its members, in order to raise their quality and preserve the values that have guided the practice of the public accounting career (IMPC, 2021).

The IMCP is a member of the regional institution AIC (Inter-American Accounting Association), which brings together the profession throughout the Americas and the IFAC world organization. According to IFAC guidelines, members must disseminate and adopt the standards issued.

The highest authority of the IMCP resides in the General Assembly of Members, made up of all the accountants associated with one of the 60 federated colleges. Since its incorporation and throughout the years IMCP has had a great contribution in the professional, academic, social, economic, political and cultural life of Mexico, which has been reflected in its faithful mark to follow before public educational institutions such as the National Autonomous University of Mexico (UNAM by its Spanish acronym), the National Polytechnic Institute (IPN by its Spanish acronym) and private companies such as the Autonomous Technological Institute of Mexico (ITAM by its Spanish acronym), the National Association of Faculties and Schools of Accounting and Administration (ANFECA by its Spanish acronym), the Mexican Institute of Finance Executives (IMEF by its Spanish acronym), as well as public agencies, among others.

The IES Conceptual Framework brings quality to professional accounting education globally by establishing guidelines (IMCP, 2019) for:

- Admission to professional training programs in accounting.
- Initial Professional Development (IPD) for aspiring accounting professionals.
- Continuing professional development (CPD) for accounting professionals.

On the other hand, accounting professionals have activities such as:

- ❖ Prepare, analyze and report financial and non-financial information with relevant and accurately presented Environmental, Social and Governance (ESG) parameters.
- ❖ They are involved in decision making, as well as in the formulation and implementation of strategies in the organizations.
- ❖ They prepare and analyze tax information.
- ❖ They audit financial and non-financial information and provide assurance and advisory services to others.

The implementation of IESs provides an effective procedure for the development of professional competence, with other desirable effects such as reducing international discrepancies in requirements when performing and informing interested third parties of organizations' information, providing international benchmarks of good practice, and facilitating the global mobility of accounting professionals.

The changes in the professional context are shaped by the generations with new characteristics in the learning process as a result of the COVID-19 pandemic, together with greater demands for the profession with an important transit of professionals between regions, associated with the increase in the fields of action with the emergence of new professions and the questioning of the future of the accounting profession.

In Mexico, several universities offer a Bachelor's Degree in Accounting and some add a strategic financial focus to the name of the degree program.

The IAESB defines an accounting professional as an individual who acquires, demonstrates and further develops professional competence to perform a function in the accounting profession and who is required to comply with a code of ethics standard of an organization of accounting professionals, the IMCP in order to fulfill its objectives in the area of professional ethics carries out the following activities: promotes that the professional activities of the associates are carried out within the framework of the professional code of ethics in 2022 in its 12th edition respect for the legal provisions related to their performance with the values of integrity, truth, responsibility, and commitment was emphasized, the professional has to comply with an authority in charge of the license to practice the profession as is the case of the Ministry of Public Education (SEP by its Spanish acronym), which issues the professional license online with electronic signature issued by the Tax Administration System.

The accounting professional fosters a long-term vision, with the ability to adapt, critical thinking, professional judgment, the ability to learn on one's own with the task of continuous updating, that is, lifelong learning and self-evaluation.

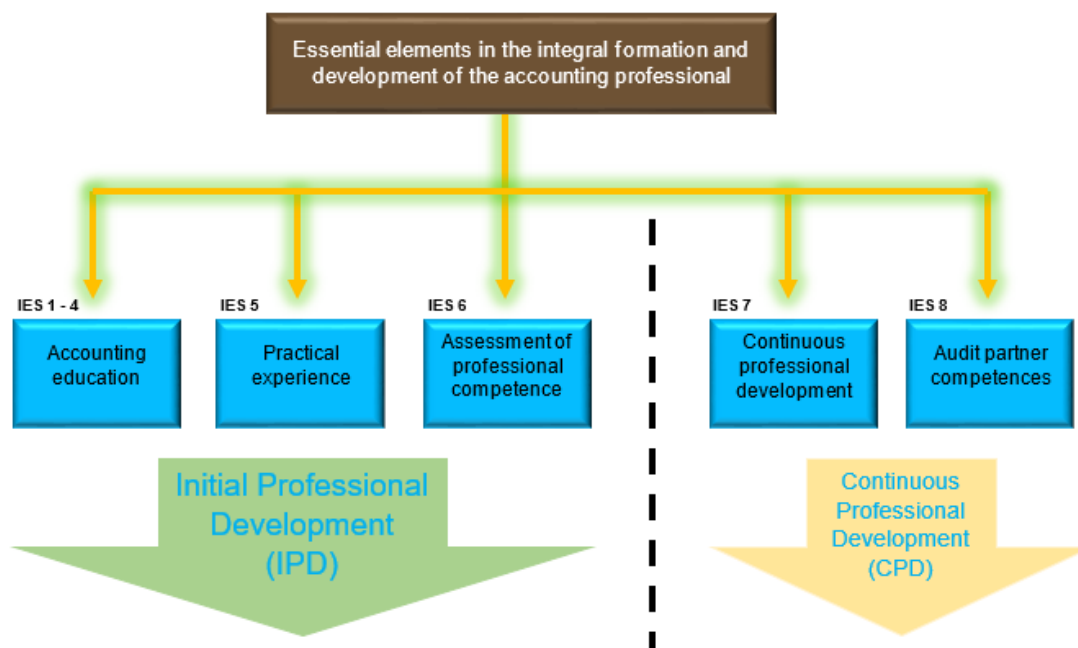
The IESs are useful to universities, employers and other stakeholders involved in the design, development, delivery and evaluation of professional training and continuing education programs as a model for the training and practical experience of accounting professionals and aspiring professionals.

