#### **Automotive Mechanic Area**

It trains student to become competent in manufacturing mechanical elements through use of tools machines taking into consideration the applicable normativity to satisfy the client's needs. As professionals they will be able to lead the automotive mechanical system's support considering diagnosis and repair of the automotive vehicles' optimus functioning.

### Syllabus / Automotive Mechanical Area

First quarter	Second quarter
Lineal algebra	Mathematical functions
Basic chemistry	Probability and statistics
Metrology	Physics
Information technology I	Electricity and magnetism
Technical industrial drawing	Information technology II
English I	Manufacturing I
• Written and oral expression (Spanish)	• English II
	Sociocultural education I
Third quarter	Fourth quarter
Differential calculus	Integral calculus
<ul> <li>Materials structure and properties</li> </ul>	Thermodynamics
Material resistance	Service workshop management
Information technology III	<ul> <li>Automotive electricity and electronics</li> </ul>
Manufacturing II	Internal combustion
Mechanic issues	Engines (Diesel)
<ul> <li>Integrated subjects I</li> </ul>	<ul> <li>Internal combustion engines (gasoline)</li> </ul>
English III	Automotive systems I
Sociocultural education II	English IV
	Sociocultural education III
Fifth quarter	Sixth quarter
Automotive air conditioning and cooling system	Internship
Automotive control instrumentation	
Fuel electronic	
Injection system	
Integrated subjects II	
Automotive systems II	
Computerized and electronic ignition systems	
• English V	
<ul> <li>Oral and written expression (Spanish)</li> </ul>	
Sociocultural education IV	

### Obtain your degree in 2 years

#### Industrial Processes Manufacturing Area

TSU + ENGINEERING 2 degrees in 3 years 8 months

The graduated is able to manage the production through administration tools to cover the client's requirements, as well as manage the supply chain, throughout logistics systems to guarantee the availability of products and materials, managing the manufacturing processes through administration techniques and quality assurance to contribute to the organization competivity.

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### Engineering

### **Production systems**

### Graduate profile

The graduate is able to manage the necessary resources of the organization to assure the planned production according to the requirements of the client, administrating the quality management system, with a systemic approach, considering technical and economic factors contributing to a sustainable development besides generating quality standards, ergonomic safety and ecology to achieve the competitively and cost effectiveness of the organization with a globalized approach.

Seventh quarter	Eight quarter
Applied engineering statistics	Advanced math II
Advanced math I	Industrial metrology
Lean manufacturing	<ul> <li>Development and project following</li> </ul>
Market research	Material engineering
English I	English II
Time management	Work planning and organization
Ninth quarter	Tenth quarter
Operations research	Processes engineering
Materials logistics	Processes automation
Advanced quality topics	<ul> <li>Investment projects analysis</li> </ul>
Integrated subjects I	Integrated subjects II
Processes simulation	English IV
<ul> <li>Advanced manufacturing and design</li> </ul>	Business negotiation
English III	
High performance teams' management	
Eleventh quarter	
Internship	

#### **Bachelor's degree**

#### **Civil protection and emergencies**

#### Graduate profile

It is the professional capable of coordinating the operation of emergency services and civil protection based on the analysis of the risks of agents and disturbing phenomena, intervention plans and actions, administrative tools and applicable regulations, to reduce morbid-mortality and the economic, social and ecological impact.

