

**ALGERIAN DEMOCRATIC AND PEOPLE'S REPUBLIC**  
**MINISTRY OF HIGHER EDUCATION**  
**AND SCIENTIFIC RESEARCH**

**TRAINING OFFER**  
**L.M.D.**

**PROFESSIONAL MASTER'S**

| Establishment                                   | Faculty / Institute                  | Department   |
|-------------------------------------------------|--------------------------------------|--------------|
| University<br>Mohamed Seddik<br>BENYAHIA. JIJEL | Faculty of Science and<br>Technology | Architecture |

| Domain                                                                   | Branch                                 | Speciality                                                          |
|--------------------------------------------------------------------------|----------------------------------------|---------------------------------------------------------------------|
| ARCHITECTURE,<br>URBAN PLANNING<br>AND URBAN<br>PROFESSIONS<br>(A.U.U.P) | Urban Techniques<br>Management (U.T.M) | Cities and urban<br>engineering in the digital<br>age<br>C.U.E.D. A |

**Academic year : 2023/2024**

الجمهورية الجزائرية الديمقراطية الشعبية  
وزارة التعليم العالي والبحث العلمي

عرض تكوين

ل. م. د

ماستر مهني

| القسم         | الكلية/المعهد            | المؤسسة                           |
|---------------|--------------------------|-----------------------------------|
| هندسة معمارية | كلية العلوم والتكنولوجيا | جامعة محمد الصديق<br>بن يحي، جيجل |

| الميدان                              | الشعبة                 | التخصص                                   |
|--------------------------------------|------------------------|------------------------------------------|
| هندسة معمارية، عمران<br>ومهن المدينة | تسيير التقنيات الحضرية | المدن والهندسة الحضرية<br>في عصر الرقمنة |

السنة الجامعية: 2024/2023

## **II – Semester organization sheet**

## 1- Semester 1 :

| Teaching Unit                                            | SH            | Weekly hours |             |           |           | Total        | Coeff     | Credits   | Evaluation mode |      |
|----------------------------------------------------------|---------------|--------------|-------------|-----------|-----------|--------------|-----------|-----------|-----------------|------|
|                                                          | 14-16 wee     | C            | TD          | TP        | Workshop  |              |           |           | ongoing         | Exam |
| <b>Fundamentals teaching unit</b>                        |               |              |             |           |           | <b>13h30</b> | <b>7</b>  | <b>14</b> |                 |      |
| <b>FTU1 (O/P)</b>                                        |               |              |             |           |           |              |           |           |                 |      |
| Material 1 : Workshop 1: urban diagnostic                | 90            |              |             |           | 6         |              | 4         | 8         | 100%            |      |
| Material 2 : Technical management and digital tools 1    | 45            |              |             | 3h        |           |              | 2         | 4         | 100%            |      |
| Material 3 : Strategic planning and urban policy         | 22h30         | 1h30         |             |           |           |              | 1         | 2         |                 | 100% |
| <b>FTU2 (O/P)</b>                                        |               |              |             |           |           |              | <b>2</b>  | <b>4</b>  |                 |      |
| Material 1 : Soil, subsoil and natural risks             | 22h30         | 1h30         |             |           |           |              | 1         | 2         |                 | 100% |
| Material 2: Transport and sustainable mobility           | 22h30         | 1h30         |             |           |           |              | 1         | 2         |                 | 100% |
| <b>Methodology TU</b>                                    |               |              |             |           |           | <b>7h30</b>  | <b>5</b>  | <b>9</b>  |                 |      |
| Material 1 : Programming, Data Science and AI (1)        | 45h           |              |             | 3h        |           |              | 2         | 4         | 100%            |      |
| Material 2 : Urban dynamics and spatio-temporal modeling | 45h           |              |             | 3h        |           |              | 2         | 4         | 100%            |      |
| Material 3 : Initiation to research                      | 22h30         | 1h30         |             |           |           |              | 1         | 1         |                 | 100% |
| <b>Discover TU</b>                                       |               |              |             |           |           | <b>3h</b>    | <b>2</b>  | <b>2</b>  |                 |      |
| Material 1 : Strategy, legislation and standardization   | 45h           | 1h30         | 1h30        |           |           |              | 2         | 2         | 40%             | 60%  |
| <b>Transversal TU</b>                                    |               |              |             |           |           | <b>1h30</b>  | <b>1</b>  | <b>1</b>  |                 |      |
| Material 1 : Technical English and terminology 1         | 22h30         | 1h30         |             |           |           |              | 1         | 1         |                 | 100% |
| <b>Total Semester 1</b>                                  | <b>382h30</b> | <b>9h00</b>  | <b>1h30</b> | <b>9h</b> | <b>6h</b> | <b>25h30</b> | <b>17</b> | <b>30</b> |                 |      |