The content of an accounting curriculum instructs the accounting student (applicant) in the development of appropriate professional competence.

Professional competence is the ability to perform a function according to defined standards, it goes beyond the knowledge of principles, rules, concepts, facts and procedures; it is the integration and application of: technical competence, managerial skills and professional attitudes, as well as values, ethics.

Each institution of higher education determines the areas of competence and learning outcomes that delineate the professional competence required of aspiring professional accountants.

FIGURE 2
ELEMENTS OF COMPREHENSIVE TRAINING IN INITIAL AND CONTINUING PROFESSIONAL DEVELOPMENT



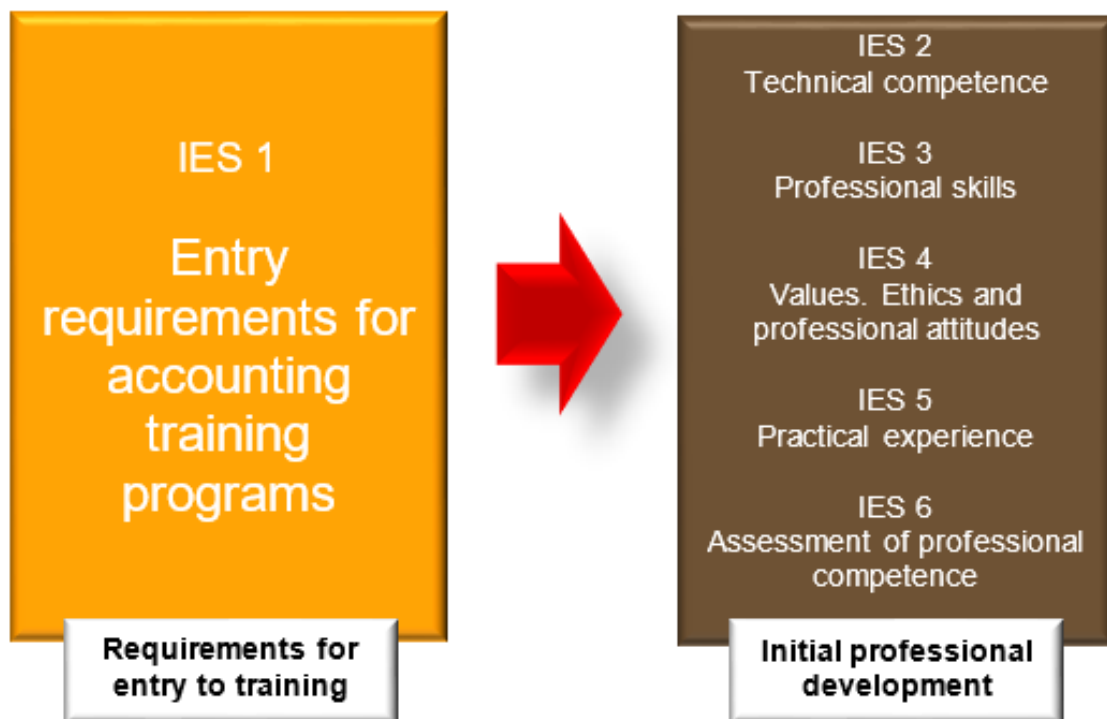
Source: Guide for the implementation of the Professional Accounting Education standards. IMCP-ANFECA

Accounting professional candidate receives as Initial Professional Development (IPD) in universities and business schools for training in technical competence with learning outcomes in the field of Accounting, in the labor market practical experience is measured by outcome-based, input-based or a combination of outcome and input-based approaches; assessment of professional competence as the point of qualification may include written and oral examinations, objective or computer-based tests, workplace competency assessments by employers with review of a portfolio of evidence; The Accounting professional in Continuing Professional Development (DPC by its Spanish acronym) is carried out with professional bodies such as accounting associations who establish the Continuing Professional Development Standard (NDPC by its Spanish acronym) with activities to be fulfilled reporting in the annual manifestation in accordance with the NDPC regulations, the participation in courses, conferences and seminars as a participant or instructor, participation and work in Commissions or discussion groups by areas, writing articles, papers or books on nature, technical, professional or academic, as well as professional and academic certifications.

