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| **Biochemistry** | | | | |
|  | **Course** | **Hours** | **Ects** | **Description** |
| Unit 1 | Biochemistry engineering | 60 | 6 | A biochemistry engineer is able to :   * Take care of unitary operation (extraction, filtration, centrifugation..) * Design a simulation of an industrial project * Lead a project management |
| This course teaches you how to lead unitary operation such as extraction, filtration, centrifugation. This course is also about learning of to write and defend a real research project. | | | | |
| Unit 2 | Genetic engineering | 30 | 2 | A biochemistry engineer is able to :   * Produce recombinant protein * Genetically modify different organisms * Purify and analyze proteins * Use bioinformatic tool of gene design |
| This course is about the production, purification and use of recombinant protein. During this course, we will present the different kind of cells used for protein production, we will discuss the different system of purification and some of the specific applications of recombinant protein. 4 hours are dedicated to a bioinformatic practicals to learn of to design a synthetic gene. | | | | |
| Unit 3 | Project (integrated practicals) | 115 | 8 | A biochemistry engineer is able to :   * Design, develop and conclude an innovative industrial project |
| This practicals is the occasion for the students to develop a real project alone. The idea is to go from an idea to an actual execution. The project should be a innovative idea. | | | | |
| Unit 4 | Environmental managing | 45 | 3 | A biochemistry engineer is able to :   * Include environmental consideration in his work * Take care of environmental norms (REACH, Seveso…) |
| This course is about the norms and the problematic of environmental issues in the industry. | | | | |
| Unit 5 | Management | 45 | 3 | A biochemistry engineer is able to :   * Manage human resource * Manage payroll |
| This course is about human resource and the lead of a real company : accounting, HR… | | | | |
| Unit 6 | Corporate technical | 90 | 6 | A biochemistry engineer is able to :   * Image, develop and defend a real project |
| This course takes place in a national contest around the creation of a startup. The student will works with professional coaches to develop an idea into a credible project. | | | | |
| Unit 7 | Quality assurance | 30 | 2 | A biochemistry engineer is able to :   * Work as a quality insurer * Manage quality assurance |
| This course will develop the reality of the quality assurance of a company. How to lead quality assurance, of the guarantee a stable product? How to manage quality of a company… | | | | |
| **Chemistry** | | | | |
|  | **Course** | **Hours** | **Ects** | **Description** |
| Unit 1 | Environmental managing | 45 | 3 | A chemistry engineer is able to :   * Include environmental consideration in his work * Take care of environmental norms (REACH, Seveso…) |
| Unit 2 | Management | 45 | 3 | A chemistry engineer is able to :   * Manage human resource * Manage payroll |
| Unit 3 | Corporate technical | 90 | 6 | A chemistry engineer is able to :   * Imagine, develop and defend a real project |
| Unit 4 | Quality assurance | 30 | 2 | A chemistry engineer is able to :   * Work as a quality insurer * Manage quality assurance |
| Unit 5 | Chemistry engineering | 75 | 6 | A chemistry engineer is able to :  Take care of unitary operation (extraction, filtration, centrifugation..) |
| This course teaches you how to lead unitary operation such as extraction, filtration, centrifugation, distillation… | | | | |
| Unit 6 | Nuclear physics | 30 | 2 | A chemistry engineer is able to :   * Work in industrial application of nuclear energy * Work in Industrial application of nuclear medicine. |
| This course is about the nuclear science and all the field around this complex field : nuclear medicine, nuclear power, radioactive element manufacturing… | | | | |
| Unit 7 | Project (integrated practical)s | 90 | 8 | A chemistry engineer is able to :   * Design, develop and conclude an innovative industrial project |