## 2- Semester 2 :

| Teaching Unit                                                                    | SH            | Weekly hours |             |            |           | Total        | Coeff     | Credits<br>14-16 wee | Evaluation mode |      |
|----------------------------------------------------------------------------------|---------------|--------------|-------------|------------|-----------|--------------|-----------|----------------------|-----------------|------|
|                                                                                  | 14-16 wee     | C            | TD          | TP         | Workshop  |              |           |                      | C               | TD   |
| <b>Fundamentals teaching unit</b>                                                |               |              |             |            |           | <b>13h30</b> | <b>9</b>  | <b>18</b>            |                 |      |
| <b>FTU1 (O/P)</b>                                                                |               |              |             |            |           |              |           |                      |                 |      |
| Material 1 : Workshop 2 : and rehabilitation of urban networks (Roadways, AEPA.) | 90 h          |              |             |            | 6         |              | 4         | 8                    | 100%            |      |
| Material 2 : Technical management and digital tools 2                            | 45 h          |              |             | 3h         |           |              | 2         | 4                    | 100%            |      |
| <b>FTU2 (O/P)</b>                                                                |               |              |             |            |           |              |           |                      |                 |      |
| Material 1 : Programming, Data Science and AI (2)                                | 45 h          |              |             | 3h         |           |              | 2         | 4                    | 100%            |      |
| Material 2 : Preventive management of urban networks                             | 22h30         | 1h30         |             |            |           |              | 1         | 2                    |                 | 100% |
| <b>Methodology TU</b>                                                            |               |              |             |            |           | <b>7h30</b>  | <b>5</b>  | <b>9</b>             |                 |      |
| <b>MTU1(O/P)</b>                                                                 |               |              |             |            |           |              |           |                      |                 |      |
| Material 1 : Digital data analysis                                               | 45 h          |              |             | 3h         |           |              | 2         | 4                    | 100%            |      |
| Material 2 : Applied geomatic                                                    | 45 h          |              |             | 3h         |           |              | 2         | 4                    | 100%            |      |
| Material 3 : Introduction to writing a master's thesis                           | 22h30         | 1h30         |             |            |           |              | 1         | 1                    |                 | 100% |
| <b>Discover TU</b>                                                               |               |              |             |            |           | <b>3h</b>    | <b>2</b>  | <b>2</b>             |                 |      |
| <b>DTU1(O/P)</b>                                                                 |               |              |             |            |           |              |           |                      |                 |      |
| Material 1 : Projects management                                                 | 45 h          | 1h30         | 1h30        |            |           |              | 2         | 2                    | 40%             | 60%  |
| <b>Transversal TU</b>                                                            |               |              |             |            |           | <b>1h30</b>  | <b>1</b>  | <b>1</b>             |                 |      |
| Material 1 : Risks and urban resilience                                          | 22h30         | 1h30         |             |            |           |              | 1         | 1                    |                 | 100% |
| <b>Total Semester 2</b>                                                          | <b>382h30</b> | <b>6h00</b>  | <b>1h30</b> | <b>12h</b> | <b>6h</b> | <b>25h30</b> | <b>17</b> | <b>30</b>            |                 |      |

