

**UNIVERSIDAD AUTÓNOMA DE BAJA CALIFORNIA**  
**COORDINACIÓN GENERAL DE FORMACIÓN BÁSICA**  
**COORDINACIÓN GENERAL DE FORMACIÓN PROFESIONAL Y VINCULACIÓN UNIVERSITARIA**  
**PROGRAMA DE UNIDAD DE APRENDIZAJE**

**I. IDENTIFICATION INFORMATION**

1. **Academic Unit:** Faculty of Engineering, Mexicali; Faculty of Chemical Sciences and Engineering, Tijuana; Faculty of Engineering and Business, Tecate; Faculty of Engineering, Architecture and Design, Ensenada and School of Sciences of Engineering and Technology, Valle de las Palmas.
2. **Study Program(s):** Aerospace Engineering, Civil Engineering, Electrical Engineering, Computer Engineering, Electronic Engineering, Renewable Energy Engineering, Mechatronics Engineering, Industrial Engineering, Mechanical Engineering, Chemical Engineering, Nanotechnology Engineering, Software Engineering and Bioengineering.
3. **Plan Duration:** 2019-2
4. **Name of Learning Unit:** Administration
5. **Code:** 33552
6. **HC:** 00 **HL:** 00 **HT:** 03 **HPC:** 00 **HCL:** 00 **HE:** 00 **CR:** 03
7. **Learning stage to which it belongs:** Disciplinary
8. **Character of Learning Unit:** Obligatory
9. **Requirements for enrollment in learning unit:** None



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## **II. GENERAL PURPOSE OF THE COURSE**

This subject has the purpose of providing the engineering student with theoretical-practical knowledge to develop the administrative process and resource management in the field of applied engineering in the public or private sector.

This subject is important so that the student acquires the foundations of the administration and develops skills of organizational analysis and facilitates them to incorporate and to direct work groups or departments in his professional exercise.

This subject belongs to the disciplinary stage with mandatory character. In addition, it is part of the administrative economics area for educational engineering programs.

## **III. COURSE COMPETENCIES**

Analyze the structure of an organization focused on the field of engineering, through the identification of the administrative process, for the optimization of resources and decision making, with a willingness to work in teams, responsibility and tolerance.

## **IV. EVIDENCE OF PERFORMANCE**

Prepares and delivers the analysis of an engineering project for interest to the public and private sector, which contains the description of the administrative process stages. That includes the situational diagnosis and the resources planning.

## V. DEVELOPMENT BY UNITS

### **Content:**

1. Administration and Company
  - 1.1 Administration concept
    - 1.1.1 Concepts Elements
    - 1.1.2 Administration characteristics
    - 1.1.3 Administration Process
    - 1.1.4 Criteria of the Administrative Process
    - 1.1.5 Administration Institutional Values
  - 1.2. Company concept
    - 1.2.1 The Company and the Administration
    - 1.2.2 The Company contextualized as a Company
    - 1.2.3 Company Functions
    - 1.2.4 Companies Classification
    - 1.2.5 Purposes or Institutional Values
    - 1.2.6 Activity Areas
    - 1.2.7 Resources
2. Administrative Process
  - 2.1. Planning
    - 2.1.1 Importance
    - 2.1.2 Principles
    - 2.1.3 Typology
    - 2.1.4 Types
    - 2.1.5 Investigation
    - 2.1.6 FODA Matrix
    - 2.1.7 Mission and View
    - 2.1.8 Purposes and Characteristics
    - 2.1.9 Objectives and their classification
    - 2.1.10 Strategies and their Guidelines
    - 2.1.11 Politics and their classification
    - 2.1.12 Programs and their classification
    - 2.1.13 Budgets and their classification
  - 2.2 Organization
    - 2.2.1 Importance
    - 2.2.2 Principles
    - 2.2.3 Stages

