

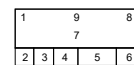
Program accredited by the EAC Accreditation Commission of ABET, <https://www.abet.org>

Program accredited by CACEI, <http://cacei.org.mx>

COLLEGE OF ENGINEERING COURSE CLASSIFICATION



NOMENCLATURE



- Academical notes
- Number of lecture hours per week
- Number of laboratory hours per week
- Number of credits
- Course identification number for the College of Engineering

- CACEI Identification Key
- Course name
- Level
- Previous course key
- Elective course

CACEI CLASSIFICATION

- CB. Basic science and mathematics
- CI. Engineering science (basic engineering)
- DI. Engineering design
- IA. Applied engineering
- CS. Social sciences and humanities
- CE. Economic-administrative sciences
- CC. Complementary courses

ELECTIVE COURSES:

BRANCH: MECHANICAL				
5686 MECHANICAL DESIGN B 4 1 9 5687 CI	5604 COMPUTERIZED NUMERICAL CONTROL 3 2 8 5631 IA	5667 REFRIGERATION AND AIR CONDITIONING 5 0 10 5515 IA	4 MATERIALS HANDLING 5 0 10 5601 IA	4 MACHINE FOUNDATION 3 0 6 5541 IA
BRANCH: MECHANICAL		BRANCH: ELECTRICAL		
4 COMPUTER-AIDED ENGINEERING 3 2 8 5800 IA	3 INDUSTRIAL MAINTENANCE 3 0 6 5525 IA	5705 DIGITAL SYSTEMS DESIGN 3 1 7 5673 CI	5938 INDUSTRIAL ELECTRONICS A 3 2 8 5717 IA	5610 INDUSTRIAL NETWORKS 5 2 12 5718 IA
BRANCH: ELECTRICAL		BRANCH: ADMINISTRATION AND QUALITY		
2 INDUSTRIAL INSTRUMENTATION 3 1 7 5713 IA	4 ELECTRICAL PROTECTIONS 3 2 8 5565 IA	5965 QUALITY MANAGEMENT SYSTEMS AND CONTINUOUS IMPROVEMENT 3 0 6 5975 CE	4 PERSONNEL MANAGEMENT 3 0 6 5902 CE	3 ECONOMIC ENGINEERING 3 0 6 5646 CE
BRANCH: HUMANITIES				DIVERSE THEMES
2 RESEARCH METHODOLOGY 0 4 4 1005 CS	2 ARTS, CULTURE AND HUMANITIES I 0 2 2 1012 CS	2 ARTS, CULTURE AND HUMANITIES II 0 2 2 1013 CS	ARTISTIC, SPORTS OR DIVULGATION ACTIVITIES 0 2 2 1014 CS	5.1 LEARNING ACTIVITIES 0 2 2 1916 OC
DIVERSE THEMES		OTHERS		
6.1 MOBILITY 3 0 6 1908 CC	3 RENEWABLE ENERGY 3 0 6 5680 IA	4 INDUSTRIAL SAFETY AND HEALTH 3 0 6 5972 IA	3 PRODUCTION SYSTEMS 3 2 8 5647 IA	3 PROJECT MANAGEMENT 3 0 6 5909 CE

ACADEMIC NOTES:

- This course can be taken after having approved 180 credits.
 - This course can be taken after having approved 270 credits.
 - This course can be taken after having approved 315 credits and the compulsory courses up to level VI.
 - This course can be taken after having approved 360 credits.
 - This block represents 10 Courses, named: Learning Activities I, II, III, IV, V, VI, VII, VIII, IX, and X, with consecutive key, 1916 to 1925, respectively.
 - This block represents 8 courses, named: Mobility I, II, III, IV, V, VI, VII, and VIII, with consecutive key, 1908 to 1915, respectively.
 - This course can be taken after having approved 360 credits and accredited all the compulsory courses up to level VII (does not include validation of the foreign language) and cannot be taken simultaneously with Professional Practices course.
 - This course is accredited through the presentation of the National General Graduate Examination (EGEL-IME). The exam must be taken when all the courses have been approved up to level VII (does not include the validation of the foreign language) and in the last semester of the curriculum.
 - This course can be accredited after having approved 315 credits and passing the English language proficiency assessment exam, specified by the Mechanical and Electrical Department (MED).
- To accredit the courses, the corresponding laboratory must be accredited.
- To achieve the internship, all the compulsory and the necessary elective credits, to cover at least 450 credits, must be approved.

PROGRAM EDUCATIONAL OBJECTIVES:

In the years following graduation, graduates of the program will:

- develop, in the field of electromechanical engineering, effective and innovative solutions to problems related to electromechanical components.
- participate in engineering design for the development of new products or processes or in the improvement of existing ones; satisfying social needs through technical and economic evaluation, and environmental and social impact.
- communicate effectively in oral, written and graphic form to transmit ideas, analysis and results of situations of electromechanical engineering; in person and remotely to multidisciplinary groups.
- behave with ethics and social responsibility in their actions and in the practice of Engineering, attaining sustainable development.
- collaborate in multidisciplinary teams, in order to generate successful solutions to engineering problems.
- participate in technological development and innovation to optimize production systems and processes through an experimental methodology.
- continue professional growth through self-taught learning, continuing education and postgraduate studies..