### 3- Semester 3 :

| Teaching Unit                                                                               | SH            | Weekly hours |             |           |           | Total        | Coeff     | Credits<br>14-16 wee | Evaluation mode |      |
|---------------------------------------------------------------------------------------------|---------------|--------------|-------------|-----------|-----------|--------------|-----------|----------------------|-----------------|------|
|                                                                                             | 14-16 wee     | C            | TD          | TP        | Workshop  |              |           |                      | C               | TD   |
| <b>Fundamentals Teaching unit</b>                                                           |               |              |             |           |           | <b>13h30</b> | <b>9</b>  | <b>18</b>            |                 |      |
| <b>FTU1 (O/P)</b>                                                                           |               |              |             |           |           |              |           |                      |                 |      |
| Material 1 : Workshop 3 :<br><b>Sustainable project</b>                                     | 90            |              |             |           | 6h        |              | 4         | 8                    | 100%            |      |
| Material 2 : GIS and environment                                                            | 45            |              |             | 3h        |           |              | 2         | 4                    | 100%            |      |
| Material 3 : Cities and NICT                                                                | 22h30         | 1h30         |             |           |           |              | 1         | 2                    |                 | 100% |
| <b>FTU2 (O/P)</b>                                                                           |               |              |             |           |           |              |           |                      |                 |      |
| Material 1 : Environmental<br>assessment and environmental<br>impact assessment of projects | 45            | 1h30         | 1h30        |           |           |              | 2         | 4                    | 40%             | 60%  |
| <b>Methodology TU</b>                                                                       |               |              |             |           |           | <b>6h</b>    | <b>5</b>  | <b>9</b>             |                 |      |
| Material 1 : Governance of urban<br>network services                                        | 45            | 1h30         | 1h30        |           |           |              | 2         | 4                    | 40%             | 60%  |
| Material 2 : Open seminar                                                                   | 45            |              |             | 3h        |           |              | 2         | 4                    | 100%            |      |
| Material 3 Urban ergonomics                                                                 | 22h30         | 1h30         |             |           |           |              | 1         | 1                    |                 | 100% |
| <b>Discover TU</b>                                                                          |               |              |             |           |           | <b>3h</b>    | <b>2</b>  | <b>2</b>             |                 |      |
| Material 1 : Programming, Planning<br>and Urban Engineering                                 | 45            | 1h30         | 1h30        |           |           |              | 2         | 2                    | 40%             | 60%  |
| <b>Transversal TU</b>                                                                       |               |              |             |           |           | <b>1h30</b>  | <b>1</b>  | <b>1</b>             |                 |      |
| Material 1 : Urban economy                                                                  | 22h30         | 1h30         |             |           |           |              | 1         | 1                    |                 | 100% |
| <b>Total Semestre 3</b>                                                                     | <b>382h30</b> | <b>7h30</b>  | <b>4h30</b> | <b>6h</b> | <b>6h</b> | <b>25h30</b> | <b>17</b> | <b>30</b>            |                 |      |

#### 4- Semester 4 :

**Domain** : Architecture, Urban Planning and City Professions  
**Branch** : Urban Techniques Management  
**Speciality** : Cities and urban engineering in the digital age

An internship in a professional environment culminating in a dissertation and oral presentation.

|                           | <b>SH</b> | <b>Coeff</b> | <b>Credits</b> |
|---------------------------|-----------|--------------|----------------|
| <b>Personal work</b>      | 750       |              |                |
| <b>Internship</b>         | 160       | 5            | 8              |
| <b>Final thesis</b>       | 45        | 5            | 8              |
| <b>Final year project</b> | 90        | 7            | 14             |
| <b>Total semester 4</b>   | 1045      | 17           | 30             |

**5- Overall summary of the course:** (indicate the overall VH broken down into courses, TDs, for the 04 teaching semesters, for the different types of TU)

| <b>VH \ TU</b>                | <b>FTU</b> | <b>MTU</b> | <b>DTU</b> | <b>TTU</b> | <b>Total</b> |
|-------------------------------|------------|------------|------------|------------|--------------|
| <b>Cours</b>                  | 135h       | 90h        | 67h30      | 67h30      | 360          |
| <b>TD</b>                     | 22h30      | 22h30      | 67h30      | -          | 112h30       |
| <b>TP</b>                     | 315h       | 225h       | -          | -          | 540h         |
| <b>Personal work</b>          | 1942h30    | 562h30     | 15h        | 7h30       | 2527h30      |
| <b>Other (Workshop)</b>       | 270h       | -          | -          | -          | 270h         |
| <b>internship</b>             | 160h       | -          | -          | -          | 160h         |
| <b>Total</b>                  | 2845       | 900h       | 150h       | 75h        | 3970         |
| <b>Credits</b>                | 84         | 27         | 6          | 3          | <b>120</b>   |
| <b>in credits for each TU</b> | 68.3%      | 24.2%      | 5%         | 2.5%       | 100%         |