Seventh quarter	Eight quarter
Physics and material properties	<ul> <li>Physical chemistry and dangerous material</li> <li>Statistics and probability</li> <li>Emergencies</li> <li>Risk analysis</li> </ul>
Disaster anatomy	
Rescuing and searching	
Civil protection administration	
English VII	English VIII
Time administration	Planning and organization of work
Ninth quarter	Tenth quarter
Risk analysis II	Civil protection training
Community intervention in disaster situations	<ul> <li>Urban and environmental planning topics</li> </ul>
<ul> <li>Logistics and civil protection</li> </ul>	Planning and risk management II
Planning and risk management I	Integrated subjects
Strategic planning	Civil protection simulation
English IX	English X
Leadership of high risk teams	Business negotiation
Eleventh quarter	
Internship	

#### **Renewable Energies solar Energy Area**

This professional is able to formulate renewable energy projects through energetic diagnosis and specialized studies focused on the natural resources of a specific environment to promote the sustainable development and the rational and efficient use of energy. Furthermore, implementing photo thermic and photovoltaic systems based on the industrial and social requirements in order to contribute and satisfy the demand of energy and reduce the environment impact.

### Syllabus / Solar Energy Area

First quarter	Second quarter
Probability statistics	Linear algebra
Basic chemistry	Physics
Electricity and magnetism	Thermodynamics
Sustainable development	Electric installations
Information technology	Industrial electronics
Electric circuits	Industrial mechanics
English I	English II
• Oral and written expression I (Spanish)	Sociocultural education III
Sociocultural education I and II	
Third quarter	Fourth quarter
Math functions	Differential calculus
Physical chemistry	<ul> <li>Structure and material properties</li> </ul>
<ul> <li>Industrial instrumentation</li> </ul>	Applied physical chemistry
Electromechanical maintenance	Industrial drawing
Renewable energies	Power electronics
Project formulation	Meteorological stations
Quality	Industrial processes
Integrated subjects I	English IV
English III	Sociocultural education IV
Fifth quarter	Sixth quarter
Integral calculus	Internship
Industrial safety	
Photovoltaic cells	
Solar collectors	
Project management	
Data acquisition	
Multi subject course	
English V	
Oral and written expression II	

Your degree in 2 years

#### Mechatronics

### Automatization area

The professional is able to develop and to maintain the automatization systems and control system using appropriate technology according to standard, technical and safety specifications, to improve and maintain the productive processes. In addition, to implement measurement systems and control under stablished standards for the appropriate function of the industrial processes.

### Flexible manufacturing system area

The professional is able to develop and to maintain the automatization systems and control system using appropriate technology according to standard, technical and safety specifications, to improve and maintain the productive processes. In addition, to implement measurement systems and control under stablished standards for the appropriate function of the industrial processes.

#### Syllabus / Automatization area

First quarter	Second quarter
Linear calculus	Mathematic functions
Physics	Basic chemistry
Electricity and magnetism	Electric circuits
Computing tools	Hydraulic and pneumatic systems
Productive processes	Analog electronics
Dimensional elements	Engine control I
English I	English II
Oral and written expression I (Spanish)	Sociocultural education II
Sociocultural education I	
Third quarter	Fourth quarter
Differential calculus	Integral calculus
Statistics and probability	Material structure and properties
Thermodynamics	Industrial instrumentation
Programmable logical controllers	Electronic circuits analysis
Digital electronics	Digital devices
Mechanical systems I	Programming language
<ul> <li>Integrated subjects I</li> </ul>	Analog devices
English III	English IV
Sociocultural education III	Sociocultural education IV
Fifth quarter	Sixth quarter
Integrated subjects II	Internship
Visual programming	
<ul> <li>Integration of automatic system</li> </ul>	
Microcontrollers	
Virtual instrumentation basis	
Control systems	
English V	
Oral and written expression II	

# Engineering

#### Mechatronics

<ul> <li>Seventh quarter</li> <li>Applied calculus</li> <li>Industrial electricity</li> <li>Computer assisted design</li> <li>Virtual instrumentation basis</li> <li>English I</li> <li>Time management</li> </ul>	<ul> <li>Eight quarter</li> <li>Applied differential equations</li> <li>Engine control</li> <li>Mechanical automation</li> <li>Mechanical design I</li> <li>English II</li> <li>Work organization and planning</li> </ul>
<ul> <li>Ninth quarter</li> <li>Statistics Process control</li> <li>Automatic control</li> <li>Project administration</li> <li>Mechanical systems</li> <li>Mechanical design II</li> <li>English III</li> <li>High-performance team leading</li> </ul>	<ul> <li>Tenth quarter</li> <li>Advanced logical control</li> <li>Flexible manufacturing systems</li> <li>Programmable digital devices</li> <li>Integrated subjects</li> <li>English IV</li> <li>Business negotiation</li> </ul>
Eleventh quarter <ul> <li>Internship</li> </ul>	

# Graduate profile

It is the professional capable of developing automation and control projects, through the design, administration and application of new technologies to satisfy the needs of the productive sector.

