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| COURSE: Advanced Aircraft Design and Certification II | | |
| MASTER: Aeronautical Engineering | YEAR: 2nd | TERM: 1st |

*La asignatura tiene 29 sesiones que se distribuyen a lo largo de 12 semanas. Los laboratorios pueden situarse en cualquiera de ellas.
The course has 29 sessions distributed along 12 weeks. Labs can be located in any of these weeks.*

2017 calendar prevision

| Month | Wk | Sessions | Mon | Wed | Fri | Mon | Wed | Fri |
|---------|----|----------|--------------|-------------------|---------------|--------------------------------|--------------------------------|-----------------------------|
| Sep | 1 | 1-2 | 4 | 6 | 8 | 4 | | |
| Sep | 2 | 3-4-5 | 11 | 13 | 15 | (2) Longitudinal FQ and HTP | (2) Longitudinal FQ and HTP | Lab Practice |
| Sep | 3 | 6-7-8 | 18 | 20 | 22 | (3) Lateral FQ and VTP | (3) Lateral FQ and VTP | (4) Powerplant Installation |
| Sep | 4 | 9-10-11 | 25 | 27 | 29 | (4) Powerplant Installation | (5) Landing Gear Design | Lab Practice |
| Oct | 5 | 12-13 | 2 | 4 | 6 | (5) Landing Gear Design | (6) Flight Loads | 6 |
| Oct | 6 | 14 | 9 | 11 | 13 | (6) Flight Loads | | |
| Oct | 7 | 15-16-17 | 16 | 18 | 20 | (6) Flight Loads | Partial Exam | (7) Ground Loads |
| Oct | 8 | 18-19-20 | 23 | 25 | 27 | (7) Ground Loads | (8) Fatigue Analysis | Lab Practice |
| Oct/Nov | 9 | 21-22 | 30 | 1 | 3 | (8) Fatigue Analysis | | (9) Aircraft Mass & CG |
| Nov | 10 | 23-24-25 | 6 | 8 | 10 | (9) Aircraft Mass & CG | (10) Interaction System-Struct | Lab Practice |
| Nov | 11 | 26-27 | 13 | 15 | 17 | (10) Interaction System-Struct | (11) Aircraft Cost Analysis | 17 |
| Nov | 12 | 28-29 | 20 | 21 ^(*) | 24 | (11) Aircraft Cost Analysis | (12) Flight & Ground Testing | 24 |

(*) Nov 21th: Tuesday instead of Wednesday

WEEKLY PLANNING

| WEEK | SESSION | DESCRIPTION | GROUPS (mark X) | | SPECIAL ROOM FOR SESSION (Computer class room, audio-visual class room) | Indicate YES/NO If the session needs 2 teachers | WEEKLY PROGRAMMING FOR STUDENT | | |
|------|---------|--|--------------------|----------|--|---|---|-------------|----------------------------------|
| | | | LECTURES | SEMINARS | | | DESCRIPTION | CLASS HOURS | HOMEWORK HOURS (Max. 7h week) |
| 1 | 1 | Aircraft Sizing Review | X | X | | NO | Reading corresponding notes chapters Study and personal work about the lecture Solve the proposed exercises | 1.6 | 3.2 |
| 1 | 2 | Aircraft Sizing Review | X | X | | NO | Reading, study and solving exercises | 1.6 | 3.2 |
| 2 | 3 | Longitudinal Flying Qualities and HTP design | X | X | | NO | Reading, study and solving exercises | 1.6 | 3.2 |
| 2 | 4 | Longitudinal Flying Qualities and HTP design | X | X | | NO | Reading, study and solving exercises | 1.6 | 3.2 |
| 2 | 5 | Lab Practice | | X | X | YES | Computational practice | 1.6 | 3.2 |
| 3 | 6 | Lateral Flying Qualities and VTP design | X | X | | NO | Reading, study and solving exercises | 1.6 | 3.2 |
| 3 | 7 | Lateral Flying Qualities and VTP design | X | X | | NO | Reading, study and solving exercises | 1.6 | 3.2 |
| 3 | 8 | Powerplant Installation | X | X | | NO | Reading, study and solving exercises | 1.6 | 3.2 |
| 4 | 9 | Powerplant Installation | X | X | | NO | Reading, study and solving exercises | 1.6 | 3.2 |
| 4 | 10 | Landing Gear Design | X | X | | NO | Reading, study and solving exercises | 1.6 | 3.2 |
| 4 | 11 | Lab Practice | | X | X | YES | Computational practice | 1.6 | 3.2 |
| 5 | 12 | Landing Gear Design | X | X | | NO | Reading, study and solving exercises | 1.6 | 3.2 |
| 5 | 13 | Flight Loads | X | X | | NO | Reading, study and solving exercises | 1.6 | 3.2 |
| 6 | 14 | Flight Loads | X | X | | NO | Reading, study and solving exercises | 1.6 | 3.2 |
| 7 | 15 | Flight Loads | X | X | | NO | Reading, study and solving exercises | 1.6 | 3.2 |
| 7 | 16 | Partial Exam | | | X | YES | Exam | 1.6 | 10 |
| 7 | 17 | Ground Loads | X | X | | NO | Reading, study and solving exercises | 1.6 | 3.2 |
| 8 | 18 | Ground Loads | X | X | | NO | Reading, study and solving exercises | 1.6 | 3.2 |
| 8 | 19 | Fatigue Analysis | X | X | | NO | Reading, study and solving exercises | 1.6 | 3.2 |

