PLANES DE ESTUDIO

ENA-V
Specialization in Applied Artificial Intelligence
(Edition 2021)

First Trimester

Code	Name	CL	L	U	CA	UDC
OP5085	Elective I	3	0	12	3	0
TC4029	Analytics and Data Science	3	0	12	3	3.5
TC5032	Data Display	3	0	12	3	3.5
		9	0	36	9	7

Second Trimester

Code	Name	CL	L	U	CA	UDC
OP4046	Quality Development Course	3	0	12	3	0
OP5086	Elective II	3	0	12	3	0
		6	0	24	6	0

Third Trimester

Code	Name	CL	L	U	CA	UDC
OP5087	Elective III	3	0	12	3	0
TC5038	Solutions with Technology Application	3	0	12	3	3.5
		6	0	24	6	3.5

Academic credits

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

Program Outcomes

Justification

Currently, any type of company, large or small, traditional or virtual, demands professionals with specialized knowledge in the areas of data science, software engineering, and business intelligence. In the same way, the emerging Industry 4.0 increasingly demands more specialists in support of the great diversity of new technologies, among which we can highlight the Internet of Things (IoT) and autonomous mobility. However, the knowledge and frontier technologies of recent years have shown that intelligent and cutting-edge solutions to the real problems that companies face on a daily basis in each of these issues are enriched and enhanced by framing them within the area of Intelligence. Artificial (AI). In other words, the solutions to current problems will not be in line with our times without the support of AI.

In this context, the Specialty in Applied Artificial Intelligence is an educational option for professional development which will allow you to provide intelligent solutions to the various current problems and challenges. And it does not matter the type of company where you work, local, national, or international, all of them require professionals specialized in topics such as natural language processing, the generation of personalized recommendation systems, the automation of software tests, autonomous mobility, or on business strategies. All these areas of specialization are embedded with a solid AI component that will allow you to enrich the proposed solutions with a degree of innovation and frontier knowledge, according to the demand that Industry 4.0 is requiring.

Target audience

The program is aimed at:

- Professionals from any area interested in acquiring specialized knowledge of AI as a means to consolidate and transform their company through solutions supported by emerging technologies, in support of decision-making and business intelligence.
- Professionals interested in designing and proposing intelligent and innovative solutions supported by any of the issues associated with emerging technologies such as data visualization and science, intelligent software, autonomous mobility, the internet of things, among others.
- Professionals in the engineering area who wish to enter into solutions based on some emerging technology and supported by artificial intelligence, to transform any of the processes or activities of the organization.

Program objective

Train specialists who are agents of change in organizations, who carry out innovation, technological development, and transfer through some emerging technology through solutions based on artificial intelligence.

Graduate competencies

At the end of the program, the graduate will be able to:

- Use specialized knowledge and business intelligence with emerging technologies to propose solutions to real and complex problems that arise in companies.
- Analyze, manage, direct and propose solutions to processes and problems that come from any of the areas of their specialty: software engineering, smart manufacturing, autonomous mobility, or in general from any process that arises from a company with technologies involved in Industry 4.0.
- Communicate clearly, effectively, and efficiently the results of your work as a specialist. This communication capacity includes both the traditional oral and written way, as well as the visualization of data and information. This effective and contextualized communication should be applicable when addressing both colleagues in your work group, as well as your superiors or clients.
- Work in the professional community of their area of expertise with leadership in an efficient, collaborative and ethical manner.

Income profile

Tecnológico de Monterrey seeks to integrate into all its graduate programs a new generation of students who have completed their undergraduate studies and who distinguish themselves by being: talented, enthusiastic people, committed to the development of their environment and to the well-being of the community. society; people who have the potential to successfully complete their graduate program and become leaders with an entrepreneurial spirit, human sense, and internationally competitive.

Therefore, for admission, the applicant participates in a comprehensive selection process that considers:

- The result of the Admission Test to Postgraduate Studies (PAEP).

- The overall grade point average for professional-level studies.

Campus that offer this program

Campus	Number of periods offered	From	Closed for new students
Programas en Línea	Complete	Trimester Jan - Apr 2022	

Last update: 04/May/2021