# Syllabus / Flexible manufacturing system area

First quarter	Second quarter
Linear calculus	Mathematic functions
Physics	Basic chemistry
Electricity and magnetism	Electric circuits
Computing tools	Hydraulic and pneumatic systems
Productive processes	Analog electronics
Dimensional elements	Engine control I
English I	English II
<ul> <li>Oral and written expression I (Spanish)</li> </ul>	
Sociocultural education I	
Third quarter	Fourth quarter
Differential calculus	Integral calculus
<ul> <li>Statistics and probability</li> </ul>	<ul> <li>Material structure and properties</li> </ul>
Thermodynamics	Mechanical drawing
<ul> <li>Programmable logical controllers</li> </ul>	Manufacturing process I
Digital electronics	Material mechanics
Mechanical systems I	Robotics
<ul> <li>Integrated subjects I</li> </ul>	English IV
English III	Sociocultural education IV
Sociocultural education III	
Fifth quarter	Sixth quarter
<ul> <li>Integrated subjects II</li> </ul>	Internship
Machine dynamic	
<ul> <li>Computer assisted manufacturing</li> </ul>	
<ul> <li>Manufacturing processes II</li> </ul>	
Flexible manufacturing	
<ul> <li>Manufacturing process control</li> </ul>	
English V	
<ul> <li>Oral and written expression II</li> </ul>	

# Lateral egress:

Technical engineering in industrial robotics.

#### Business development logistics and transport area

He is the professional able to manage the process of goods and services sales through strategies, techniques and commercial tools to contribute to the client satisfaction and company development, as well as the paperwork for purchases and supplies according to the organization necessities, policies and procedures.

Also, he is in charge of the coordination of the purchase traffic while designing the logistic system of distribution to assure its arrival in time and manner.

He will be able to work in companies dedicated to national and international supplying transport, goods and services distribution and commercialization, as well as working in organization those that offer logistic operation and outsourcing and even in his own company.

#### Syllabus / Business development and innovation engineering

Seventh quarter	Eight quarter
Business statistics	Financial management
Economy for business	Strategies for new business
Purchase management	Human capital directions I
Corporative law	Corporate creativity
English I	English II
Timing management	Work planning and organization
Ninth quarter	Tenth quarter
Innovation techniques	Financial engineering
Administrative control system	Corporate development
Corporate sales strategies	Human capital direction II
<ul> <li>Integrated subjects I</li> </ul>	Organizational reengineering
Logistics	Integrated subjects II
English III	English IV
Direction of high performance teams	Corporate negotiation
Eleventh quarter	
Internship	

#### Graduate profile

He is the professional able to design commercial plans according to the organization capabilities, to improve its competitiveness in the market, as well as support the corporate development through the human and financial capital optimization, for the organization strengthening.

#### **Industrial Maintenance**

It is the professional able to manage maintenance activities by means of master plans to ensure operation and contribute to the company productivity. It is also his/her responsibility to monitor the replacement, or manufacture of electromechanical system parts in machinery, equipment and industrial networks distribution using standards to keep the system in optimal conditions.