According to IES 1 Admission Requirements for Professional Accounting Education Programs effective July 1, 2014, IFAC member bodies are responsible for establishing and communicating the admission requirements for educational programs, which may vary according to jurisdiction over government and regulatory agreements, and are useful to educational organizations, regulators, employers, government authorities, and any other stakeholders that provide and offer programs in the accounting profession.

The objective of IES 1 establishes fair and proportionate educational admission requirements for accounting curricula that protect the public interest through the creation and maintenance of high quality standards.

**FIGURE 3
REQUIREMENTS AND INITIAL DEVELOPMENT IN THE ACCOUNTING PROFESSION**



Source: Prepared by the authors with information from the IMCP International Education Pronouncements Manual.

The entrance of the candidate to the accounting profession with reasonable chances of successful completion depends on sufficient information to decide to undertake the study of the accounting profession, the dissemination and publication of useful information by the trainers and Higher Education Institutions, who provide the necessary foundations for the DPI.

TABLE 1
THE ADMISSION REQUIREMENTS OF THE ASPIRING PROFESSIONAL ACCOUNTANT

General / Skills	Individuals /Skills	Specific / Skills
Intellectuals	Systematization	Adaptation
Decision making	Technical expression	Criterion
Social interest	Mental independence	Analysis
Creativity	Teamwork	Cooperation
Range of criteria	Research	
Communication	Decision	
Self-esteem	Competitiveness	
	Unthinking critic	

Source: Prepared by the authors with information from the IMCP International Training Pronouncements Manual.

The Faculty of Accounting and Administration at the National Autonomous University of Mexico (FAA UNAM) includes four components in the 2023 curriculum for the Bachelor's Degree in Accounting:

TABLE 2
COMPONENTS IN THE 2023 CURRICULAR MAP

Knowledge	Skills	Attitudes	Values
Text comprehension, analysis and synthesis	Writing essays, making speeches, summarizing, etc.	Service and collaborative work	Respect
Understand an oral or written speech in English	Oral and written communication and expression	Respect for human rights and environmental protection	Honesty
Mathematics: algebra, geometry and calculus.	Collaborative work	Social responsibility	Partnership
Basic research techniques	Interpersonal conflict resolution	Innovation and creativity	Responsibility
	Inductive and deductive reasoning	Willingness to research	Empathy
	Analysis and synthesis of information		Discipline
	Structured thinking and mathematical logic		Commitment and perseverance

Source: Prepared by the authors with information on the FCA UNAM curriculum map.

IES 2 Initial Professional Development (DPI by its Spanish acronym) - Technical Competence in effect as of July 1, 2015, specifies the areas of competence that represent the minimum knowledge that the professional accountant must have to practice the profession and the learning outcomes for technical competence.

The objective of IES 2 is to establish the technical competence that the aspiring professional accountant needs to develop and demonstrate at the end of the DPI in order to perform a role as a professional accountant.

FIGURE 4
AREAS OF FORMATIVE COMPETENCE OF THE ACCOUNTING PROFESSIONAL



Source: Prepared by the authors with information from the IMCP International Education Pronouncements Manual.

Learning outcomes are what a person is expected to know, be able to do or understand after the DPI learning period is over.

The IASB (2019) establishes competency areas as a category for which a set of related learning outcomes can be specified:

- *Accounting and financial reporting*, the level of proficiency is intermediate with six outcomes: 1) apply accounting principles, operations and other events, 2) use International Financial Reporting Standards (IFRS) and other relevant standards, 3) evaluate the accounting policies used to prepare financial statements, 4) prepare financial statements including consolidated information in accordance with IFRS, 5) interpret financial information and related notes, 6) analyze sustainability and integrated reports.
- *Managerial accounting*, the level of mastery is intermediate with five outcomes: 1) use techniques to support management decision making, such as production costs, inventory management, budgeting and variance analysis, 2) apply quantitative techniques to analyze cost behavior, 3) examine financial and non-financial information for decision making, 4) prepare reports on planning and budgeting, cost management, performance measurement, quality control and corporate evaluation, 5) evaluate the performance of products and segments of the business.
- *Finance and financial management*, the level of mastery is intermediate with six outcomes: 1) contrast the different sources of financing available in the local and international Financial

System, 2) examine cash flow in organizations, as well as working capital needs, 3) compare the historical and projected financial situation of an organization, using techniques of vertical and horizontal analysis, 4) evaluate the components of the capital structure and the calculation of the capital cost, 5) employ capital budgeting techniques and their evaluation in capital investment decisions, 6) explain income, asset and market valuation based approaches.

