

**Student Specialized in
Physics of the Cosmos**

1st 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

2nd period (March – June)

Compulsory Classes	ECTS
Cosmology	6
Research Project (TFM)	18

Chose 1 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

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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

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2nd period (March – June)

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Chose 1 Optional Class	ECTS
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