### Syllabus / Industrial maintenance

Linear algebra	
	Mathematical functions
Basic chemistry	Physics
Introduction to maintenance	Electricity and magnetism
Safety and environment	Maintenance management
Information technologies	Maintenance quality
Staff management	Industrial drawing
English I	Methods and work systems
Oral and written expression I	Costs and budgets
Sociocultural education I	English II
Third quarter	Fourth quarter
Differential calculus	Integral calculus
<ul> <li>Probability and statistics</li> </ul>	<ul> <li>Structure and material properties</li> </ul>
Thermodynamics	Electrical machine
Electrical systems	Industrial services networks
<ul> <li>Machinery and mechanisms</li> </ul>	Digital electronics
Analog electronic	Programming principles
<ul> <li>Integrated subjects I</li> </ul>	Hydraulic and pneumatic systems
• English III	English IV
Sociocultural education II	Sociocultural education III
Fifth quarter	Sixth quarter
Electrical installations	Internship
Thermal machinery	
<ul> <li>Manufacturing process maintenance</li> </ul>	
<ul> <li>Robotics and automatization</li> </ul>	
Material engineering	
<ul> <li>Integrated subjects II</li> </ul>	
English V	
Oral and written expression II	
Sociocultural education IV	

### Industrial maintenance engineering

<ul> <li>Seventh quarter</li> <li>Industrial statistics</li> <li>Maintenance and operation protocol</li> <li>Tribology</li> <li>Elective course I (TPM principles)</li> <li>English I</li> <li>Time management</li> </ul>	<ul> <li>Eight quarter</li> <li>Applied differential equations</li> <li>Destructive test</li> <li>TPM and RCM techniques</li> <li>Integrated subjects I</li> <li>English II</li> <li>Work planning and organization</li> </ul>
<ul> <li>Ninth quarter</li> <li>Strategical management for maintenance</li> <li>Predictive mechanical maintenance</li> <li>Automatic system and industrial networks</li> <li>English III</li> <li>High performance staff management</li> </ul>	<ul> <li>Tenth quarter</li> <li>Non-destructive tests</li> <li>Visualization and control processes</li> <li>Integrated subjects II</li> <li>Elective course (Management strategies)</li> <li>English IV</li> <li>Business negotiation</li> </ul>
Eleventh quarter <ul> <li>Internship</li> </ul>	

### Graduate profile

Professional capable of optimize maintenance activities and operational equipment conditions through techniques and reliability tools to increase the equipment efficiency and reduce maintenance costs as a way to achieve sustainability and competitiveness.

As well as to decide maintenance strategies through the analysis of financial, economical, technological and human factors.

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### Accounting

It is the professional integrally trained, capable of evaluating financial operations in the economic field by applying the norms of financial information, and correctly making decisions that can optimize resources.

# Syllabus / Accounting

First quarter	Second quarter
Mathematics I	Statistic
<ul> <li>Information technology I</li> </ul>	Information technology II
Civil rights	Commercial law
Basic accounting	Intermediate accounting
Administration foundations	Labor law
English I	Economy
Oral and written expression I (Spanish)	• English II
Sociocultural education I	Sociocultural education II
Third quarter	Fourth quarter
Financial mathematics	Audit fundamentals
Company accounting	Cost accounting I
Advanced accounting	Financial management
<ul> <li>Introduction to tax laws</li> </ul>	Budgets
<ul> <li>Analysis and interpretation of financial statements</li> </ul>	Taxation of liable people
Quality	Foreign commerce
<ul> <li>Integrated subjects I</li> </ul>	English IV
English III	Sociocultural education IV
Sociocultural education III	
Fifth quarter	Sixth quarter
Financial auditing	Internship
Cost accounting II	
Legal persons taxes	
Project financial evaluation	
Wages and salaries	
Integrated subjects II	
English V	
Oral and written expression II (Spanish)	

