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Scientific articles

La formación del arquitecto nicolaíta en los primeros años del siglo XXI

The training of the Nicolaíta architect in the first years of the 21st century

A formação do arquiteto Nicolaíta nos primeiros anos do século XXI

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Resumen

Este trabajo tiene como objetivo presentar los resultados obtenidos mediante el análisis de frecuencias de variables con el fin de determinar el comportamiento en el mercado laboral de egresados de la carrera de Arquitectura de la Universidad Michoacana de San Nicolás de Hidalgo. En tal sentido, se destacan las fortalezas y la versatilidad de los planes de estudios anteriores al actual, así como del plan vigente en la facultad con el propósito de actualizar los contenidos para asegurar la pertinencia de nuestros egresados en un mercado laboral en constante evolución. Los interrogantes fundamentales para este estudio incluyen la pertinencia del programa educativo, la transformación de la profesión y la competencia en el contexto contemporáneo, así como las expectativas y la capacidad de los egresados para integrarse en el mercado laboral. La metodología empleada se sustentó en el enfoque exploratorio, pues se efectuó el análisis de la información proveniente de encuestas realizadas en la facultad y en la propia institución. En las conclusiones se reflexiona sobre la relevancia de estos hallazgos y se ofrece un panorama de las preferencias laborales de los egresados y





su posible impacto en la adaptación de los programas académicos a las demandas del mercado laboral.

Palabras clave: carrera de Arquitectura, análisis de frecuencias de las variables, encuestas de egresados, desempeño laboral.

Abstract

This work has the objective of showing some of the results obtained through the analysis of frequencies of the variables of the surveys of graduates, from this information a study is made on the behavior of the graduates of the architecture career offered by the (Universidad Michoacana de San Nicolás de Hidalgo) in the labor market. This study highlights the strengths and versatility offered by the curricula prior to the current one, and the one currently operating in the faculty, with the purpose of evolving the contents in the search for the relevance of our graduates in the labor market in a constantly changing environment.

The questions that are the starting point for this paper are the relevance of the educational program plan, the transformation of the profession and the competence in the contemporary world, as well as the expectations and capacity of the graduate to integrate into the labor market. The methodology used in this work has an exploratory approach, based on the analysis of the information of the surveys that operate in the faculty and the institution itself. The conclusions will address the relevance of these findings, providing an in-depth understanding of the labor preferences of graduates and their potential impact on the adaptation of academic programs to the demands of the market.

Key words: Architecture career, variable frequency analysis, alumni surveys, job performance



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Resumo

Este trabalho tem como objetivo apresentar os resultados obtidos através da análise de frequências de variáveis para determinar o comportamento no mercado de trabalho dos graduados do curso de Arquitetura da Universidade Michoacana de San Nicolás de Hidalgo. Neste sentido, destacam-se os pontos fortes e a versatilidade dos planos de estudos anteriores ao atual, bem como o plano atual na faculdade com o objetivo de atualizar os conteúdos para garantir a relevância dos nossos licenciados num mercado de trabalho em constante evolução. As questões fundamentais para este estudo incluem a relevância do programa educativo, a transformação da profissão e da competência no contexto contemporâneo, bem como as expectativas e capacidade dos licenciados para se integrarem no mercado de trabalho. A metodologia utilizada baseou-se na abordagem exploratória, uma vez que foi realizada a análise de informações provenientes de pesquisas realizadas na faculdade e na própria instituição. As conclusões reflectem sobre a relevância destas conclusões e oferecem uma visão geral das preferências de trabalho dos diplomados e do seu possível impacto na adaptação dos programas académicos às exigências do mercado de trabalho.

Palavras-chave: Curso de Arquitetura, análise de frequência de variáveis, pesquisas com graduados, desempenho no trabalho.

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Introduction

In this article, an exhaustive statistical analysis is carried out of the professional trajectories of the graduates of the last decade of the Architecture program at the Universidad Michoacana de San Nicolás de Hidalgo. To this end, a detailed comparison is offered that examines job performance in various areas of the architect, such as design, construction, construction supervision, independent work, specialized or technical analysis, as well as management roles and administrative functions.

