

# Manufacturing Engineering and Production Technology B.Sc.

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## Program Report

2012-2013



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# Manufacturing Engineering and Production Technology

## PROGRAM REPORT

November 2013

### 1. General

#### 1.1 Basic Information

- 1- Program title: Manufacturing Engineering and Production Technology.
- 2- Program type: Single.
- 3- Department offering the program: Manufacturing Engineering and Production Technology.
- 4- Co-coordinator: Dr. Abdelmagid A. Abdalla
- 5- Year of operation: 2002-2003

#### 1.2 External Evaluators:

- Prof. Dr Tawfik Tawfik M. El-Midani: Professor of Production Engineering, Production Engineering and Mechanical Design Department, Faculty of Engineering, Mansoura University.
- Prof. Dr. Mohamed Abdel Mohsen Sayed Mahdy: Head of Design and Production Department, Faculty of Engineering, Ain Shams University.

#### Comments of external evaluator and other stakeholders

##### a) Comments of stakeholders:

- 1) The department, as a part of the modern academy for engineering and technology has been established according to the decree no. 2003 dated 25/10/2000 and modified by the ministerial decree no. 296 dated 5/3/2002.
- 2) The major area for students studying in the department is manufacturing engineering and Production technology. But other major can be easily added as most of the needed subjects and most of the needed laboratories, as well as the needed teaching staff already exist.
- 3) Advanced and modern manufacturing methods are included in the curricula of the department.
- 4) Other important aspects of the educational system are totally regarded, that includes; implementation methods and techniques, full awareness of technical systems and computer related use.
- 5) Development of research skills and team work through the preparation of project research documents, third year and fifth year projects, and gathering data from similar projects.

##### b) Comments of external evaluator

As the external evaluators reports were performed for the relevant program last year, and as these reports are valid for five years, so, the comments of external evaluators will not be repeated in this report.

##### 1) First Evaluator

Refer to previous report (2010/2011)

##### 2) Second Evaluator

Refer to previous report (2010/2011)

## 2. Professional Information

### 2.1 Statistics

- 1-No. of students starting the program at 2009-2010: 110 (students accepted in the Academy the academic year 2008-2009 were 1309 students with a ratio 8.4 %)
- 2-Ratio of students` attending the program in 2012-2013 to those of accepted in the Academy the academic year 2008-2009:  $92/1309 = 7.03 \%$
- 3-No. and percentage of students passing in each year for the students graduated in 2013

Table (1): No. and percentage of students passing in each year/level/semester

Year		Number of students	No of passing Students	Percentage of passing students
Second	2009-2010	110	79	71.8 %
Third	2010-2011	98	82	83.66 %
Fourth	2011-2012	95	80	84.2 %
Fifth	2012-2013	92	81	88.04 %