### **Certified Public Accountant**

Seventh quarter	Eight quarter
Financial structure	Capital structure
Special accountings	Legal persons tax simulator
Legal persons tax simulator	Government accounting
English VI	English VII
Time management	Work planning and organization
Ninth quarter	Tenth quarter
<ul> <li>Costs and stocks management</li> </ul>	Tax auditing
Tax simulator of legal persons non-lucrative	Taxing defense seminar
Government auditing	Cost administration for decision making
Financial evaluation	Integrated subjects II
Integrated subjects I	Integrated subjects III
Wages and salaries	Human resources administration I
English VIII	English IX
High performance equipment direction	Company bargaining
Eleventh quarter	
Internship	

#### Graduate profile

The public accountant is the professional who will be able to improve the efficiency and profitability of enterprises, as well as planning, and advising on accounting, financial and tax matters, supported by the use of vanguard software and tools.

This professional is characterized by his/her positive attitude in favor of the economic entity, independence of criterion, personal responsibility, integrity and an ethical sense.

#### Business development logistics and transport area

He is the professional able to manage the process of goods and services sales through strategies, techniques and commercial tools to contribute to the client satisfaction and company development, as well as the paperwork for purchases and supplies according to the organization necessities, policies and procedures.

Also, he is in charge of the coordination of the purchase traffic while designing the logistic system of distribution to assure its arrival in time and manner.

He will be able to work in companies dedicated to national and international supplying transport, goods and services distribution and commercialization, as well as working in organization those that offer logistic operation and outsourcing and even in his own company.

#### Syllabus / Business development logistics and transport area

First quarter	Second quarter
Mathematics	Business statistic
Enterprise environment	Business computing II
Management	Consumer study
Business computing I	Purchase
Marketing fundamentals	Budget
Quality	Sales paperwork
English I	English II
<ul> <li>Oral and written expression I (Spanish)</li> </ul>	Sociocultural education II
Sociocultural education I	
Third quarter	Fourth quarter
<ul> <li>Applied mathematics to transportation</li> </ul>	International logistics I
<ul> <li>Business logistics introduction</li> </ul>	National commerce (trading)
Basis of transportation	Handling of materials
Strategic marketing	<ul> <li>Logistics geography and infrastructure</li> </ul>
Selling strategies	Examination and maintenance of transportation
Warehouse management	equipment
<ul> <li>Integrated subjects I</li> </ul>	<ul> <li>Information technologies in logistics</li> </ul>
English III	English IV
Sociocultural education III	Elementary French
	Sociocultural education IV
Fifth quarter	Sixth quarter
International logistics II	Internship
Passengers transportation	
Performance indicators in logistics	
Integrated subjects II	
<ul> <li>International commerce (trading)</li> </ul>	
English V	
Business French	
Business English	
<ul> <li>Oral and written expression II (Spanish)</li> </ul>	

### Syllabus / Business development and innovation engineering

Seventh quarter	Eight quarter
Business statistics	Financial management
Economy for business	Strategies for new business
Purchase management	Human capital directions I
Corporative law	Corporate creativity
English I	English II
Timing management	Work planning and organization
Ninth quarter	Tenth quarter
Innovation techniques	Financial engineering
Administrative control system	Corporate development
Corporate sales strategies	Human capital direction II
<ul> <li>Integrated subjects I</li> </ul>	Organizational reengineering
Logistics	Integrated subjects II
English III	English IV
• Direction of high performance teams	Corporate negotiation
Eleventh quarter	
Internship	

#### Graduate profile

He is the professional able to design commercial plans according to the organization capabilities, to improve its competitiveness in the market, as well as support the corporate development through the human and financial capital optimization, for the organization strengthening.

### Network and telecommunications area

Is the professional capable of implementing and administering telecommunications networks and computer services that guarantee the optimal management of information of the organizations, as well as implementing telecommunications links that satisfy the communication needs of the organizations.

#### Computer systems area

Is the professional capable of implementing software applications through programming techniques, considering the requirements of the organization to streamline their processes, in addition to providing technical support to computer equipment, operating systems and local networks according to the technical needs that ensure optimum Functioning of its computer resources.

