

**Student Specialized in  
Physics of the Cosmos**

**1<sup>st</sup> period (October – January)**

Compulsory Classes	ECTS
Statistics and Data Analysis	6
Programming in a Scientific Environment	3
Physics of the Cosmos	6
The Standard Model of Particle Physics	6
Frontier Research in Astrophysics and Particle Physics *	3
Extragalactic Astrophysics	6

\* This class spans both periods, usually from November to May

**2<sup>nd</sup> period (March – June)**

Compulsory Classes	ECTS
Cosmology	6
Research Project (TFM)	18

  

Chose <b>1</b> Optional Class	ECTS
Analysis Tools in Particle Physics	6
Dark Universe	6
Multi-messenger Exploration of the Universe	6
High Performance Computing	6
Research Project I	6

**Student Specialized in Particle Physics**

**1<sup>st</sup> period (October – January)**

**2<sup>nd</sup> period (March – June)**

Compulsory Classes	ECTS
Statistics and Data Analysis	6
Programming in a Scientific Environment	3
Physics of the Cosmos	6
The Standard Model of Particle Physics	6
Frontier Research in Astrophysics and Particle Physics *	3
Detection Methods and Techniques in Particle Physics	6

Compulsory Classes	ECTS
Analysis Tools in Particle Physics	6
Research Project (TFM)	18

Chose <b>1</b> Optional Class	ECTS
Cosmology	6
Dark Universe	6
Multi-messenger Exploration of the Universe	6
High Performance Computing	6
Research Project I	6

\* This class spans both periods, usually from November to May