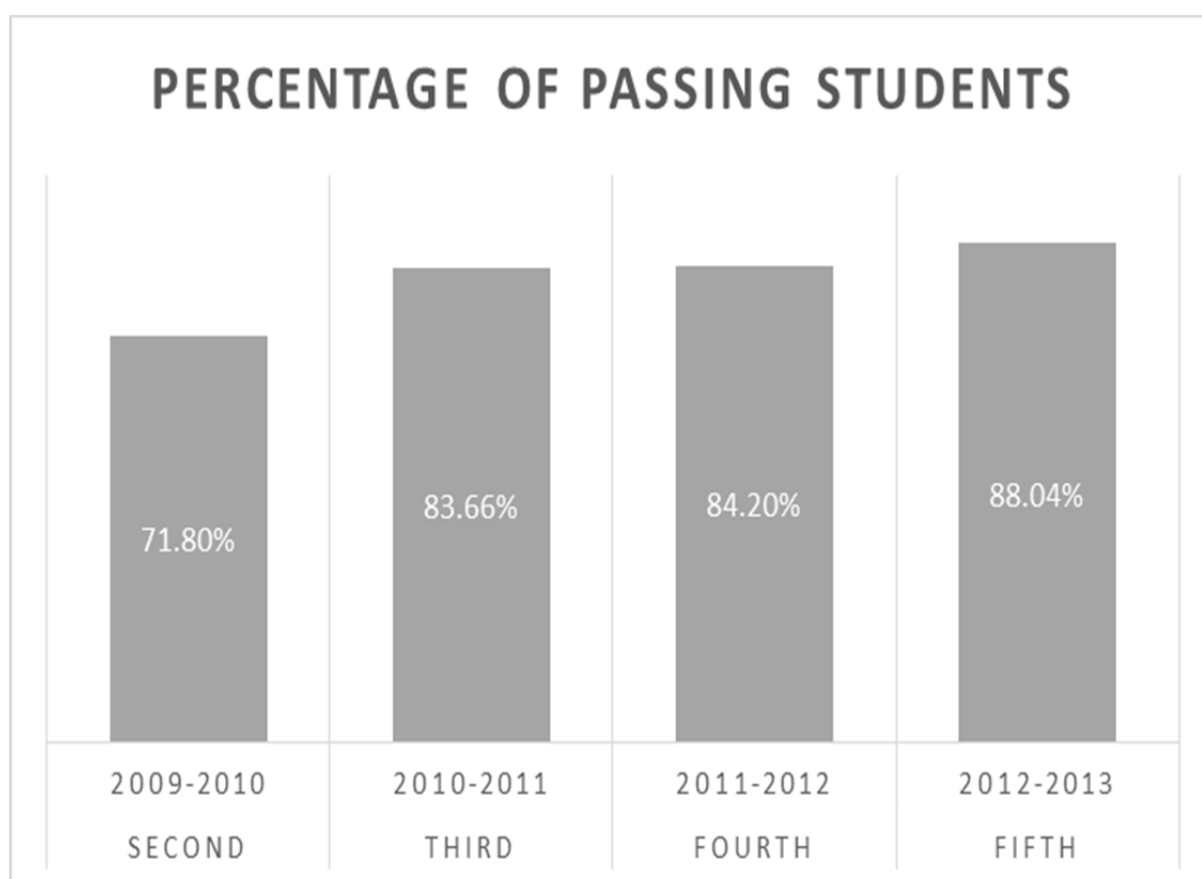


Figure (1): Ratio of students (graduated in 2013) passing in each year/level/semester

- 4-No. of students completing the program and as a percentage of those who started:  
 $92 / 110 = 83.63\%$

