



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.*

2016 calendar prevision

Month	Week	Sessions	Mon	Wed	Fri	Mon	Wed	Fri
Sep	1	1-2	5	7	9		Aircraft Sizing Review	Aircraft Sizing Review
Sep	2	3-4-5	12	14	16	Longitudinal FQ and HTP	Longitudinal FQ and HTP	Lab Practice
Sep	3	6-7	19	21	23	Lat-Dir FQ and VTP	Lat-Dir FQ and VTP	
Sep	4	8-9-10	26	28	30	Powerplant	Powerplant	Landing Gear
Oct	5	11-12-13	3	5	7	Landing Gear	Ground Loads	Lab Practice
Oct	6	14	10	12	14	Ground Loads		
Oct	7	15-16-17	17	19	21	Ground & Flight Loads	Flight Loads	Lab Practice
Oct	8	18-19-20	24	26	28	Flight Loads	Partial Exam	Fatigue
Oct/Nov	9	21	31	2	4		Fatigue	
Nov	10	22-23-24	7	9	11	Aircraft Mass & CG	Aircraft Mass & CG	Lab Practice
Nov	11	25-26-27	14	16	18	Interaction Syst-Flight-Struct	Interaction Syst-Flight-Struct	Flight and Ground Testing
Nov	12	28-29	21	23	25	Cost Analysis	Cost Analysis	

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	(1) 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	(1) Reading, study and solving exercises	1.6	3.2
2	3	Longitudinal Flying Qualities and HTP design	X	X		NO	(1) Reading, study and solving exercises	1.6	3.2
2	4	Longitudinal Flying Qualities and HTP design	X	X		NO	(1) Reading, study and solving exercises	1.6	3.2
2	5	Lab Practice		X	X	YES	(2) Computational practice	1.6	3.2
3	6	Latero-Directional Flying Qualities and VTP design	X	X		NO	(1) Reading, study and solving exercises	1.6	3.2
3	7	Latero-Directional Flying Qualities and VTP design	X	X		NO	(1) Reading, study and solving exercises	1.6	3.2
4	8	Powerplant selection and installation	X	X		NO	(1) Reading, study and solving exercises	1.6	3.2
4	9	Powerplant selection and installation	X	X		NO	(1) Reading, study and solving exercises	1.6	3.2
4	10	Landing Gear Design	X	X		NO	(1) Reading, study and solving exercises	1.6	3.2
5	11	Landing Gear Design	X	X		NO	(1) Reading, study and solving exercises	1.6	3.2
5	12	Ground Loads	X	X		NO	(1) Reading, study and solving exercises	1.6	3.2
5	13	Lab Practice		X	X	YES	(2) Computational practice	1.6	3.2
6	14	Ground Loads	X	X		NO	(1) Reading, study and solving exercises	1.6	3.2
7	15	Ground & Flight Loads	X	X		NO	(1) Reading, study and solving exercises	1.6	3.2
7	16	Flight Loads	X	X		NO	(1) Reading, study and solving exercises	1.6	3.2
7	17	Lab Practice		X	X	YES	(2) Computational practice	1.6	3.2
8	18	Flight Loads	X	X		NO	(1) Reading, study and solving exercises	1.6	3.2
8	19	Partial Exam			X	YES	(1) Reading, study and solving exercises	1.6	10

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		
			LECTURE S	SEMINARS			DESCRIPTION	CLASS HOURS	HOMEWORK HOURS (Max. 7h week)
8	20	Fatigue Analysis	X	X		NO	(1) Reading, study and solving exercises	1.6	3.2
9	21	Fatigue Analysis	X	X		NO	(1) Reading, study and solving exercises	1.6	3.2
10	22	Aircraft Mass and CG estimation	X	X		NO	(1) Reading, study and solving exercises	1.6	3.2
10	23	Aircraft Mass and CG estimation	X	X		NO	(1) Reading, study and solving exercises	1.6	3.2
10	24	Lab Practice		X	X	YES	(2) Computational practice	1.6	3.2
11	25	Interaction Systems-Flight-Structures	X	X		NO	(1) Reading, study and solving exercises	1.6	3.2
11	26	Interaction Systems-Flight-Structures	X	X		NO	(1) Reading, study and solving exercises	1.6	3.2
11	27	Aircraft Cost Analysis	X	X		NO	(1) Reading, study and solving exercises	1.6	3.2
12	28	Aircraft Cost Analysis	X	X		NO	(1) Reading, study and solving exercises	1.6	3.2
12	29	Flight and Ground Testing	X	X		NO	(1) 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	