Universidad Carlos III de Madrid
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COURSE: Aerospace Systems Control		
DEGREE: Bachelor in Aerospace Engineering	YEAR: 3	TERM: 2

La asignatura tiene 29 sesiones que se distribuyen a lo largo de 14 semanas. Los laboratorios pueden situarse en cualquiera de ellas. Semanalmente el alumnos tendrá dos sesiones, excepto en un caso que serán tres

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	Subject introduction	X			NO		1,6	4
1	2	Why control?: Brainstorming session		X		NO		1,6	
2	3	Laplace transforms	X			NO		1,6	4

2	4	Exercises on Laplace transforms		X		NO		1,6	
3	5	System modeling: transfer function	X			NO		1,6	4
3	6	Exercises on System modeling: transfer function		X		NO		1,6	
4	7	System modeling: state space	X			NO		1,6	4
4	8	Exercises on System modeling: state space		X		NO		1,6	
5	9	Stability and feedback: systems characterization	X			NO		1,6	4
5	10	Exercises on Stability and feedback: systems characterization		X		NO		1,6	
6	11	Stability and feedback analysis in time domain	X			NO		1,6	4
6	12	Exercises on Stability and feedback analysis in time domain		X		NO		1,6	

7	13	Stability and feedback analysis in frequency domains	x			NO		1,6	4
7	14	Exercises on Stability and feedback analysis in frequency domain		x		NO		1,6	
7	15	1st Practical Session: System modeling in Matlab			Computer classroom	NO		1,6	4
8	16	Aircraft systems fundamentals: a practical view	x			NO		1,6	6
8	17	Aircraft dynamics (I)		x		NO		1,6	
9	18	Aircraft dynamics (II)	X			NO		1,6	
9	19	Exercises on Aircraft dynamics		x		NO		1,6	
10	20	First partial examination						1,6	4
10	21	PID controllers: design methods	X			NO		1,6	4
11	22	Exercises on PID controllers: design methods		X		NO		1,6	
11	23				Computer	NO		1,6	

		2nd Practical Session: PID control and stability in Matlab			classroom				4
12	24	Nonlinear systems: describing function	X			NO		1,6	4
12	25	Exercises on Nonlinear systems: describing function		X		NO		1,6	
13	26	Nonlinear systems: stability analysis	X			NO		1,6	4
13	27	Exercises on Nonlinear systems: stability analysis		x		NO		1,6	
14	28	3rd Practical Session: Nonlinear systems analysis in Matlab			Computer classroom	NO		1,6	4
14	29	Extra class: practical session or subject review			Computer classroom	NO		1,6	2
15	30	Second partial examination	x			NO		1,6	4
							Subtotal 1	**48**	**68**
							Total 1 *(Hours of class plus student homework hours between weeks 1-14)*	116	

15		Tutorials, handing in, etc							
16		Assessment						3	15
17									
18									

Subtotal 2	**3**	**15**
Total 2 *(Hours of class plus student homework hours between weeks 15-18)*	18	

TOTAL *(Total 1 + Total 2. Maximum 180 hours)*	**134**