- 2.2.4 Typology
- 2.2.5 Reorganization
- 2.2.6 Techniques
- 2.3 Directive
  - 2.3.1 Importance
  - 2.3.2 Principles
  - 2.3.3 Stages
- 2.4 Control
  - 2.4.1 Importance
  - 2.4.2 Principles
  - 2.4.3 Process
  - 2.4.4 Control System Implementation
  - 2.4.5 Control Characteristics
  - 2.4.6 Factors that are related with control
  - 2.4.7 The control and its periodicity
  - 2.4.8 Control by functional areas
  - 2.4.9 Control Techniques
- 3. PyMEs for Human Talent Management
  - 3.1 Human factor importance
    - 3.1.1 Applicable Legislation
    - 3.1.2 Job Description
    - 3.1.3 Administration of salaries and compensations
    - 3.1.4 Recruitment, Selection and Hiring Process
    - 3.1.5 Training and Staff Development
    - 3.1.6 Performance Evaluation System

## VI. STRUCTURE OF PRACTICES

Practice No.	Proficiency	Description	Support materials	Time
<b>UNIT I</b>				
1	Identify the characteristics of the administration, through documentary research of its theoretical and methodological foundations, to understand the implicit criteria within the administrative process, with a critical and analytical attitude.	Check different documentary sources and identify the characteristics, concepts, and theories of the administration. Make notes, dialogue tables with classmates where the teacher will act as mediator.	-Computer -Internet -Bibliography -workshop notebook	4 hours
2	Identify the characteristics and function of the administration and the company, through the study of their conceptual and theoretical definitions in order, to recognize their application in the business context, with a critical and analytical attitude.	Conduct an investigation of a company or organization and identify their characteristics and its classification. Delivery a technical report	-Computer -Internet -Bibliography -workshop notebook	4 hours
3	Analyze and interpret the purposes and characteristics of Planning within a company, to know its function and the importance of the administrative process, through a theoretical-practical approach, with a responsible analytical and committed attitude.	Perform the analysis of the planning process of a company and shares the results of your analysis with the group. Emphasizes its purposes, objectives, strategies, programs, budgets and procedures. Delivery a written work and share the work with the group through an exhibition.	-Internet -Bibliography -sheets -Computer -Projector -Rubric -workshop notebook	12 hours
4	Analyze and interpret the organizational structure, through the organization chart, job description, salary tabulator and resource coordination, to optimize	Performs the analysis of the organization process within the same selected company. Emphasizes the division of labor in the organizational chart, job	-Internet -Bibliography -sheets -Computer -Projector	6 hours

	resources and facilitate work, with a responsible, analytical and committed attitude.	descriptions and salary tabulator. Delivery a written work and share it with the group, through an exhibition.	-Rubric -workshop notebook	
5	Analyze and interpret the purposes and characteristics of the Directive, to ensure efficiency and effectiveness within the administrative process, through a theoretical-practical, approach with a responsible, analytical and committed attitude.	Performs the analysis of the management process within the same selected company. Emphasizes decision making, communication, motivation, supervision and effective leadership. Delivery a written work and share with the group through an exhibition.	-Internet -Bibliography -sheets -Computer -Projector -Rubric -Workshop notebook	6 hours
6	Analyze and interpret the purposes and characteristics that the Control has within a company, to guarantee the fulfillment of the established objectives, through a theoretical-practical approach, with a responsible, analytical and committed attitude.	Performs the analysis of the Control process within the same selected company. Emphasizes the measurement and verification of indicators, standardization, feedback and decision making. Delivery a written work and share it with the group through an exhibition.	-Internet -Bibliography -Sheets -Computer -Projector -Rubric -Workshop notebook	6 hours
7	Identify the performance of the human talent in an organization by reviewing the elements and the process of recruitment, selection and training, to know and interpret the bases that support this process, with empathy, objectivity, and respect.	Analyze the process of recruitment, selection, hiring of personnel and evaluation of performance in an organization. Make a report that includes the administrative process focused on human resources and share your experience with the group. Characteristics: Know the practicality of the theory within a real context. Procedure: Choose and schedule a visit to a company in the municipality (preferably one company which the administrative process was analyzed).	-Sheets -Pen -Rubric	6 hours

8	Describe the structure of an organization focused on the field of engineering, through the application of the administrative process in order, to diagnose the situation of the organization and the planning resources, with a disposition to team work, responsibility and tolerance.	Prepares and delivers the analysis of an engineering project of interest to the public or private sector which contains the description of the stages of the administrative process. That includes the situational diagnosis and the planning of the resources		6 hours
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## VII. WORK METHOD

**Framing:** The first day of class the teacher must establish the work form, evaluation criteria, quality of academic work, rights and obligations teacher-student.

