Course Specifications

Program(s) on which this course is given:	Aerospace Engineering Department
Department offering the program:	Aerospace Engineering Department
Department offering the course:	Aerospace Engineering Department
Academic Level:	PhD
Date	April 2015
Semester (based on final exam timing)	■ Fall ☐ Spring

A- Basic Information

1. Title:	**Recognition, estimation and precise control**			**Code:**		**AER750**		
2. Units/Credit hours per week:	Lectures	2 hrs	Tutorial		Practical		Total	2 hrs

B- Professional Information

1. Course description:

The course aims at teaching students the followings: Evaluation of precise control parameters during control period, precise control systems, self consistent control systems, stability, robustness, convergence, random precise control, coefficients tabulation, alternatives of precise control

2. Intended Learning Outcomes of Course (ILOs):

a) Knowledge and Understanding

1. Students will be able to understand the fundamental concepts of Evaluation of precise control parameters during control period .
2. Students will be able to understand the precise control systems.

b) Intellectual Skills

1. Students will be able to understand stability, robustness, convergence, random precise control.

c) Professional and Practical Skills

1. Students will be able to understand the coefficients tabulation, alternatives of precise control.

d) General and Transferable Skills

3. Contents

Topic	Total hours	Lectures hours	Tutorial/ Practical hours
Evaluation of precise control parameters	4	4	
self consistent control systems	6	6	
stability, robustness, convergence, random precise control	4	4	
coefficients tabulation	4	4	
alternatives of precise control	6	6	
	Lectures (√)	Practical Training/Laboratory (√)	Seminar/Workshop ( )

	Class Activity ( )	Case Study ()	Projects ()
	E-learning ( )	Assignments/Homework (√)	Other:

5. Student Assessment Methods

• **Assessment Schedule**	**Week**
Assignment 1	Week 2
Assignment 2	Week 5
Assignment 3	Week 7
Assignment 4	Week 11

• **Weighting of Assessments**	
Assignments	25%
Attendance	5%
Final-term Examination	70%

6. List of References

6.1- Course Notes

6.2- Essential Books (Text Books)

1. Self Tuning Adaptive Control.

6.3- Recommended Books

1. Feedback Control Systems [John Van De Vegte].

7. Facilities Required for Teaching and Learning

. Data Show , Screen.

Course Coordinator:	**Prof. Gamal M. El-Bayumey**
Head of Department:	**Prof. Ayman H. Kassem**