

**Democratic and People's Republic of Algeria**  
**Ministry of Higher Education and Scientific Research**  
**Hassiba Benbouali University – Chlef**



**Academic offer**  
**Master's Degree**  
**In**  
**Animal production and nutrition**

| <b>Etablissement</b>                | <b>Faculté / Institut</b>        | <b>Département</b> |
|-------------------------------------|----------------------------------|--------------------|
| <b>Hassiba Benbouali University</b> | <b>Natural and Life Sciences</b> | <b>Agronomy</b>    |

**Field: Natural and life sciences**

**Subject: Agronomic Sciences**

**Specialty: Animal production and nutrition**

**Academic year : 2025/2026**



**Specialty “ Animal production and nutrition ”**  
**Semester 01**

| Teaching Unit                                                 | Semestri<br>al HV | HV Weekly |                  |                   |                               | coefficients | Credits | Evaluation |      |
|---------------------------------------------------------------|-------------------|-----------|------------------|-------------------|-------------------------------|--------------|---------|------------|------|
|                                                               | 15<br>weeks       | Course    | Directed<br>Work | Practical<br>Work | Student<br>Individual<br>Work |              |         | Continuous | Exam |
| Basic Teaching Unit                                           |                   |           |                  |                   |                               |              |         |            |      |
| BTU1                                                          |                   |           |                  |                   |                               | 09           | 18      |            |      |
| Teaching subject 1: Endocrinology of reproduction             | 67h30             | 1h30      | 1h30             | 1h30              | 82h30                         | 3            | 6       | 40%        | 60%  |
| Teaching subject 2: Reproduction, metabolism and environment  | 45h               | 3h00      |                  |                   | 55h                           | 2            | 4       | 40%        | 60%  |
| BTU2 Science of food                                          |                   |           |                  |                   |                               |              |         |            |      |
| Teaching subject 3: Nutritional and nutritional value of food | 45h               | 1h30      | 1h30             |                   | 55h                           | 2            | 4       | 40%        | 60%  |
| Teaching subject 4: Food manufacturing technique              | 45h               | 1h30      |                  | 1h30              | 55h                           | 2            | 4       | 40%        | 60%  |
| Methodological Teaching Unit                                  |                   |           |                  |                   |                               |              |         |            |      |
| MTU1                                                          |                   |           |                  |                   |                               | 05           | 09      |            |      |
| Teaching subject 1: Biotechnology and livestock               | 60h00             | 01h30     | 01h30            | 01h00             | 65h00                         | 03           | 05      | 40%        | 60%  |
| Teaching subject 2: Applied bioinformatics                    | 45h00             | 01h30     | 01h30            | -                 | 55h00                         | 02           | 04      | 40%        | 60%  |
| Discovery Teaching Unit                                       |                   |           |                  |                   |                               |              |         |            |      |
| DTU1                                                          |                   |           |                  |                   |                               | 02           | 02      |            |      |
| Teaching subject 1 : Bio statistics                           | 22h30             | 01h00     |                  | 00h30             | 02h30                         | 01           | 01      | 40%        | 60%  |
| Teaching subject 2 : Informatic                               | 22h30             | 01h00     |                  | 00h30             | 02h30                         | 01           | 01      | 40%        | 60%  |
| Transversal Teaching Unit                                     |                   |           |                  |                   |                               |              |         |            |      |
| TTU1                                                          |                   |           |                  |                   |                               | 01           | 01      |            |      |
| Teaching subject 1: Communication                             | 22h30             | 01h30     | -                | -                 | 02h30                         | 01           | 01      | -          | 100% |
| Total Semester 01                                             | 375h              | 16h30     | 06h00            | 02h30             | 375h                          | 17           | 30      |            |      |

**Specialty “ Animal production and nutrition**

## Semester 02

| Teaching Unit                                     | Semestrial HV | HV Weekly |               |                |                         | coefficients | Credits | Evaluation |      |
|---------------------------------------------------|---------------|-----------|---------------|----------------|-------------------------|--------------|---------|------------|------|
|                                                   | 15 weeks      | Course    | Directed Work | Practical Work | Student Individual Work |              |         | Continuous | Exam |
| Basic Teaching Unit                               |               |           |               |                |                         |              |         |            |      |
| BTU1                                              |               |           |               |                |                         | 09           | 18      |            |      |
| Teaching subject 1: genetic improvement programme | 67h30         | 1h30      | 1h30          | 1h30           | 82h30                   | 3            | 6       | 40%        | 60%  |
| Teaching subject 2: molecular genetics            | 45h           | 3h00      |               |                | 55h                     | 2            | 4       | 40%        | 60%  |
| BTU2                                              |               |           |               |                |                         |              |         |            |      |
| Teaching subject 3: Ingestion and digestion       | 45h           | 1h30      | 1h30          |                | 55h                     | 2            | 4       | 40%        | 60%  |
| Teaching subject 4: nutritional metabolism        | 45h           | 1h30      |               | 1h30           | 55h                     | 2            | 4       | 40%        | 60%  |
| Methodological Teaching Unit                      |               |           |               |                |                         |              |         |            |      |
| MTU1                                              |               |           |               |                |                         | 05           | 09      |            |      |
| Teaching subject 1: Ruminant production           | 60h           | 1h30      | 1h30          | 1h00           | 65h                     | 03           | 05      | 40%        | 60%  |
| Teaching subject 2: Production of non-ruminants   | 45h00         | 01h30     | 01h30         |                | 55h00                   | 02           | 04      | 40%        | 60%  |
| Discovery Teaching Unit                           |               |           |               |                |                         |              |         |            |      |
| DTU1                                              |               |           |               |                |                         | 02           | 02      |            |      |
| Teaching subject 1 : Feeding and formulation      | 22h30         | 01h00     |               | 00h30          | 02h30                   | 01           | 01      | 40%        | 60%  |
| Teaching subject 2 : artificial intelligence      | 22h30         | 01h00     |               | 00h30          | 02h30                   | 01           | 01      | 40%        | 60%  |
| Transversal Teaching Unit                         |               |           |               |                |                         |              |         |            |      |
| TTU1                                              |               |           |               |                |                         | 01           | 01      |            |      |
| Teaching subject 1: legislation                   | 22h30         | 01h30     | -             | -              | 02h30                   | 01           | 01      | -          | 100% |
| Total Semester 02                                 | 375h          | 16h30     | 06h00         | 02h30          | 375h                    | 17           | 30      |            |      |