Through this comparative approach, significant patterns in post-graduation career choices are identified. In addition, various actions are analyzed to address the problem of timely follow-up of graduates in order to establish indicators that guide improvements in the teaching of architecture, since this professional, in the 21st century, must be trained to conceive, design and build. living spaces of any scale, from human to monumental, as well as satisfying the needs of people both in the conception of individual rooms and in any architectural typology.





In addition to this, it must integrate urban planning to meet the needs of human settlements (Rodríguez *et al.*, 2021), taking as references the sustainable development goals (SDGs) outlined in the UN 2030 agenda, which promote a habitat urban towards sustainability (UN-HABITAT, 2024).

The Architecture program at the Universidad Michoacana de San Nicolás de Hidalgo was established by mandate of the H. University Council on January 13, 1978 and began operating on November 15 of the same year (Bedolla *et al.*, 2012). Since its inception, it has had notable acceptance in the society of Morelia and Michoacán, with a considerable enrollment to date, with offices in Morelia and Uruapan, and future plans to open another in Zamora. The Faculty of Architecture welcomes students and graduates from diverse backgrounds, both from different states in Mexico and from other places in the world.

An example of its growth is that between 2003 and 2013 the enrollment of the Faculty of Architecture increased significantly, going from 1,475 students in 2003 to 2,244 in 2013 (FAUM, 2014).

School	2002	2003	2004	2005	2006	2007	2008	2009	2010	2011	2012
cycle	-	-	-	-	-	-	-	-	-	-	-
	2003	2004	2005	2006	2007	2008	2009	2010	2011	2012	2013
New	395	501	633	614	595	532	546	543	545	553	525
student											
S											
Enrolle	1475	1550	1797	1848	1901	1956	2052	2175	2129	2237	2244
d											
student											
S											

 Table 1. Number of students enrolled in the UMSNH Faculty of Architecture from 2003 to

2013

Source: Own elaboration based on data from FAUM et al. (2014)

Figure 1. Students enrolled in the Faculty of Architecture of the UMSNH from 2003 to

2013





Source: Own elaboration based on Aguilar (2018)

During the period between 2003 and 2013, the terminal efficiency of the Architecture degree shows notable growth. In 2003, 73 graduates graduated, a figure that increased to 144 in 2008 and reached 298 in 2012. Table 2 details the number of graduates graduated between 2002 and 2012.

Table 2. Terminal efficiency of the Faculty of Architecture in the period from 2002 to 2012

Generation	2002-	2003-	2004-	2005-	2006-2011	2007-2012
	2007	2008	2009	2010		
Number of	73	77	101	106	110	137
graduates						

Source: Own elaboration based on data from UMSNH (2014)

Figure 2. Terminal efficiency of graduates from the UMSNH Faculty of Architecture from 2003 to 2013



Source: Own elaboration based on Aguilar (2018)

During the period from 2003 to 2013, the number of graduates showed gradual growth with some notable variations. In 2003, a total of 73 graduates graduated, a figure that increased to 144 in 2008. However, in 2009 there was a notable decrease with only 53





graduates. This trend changed dramatically in 2010 with a significant increase to 113 qualified graduates, which continued until reaching a peak in 2012 with 298 qualified architects. In 2013, there was a slight decrease with 242 graduates.

Table 3. Number of graduates who graduated from 2003 to 2013 at the UMSNH Faculty of

 Architecture

Year	2003	2004	2005	2006	2007	2008	2009	2010	2011	2012	2013
Number	73	90	144	162	157	144	53	113	140	298	242
of											
graduated											
graduates											

Source: Own elaboration based on (FAUM, 2014)

Figure 3. Graduates graduated in the period from 2003 to 2013 at the Faculty of

Architecture of the UMSNH



Source: Own elaboration based on Aguilar (2018)

During the period from 2015 to 2018, significant variations are observed in the number of graduates with degrees. In 2015, the number reached 378 graduates, that is, a notable increase compared to the 242 graduates in 2013. However, in 2016, a drastic decrease was experienced with only 41 graduates. The trend was reversed in 2017 with an increase in the number of graduates, although by 2018 it decreased again with a total of 159.