**Teaching activities:**

Employs exhibition techniques, use discussion tables, delivery of bibliographic material, advise and provide feedback on the topics and activities carried out, promotes the active participation of students, and present case studies to exemplify the themes.

**Students activities:**

Analysis of materials proposed by the teacher, literature research electronically, work collaboratively, discussion about printed materials, make exhibitions in class, preparation of business project in written and / or electronic form, participate in the discussion tables, delivery reports of the analyzes carried out in the chosen organizations.

## VIII. EVALUATION CRITERIA

The evaluation will be carried out permanently during the development of the learning unit as follows:

### Accreditation criterion

- 80% attendance to have the right to ordinary exam and 70% attendance to be entitled to extraordinary examination according to the School Statute articles 71 and 72.
- Scaled from 0 to 100, with a minimum approval of 60.

### Evaluation Criterion

Exams (2).....	20%
Exhibition in class .....	20%
Punctuality in tasks delivery.....	20%
Perfomance evidence.....	40%
(Analysis of an engineering project)	
<b>Total.....</b>	<b>100%</b>

## IX. BIBLIOGRAPHY

Required	Suggested
<p>Lussier, R. (2018). <i>Management Fundamentals</i>. United States: SAGE.</p> <p>Münc, L. &amp; García, J. (2015). <i>Fundamentos de Administración</i>. México: Trillas.</p> <p>Münc, L. (2014). <i>Administración; gestión organizacional, enfoques y proceso administrativo</i>. Recuperado de <a href="https://libcon.rec.uabc.mx:4460/Pages/BookDetail.aspx?b=1524">https://libcon.rec.uabc.mx:4460/Pages/BookDetail.aspx?b=1524</a></p> <p>Robbins, S., y Coulter, M. (2010). <i>Administración</i>. Recuperado de <a href="https://libcon.rec.uabc.mx:4460/Pages/BookDetail.aspx?b=238">https://libcon.rec.uabc.mx:4460/Pages/BookDetail.aspx?b=238</a> [clásica]</p>	<p>Benavides, P. R. (2014). <i>Administración</i>. (2<sup>a</sup>. ed.). Recuperado de <a href="https://libcon.rec.uabc.mx:4431">https://libcon.rec.uabc.mx:4431</a></p> <p>Chiavenato, I., y Villamizar, G. (2002). <i>Gestión del talento humano; el nuevo papel de los recursos humanos en las organizaciones</i>. Bogotá: McGraw-Hill. [clásica]</p> <p>Gray, C. F., &amp; Larson, E. W. (2009). <i>Administración de proyectos (4<sup>a</sup>. ed.)</i>. Recuperado de <a href="https://libcon.rec.uabc.mx:4431">https://libcon.rec.uabc.mx:4431</a> [clásica]</p> <p>Gutiérrez, K. M., &amp; Molinares, G. A. (2018). <i>Recursos Humanos: Desarrollo organizacional como un proceso de cambio</i>. Recuperado de <a href="http://repositorio.unan.edu.ni/7830/1/18329.pdf">http://repositorio.unan.edu.ni/7830/1/18329.pdf</a></p> <p>Thompson, A. A., Gamble, J. E., &amp; Peteraf, M. A. (2012). <i>Administración estratégica: teoría y casos</i>. (18<sup>a</sup> ed.). Recuperado de <a href="https://libcon.rec.uabc.mx:4431">https://libcon.rec.uabc.mx:4431</a>[Clásica]</p>

## IX. PROFESSOR PROFILE

The teacher of this course must have a Bachelor's degree in Business Administration, related area or alternatively an engineer, preferably with a postgraduate degree in economic-administrative area with at least three years of work experience in administrative areas, management and direction of projects with minimum teaching experience of three years, must be responsible, respectful, promote the active participation of the student, have skills in the TIC management.