**Specialty « Animal production and nutrition »**  
**Semester 03**

| Teaching Unit                                                     | Semestrial HV | HV Weekly |               |                |                         | coefficients | Credits | Evaluation      |      |
|-------------------------------------------------------------------|---------------|-----------|---------------|----------------|-------------------------|--------------|---------|-----------------|------|
|                                                                   | 15 weeks      | Course    | Directed Work | Practical Work | Student Individual Work |              |         | Continuou<br>us | Exam |
| Basic Teaching Unit                                               |               |           |               |                |                         |              |         |                 |      |
| BTU1                                                              |               |           |               |                |                         | 09           | 18      |                 |      |
| Teaching subject 1: Biotechnology of reproduction                 | 67h30         | 1h30      | 1h30          | 1h30           | 82h30                   | 3            | 6       | 40%             | 60%  |
| Teaching subject 2: Experimental and molecular embryology         | 45h           | 3h00      |               |                | 55h                     | 2            | 4       | 40%             | 60%  |
| BTU2                                                              |               |           |               |                |                         |              |         |                 |      |
| Teaching subject 3: Processing and preservation of dairy products | 45h           | 1h30      | 1h30          |                | 55h                     | 2            | 4       | 40%             | 60%  |
| Teaching subject 4: Meat processing and conservation              | 45h           | 1h30      |               | 1h30           | 55h                     | 2            | 4       | 40%             | 60%  |
| Methodological Teaching Unit                                      |               |           |               |                |                         |              |         |                 |      |
| MTU1                                                              |               |           |               |                |                         | 05           | 09      |                 |      |
| Teaching subject 1: Animal health and welfare                     | 60h00         | 01h30     | 01h30         | 01h00          | 65h00                   | 03           | 05      | 40%             | 60%  |
| Teaching subject 2: Animal ecology                                | 45h00         | 01h30     | 01h30         | -              | 55h00                   | 02           | 04      | 40%             | 60%  |
| Discovery Teaching Unit                                           |               |           |               |                |                         |              |         |                 |      |
| DTU                                                               |               |           |               |                |                         | 02           | 02      |                 |      |
| Teaching subject 1 : Analytical methods                           | 22h30         | 01h00     |               | 00h30          | 02h30                   | 01           | 01      | 40%             | 60%  |
| Teaching subject 2:Free and open-source software                  | 22h30         | 01h00     |               | 00h30          | 02h30                   | 01           | 01      | 40%             | 60%  |
| Transversal Teaching Unit                                         |               |           |               |                |                         |              |         |                 |      |
| TTU1                                                              |               |           |               |                |                         | 01           | 01      |                 |      |
| Teaching subject 1: Entrepreneurship                              | 22h30         | 01h30     | -             | -              | 02h30                   | 01           | 01      | -               | 100% |
| Total Semester 03                                                 | 375h          | 16h30     | 06h00         | 02h30          | 375h                    | 17           | 30      |                 |      |

**Specialty « Animal production and nutrition »**  
**Semester 04**

Students must complete a final year project (PFE) in the department or through an internship in a company, culminating in a dissertation and oral presentation, either by distance learning or in class

|                      | <b>HV</b> | <b>Coeff</b> | <b>Credits</b> |
|----------------------|-----------|--------------|----------------|
| Personal thesis work | 450       | 9            | 18             |
| Internship           | 225       | 5            | 09             |
| Seminars             | 75        | 3            | 3              |
| Other (specify)      | /         | /            | /              |
| Total Semester 4     | 750       | 17           | 30             |

**1- Overall summary of training:** (indicate the overall VH separated into courses, TD, for the 04 teaching semesters, for the different types of UE)

| <b>VH \ UE</b>                     | <b>BTU</b> | <b>MTU</b> | <b>DTU</b> | <b>TTU</b> | <b>Total</b> |
|------------------------------------|------------|------------|------------|------------|--------------|
| Course                             | 315h00     | 135h00     | 67h30      | 67h30      | 585h00       |
| TD                                 | 135h00     | 22h30      | 45h00      | -          | 202h30       |
| PRACTICAL WORK                     | 157h30     | 157h30     | 22h30      | -          | 337h30       |
| Personal work                      | 742h30     | 360h00     | 15h00      | 7h30       | 1125h00      |
| PFE                                | 750h00     | -          | -          | -          | 750h00       |
| Total                              | 2100h00    | 675h00     | 150h00     | 75h00      | 3000h00      |
| <b>Crédits</b>                     | 84         | 27         | 6,0        | 3,0        | <b>120</b>   |
| <b>% en crédits pour chaque UE</b> | 70,00%     | 22,50%     | 5,00%      | 2,50%      | 100%         |