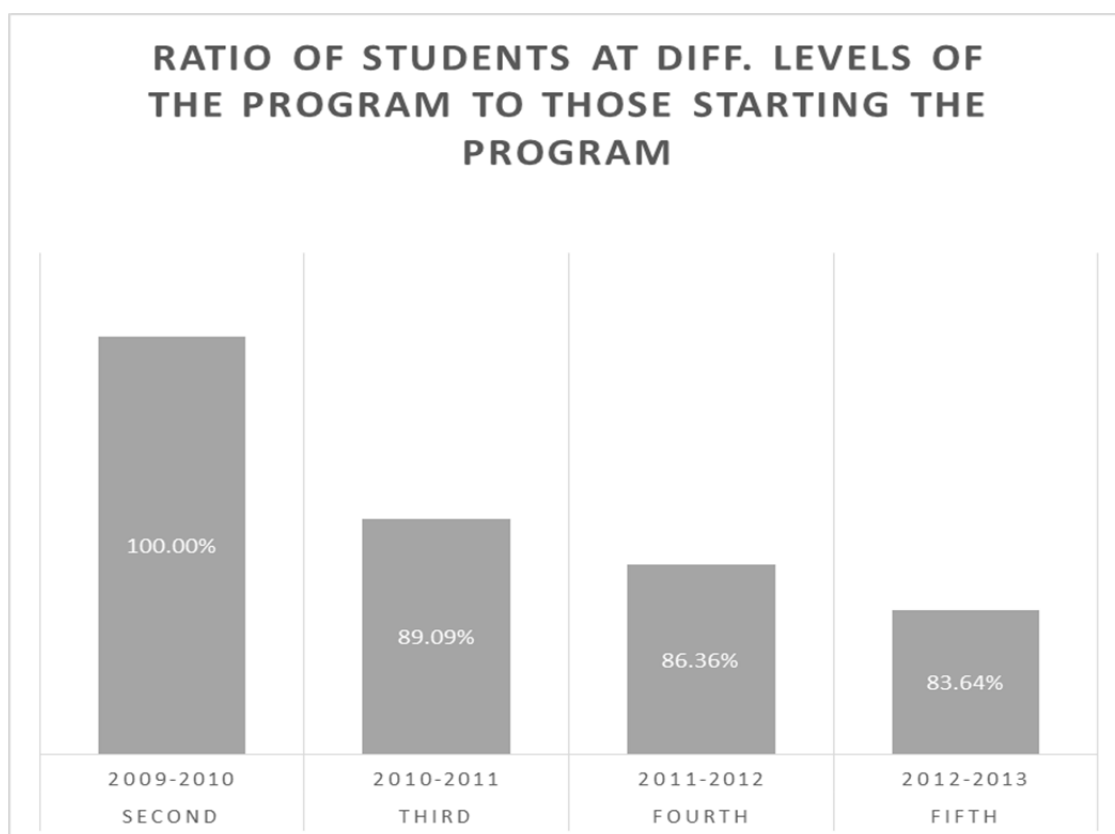


Figure (2): No. of students completing the program and as a percentage of those who started

5-Grading: No. and percentage in each grade

Table (2): No. and percentage of students passing in each grade

Year	No. of Students	Excellent	V. good	Good	Suff.	Failed
2 <sup>nd</sup> year 2009-2010	110	4	13	14	48	31
%	100%	3.6 %	11.8 %	12.7 %	43.6 %	28.2 %
3 <sup>rd</sup> year 2010-2011	98	12	16	12	42	16
%	100%	12.2 %	16.3 %	12.2 %	42.9 %	16.3 %
4 <sup>th</sup> year 2011-2012	95	9	11	20	40	15
%	100%	9.47 %	11.6 %	21.05 %	42.1 %	15.8 %
5 <sup>th</sup> year 2012-2013	92	15	16	21	29	11
%	100%	16.3 %	17.39 %	22.82 %	31.52 %	11.95 %

