Course guide
205065 - 205065 - Spaceports, Airports for Spaceflights

Last modified: 19/04/2023

Unit in charge: Terrassa School of Industrial, Aerospace and Audiovisual Engineering
Teaching unit: 758 - EPC - Department of Project and Construction Engineering.

Degree: MASTER'S DEGREE IN AERONAUTICAL ENGINEERING (Syllabus 2014). (Optional subject).
MASTER'S DEGREE IN SPACE AND AERONAUTICAL ENGINEERING (Syllabus 2016). (Optional subject).

Academic year: 2023 **ECTS Credits:** 3.0 **Languages:** English

LECTURER

Coordinating lecturer: Roca Ramon, Xavier

Others: Galan Herranz, Jose Ignacio

TEACHING METHODOLOGY

The teaching methodology is divided in three parts:
- Presential sessions of exposition - participation of the contents and exercices realization.
- Presential sessions of laboratory work.
- Autonomous work of study and realization of exercices and activities.

It is an experimental subject with a high degree of student participation. Collaborative and supervised research of more informative than scientific information available.

LEARNING OBJECTIVES OF THE SUBJECT

The "Space" is taking importance, situated in the center stage, and infrastructure, landing/taking off areas, how to build logistics and maintenance zones, passenger management, regulations, etc. are needed. It is an area in development and experimentation. Some initiatives have started, private money supported specially oriented to the part of "adventure" tourism. Other examples are materials and organisms research in microgravity conditions.
The information of this subjects is limited due to its recent launch, and development mainly of private funds. Although the investigations of Space Agencies of possible life in other planets go ahead. Our future could be out of the limits we have known untill now.
Literature and cinema have recurrently treated the space life, a few years ago considered books, or futuristic films, today they can be almost a reality.

STUDY LOAD

Type	Hours	Percentage
Self study	48,0	64.00
Hours large group	27,0	36.00

Total learning time: 75 h

CONTENTS

INTRODUCTION

Description:
content english

Full-or-part-time: 10h
Laboratory classes: 4h
Self study : 6h

HISTORY. STATE OF THE ART OF THE SPACEPORTS

Description:
content english

Full-or-part-time: 10h
Laboratory classes: 6h
Self study : 4h

AIRSIDE APPENDIX 14 FROM ICAO APPLIED TO SPACE AIRCRAFT

Description:
content english

Full-or-part-time: 10h
Laboratory classes: 4h
Self study : 6h

LANDSIDE. TERMINAL BUILDING: AREAS, PASSENGER EXPERIENCE, TRAINING AREAS, LOGISTICS AREAS

Description:
content english

Full-or-part-time: 10h
Laboratory classes: 6h
Self study : 4h

HANDLING / EQUIPMENT / TIMES

Description:
content english

Full-or-part-time: 10h
Laboratory classes: 4h
Self study : 6h

SPACE MISSION

Description:
content english

Full-or-part-time: 10h
Laboratory classes: 6h
Self study : 4h

PRESENTATION OF STUDENTS

Description:
content english

Full-or-part-time: 15h
Laboratory classes: 3h
Self study : 12h

GRADING SYSTEM

The qualification will consist on a final presentation that the students will do about all the work done continuously during the course. In groups they would have chosen a topic, and will expose its state of art, and future purposes for its improvement.