Year corresponding to the	2015	2016	2017	2018	Total number of graduates
degree period					between 2015 and 2018
Graduated graduates	378	41	217	159	795

Table 4. FAUM graduates who graduated from 2015 to 2018

Source: Own elaboration with data from Aguilar (2018)







Figure 4. FAUM graduates with degrees in the period from 2015 to 2018

Source: Own elaboration based on Aguilar (2018)

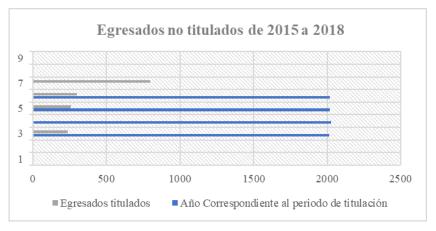
In 2018, the number of graduates was 460, of which only 159 managed to obtain their architectural degree. These data reveal the significant disparity between the number of graduates who enrolled in the degree period and those who managed to obtain the title of architect.

Table 5. Number of FAOM graduates who did not graduate from 2015 to 2018	Number of FAUM graduates who did not graduate from 201	5 to 2018	
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Year corresponding to the	2015	2016	2017	2018	Total number of non-graduates
degree period					between 2015 and 2018
Graduated graduates	236	3	256	301	796

Source: Own elaboration based on Aguilar (2018)

Figure 5. Number of graduates from the UMSNH Faculty of Architecture who failed to obtain the degree in the period from 2015 to 2018



Source: Own elaboration based on Aguilar (2018)

Based on data obtained from the report "Proposal for the organization and implementation of Institutional Tutoring Programs at the IES", it is established that by 2022



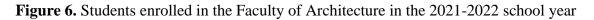


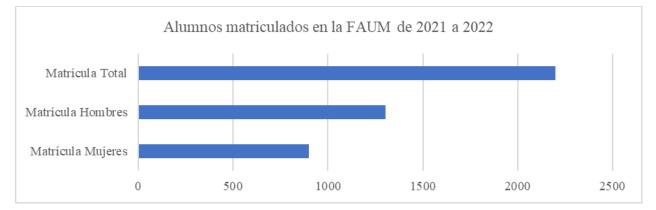
our faculty had an enrollment of 2,200 students, of which 898 belonged to the female gender. and 1302 for men (Aguilar and Bedolla, 2022).

Table 6. Number of enrolled in the Faculty	of Architecture in the year 2022
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Women's registration	Men's registration	Total enrollment		
898	1,302	2,200		
0 11	. 1 1 4 1	1 D 1 11 (2022)		

Source: Own elaboration based on Aguilar and Bedolla (2022)





Source: Own elaboration based on Aguilar and Bedolla (2022)

Finally, it is worth mentioning that the analysis was based on annual surveys, although interrupted by the pandemic, so it is expected to be resumed. In addition, the collaboration with the Coordination of Planning, Infrastructure and University Strengthening has allowed us to carry out frequency analysis of variables from the graduate survey from 2018 to 2023, which provides a more complete vision of the evolution of the faculty. García R., F. (2023).

Materials and methods

The methodology used consisted of the consultation and analysis of annual surveys directed at graduates enrolled during the degree process at the Faculty of Architecture of the Universidad Michoacana de San Nicolás de Hidalgo.

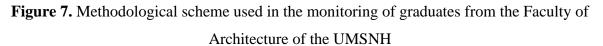
Additionally, as part of the graduate monitoring carried out by this institution, annual consultations are held with graduates who work in both the public and private sectors, either as employees or employers, in government and private entities. Forums are also organized in which graduates and students from different semesters participate, which offer an adequate space to exchange concerns, obtain an insight into the demands of the labor market and





receive practical advice that is of great value when entering the professional field. In other words, these events allow participants to meet and share experiences with graduates active in the construction industry. In this sense, the diversity of professional trajectories of some architects is recognized, which include fields such as the design and execution of murals, jewelry, 3D designs, among others.