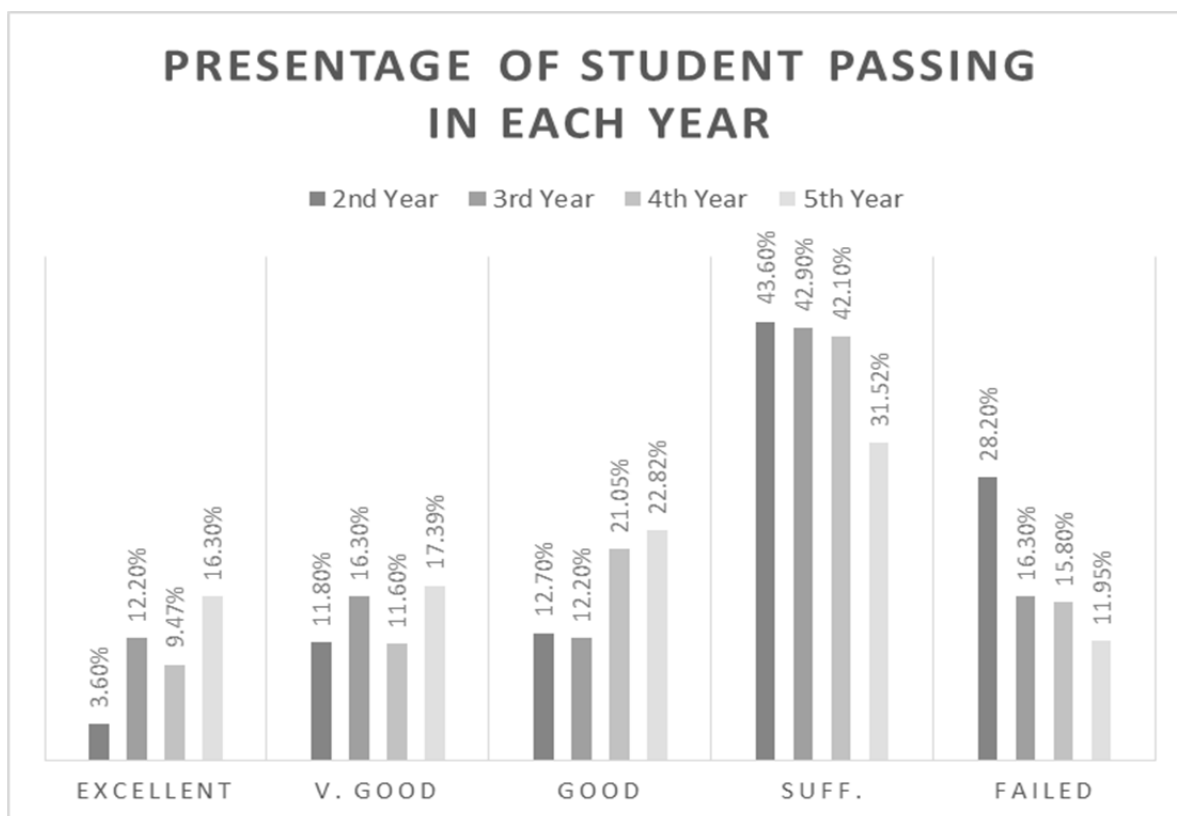


Figure (3): No. and percentage of students passing in each grade

Academic year	Number	Percentage
students joining the program on Sept 2012	92	100%
students completing the program at May 2013	60	65.2%
students completing the program at Nov 2013	21	22.8%
Total Number of students completing the program at 2013	Not available	

Table (3): No. and percentage of students passing in each grade -5<sup>th</sup> year

Year	Excellent		V. good		Good		Sufficient		failed	
	No.	%	No.	%	No.	%	No.	%	No.	%
5 <sup>th</sup> year 2012-2013 (92 students)	15	16.3%	16	17.4%	21	22.83%	29	31.53%	11	11.9%