| WEEKLY PLANNING | | | | | | | | | |
|---|---------|---------------------------------------|-----------------|----------|---|---|--------------------------------------|-------------|-------------------------------|
| WEEK | SESSION | DESCRIPTION | GROUPS (mark X) | | SPECIAL ROOM FOR SESSION (Computer class room, audio-visual class room) | Indicate YES/NO If the session needs 2 teachers | WEEKLY PROGRAMMING FOR STUDENT | | |
| | | | LECTURES | SEMINARS | | | DESCRIPTION | CLASS HOURS | HOMEWORK HOURS (Max. 7h week) |
| 8 | 20 | Lab Practice | | X | X | YES | Computational practice | 1.6 | 3.2 |
| 9 | 21 | Fatigue Analysis | X | X | | NO | Reading, study and solving exercises | 1.6 | 3.2 |
| 9 | 22 | Aircraft Mass and CG estimation | X | X | | NO | Reading, study and solving exercises | 1.6 | 3.2 |
| 10 | 23 | Aircraft Mass and CG estimation | X | X | | NO | Reading, study and solving exercises | 1.6 | 3.2 |
| 10 | 24 | Interaction Systems-Flight-Structures | X | X | | NO | Reading, study and solving exercises | 1.6 | 3.2 |
| 10 | 25 | Lab Practice | | X | X | YES | Computational practice | 1.6 | 3.2 |
| 11 | 26 | Interaction Systems-Flight-Structures | X | X | | NO | Reading, study and solving exercises | 1.6 | 3.2 |
| 11 | 27 | Aircraft Cost Analysis | X | X | | NO | Reading, study and solving exercises | 1.6 | 3.2 |
| 12 | 28 | Aircraft Cost Analysis | X | X | | NO | Reading, study and solving exercises | 1.6 | 3.2 |
| 12 | 29 | Flight and Ground Testing | X | X | | NO | Reading, study and solving exercises | 1.6 | 3.2 |
| Subtotal 1 | | | | | | | | 46.4 | 99.6 |
| Total 1 (Hours of class plus student homework hours between weeks 1-12) | | | | | | | | 150 | |
| 13 | | Tutorials, handing in, etc | | | | | | | 5 |
| 14-16 | | Final Assessment | | | X | YES | | 3 | 15 |
| Subtotal 2 | | | | | | | | 3 | 20 |
| Total 2 (Hours of class plus student homework hours between weeks 13-16) | | | | | | | | 23 | |
| TOTAL (Total 1 + Total 2. Maximum 180 hours) | | | | | | | | 173 | |