Based on the above, a methodological scheme is presented focused on the exploration and analysis of information collected throughout the training process of the architect of the Michoacana University of San Nicolás de Hidalgo. In this way, an attempt is made to evaluate the adequacy of the study plan and curriculum in order to promote effective integration into the labor market. The comparison of data, analysis and monitoring of our graduates through various actions and platforms allows us to design a program that dynamically responds to the demands of a constantly changing market. This commitment translates into an educational offer that includes seminars, courses, workshops, diplomas and postgraduate courses that are highly relevant and competitive in the current workplace.





Source: self made





When comparing the data, it stands out that the majority of architects work in the commercial sector, which suggests a high demand in this specific area. On the other hand, low representation in sectors such as education and the extractive industry could indicate areas with fewer job opportunities for graduates.

It should be noted that the statistical approach used is similar to that described by Javier Parra Olivares. Through this study, we contribute to a deeper understanding of the professional and economic trajectories of graduates, which allows us to recognize the sectors that demand adjustments in academic programs and guidance services (Parra, 2002).

The relevance of this analysis lies in its ability to inform educational institutions and career counselors about the employment trends of graduates. In other words, understanding sectoral preferences can also help adapt academic programs to better meet labor market needs.

In conclusion, this statistical approach provides valuable information on the distribution of graduates in different economic sectors, and highlights areas of concentration and opportunities to improve academic preparation in line with current labor demands.

Results

Based on the data obtained through surveys carried out during the degree process to monitor graduates of the Faculty of Architecture, it can be stated that in the labor market the activities carried out by architects cover the four areas of knowledge offered in our program. educational: design, technology, theoretical-humanistic and urban environmental. Furthermore, it is observed that the most frequent job opportunities for architects are concentrated in the areas of construction and technology, urban environment and architectural composition. On the other hand, professional practice in the theoreticalhumanistic area has a lower presence compared to the other areas.





Fields with	the greatest job opp	ortunities for graduates of the	UMSNH Faculty of
	Jenning in the second sec	Architecture	j i i i i i i i i i i i i i i i i i i i
Theoretical-	Urban-	Architectural composition	Technology
humanistic	environmental		
Architect	Architect	Architect	Construction resident
teacher	Partner	Cartoonist	Work supervisor
Partner	Head of area	Designer	Architect
Head of area	Urban analyst	Head of area	Partner
Technical-	Editor	Responsible for the	Community resident
pedagogical		execution of new plant	
administrative		projects	
Instructor	Public works	Coordinator	Head of area
	architect		
	Urban projects	Space design	Administrator
	assistant		
	Designer	Designer and project	Unit price analyst
		manager	
	Head of	Renderer	Auditor
	Department		
	Project Manager	Assistant	Work manager
	PU Analyst	Public works architect	Civil works supervisor
	Subdivision	Assistant	Project Engineer
	designer		
	Public space	Creator	Civil works supervisor
	designer		
	Landscape	Office Partner	Bidding assistant
		Project coordinator	Coordinator
		Designer	Facility Resident
		Manager	Administrative
			Assistant
			Surveyor
			Programming and cost
			manager
			building resident
			Quality supervisor
			Construction manager
			Works coordinator

Table 7. Fields with the greatest job opportunities for graduates of the UMSNH Faculty of

Architecture

Source: Own elaboration with data from Aguilar (2020)





Regarding the issue of inclusion, we can observe that when comparing the results with previous research, an evolution towards greater gender equality is perceived in the area studied. However, the absence of specific categories for the LGBTTIQ+ community highlights the importance of continuing to refine and expand data collection methods.

In summary, the statistical analysis reveals a notable equity between male and female graduates during the evaluated period. Despite this, the lack of inclusion of LGBTTIQ+ identities highlights the need to constantly adapt and improve research instruments to ensure accurate representation and adequately reflect the diversity of the student population.