#### Syllabus / Network and telecommunications area

First quarter	Second quarter	
Logical thinking skills development	Mathematical thinking skills development	
	Programming	
Technical support	Data bases	
Programming methods	Analysis and system design principles	
Networking principles	Local networks	
English I	English II	
Oral and written expression I (Spanish)	Sociocultural education II	
Sociocultural education I		
Third quarter	Fourth quarter	
Informatics function management	Telecommunicating systems I	
Web apps development	WAN networks	
OS (operating Systems)	Analogical systems	
Integrated subjects I	Server management I	
Data network toggling	English IV	
Data network commuting	Sociocultural Education IV	
Telecommunication applied math		
English III		
Sociocultural education III		
Fifth quarter	Sixth quarter	
Project management	Internship	
Telecommunication systems II		
Digital systems		
Server management II		
Integrated subjects II		
English V		
Oral and written expression II (Spanish)		

### Syllabus / Information Technologies Engineering

Seventh quarter	Eight quarter
Mathematics applied to IT	IT project management I
Elective course	Data bases for apps
Economics engineering	Convergent networks
Apps programming	IT quality systems
Business processes model	English VII
English VI	Work planning and organization
Time management	
Ninth quarter	Tenth quarter
IT project management II	Applied statistics
Web applications development	IT systems audit
Integrated subjects I	Information safety
Elective course II	Elective course
English VIII	Integrated subjects II
High performance staff management	English IX
	Business negotiation
Eleventh quarter	
Internship	

### Graduate profile

It is the professional capable to lead IT related projects in order to contribute to the productivity and strategy objectives achievements, by the appropriate methodologies, beside assessing systems in order to stablish remedial actions and organization innovation by the application of new technologies.

#### Human resources administration

It is the professional with solid academic training, is able to evaluate the current and future financial situation through projection and analysis skills. In order to optimise the organization resources, to formulate planning strategies according to the organization needs and its environment to achieve planned goals and manage human capital according to the structure, needs and normativity to reach the organization goals.

### Syllabus / Human Resources Administration

First quarter	Second quarter
Informatics	Accounting II
Statistics	Planning strategies
Accounting	Administrative procedures
Foundations managements	Marketing fundamentals
English I	Financial statements analysis
Oral and written expression I (Spanish)	English II
Sociocultural education I	Sociocultural education II
Third quarter	Fourth quarter
<ul> <li>Theory and organizational development</li> </ul>	Human capital management
Human capital management	Human capital development I
Finance planning	Payroll and salaries
Integrated subjects I	Social security and social welfare
Labor law	Human capital integration
Position analysis	English IV
English III	Sociocultural education IV
Sociocultural education III	
Fifth quarter	Sixth quarter
<ul> <li>Organization and quality control</li> </ul>	Internship
Human capital development II	
Payroll and salaries	
<ul> <li>Occupational safety and health</li> </ul>	
English V	
<ul> <li>Oral and written expression II (Spanish)</li> </ul>	
<ul> <li>Integrated subjects II</li> </ul>	

#### Syllabus / Development and business innovation

Seventh quarter	Eight quarter
Business statistics	Financial management
Business economics	Business strategies
Purchasing management	Human capital management
Labor law	Business creativity
English I	English II
Time management	Planning and work organization
Ninth quarter	Tenth quarter
Innovation strategies	Financial management
Control management systems	Business development
Corporative sales strategies	Human capital management II
Integrated subjects I	Organizational development
English III	Organizational reengineering
High performance management	Integrated subjects II
	English IV
	Business negotiation
Eleventh quarter	
Internship	

### Graduate profile

The professional will be able to design business plans according to the company's needs. In order to improve its competitiveness in the market as well as to provide support the business development through an optimus financial and human capital to consolidate company.

#### Administration area

### Administration and evaluation projects

### It is the professional

With a solid academic education, proficient to evaluate the current and future financial situation of the organization to optimized the resources, is able to develop a strategic planning according to the needs and the environment of the company. Evaluates and suggests projects, investment programs and action plans for new production units and ongoing enterprises, through the application of techniques and financial and market methods to attend the organization needs and the region's economic development.

