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| **1- Identification of the Education Offer** |

***Level* : Licence**

***Field : Civil Engineering***

***Branch* : *Civil Engineering***

***Speciality* : *Civil Engineering***

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| **2- Educational Establishment :** |

***Faculty/Institute: Faculty of tehnology***

***Department: Civil Engineering departement***

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| **3- External partners** |

***Algerian Academic partners:***

***Companies and other socio-economic partners*: SOGERHWIT, STARR, SEROR, ADA**

***International partners :***

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

The Civil Engineering License course aims to give the student a scientific and technological basis ensuring the mastery of academic and practical knowledge in the various construction fields. Besides, a professional aptitude leading to a good insertion in functions of framing, management within construction companies, follow-up and control of projects, this License ensures to the student a scientific and specific basic training which him confers a capacity of assimilation allowing him to access higher degrees: the Master and the possibility of preparing a Doctorate in the various specialties of Civil Engineering.

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| **5- Facilities, Equipment and Laboratoires** |

* Material identification and quality control tests (steel, metal, wood, concrete, cement, plaster, etc.)
* Static and dynamic tests on reduced or actual scale on structural systems.
* Testing of innovative materials and products in the field of construction.

Laboratories : EOLE, RISAM

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| **6- Profiles and Competencies Targeted** |

This training aims to train executives for the Civil Engineering, Building and Public Works sector in general, and more particularly, companies, design offices, and consulting firms.

In addition, we are witnessing the emergence of a field, promising in terms of employability and research, which is in full technological evolution, it is a question of developing new materials. These require the introduction of new technologies, new methods of execution, and new commercial techniques and consequently a revival in the demand for specialized personnel.

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| **7- Development Prospects and Employability** |

- Programming of works : public sector (local authorities, construction companies.

- The calculation of the works: Design offices, engineering firms.

- The conduct and monitoring of works and the quality - control of works: Building companies for structural works and secondary works, control offices.

- Maintenance and management of heritage: Technical management, rehabilitation, development.

- Follow-up of construction sites: B.T.P of medium and large scales.

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| **8- Organisation of the Semesters Teaching** |

**SEMESTER 3**

**Fundamental teaching units**

Mathematics 3

 Waves and vibrations

Fluid mechanics

Rational mechanics

**Methodological teaching unit**

Probability and statistics

Informatic 3

Technical drawing

Ripples and vibrations

Discovery Teaching Unit

Core technology

Metrology

**Cross-curricular teaching unit**

Technical English

**SEMESTER 4**

**Fundamental teaching units**

Ground Mecanic

Construction materials

Mathematics 4

Numerical methods

Resistance of materials

**Methodological teaching unit**

Ground Mecanic

Construction materials

Computer Assisted drawing

Numerical methods

Fluid mechanics

Resistance of materials

Discovery Teaching Unit

Geology

Topography

**Cross-curricular teaching unit**

Information and communication expression techniques

**SEMESTER 5**

**Fundamental teaching units**

Resistance of materials 2

Reinforced concrete 1

Metal frame

Soil mechanics 2

Building materials 2

Methodological teaching unit

Topography

Soil mechanics 2

Building materials 2

Construction drawing

**Discovery Teaching Unit**

Topography 2

General hydraulics

**Cross-curricular teaching unit**

Construction techniques and rules

**SEMESTER 6**

**Fundamental teaching units**

Calculation of structures

Metal constructions

Reinforced concrete 2

Foundations and geotechnical structures

**Methodological teaching unit**

End of cycle project

Computer aided calculation

Quantity survey and price estimate

**Discovery Teaching Unit**

Various roads and networks

Organization of construction sites

**Cross-curricular teaching unit**

Entrepreneurship and business management