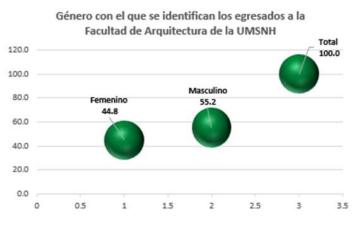


Figure 8. Gender with which graduates of the UMSNH Faculty of Architecture identify

Source: Own elaboration based on the UMSNH (2023)

As part of the study, the reasons that graduates indicated for postponing their degree are highlighted: 11.1% mentioned lack of time, 11.6% expressed lack of financial resources, 3.4% attributed the situation to family reasons and 2.7% mentioned inefficiencies. in the titling procedures. However, an opportunity for improvement is identified by not having included an option for those who prefer not to respond, since the "empty" box represents a high 65.0%, which generates imprecision in the category.





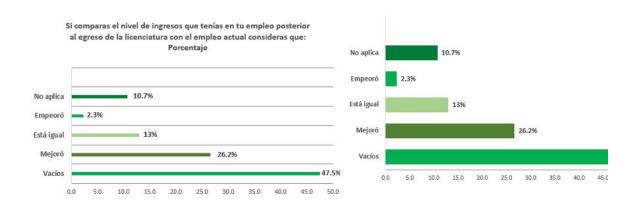


Figure 9. Comparison of work carried out before and after university studies

From a statistical perspective, the high percentage of empty responses underscores the importance of providing more inclusive options that allow for accurate and meaningful data collection. This finding highlights the relevance of identifying common obstacles that graduates face in obtaining degrees, so valuable information must be offered to implement strategies that address these specific challenges.

By comparing these results with previous research, the consistency of economic perception among Architecture degree graduates can be evaluated and trends over time understood. In conclusion, the statistical analysis reveals diverse economic perceptions among graduates of the bachelor's degree in architecture. However, the high proportion of non-responses highlights the need for refinements in question formulation to achieve more complete and representative data collection. This finding contributes significantly to the understanding of the connection between academic training and the economic perception of graduates.







Figure 10. Comparison according to the improvement or not of the salary obtained

The relevance of analyzing the type of organization in which graduates work lies in understanding their distribution in different types of organizations, which provides valuable information to adjust academic training and develop effective job placement strategies. These results can be compared with previous studies or institutional standards to understand trends and efficiently adapt the educational offer.

Regarding the area or department in which the graduates work, the distribution is as follows: 8% are teachers, 7.0% carry out diagnoses and/or consulting, 13.4% are dedicated to technical-administrative tasks, 11.4% are involved in supervision, and 6.6% have operational roles.



Figure 11. Type of organization in which the graduate of the UMSNH degree in Architecture carries out his work activity

Source: Own elaboration based on the UMSNH (2023)



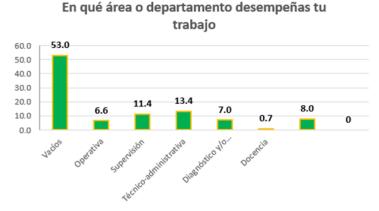
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From a statistical perspective, these data offer a complete view of the various occupational areas in which graduates work, information that is crucial to adjust academic training and adapt effective job placement strategies. The relevance of this analysis lies in understanding the labor distribution of graduates in different areas, which makes it easier to align the academic offer with the current demands of the labor market.

On the other hand, and compared with previous studies, these results allow us to evaluate the consistency in the areas of performance among graduates and can help anticipate possible changes in future employment trends.

Figure 12. Percentage of coincidence of the job carried out with his training as an architect



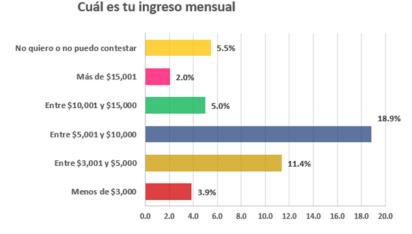
Source: Own elaboration based on the UMSNH (2023)

Regarding the monthly income of the graduates, there is notable diversity, since 18.9% are in the range of \$5,001.00 to \$10,000.00, while only 2.0% report income greater than \$15,001.00. These economic disparities highlight the importance of analysis to inform educational institutions and counseling professionals about post-graduation financial conditions.