#### Syllabus / Administration area / Administration and evaluation projects

First quarter	Second quarter
Informatics	Accounting II
Statistics	Strategic planning
Accounting I	Administrative procedures
Principles of administration	Principles of marketing
English I	Analysis and interpretation of financial statements
• Oral and written expression I (Spanish)	English II
Sociocultural education I	Sociocultural education II
Third quarter	Fourth quarter
<ul> <li>Theory and organizational growth</li> </ul>	<ul> <li>Informatics applied to business</li> </ul>
<ul> <li>Administration of working capital</li> </ul>	Administration of projects I
Financial planning	Local and regional growth II
<ul> <li>Integrated subjects I</li> </ul>	Technical study
Applied economics to business	Financial study
<ul> <li>Local and regional growth I</li> </ul>	Production systems
Market research	English IV
English III	Sociocultural education IV
Fifth quarter	Sixth quarter
Quality	Internship
Administration of projects II	
Commercialization	
Financial economic evaluation	
Business advisory	
Integrative course II	
English V	
<ul> <li>Oral and written expression II (Spanish)</li> </ul>	

### Engineering

#### Business growth and project management

Seventh quarter	Eight quarter
Research seminar	Legal organization status
Applied math	Advisory application and design
Business diagnosis	National financial system
Information management	English VII
English VI	<ul> <li>Job organization and planning</li> </ul>
Time administration	
Ninth quarter	Tenth quarter
<ul> <li>Organizations management</li> </ul>	Strategic management
Marketing management	Financing application
Financial management	Integrated subjects II
Integrated subjects I	Administrative audit
English VIII	English IX
Management of high quality equipment	Business negotiation
Eleventh quarter	
Internship	

### Graduate profile

The engineer in business growth and project management is the professional with strategic thinking directed to results, encourages and promotes the creation of new projects and business, which contribute to the economic and business growth.

The engineer is known by its positive attitude and entrepreneur spirit, with the ability of negotiating, willing to work independent, in team work and multidisciplinary.

#### Paramedic

TSU + ENGINEERING 2 degrees in 3 years and 8 months

It is the professional capable of coordinating and providing pre-hospital care and to rescue victims based on scene evaluation, by means of techniques and protocols corresponding to the applicable normativity, to preserve victims' functions and lives from the scene until the reception unit; moreover, the student will be able to coordinate the emergency care and prevention of safety and hygiene risks, through statistic tools and terrestrial emergency unit operations to contribute in order to preserve victims' lives and for the improvement in occupational health.

First quarter	Second quarter
Chemistry	Bio-chemistry
Mathematics	Physiology
Anatomy	Physics
Exploratory technique	Vital support protocols
Electromedic equipment management	ER management I
Initial physical conditioning	Intermediate physical conditioning
English I	English II
Oral and written expression I (Spanish)	Socio-cultural education II
Sociocultural education I	
Third quarter	Fourth quarter
Research Methodology	Emergency comunication
<ul> <li>Information technology</li> </ul>	Emergency physicology
<ul> <li>Prehospital support in trauma</li> </ul>	Rescue techniques
Physiopathology	Industrial safety I
ER management II	Operative coordination
<ul> <li>Violence scenes management</li> </ul>	Physical training I
<ul> <li>Advanced physical conditioning</li> </ul>	Integrated subjects I
English III	English IV
Sociocultural education III	Sociocultural education IV
Fifth quarter	Sixth quarter
Emergency comunication	Internship
Emergency physicology	
Rescue techniques	
Industrial safety I	
Operative coordination	
Physical training I	
<ul> <li>Integrated subjects I</li> </ul>	
English IV	
<ul> <li>Sociocultural education IV</li> </ul>	

#### **Bachelor's degree**

#### **Civil protection and emergencies**

#### Graduate profile

It is the professional capable of coordinating the operation of emergency services and civil protection based on the analysis of the risks of agents and disturbing phenomena, intervention plans and actions, administrative tools and applicable regulations, to reduce morbid-mortality and the economic, social and ecological impact.

