## uc3m Universidad Carlos III de Madrid

## Quantum technologies and aerospace engineering

Academic Year: (2023 / 2024) Review date: 10-03-2023

Department assigned to the subject: Aerospace Engineering Department

Coordinating teacher: SANJURJO RIVO, MANUEL

Type: Electives ECTS Credits: 3.0

Year: 2 Semester: 1

## **DESCRIPTION OF CONTENTS: PROGRAMME**

Quantum Technologies and Aerospace Engineering.- Introduction to the space environment and space systems (setup, integration and testing). Aerospace quantum telecommunication systems (emitters and receivers). Setup and experimental techniques of quantum aerospace systems: acquisition, pointing and tracking (APT) in space; quantum key distribution, entanglement and teleportation.