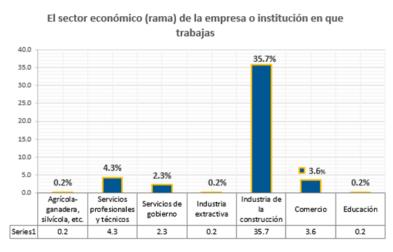
Figure 13. Percentage of monthly income obtained by the UMSNH Architecture graduate



As part of the study, we have obtained data that allows us to analyze the economic sectors where graduates work, broken down into specific categories. The results reveal significant diversity: 35.7% work in the trade sector, followed by 3.6% in the construction industry and 2.3% in professional and technical services. Although education and the extractive industry have a minimal representation (0.2% each), the agricultural, livestock, forestry or other sectors also contribute 0.2%. This analysis also reveals the activities carried out by the graduates of the Faculty of Architecture, that is, supervision (9.1%), work coordination (5.9%) and project management (5.9%).

Figure 14. Economic sector to which the work activity of the graduate of the UMSNH

degree in Architecture belongs



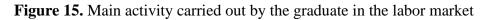
Source: Own elaboration based on the UMSNH (2023)

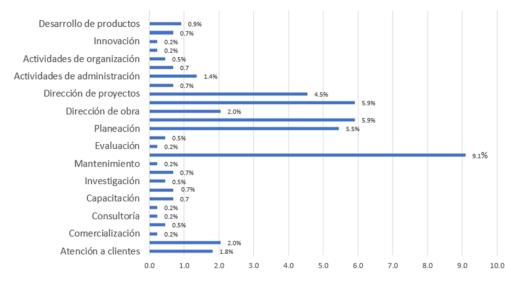
Likewise, a significant presence stands out in technological areas, construction and urban development. Comparison of these figures reveals a high representation in supervisory,





construction coordination, and project management roles, indicating that many graduates occupy leadership positions in the field of architecture. Furthermore, the connection with technology, construction and urban development underlines the critical importance of these areas in the professional practice of architects.





La principal actividad que desempeñas

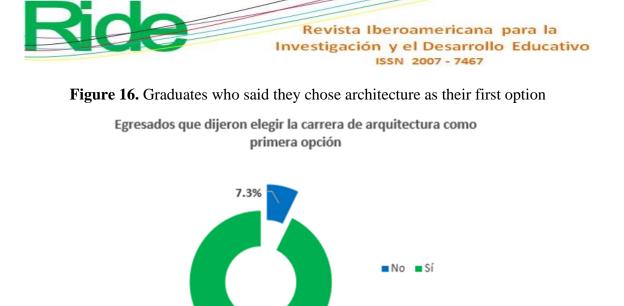
Source: Own elaboration based on the UMSNH (2023)

Finally, it can be stated that the relevance of this analysis lies in its ability to inform both the Faculty of Architecture and students about current labor trends. Indeed, these findings can guide the adaptation of academic programs to better align them with professional development opportunities. In conclusion, this statistical approach highlights the diversity and breadth of activities carried out by architecture graduates, which shows a wide spectrum of professional development opportunities, especially related to technology, construction and urban development.

Discussion

From the data consulted, we can address a recurring question in the academy of our Faculty of Architecture: do students choose the architecture career because of a previous vocation, an anticipated interest in the profession, skills demonstrated upon entry, or are these skills develop with academic instructions over time? This debate is translated into quantitative data through key questions, such as whether a career in architecture was the initial choice and what were the reasons behind that choice.





This comparison between those who chose the career as their first choice and those who did not provides valuable insight into understanding the motivations behind choosing architecture as a field of study. Furthermore, the relationship between the initial choice and the degree process highlights the importance of the vocation in the academic and professional career of architecture students.

Regarding the motivations that led the graduates to choose architecture as a profession, 19.1% mentioned the prestige of the institution, 6.1% pointed out the high demand for the career, 0.7% mentioned the financial remuneration, 0.9% chose Due to the ease of entry, 11.8% highlighted the study plan, and 0.5% referred to the duration of the degree. Furthermore, it stands out notably that 56.6% mentioned having a vocation for architecture, while 2.3% did so due to family tradition and 2.0% for other reasons.





