



# Annual Course Report

(Elective-4)

## A- Basic Information

1 Title and Code	Elective-4 AC452				
2 Programme(s) on which this course is given	AC				
3 Academic year / Level of programme	4 <sup>th</sup> year/ 2 <sup>nd</sup> Semester				
4 Units/Weekly hours					
Lecture	<input type="text" value="3"/>	Tutorial/Practical	<input type="text" value="1"/>	Total	<input type="text" value="4"/>

## 5- Names of lecturers contributing to the delivery of the course

**Prof. Mohammed I. Mahmoud**

Dr. Fahima Essawy

**Course coordinator: Prof. Mohammed I. Mahmoud**

**External evaluators:**

## B- Statistical Information

No. of students attending the course:	No.	382		
No. of students completing the course:	No.	378	%	98.95

### Results:

Passed:	No.	371	%	98.15
Failed:	No.	7	%	1.85

### Grading of successful students:

Excellent:	No.	111	%	29.37
Very Good:	No.	108	%	28.57
Good:	No.	76	%	20.11
Pass:	No.	76	%	20.11

## C- Professional Information

## 1. Course Teaching

- (Advanced PLC)

Topic	No of hours	Lecturer
<b>Part I: PLC advanced elements</b>		<b>Prof. Mohammed I. Mahmoud</b>
<b>1- Introduction</b>	5	
<b>2- PLC timers</b>	5	
<b>3- PLC counters</b>	5	
<b>4- PLC registers</b>	5	
<b>5- PLC jumps</b>	5	
<b>Part II advanced PLC applications</b>		
<b>6- PLC traffic control</b>	5	
<b>7- PLC mix-colors production line</b>	5	
<b>8- PLC automation underground</b>	5	
<b>9- PLC car barking</b>	5	
<b>10- PLC industrial Systems</b>	5	
<b>11- PLC industrial Systems</b>	5	
<b>12- PLC industrial systems</b>	5	
<b>13 PLC medical systems</b>	5	
<b>14 PLC network systems</b>	5	
<b>Appendix</b>	5	
<b>Total sum</b>	<b>70</b>	

- New Programming Language (MATLAB)

Topic	No of hours	Lecturer
<b>1- Matlab Fundamentals</b>	5	<b>Dr. Fahima Esawy</b>
<b>2- Plotting commands</b>	5	
<b>3- Control statements</b>	5	
<b>4- Automatic Control toolbox</b>	5	
<b>5- Automatic Control toolbox</b>	5	
<b>6- Signal processing toolbox</b>	5	
<b>7- Signal processing toolbox</b>	5	
<b>8- Signal processing toolbox</b>	5	
<b>9- Fuzzy Logic toolbox</b>	5	
<b>10- Fuzzy Logic toolbox</b>	5	
<b>11- Fuzzy Logic toolbox</b>	5	
<b>12- Neural Network Toolbox</b>	5	
<b>13 Neural Network Toolbox</b>	5	
<b>14- Neural Network Toolbox</b>	5	

<b>Total sum</b>	<b>70</b>	
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**Topics taught as a percentage of the content specified:**

≥90 %       **70-90 %**       **<70%**

**2. Teaching and Learning Methods:**

Lectures:

Practical Training/ Laboratory:

Seminar/Workshop:

Class Activity:

Case Study:

Other Assignments/Homework:

**Case Study**

Other assignments/homework:  
A real world project assigned.

**3. Student Assessment:**

Method of Assessment	Percentage of total
Written examination	70
Midterm exams	15
Oral Examination	0
Practical/laboratory work	0
Other Assignments/class work	15
Total	100 %

**Members of Examination Committee:**

Assoc. Prof. Gaber Ibrahim Allam.  
Dr. Fahima Essawy  
Dr. Samir Badawy.

**Role of external evaluator:**



**Course Coordinator: Prof. Mohammed I. Mahmoud**

**Signature:**

**Date:**     /     /