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| **Identity card of the specialty:**Academic license:Process Engineering |

**Level:**Licence

**Domain:**science and technology

**Sector:**Process Engineering

**Speciality:**Process Engineering

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| **1- Location of the training:** |

**Faculty (or Institute)**: Science and technology

**Department**: Mechanical Engineering

References of the authorization decree of the diploma to be prepared:**703**from 05/08/2015.

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| **2- External partners:** |

**Companies and other socio-economic partners**:

- the petrochemical industry: Sbaa refinery, drilling in the wilayas of Adrar and Béchar

- the mineralogical industry: barite, ceramics and brickyards in Béchar and iron in Tindouf,

- food industry**International partners**:

**Other partner establishments**:

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| **3- General organization of the training: position of the project** |

**Common foundation of the domain:**

**Science and Technology**

**Sector :**

**-Process Engineering**

**Major: Mechanical Engineering**

**Major: Mechanical Engineering**

**Major: Mechanical Engineering**

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*Other Specialties approved in the sector group in your establishment***:**

**-**

**Speciality :**

**-Process Engineering**

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| **4- Context of the training:** |

*Enter in the following diagram the License object of this canvas as well as all the licenses approved (functional or not) at the level of the establishment and belonging to the same Group of sectors. Specify with an asterisk any other license whose supervision is also provided by a good part of the teachers involved in this present license. Indicate frozen licenses with a double asterisk. Also mark with (P) any professional license.*

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| **5- Objectives of the training:** |

Process Engineering is an important sector in the field of science and technology (Domain ST). Indeed, this sector, which initially developed around theBasic Chemical Engineeringregroupa very wide range of specialties (Chemical Engineering, Environmental Engineering, Materials Engineering,Pharmaceutical Engineering, Electrochemical Engineering,Cryogenics, Energy, Agribusiness, etc.).

Process Engineering is essential in all industrial processes for the transformation of matter and energy.To this end, it is essential to train people capable of mastering transformation processes on an industrial scale. This bachelor's degree, whose curriculum contains the fundamental subjects of the sector (physical chemistry, unit operations, transfer phenomena, reactors, etc.) constitutes basic training for all the specialties of Process Engineering.

At the end of this multidisciplinary training, graduates will have acquired basic knowledge, not only in fundamental sciences (*Maths, Physics, Chemistry*), but also in technology and industrial processes (*Reactors, Processes, Transfer Phenomena, Instrumentation, Industrial Installations,etc*) which are necessary for the understanding of process engineering and its various applications.

This training allows the graduate not only to pursue studies and prepare for various specialized masters, but also to integrate quickly into the socio-economic sector.

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| **6- Profiles and skills targeted:** |

The general character of the license constitutes a basic training of the sector allowing access to masters in the different options (Chemical engineering, Environmental engineering, Pharmaceutical engineering, Water treatment, Electrochemical engineering, Polymer engineering, Cryogenics etc. .), these aim to consolidate the basic notions of process engineering.

At the end of the 3rd year (L3), the graduate has acquired sufficient theoretical and practical knowledge (Knowledge and Know-how) which enables him to assimilate any process for the transformation of matter. He is thus capable of establishing processing balance sheets, sizing and controlling equipment and taking measurements in a production and processing chain.

The skills acquired make it possible to integrate different industrial sectors (chemical, pharmaceutical, electrochemical, food industries, materials, cosmetics, water treatment, environmental protection, etc.), and to meet the country's need for executives techniques.

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| **7- Local, regional and national employability potential:** |

Process Engineering deals with the industrialization of chemistry and processes for transforming and purifying matter. The fields of application follow one another throughout the development of the manufacturing process: development in the laboratory, pilot scale, sizing of the equipment, construction of the unit then its operation.

This course in process engineering aims to train versatile executives with knowledge and know-how that allow them to fit into all levels of the process. They are intended to occupy positions of Study Manager, Project Manager, Process Technician, etc.

This course targets large companies operating in the fields of processes, chemistry, energy and the environment on a national scale, such as Sonatrach, Sonelgaz, ADE, cement factories, Saidal, etc. At the regional level, there is also a strong potential for outlets at the level of the SME-SMI fabric having activities of design offices, consulting firms, material transformation and treatment.

With the curriculum offered as part of this license, graduates are able to integrate different sectors*socio-economic*:

* Technical education in secondary;
* Research laboratories;
* Public bodies;
* Design offices;
* The industrial sector.

For this last sector, these graduates constitute the backbone of management in the production units (*Chemical Industries, Petrochemicals, Refining, Cement, Water Treatment,Drug manufacturing technology*,*Agrifood, etc.*)