Figure 17. Reason why they chose the Architecture degree at UMSNH

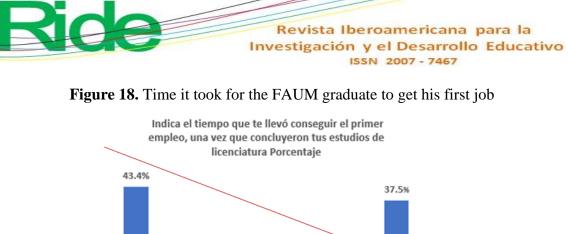


Now, the main contribution of this study lies in offering a detailed vision of the reasons that drive the choice of architecture as a career in order to provide valuable information to guide educational policies and vocational guidance strategies. In this sense, it should be highlighted that understanding the motivations behind professional choice is essential for educational institutions, counselors and policy makers, as it allows them to adjust their approaches to attract and retain committed and motivated students in the field of architecture.

For adequate monitoring, it is relevant to know the time it took for graduates to obtain their first job. On this matter, it can be indicated that 43.4% found employment in less than 6 months, 13.9% between 6 months and a year, 5.0% between 1 and 2 years, 0.2% needed more than 2 years, and a considerable 37.5% indicated that they had not found employment. For a more precise evaluation, it would be useful to compare these data with the year of graduation.

This information is directly related to the question about the reasons for the delay or difficulties in obtaining employment. Graduates mainly identified the lack of qualifications (30.5%) and little professional experience (43.4%) as the main reasons. Other aspects mentioned include personal situation (2.7%), unattractive job offers (6.8%), lack of preparation (1.1%), high demands on the job (4.3%), and a shortage of job offers (9.1%). %).







On the other hand, it is interesting to note that, according to those surveyed, the architecture degree continues to be well accepted in the labor market, which underlines its relevance as part of the UMSNH academic offering. The significance of these findings lies in the importance of maintaining and strengthening academic programs that are aligned with the needs of the labor market to ensure that architecture students are well prepared for a successful transition to the professional world.

Regarding the perception of the graduates about how the Architecture degree coincided with the demands of their work, the results show that 51.6% consider that it facilitated their performance, 12.0% indicated that it had no influence, 0.7% said that it made it difficult and a considerable 35.7% left this item empty in the survey. In other words, these results suggest that the majority of graduates perceive that the Architecture degree adequately aligns with the demands of their work. However, the lack of detailed data by a considerable percentage highlights the importance of delving deeper into individual experiences and perceptions to obtain a more complete and accurate understanding.

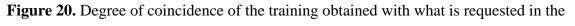






Figure 19. Acceptance of the architecture degree in the labor market to obtain your first job

Another contribution of this study was to highlight the importance of collecting detailed information on graduates' perceptions of how their academic training influences their job performance. The relevance of these findings underscores the need to adapt academic programs to ensure better alignment with changing labor market needs.



company where you work



La coincidencia de la carrera con las necesidades de la empresa / institución

Source: Own elaboration based on the UMSNH (2023)

In short, it can be indicated that through the data collected by the Graduate Monitoring Coordination, analyzed through the degree surveys and the information provided by the Coordination of Planning, Infrastructure and University Strengthening of the Michoacana University of San Nicolás de Hidalgo, a monitoring and statistical analysis of the performance of our department's graduates has been carried out. This analysis covered both the work environment and the understanding of the specific demands of the profession, which





provides a solid basis to make adjustments to the curriculum and contents of our study plans with greater certainty (Aguilar, 2020; Aguilar and Bedolla, 2022; UMSNH, 2023).

Conclusions

The UMSNH Faculty of Architecture, with a history of 45 years since its founding in 1978, has experienced notable growth. Throughout its history, it has conducted three curriculum reviews culminating in the launch of the most recent in 2019, so in 2024 we will celebrate the first graduating class under this new plan.

