GENERIC PROFILE OF AN ELECTROMECHANICAL ENGINEER

Professionalism: Honesty and professional responsibility are essential in an electromechanical engineer in order to achieve the best production level.

Creativity and Uniqueness: An electromechanical engineer needs to be creative to surpass conventionality and should develop the ability to have heuristic thoughts. Uniqueness is necessary to make use of the existing resources, as well as willingness for continuous effort is essential to achieve developments which improve the quality and efficiency of the Argentinean industry.

Capacity is necessary to form critical judgement and rational approach in the management of different technologies which are in continuous evolution.

An electromechanical engineer should be willing to continue training by himself following the rate of evolution and to learn with no formal training support. He also needs to develop abilities and skills to interact with different roles in diverse and interdisciplinary groups, with common sense, and management and supervision abilities, emotional stability and other leadership characteristics.

PROFILE OF AN ELECTROMECHANICAL ENGINEER

An electromechanical engineer should be qualified to interpret the local and country reality and its incorporation into the world. He will perform not only in technical but also in resources administration and management fields. This involves that the electromechanical engineer

should have an excellent technical training regarding planning, studies, projects, construction, operation and maintenance in his speciality area and knowledge related to legal, economic, financial, hygiene and safety and management engineering. In conclusion, he should have an adequate technical, professional, cultural and humanistic training.

PERFORMANCE AREAS OF AN ELECTROMECHANICAL ENGINEER

Resources administration area or organizational behaviour area: An electromechanical engineer should know how to make use of human and technological resources and materials available to his position with productive and efficiency criteria. He should also know how to reduce production costs. In other words, an electromechanical engineer should have a deep knowledge of the productive factors, operation costs and maintenance. He should also have the ability to evaluate investment projects in relation to the production of industrial goods and services.

Mechanical knowledge area: The scope of work of an electromechanical engineer is related to mechanical, thermic, fluid dynamics, refrigeration systems, equipment and components and their automation and control, including knowledge of projects and their utilization, making use of the appropriate technical and IT tools. He should also be aware of the adequate selection of equipment which forms the systems above mentioned, in order to ensure highly efficient global solutions.

Electrical knowledge area: The scope of an electromechanical engineer includes electronic systems formed by electric power plants, transmission lines, primary and secondary distribution electrical substations, their corresponding components, automation and control. This includes design, project and exploitation knowledge and the adequate use of technical and IT tools. He should also be aware of the adequate selection of equipment which form the electric system, without distorting the balance among technical quality, functionality and costs.

SCOPE OF THE ELECTROMECHANICAL ENGINEER DEGREE AWARDED BY UNIVERSIDAD TECNOLÓGICA NACIONAL, FACULTAD REGIONAL MENDOZA

An electromechanical engineer will be able to work on project, management and operation of machines, equipment, devices, tools, mechanisms and accessories, either with electric, mechanical, thermal, hydraulic or pneumatic operating principles or the combination of any of them.

- He also can be in charge of the project, management, operation and maintenance of:
- Workshops, factories and industrial plants.
- Systems and facilities of generation, transportation and distribution of electricity, mechanical and thermal energy, including the transformation of any of them.
- Systems and facilities of power and lightning.
- Systems and facilities for the elaboration of metallic and nonmetallic materials and their structural transformation and surface finish for the manufacture of parts.
- Electrothermal, electrochemical, electromechanical, pneumatic, heating, refrigeration, air conditioning and air ventilation systems and facilities.
- Systems and facilities for the transportation and storage of solid and fluid elements.
- Mechanical and electric drive systems and facilities.
- Structures in general related to his profession, except concrete and masonry structures.
- Laboratories of investigation tests and control of specifications related to the works mentioned above.
- Subject matters concerning Legal, Economical and Financial Engineering, and industrial safety in relation with the previous paragraphs.
- He makes arbitrations, expertises and valuations related to the previous paragraphs.

Leadership

Head: Félix Rafael Ruiz, Engineer

Secretary: Héctor Daniel Girolomini, Engineer

Advisory Council

Teacher Counselors

Permanent Council

Daniel Girolomini, Engineer

Deputy Council

Esteban Frare

Area Council

Permanent Council

Teachers Counselors

ALVAREZ, Luis Rogelio

MARTINEZ, Evaristo Mario

ARENA, Alejandro Pablo

ARANDA, Cesar Omar

GONZALEZ, Claudio Esteban

Graduated Students Counselors

LOPEZ, Marta Graciela

CRUCIANI, Nicolás Emmanuel

Students Counselors

HENDERSON, German Rodolfo

ITURRIETA, Luciana Belén

KLEPIC, Kevin

Deputy Council

Teachers Counselors

CORBACHO, Jose Roberto

OLIVA, Hugo Ricardo

MATTOLINI, Gabriel

MARTINEZ, Roberto

Graduated Students Counselors

MOLINA, Francisco Agenor

MATUS, Silvio Fidel

Students Counselors

GARRIDO, Jorge Nicolás

LAGRENADE FALCO, León Azul

BLANCO MARTÍN, Facundo Alejandro