### MESIO UPC-UB. Suggested elective subjects according to intensifications.

#### Q1 Compulsory by pathway

**Intensifications:** Biostatistics and Bioinformatics (BIO) | Business and Social Statistics (EMP) | Operations Research (IO) | Data Science (DS)

**Electives by intensification**
- Lifetime data analysis
- Clinical trials
- Fundations of bioinformatics
- Spatial epidemiology

**Other related electives**
- Mathematics (for pathway 2)
- Linear and generalized linear models

**Intensifications:** Advanced exp. design in clinical research | Actuarial statistics | Large scale optimization | Statistical programming and data bases

**Electives by intensification**
- Advanced topics in survival analysis
- Time series
- Quantitative marketing techniques
- Simul. for business decision making

**Other related electives**
- Bayesian analysis
- Multivariate data analysis (for pathway 1)
- Time series

**Intensifications:** Epidemiology | Financial statistics | Discrete network models# | Statistical learning

**Electives by intensification**
- Longitudinal data analysis
- Social indicators
- Simul. for business decision making

**Other related electives**
- Bayesian analysis
- Multivariate data analysis (for pathway 1)
- Longitudinal data analysis

**Intensifications:** Bayesian analysis | Statistical programming and data bases | Bayesian analysis

**Electives by intensification**
- Multivariate data analysis (for pathway 1)
- Time series
- Statistical learning

**Other related electives**
- Bayesian analysis
- Longitudinal data analysis

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# Only 2 of these 3 subjects are offered every course