On the other hand, it is worth noting that from an initial enrollment of 50 students, the faculty has grown significantly, as it currently welcomes 2,485 students at the Morelia Campus and 127 at the Uruapan Campus. In addition, the development of 5 postgraduate courses and 5 seminars that offer dual degrees and updating for graduates stands out. Likewise, professional internships have been implemented for students of the 2019 plan, and forums are organized with graduates that enrich training by sharing work experiences and market needs. The introduction of dual degree postgraduate courses and seminars is a valuable strategy to provide graduates with additional opportunities and update their skills. Likewise, the implementation of professional practices is notable, offering future graduates the opportunity to integrate theory with practice.

Forums with graduates constitute an invaluable platform to share work experiences and understand the needs of the market. Active collaboration with the business sector and the participation of graduates in the design of study plans are fundamental steps to maintain academic relevance.

However, as a recommendation, it is proposed to reinforce the continuity of the annual surveys to keep information on the performance of graduates and market demands updated. In addition, the possibility of expanding the offer of postgraduate courses or seminars should be explored to adapt to the new emerging demands in the field of architecture, since continuous collaboration with the business sector and the active participation of graduates in curricular design can enrich even more academic training. Finally, it would be beneficial to consider implementing mentoring programs to facilitate students' transition into the world of work.

Given the versatility of the architectural profession and its multidisciplinary and interdisciplinary field of work, the study of graduates and improvements in programs and study plans are complex and multifaceted areas. The integration of artificial intelligence,





applied technology, transformation of the urban environment and housing dynamics are just some of the aspects in which this profession is developed. Therefore, there are numerous niches of opportunity in the analysis, process and application of architectural education.

Future lines of research

The study of the behavior of architecture graduates presents various opportunities, among which the need to analyze the different degree modalities offered by the faculty to identify the most beneficial ones, as well as explore the possibility of implementing forms of degrees. more accessible that promote greater terminal efficiency.

On the other hand, it is essential to investigate new ways of evaluating the insertion and work practice of graduates in the market in order to offer more effective options for their continuous professional development. In addition, the fields of knowledge where architecture students need more training and experience during their training can be identified.

Finally, it is pertinent to establish an association of alumni to encourage their participation in the faculty's activities and facilitate closer monitoring of their professional career.

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References

- Aguilar H., E. A. (2018). *Análisis de titulados y no titulados por periodo de titulación*. Coordinación de Seguimiento de Egreso y Pre-Egreso, Facultad de Arquitectura, UMSNH.
- Aguilar H., E. A. (2020). *Porcentajes egresados ámbito laboral*. Coordinación de Seguimiento de Egreso y Pre-Egreso, Facultad de Arquitectura, UMSNH.
- Aguilar H., E. A. y Bedolla, E. (2022). *Propuesta para la organización e implementación de Programas Institucionales de Tutorías en las IES* (documento inédito).
- Bedolla A., J. A. (coord.) (2012). Manual de Inducción 2012. Universidad Michoacana de San Nicolás de Hidalgo, Facultad de Arquitectura.
- FAUM (2014). Manual de Inducción 2014. Universidad Michoacana de San Nicolás de Hidalgo, Facultad de Arquitectura.
- García R., F. (2023). Resultados de la Encuesta Institucional de Egresados. Coordinación de Planeación, Infraestructura, Fortalecimiento Universitario, Universidad Michoacana de San Nicolás de Hidalgo.
- ONU-HABITAT (20-22-2024). *La nueva agenda urbana*. https://onuhabitat.org.mx/index.php/la-nueva-agenda-urbana-en-espanol
- Parra O., J. (2002). Análisis exploratorio y análisis confirmatorio de datos. *Espacio Abierto,* 11(1).
- Rodríguez M., S., Martínez A., O. y González N., C. (2021). Evaluación por simulación dinámica del comportamiento térmico en una casa interés social con la incorporación de estrategias de arquitectura bioclimática en Guanajuato, México. *Ingeniería, Investigación y Tecnología, 22*(1), 1-13. https://doi.org/10.22201/fi.25940732e.2021.22.1.004



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