uc3m Universidad Carlos III de Madrid

Aerospace project management

Academic Year: (2020 / 2021) Review date: 09-07-2020

Department assigned to the subject: Bioengineering and Aeroespace Engineering Department

Coordinating teacher: FAJARDO PEÑA, PABLO

Type: Compulsory ECTS Credits: 3.0

Year: 1 Semester: 2

REQUIREMENTS (SUBJECTS THAT ARE ASSUMED TO BE KNOWN)

fundamentals to business management

OBJECTIVES

Wide knowledge about the aerospace project management processes, through all the development phases of those projects.

The different phases in which an aerospace project is developed are analyzed, also assessing their characteristics and specific aspects. These aspects define the methods and procedures applied for project management.

Apply techniques for scoping programs/projects, resource needs, schedules, risks management, etc.

Effectively monitor and measure progress.

Effective management of all resources (people, tools, and budgets).

Utilize basic project management tools and techniques effectively.

DESCRIPTION OF CONTENTS: PROGRAMME

- 1. Introduction to Aerospace Projects Management
- 2. Project lifecycle
- 3. Organization and project management
- 4. Project management processes
- 5. Project management knowledge areas
- 6. Initiating Processes
 - 6.1. Project Charter
- 7. Planning Processes
 - 7.1. Project Management Plan
 - 7.2. WBS
 - 7.3. Project Schedule
 - 7.4. Project Cost/Budget
 - 7.5. Project Team
 - 7.6. Risk Management
 - 7.7. Make or Buy
- 8. Executing Processes
 - 8.1. Project Team
 - 8.2. Information distribution
- 9. Monitoring and Controlling Processes
 - 9.1. Scope, schedule and cost controlling
 - 9.2. Report performance
 - 9.3. Control procurements
- 10. Closing Processes
- 11. Financial management for Aerospace Projects

LEARNING ACTIVITIES AND METHODOLOGY

Theory sessions.

Problem sessions working individually and in groups.

ASSESSMENT SYSTEM

End-of-term exam (25%)

Lab sessions, projects with oral presentation, assignments, etc (75%)

In order to pass the subject, two requirements need to be met:

- 1) to have a MINIMUM mark of 4.0/10 in the end-of-term exam;
- 2) to have a minimum overall mark of 5.0/10 (weighing 25% the end-of-term exam mark and 75% the mark of the continuous evaluation).

% end-of-term-examination: 25

% of continuous assessment (assignments, laboratory, practicals...): 75

BASIC BIBLIOGRAPHY

- null A Guide to the Project Management Body of Knowledge: PMBOK(R) Guide, Publisher: Project Management Institute, 5 edition (January 1, 2013)

ADDITIONAL BIBLIOGRAPHY

- null Earned Value Management Tutorial, Department of Energy. United States of America. .
- Harold Kerzner Project Management, John Wiley and Sons Inc..