Seventh quarter	Eight quarter		
Physics and material properties	Physical chemistry and dangerous material		
Disaster anatomy	Statistics and probability		
Rescuing and searching	<ul><li>Emergencies</li><li>Risk analysis</li></ul>		
Civil protection administration			
English VII	English VIII		
Time administration	Planning and organization of work		
Ninth quarter	Tenth quarter		
Risk analysis II	Civil protection training		
Community intervention in disaster situations	<ul> <li>Urban and environmental planning topics</li> </ul>		
<ul> <li>Logistics and civil protection</li> </ul>	Planning and risk management II		
Planning and risk management I	Integrated subjects		
Strategic planning     Civil protection simulation			
English IX	English X		
Leadership of high risk teams	Business negotiation		
Eleventh quarter			
Internship			

### **Business Development Marketing Area**

It is the professional capable of managing the sales process through strategies, techniques, tools, and the know-how to contribute to the development of the organization. This alumnus is also able to manage supplies acquisition and control through company's procedures and policies to control inventories and stock, ensuring availability through the design of marketing strategies and identification of business opportunities for national and international strengthening of organizations.

Syllabus /	/ Business	Development	Marketing Area
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First quarter	Second quarter
Math	Business Statistics
Business Environment	<ul> <li>Information Technologies for Business II</li> </ul>
Administration	<ul> <li>Consumer Studies</li> </ul>
<ul> <li>Information Technologies for Business I</li> </ul>	Acquisitions
<ul> <li>Fundamentals of Marketing</li> </ul>	Budgets
	C C
English I     Oral and Micittan Europeanian I (Engrich)	English II     Casicaultural Education II
Oral and Written Expression I (Spanish)	Sociocultural Education II
Sociocultural education I	
Third quarter	Fourth quarter
Finance	Business Planning
Sales Strategies	Market Research II
Stock Management	Marketing Blending
Integrated subjects I	Advertisement Production I
Market Research I	International Business
Strategic Marketing	English IV
Integral Marketing Media	Sociocultural education IV
• English III	
Sociocultural education III	
Fifth quarter	Sixth quarter
Strategic Marketing Planning	Internship
Exports Plan	
E-Commerce	
Advertisement Production II	
Human Relations	
Integrated subjects II	
English V	
Oral and written Expression II (Spanish)	

### Engineering in business development

We aim at training specialists able to design commercial plans according to the organization's capability, in order to improve it's competitively in the market as well as to help business development throughout optimization of human and financial capital and to help consolidate the organization.

Seventh quarterBusiness StatisticsBusiness EconomicsShopping ManagementCorporate LawEnglish VITime Management	<ul> <li>Eight quarter</li> <li>Finance Management</li> <li>New Business Strategies</li> <li>Human Resources Management I</li> <li>Business creativity</li> <li>English VII</li> <li>Planning and Organization of Projects</li> </ul>
Ninth quarterInnovation StrategiesManagement Control SystemsCorporate Sales StrategiesIntegrated subjects ILogisticsEnglish VIIIHigh Performing Teams Management	<ul> <li>Tenth quarter</li> <li>Financial Engineering</li> <li>Business development</li> <li>Human Resources Management II</li> <li>Organization's Reengineering</li> <li>Integrated subjects II</li> <li>English IX</li> <li>Business Negotiation</li> </ul>
<ul><li>Eleventh quarter</li><li>Internship</li></ul>	

# SYLLABUS / Engineering in business development

#### Graduate profile

It is the professional capable of designing business plans according to the capabilities of the organization, to improve its competitiveness in the market; as well as to support business development through the optimization of financial and human capital, for the consolidation of the organization