

Semester 1 :

| Teaching unit | BHV 14-16 | WEEKLY H.V | | | | Coeff | Credits | Evaluation mode | |
|----------------------------------|---------------|--------------|-----------|-------------|-------|-----------|-----------|-----------------|------|
| | | L | DW | PW | OTHER | | | Continuous | Exam |
| Fondamental TU | | | | | | | | | |
| FTU1.1 | 112h30 | 4h30 | 3h | | | 5 | 10 | | |
| Introduction to dynamic systems | 67h30 | 3h | 1h30 | | | 3 | 6 | 33% | 67% |
| Difference equations | 45h | 1h30 | 1h30 | | | 2 | 4 | 33% | 67% |
| FTU1.2 | 112h30 | 4h30 | 3h | | | 5 | 10 | | |
| Linear Programming | 45h | 1h30 | 1h30 | | | 2 | 4 | 33% | 67% |
| Group theory1 | 67h30 | 3h | 1h30 | | | 3 | 6 | 33% | 67% |
| Methothological TU | | | | | | | | | |
| MTU1.1 | 90 h | 3h | 3h | | | 4 | 8 | | |
| Introduction to random processes | 67h30 | 3h | 1h30 | | | 3 | 6 | 33% | 67% |
| Scientific English1 | 22 h30 | | 1h30 | | | 1 | 2 | 100% | |
| Discovery TU | | | | | | | | | |
| DTU1.1 | 22 h30 | | | 1h30 | | 1 | 1 | | |
| Programming with Matlab | 22 h30 | | | 1h30 | | 1 | 1 | 100% | |
| Transversal TU | | | | | | | | | |
| TTU1.1 | 22 h30 | 1h30 | | | | 1 | 1 | | |
| ICT2 | 22 h30 | 1h30 | | | | 1 | 1 | | 100% |
| Total Semester 1 | 360h | 13h30 | 9h | 1h30 | | 16 | 30 | | |

2- Semester 2 :

| Teaching unit | BHV | WEEKLY H.V | | | | Coeff | Credits | Evaluation mode | |
|----------------------------|---------------|--------------|-----------|-----------|-------|-----------|-----------|-----------------|------|
| | 14-16 | L | DW | PW | OTHER | | | Continuous | Exam |
| Fondamental TU | | | | | | | | | |
| FTU2.1 | 112h30 | 4h30 | 3h | | | 5 | 10 | | |
| Dynamic systems in biology | 45h | 1h30 | 1h30 | | | 2 | 4 | 33% | 67% |
| Discrete dynamic systems | 67h30 | 3h | 1h30 | | | 3 | 6 | 33% | 67% |
| FTU2.2 | 90h | 3h | 3h | | | 4 | 8 | | |
| Graph theory | 45h | 1h30 | 1h30 | | | 2 | 4 | 33% | 67% |
| Algebraic Topology I | 45h | 1h30 | 1h30 | | | 2 | 4 | 33% | 67% |
| Methothological TU | | | | | | | | | |
| MTU 2.1 | 90h | 3h | 3h | | | 4 | 8 | | |
| Time series | 67h30 | 3h | 1h30 | | | 3 | 6 | 33% | 67% |
| Scientific English 2 | 22 h30 | | 1h30 | | | 1 | 2 | 100% | |
| Discovery TU | | | | | | | | | |
| DTU 2.1 | 67h30 | 1h30 | | 3h | | 2 | 3 | | |
| Introduction to Latex | 67h30 | 1h30 | | 3h | | 2 | 3 | 40% | 60% |
| Transversal TU | | | | | | | | | |
| TTU 2.1 | 22 h30 | 1h30 | | | | 1 | 1 | | |
| Legislation | 22 h30 | 1h30 | | | | 1 | 1 | | 100% |
| Total Semester 2 | 382h30 | 13h30 | 9h | 3h | | 16 | 30 | | |

3- Semester 3 :

| Teaching unit | BHV | WEEKLY H.V | | | | Coeff | Credits | Evaluation mode | |
|---|---------------|--------------|-----------|----|-------|-----------|-----------|-----------------|------|
| | 14-16 | L | DW | PW | OTHER | | | Continuous | Exam |
| Fondamental TU | | | | | | | | | |
| FTU 3.1 | 112h30 | 4h30 | 3h | | | 5 | 10 | | |
| Group Theory II | 67h30 | 3h | 1h30 | | | 3 | 6 | 33% | 67% |
| Algebraic Topology II | 45h | 1h30 | 1h30 | | | 2 | 4 | 33% | 67% |
| | | | | | | | | | |
| FTU 3.2 | 112h30 | 4h30 | 3h | | | 5 | 10 | | |
| | | | | | | | | | |
| Algebra and coding | 67h30 | 3h | 1h30 | | | 3 | 6 | 33% | 67% |
| Elliptical curves | 45h | 1h30 | 1h30 | | | 2 | 4 | 33% | 67% |
| Methothological TU | | | | | | | | | |
| MTU 3.1 | 45h | 3h | 3h | | | 4 | 8 | | |
| Symmetrical functions | 45h | 3h | 1h30 | | | 3 | 6 | 33% | 67% |
| Scientific writing | | | 1h30 | | | 1 | 2 | 100% | |
| Transversal TU | | | | | | | | | |
| TTU 3.1 | 22 h30 | 3h | | | | 2 | 2 | | |
| Entrepreneurship and project management | 22 h 30 | 1 h 30 | | | | 2 | 2 | | 100% |
| Total Semester 3 | 292h30 | 13h30 | 9h | | | 16 | 30 | | |

4- Semester 4 :

Semester S4 is reserved for initiation to research, culminating in a thesis and a defense.

Hours of work = 14 weeks.

Credit = 30.

Method of assessment: Defense before the jury.

| | BHV | Coeff | Credits |
|--------------------|------------|--------------|----------------|
| Personal work | | | |
| Company internship | | | |
| Seminars | | | |
| Memory writing | 360h | 15 | 30 |
| Total Semester 4 | 360h | 15 | 30 |