- *Taxes*, the level of mastery is intermediate with four outcomes: 1) explain the obligations of compliance and filing of national tax returns, 2) prepare calculations of direct and indirect taxes for individuals and organizations, 3) describe the differences in tax matters between planning, abatement and avoidance, 4) examine tax-related operations in international transactions.
- *Audit and assurance*, the intermediate proficiency level with five outcomes: 1) Identify the objectives and phases involved in a financial statement audit, 2) evaluate the risks of material misstatement in financial statements and assess the impact on strategy, 3) apply International Standards on Auditing, laws and regulations applicable to a financial statement audit, 4) employ quantitative methods in audit engagements, 5) describe the key elements of assurance assignments and applicable standards.
- *Corporate governance, risk management and internal control*, the intermediate level of mastery involving four outcomes: 1) expose the principles of good corporate governance, including stakeholders, disclosures and transparency requirements, 2) differentiate the elements of corporate governance structure in an organization, 3) differentiate risks and opportunities in risk management, 4) investigate the factors of internal control related to financial reporting.
- *Business laws and regulations*, the intermediate level of mastery involving two outcomes: 1) explain the laws and regulations for the incorporation of organizations, 2) recognize the laws and regulations applicable to the labor framework in which accounting professionals operate.
- *Information technology*, the intermediate level of mastery involving three outcomes: 1) compare general information technology controls and application of relevant controls, 2) explain contribution of information technology in data analysis and decision making, 3) employ information technology in decision making through business analysis.
- *Business and organizational environment*, the intermediate level of mastery involving three outcomes: 1) describe the operating environment of organizations, political, legal, social, economic, international and cultural, 2) analyze economic globalization and finance, 3) report the role of multinational, e-commerce and emerging markets.
- *Economics*, the fundamental level of mastery with three outcomes: 1) identify the principles of economics at the micro and macro level. 2) relate the effects of variations in macroeconomic indicators on the operations of organizations, 3) expose the different types of market, perfect competition, monopolistic, as well as monopoly, oligopoly.
- *Business and management strategy*, the level of mastery with five outcomes: 1) define the different ways in which organizations can be structured, 2) recognize the purpose and importance of functional and operational areas within organizations, 3) distinguish internal and external factors in the formulation of organizational strategies, 4) describe the processes for implementing an organization's strategies, 5) identify the use of theories on organizational behavior applicable to human resources individually and in teams.

The fundamental, intermediate and advanced proficiency levels (IMCP 2019) confirm learning outcomes are categorized into:

- **Fundamental:** these are work situations characterized by low levels of complexity and uncertainty.
 - Define, explain, summarize and interpret principles and theories. Perform assigned tasks using appropriate professional skills.
 - Recognize the importance of values, ethics and professional attitudes in the performance of assigned tasks.

- Solve simple problems and refer complex problems to supervisors
- Provide information and explain ideas clearly, using oral and written communications.
- Intermediate with work situations identified by moderate levels of complexity and uncertainty.
 - Independently apply, compare, and analyze the underlying principles and theories of relevant areas of technical competence to complete work assignments and make decisions
 - Combine technical proficiency and skills to complete work assignments
 - Apply professional values, ethics and attitudes to work assignments, and
 - Present information and explain ideas in a clear way, using oral and written communications, to interested accountants and non-accountants.

In the draft curricula for professional training in accounting within the eleven areas of competence, the names of the compulsory subjects may vary and the learning outcomes may be obtained over several subjects, in the FCA UNAM the curricular map of the Bachelor's Degree in Accounting 2023 is conformed:

TABLE 3
SUMMARY OF THE SUBJECTS OF THE DEGREE IN ACCOUNTING
CURRICULAR MAP 2023

Subjects	Quantity	Percentage	Credits
Mandatory	45	85.71%	384
Elective:			
Professionalizing	7	13.50%	56
Human Development	2	1.78%	16

Source: Prepared by the authors with information on the FCA UNAM curriculum map.