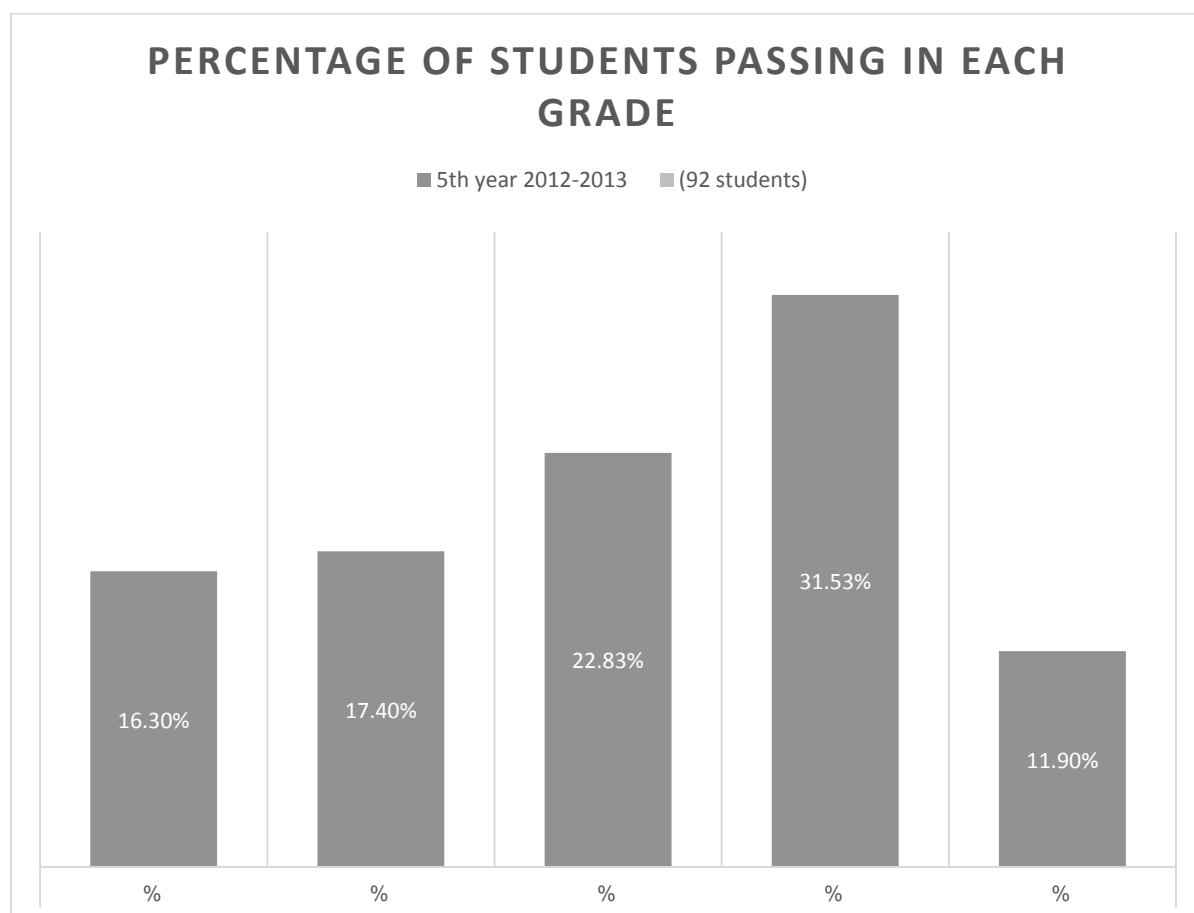


Figure (4): No. and percentage of students passing in each grade 5<sup>th</sup> year

#### 6-First destinations of graduates:

i. Proceeded to appropriate employment %	Not available
ii Proceeded to other employment %	Not available
iii Undertaken postgraduate study %	Not available
iv. Engaged in other types of activity %	Not available
v. Unknown first destination %	Not available

