



### 1- Presentation of the faculty

The faculty of Mathematics was created in the year 2004 in accordance with the executive decree N ° 04-242 of August 29, 2004 and is structured into 4 departments:

- Algebra and Number Theory,
- Analysis,
- Operational Research ,
- Probability and Statistics.

### 2- Main missions of the faculty

The mission of the mathematics faculty is to promote fundamental and applied mathematics and to contribute to the economic and social development, through excellence in teaching and innovative research.

#### I. Degrees Offered

##### Bachelors

- Mathematics
- Probability and Statistics
- Algebra and Cryptography
- Operational research

##### Doctorate

- Mathematics
- Applied Mathematics

##### Masters

- Partial Differential Equations
- Operational Research, Management, Risk and Negotiation
- Operational Research Models and Methods for Engineering and Research
- Mathematics and Applications
- Financial Mathematics
- Engineering in Operational Research
- Dynamical Systems and Geometry
- Statistics and Applied Probabilities
- Arithmetic, Coding and Combinatorics
- Stochastic modeling and forecasting in operational research
- Big Data Analytics (inter-faculties)

## **II. Research**

The faculty has 09 laboratories approved by the Ministry of Higher Education and Scientific Research. Through their respective areas of interest, these laboratories cover multiple and innovative research axes, and are open to the socio-economic and industrial environment.

The laboratories within the faculty are:

- 1. *Dynamical Systems* ([www.lsd.usthb.dz](http://www.lsd.usthb.dz))**
- 2. *Algebra and Number Theory* ([www.latn.usthb.dz](http://www.latn.usthb.dz))**
- 3. *Stochastic Modeling and Data Processing* ([www.lmstd.usthb.dz](http://www.lmstd.usthb.dz))**
- 4. *Operational Research, Combinatorics, Theoretical Computing and Stochastic Methods* ([www.lrecits.usthb.dz](http://www.lrecits.usthb.dz))**
- 5. *Mathematical and Numerical Analysis of Partial Differential Equations* ([www.lamnedp.usthb.dz](http://www.lamnedp.usthb.dz))**
- 6. *Operational Research and Decision Mathematics* ([www.laromad.usthb.dz](http://www.laromad.usthb.dz))**
- 7. *Fundamental Computing, Operational Research, Combinatorics and Econometrics (IFORCE)* ([www.liforce.usthb.dz](http://www.liforce.usthb.dz))**
- 8. *Multicriteria Decision Making and Operational Research* ([www.lamcdro.usthb.dz](http://www.lamcdro.usthb.dz))**
- 9. *Arithmetic, Coding, Combinatorics and Computer Algebra* ([www.la3c.usthb.dz](http://www.la3c.usthb.dz))**