**TABLE 4
CURRICULAR MAP OF THE BACHELOR'S DEGREE IN ACCOUNTANCY 2023**

Curricular map of the bachelor's degree in accounting 2023							
semester							
1*	2*	3*	4*	5*	6*	7*	8*
Fundamental accounting I	Fundamental accounting II	Intermediate accounting I	Intermediate accounting II	Professional optative	Superior accounting	Professional optative	Professional optative
Administration	Marketing	Operations	Human resources	Human development optative	Professional optative	Professional optative	Professional optative
Fundamentals of law	Commercial law	Tax law	Labor law	Costs I	Costs II	Management control	Budget
Mathematical logical reasoning for decision making	Financial mathematics	Descriptive statistic	Inferential statistics	ISR of Moral persons I	ISR of Moral persons II	ISR of Physical persons (except salaries)	Professional optative
Gender and human rights in organizations	Information and Communication Technologies	Human development optative	Internal control systems	Audit I	Audit II	Audit II	Internal audit
Theory of knowledge	Research principles and techniques	Ethics in organizations	Finance I	Finance II	Finance III	Finance IV	Finance V
Microeconomics	Macroeconomy	Analysis of the economic, political and social environment	Sustainable development in organizations	ISR on salaries, social security and local payroll taxes	Indirect contributions and foreign commerce		
Subjects; 7 Hours: 30	Subjects; 7 Hours: 30	Subjects; 7 Hours: 30	Subjects; 7 Hours: 30	Subjects; 7 Hours: 28	Subjects; 7 Hours: 28	Subjects; 6 Hours: 24	Subjects; 6 Hours: 24

Source: Prepared by the authors with information on the FCA UNAM curriculum map.

CONCLUSIONS

The main challenge of introducing international standards in the world is to ensure that the certified public accountant receives the necessary knowledge and skills to perform his or her functions, also taking into account cultural, economic, social and legal differences, in a homogeneous manner and so that, regardless of the variables previously mentioned, accounting information can be created, read, analyzed and interpreted by different actors.

The Academy plays a very important role since it must prepare students and professionals who are capable of understanding the new international standards in order to apply them in the different national contexts that require it, since this knowledge will be reflected in better accounting practices, which in turn will result in an improvement in the quality of the accounting profession, as well as information reflected in decision making that is better adapted to international business realities.

Likewise, the generation of homogeneous information, using the new international standards as a tool, will have significant impacts that will be reflected in objective decision making in the internal and external environment of international business realities, since in a globalized environment, companies must focus their efforts not only on the analysis of micro environments, but also on macro environments, and this is achieved through the presentation of standardized information.

ACKNOWLEDGEMENT

Translated & edited by American Publishing Services (<https://americanpublishingservices.com/>).

REFERENCES

- Cardona, J., & Zapata, M. (2004, June). Estándares internacionales para la formación del contador público. *Revista Contaduría Universidad de Antioquía*, 44, 149–180.
- Facultad de Contaduría y Administración Universidad Nacional Autónoma de México. (2023). *Plan de estudios de la Licenciatura de Contaduría*. Retrieved from https://licenciaturas.fca.unam.mx/docs/contaduria/plan_2023/proyecto.pdf
- García, D. (November). *Efectos de la adopción de las Normas Internacionales de Educación en el ámbito académico el profesional para la formación del contador en países de América Latina* [Tesis de Maestría en Administración].
- IAESB. (2019). *Pronunciamientos Internacionales de Educación*. México: Instituto Mexicano de Contadores Públicos.
- IFAC. (2022). *International Standards 2022*. Retrieved from <https://www.international-standards.org/>
- Instituto Mexicano de Contadores Públicos. (2021, January). *Misión y visión*. Retrieved from <https://imcp.org.mx/que-es-el-imcp/>
- Instituto Mexicano de Contadores Públicos. (2022, January). *Código de ética*. Retrieved from <https://imcp.org.mx/codigo-de-etica-profesional/>
- Kostadinovski, A. (2013). International Education Standards for Professional Accountants. *International Accounting Education Standards*. Retrieved from <http://eprints.ugd.edu.mk/8440/3/INTERNATIONAL%20EDUCATION%20STANDARDS%20FOR%20PROFESSIONAL%20ACCOUNTANTS.pdf>
- Rufino, H., Payabyab, R., & Lim, G. (2018). Competency Requirements for Professional Accountants: Basis for Accounting Curriculum Enhancement. *Review of Integrative Business and Economics Research*, 7(3), 116–128.
- Zepeda, A., Aguilar, E., & Salazar, M. (2014). *La armonización contable en México y su relación con la educación superior* [Tesis de Maestría, Universidad Autónoma de México, México].