## 2.2 Academic Standards

### 2.2.1 Achievement of program intended learning outcomes, ILO's:

#### 2<sup>nd</sup> year Manufacturing Eng. & Prod. Technology

Code	Course Name	Knowledge & Understanding	Intellectual Skills	Practical & Professional Skills	General & Transferable Skills
		A	B	C	D
A060	Civil Engineering Technology	5, 7, 11, 18	2	1, 7, 16	3
B200	English Language III	2, 9, 10		12	3
B211	Mathematics III	1, 5	1, 2, 3, 7	1, 7	1
E210	Computer Programing I	2, 5, 12, 14, 16, 17	1, 2, 3, 4, 8, 11, 13	1, 2, 5, 7, 16	3, 4, 9
M201	Fluid Mechanics	1, 2, 3, 4, 5, 8, 10, 12, 13, 16, 18	1, 2, 3, 4, 7, 8, 12, 13, 14, 16, 17	1, 2, 3, 4, 5, 6, 8, 12, 13, 16, 17, 18	1, 2, 3, 5, 8
M250	Engineering Skills I	2, 3, 6, 10, 13, 18	3, 6, 7, 8, 9	2, 4, 10, 13	1, 3, 4, 9
M251	Mechanics of Machines I	1, 2, 13	2, 3, 4, 5, 17	1, 11	1, 2, 3, 5
M261	Strength of Materials	3, 4, 5, 10, 13, 18	2, 6, 7, 13, 14, 17	5, 12, 15, 17	2, 7
B202	History of Science & Technology	5, 7, 8, 9, 11	2, 7, 9	4, 10	2, 3, 6, 9
B212	Mathematics IV	1, 5	1, 2, 3, 7	1, 7	1
E213	Computer programing II	2, 5, 12, 14, 16, 17	1, 2, 3, 4, 8, 11, 13	1, 2, 5, 7, 16	3, 4, 9
M222	Thermodynamics	1, 2, 3, 4, 5, 8, 10, 12, 13, 18	1, 2, 3, 4, 5, 7, 8, 12, 13, 14, 17	1, 2, 3, 4, 5, 6, 8, 12, 13, 16, 18	1, 2, 3, 5, 8
M252	Mechanics of Machines II	1, 4, 5, 12, 13, 18	2, 3, 12, 13, 15, 17	1, 2, 5, 11	2, 6, 8, 9
M253	Engineering Skills II	2, 3, 6, 10, 13, 18	3, 6, 7, 8, 9	2, 4, 10, 13	1, 3, 4, 9
M262	Material Technology I	1, 3, 4, 8, 10, 12, 13, 17, 18	1, 5, 13, 17	1, 4, 11, 12, 15, 17	7, 9
M271	Principles of Manufacturing	3, 8, 13, 14	4, 9, 18	5, 8, 11, 12, 15	1, 8, 9

**3<sup>rd</sup> year Manufacturing Eng. & Prod. Technology**

Code	Course Name	Knowledge & Understanding	Intellectual Skills	Practical & Professional Skills	General & Transferable Skills
		A	B	C	D
B300	English Language IV	2, 9, 10		12	3
B311'	Mathematics V	1, 5	1, 2, 3, 7	1, 7	1
E030	Electrical & Electronic Circuits	1, 3, 5, 8, 12, 14, 16, 18	1, 2, 4, 7, 11, 16	1, 2, 5, 7, 16	3, 7
M310a	Computer Application I	1, 4, 12, 15, 18	1, 2, 3, 4, 13, 16, 17	1, 3, 5, 7, 13, 16, 17, 19	6
M331	Thermo-Fluid Machinery	4, 5, 8, 10, 17, 18	2, 3, 4, 5, 12, 13, 14, 17, 18	1, 2, 3, 5, 12, 13, 16, 17, 18	1, 3, 5, 7, 9
M351	Mechanics of Machines III	1, 4, 5, 12, 13, 18	2, 3, 12, 13, 15, 17	1, 2, 5, 12	2, 6, 8, 9
M360	Industrial Psychology	9, 11, 19	3, 5, 9	2, 4, 8	1, 2, 6, 9
M363	Manufacturing Technology I	1, 3, 4, 8, 12, 13, 14, 18	1, 4, 12, 13, 17, 18	3, 8, 9, 10, 11, 12, 15, 17, 19	1, 3, 6, 9
E050	Electrical Power Systems	1, 3, 5, 8, 12, 14, 16, 18	1, 2, 4, 7, 11, 16	1, 2, 5, 7, 16	3, 7
M310b	Computer Application II	3, 4, 8, 10, 15	1, 2, 9, 18	1, 5, 12, 13, 14, 17, 19	1, 3, 6, 7, 9
M312	Industrial Management	2, 5, 7, 9, 11, 13, 19	4, 9, 10	8, 9	1, 3, 6
M352	Measuring Instruments & Instrumentation	5, 10	6, 11, 14	5, 11, 15, 16, 17	2, 8
M364	Manufacturing Technology II	3, 4, 8, 13, 14, 18	2, 9, 12, 13, 18	1, 2, 5, 12, 15, 18, 19	1, 3, 6, 7, 9
M371	Machine Design I	3, 4, 5, 13, 14, 18, 19	1, 2, 3, 6, 13, 16, 17, 18	1, 3, 6, 12, 13	3, 5, 7, 9
M399	Project I	1, 2, 4, 5, 8, 10, 12, 13, 14, 17, 18, 19	1, 2, 3, 7, 9, 13, 17	1, 2, 4, 5, 7, 12, 13, 14, 16, 17, 19	1, 3, 4, 6, 8, 9

