

MATHEMATICS DEGREE

ACADEMIC YEAR 2007/2008

| | |
|-------------------------------|--|
| Degree | Mathematics |
| Centre | Faculty of Sciences C/ Francisco Tomás y Valiente, 7 Campus de Cantoblanco 28049 – Madrid Phone: 914974329 Web page |
| Academic Credits | 300 |
| 1 st and 2nd cycle | |

| Total Credits | Compulsory Credits | Optional Credits | Free Election Credits | Total |
|---------------|--------------------|------------------|-----------------------|-------|
| First Cycle | 138 | -- | 12 | 150 |
| Second Cycle | 66 | 56 | 28 | 150 |
| Total | 204 | 56 | 40 | 300 |

FIRST CYCLE

| | | | |
|--------------|--------------------------|-----------------------|----------------------------|
| First Course | Compulsory Credits 70 | Optional Credits 0 | Free Election Credits 5 |
|--------------|--------------------------|-----------------------|----------------------------|

| Code | Subject | Type | Credits | Semester |
|-------|-----------------------------|------|---------|----------|
| 14433 | Linear Algebra | (Tr) | 12 | 1 |
| 14434 | Geometry I | (Tr) | 12 | 2 |
| 14435 | Calculus I | (Tr) | 12 | 1 |
| 14436 | Calculus II | (Tr) | 12 | 2 |
| 14437 | Introduction to Informatics | (Tr) | 10 | 2 |
| 14438 | Sets and Numbers | (Ob) | 12 | 1 |

| | | | |
|---------------|--------------------------|-----------------------|----------------------------|
| Second Course | Compulsory Credits 68 | Optional Credits 0 | Free Election Credits 7 |
|---------------|--------------------------|-----------------------|----------------------------|

| Code | Subject | Type | Credits | Semester |
|-------|---------------------------------|------|---------|----------|
| 14307 | Numerical Analysis I | (Tr) | 10 | 1 |
| 14309 | Probability I | (Tr) | 10 | 1 |
| 14314 | Geometry II | (Tr) | 8 | 2 |
| 14439 | Topology | (Tr) | 8 | 2 |
| 14440 | Calculus III | (Tr) | 8 | 1 |
| 14441 | Ordinary Differential Equations | (Tr) | 8 | 1 |
| 14442 | Mathematical Modelling I | (Ob) | 8 | 2 |
| 14443 | Physics for Mathematicians | (Ob) | 8 | 2 |

SECOND CYCLE

| | | | |
|--------------|--------------------------|------------------------|-----------------------------|
| Third Course | Compulsory Credits 48 | Optional Credits 16 | Free Election Credits 11 |
|--------------|--------------------------|------------------------|-----------------------------|

| Code | Subject | Type | Credits | Semester |
|-------|--|------|---------|----------|
| 14444 | Complex Analysis I | (Tr) | 8 | 1 |
| 14445 | Differential Equations and Functional Analysis | (Tr) | 8 | 2 |
| 14446 | Measure and Integration Theory | (Tr) | 8 | 1 |
| 14447 | Algebra I | (Tr) | 8 | 1 |
| 14448 | Probability II | (Ob) | 8 | 2 |
| 14449 | Algebra II | (Tr) | 8 | 2 |

| | | | |
|---------------|--------------------------|------------------------|-----------------------------|
| Fourth Course | Compulsory Credits 18 | Optional Credits 40 | Free Election Credits 17 |
|---------------|--------------------------|------------------------|-----------------------------|

| Code | Subject | Type | Credits | Semester |
|-------|-----------------------|------|---------|----------|
| 14321 | Numerical Analysis II | (Tr) | 9 | 1 y 2 |
| 14322 | Geometry III | (Tr) | 9 | 1 y 2 |

Optional Subjects Offer in the Second Cycle

| Code | Subject | Type | Credits | Semester |
|-------|------------------------------------|------|---------|----------|
| 14466 | Operations Research (*) | (Op) | 8 | 2 |
| 14450 | History of Mathematics (*) | (Op) | 8 | 1 |
| 14451 | Discrete Mathematics (*) | (Op) | 8 | 1 |
| 14452 | Coding Theory and Cryptography (*) | (Op) | 8 | 1 |
| 14453 | Mathematical Finance (*) | (Op) | 8 | 2 |
| 14454 | Partial Differential Equations | (Op) | 8 | 1 |
| 14455 | Real Analysis | (Op) | 8 | 1 |
| 14456 | Complex Analysis II | (Op) | 8 | 2 |
| 14457 | Functional Analysis | (Op) | 8 | 2 |
| 14458 | Geometry IV | (Op) | 8 | 2 |
| 14459 | Algebra III | (Op) | 8 | 2 |
| 14460 | Number Theory | (Op) | 8 | 1 |
| 14461 | Mathematical Logic | (Op) | 8 | 1 |
| 14462 | Statistics I | (Op) | 8 | 1 |
| 14463 | Statistics II | (Op) | 8 | 2 |
| 14464 | Mathematical Modelling II | (Op) | 8 | 2 |
| 14465 | Numerical Analysis | (Op) | 8 | 2 |
| 14466 | Operations Research | (Op) | 8 | 2 |
| 14596 | Seminar | (Op) | 8 | 2 |

(Tr): Troncal = Compulsory Credits

(Ob): Obligatorio = Compulsory Credits

(Op): Optativo = Optional Credits