**4<sup>th</sup> year Manufacturing Eng. & Prod. Technology**

Code	Course Name	Knowledge & Understanding	Intellectual Skills	Practical & Professional Skills	General & Transferable Skills
		A	B	C	D
B411	Mathematics VI	1, 5	1, 2, 3, 7	1, 7	1
M454	Production Management	1, 7, 8, 10, 19	1, 2, 9, 10, 13	1, 6, 9, 12, 17	1, 3, 6, 7, 9
M461	System Dynamics	1, 5, 12, 19	1, 2, 7, 11, 13, 14, 15, 16	1, 5, 6, 7, 16, 17	1, 2, 7, 9
M471	Machine Design II	3, 4, 5, 13, 14, 18, 19	1, 2, 3, 6, 13, 16, 17, 18	1, 3, 6, 12, 13	3, 5, 7, 9
M481	Manufacturing Technology III	3, 4, 5, 8, 12, 13, 15	2, 4, 9, 10, 12, 15, 18	8, 11, 13, 14, 19	8, 9
E051	Signal Processing	1, 3, 5, 8, 12, 14, 16, 18	1, 2, 4, 7, 11, 16	1, 2, 5, 7, 16	3, 7
M462	Material Technology II	1, 3, 4, 8, 10, 12, 13, 17, 18	1, 5, 13, 17	1, 4, 11, 12, 15, 17	7, 9
M472	Computer Aided Design (C A D)	1, 2, 4, 8, 12, 13, 14, 15, 17, 18	1, 2, 3, 5, 6, 8, 11, 13, 15, 16	1, 2, 3, 4, 6, 7, 11, 13, 14	1, 4, 6, 7, 9
M474	Machine Tool Design	3, 4, 5, 10, 13, 18	2, 7, 9, 14, 17, 18	1, 3, 5, 15, 18	2, 5, 7
M482	Automatic Control	1, 4, 13, 18	1, 5, 11, 13, 17	1, 3, 5, 7, 16, 17	3, 9

**5<sup>th</sup> year Manufacturing Eng. & Prod. Technology**

Code	Course Name	Knowledge & Understanding	Intellectual Skills	Practical & Professional Skills	General & Transferable Skills
		A	B	C	D
M552	Operations Research	1, 5, 7, 12	1, 2, 4, 8, 9, 13	1, 7, 9, 11	1, 2, 6
M561	Engineering Economy	1, 2, 5, 11	1, 2, 3, 4, 9, 12, 13, 15	1, 6, 7, 12	1, 2, 8
M571	Computer Aided Manufacturing (C A M)	2, 3, 5, 8, 10, 13, 15	2, 8, 12, 13, 18	1, 5, 6, 12, 14, 15, 17, 18	1, 3, 6, 7, 9
M573	Automation	4, 6, 8, 13, 15, 16, 18, 19	1, 2, 6, 9, 10, 12, 18	1, 3, 6, 14, 17	1, 3, 6, 7, 9
M578	Hydraulic Power Systems	1, 3, 8, 10	1, 2, 5, 8, 13, 14	1, 3, 5, 8, 11, 12, 16	1, 3, 7, 9
M580a	Elective I	4, 5, 6, 7, 12, 13, 19	1, 2, 3, 6, 7, 10, 11, 12, 15, 18	1, 2, 7, 8, 11, 19	1, 3, 5, 6, 9
M598	Report	10, 11	4	2, 4, 12, 13	6, 9
B512	Laws & Regulations for Engineering	6, 7, 9	10	9, 10, 11	3, 7
B572	Pollution & Society	6, 7, 8		8, 10	1, 9
M574	Quality Control	1, 6, 8, 13, 14	1, 2, 11, 14	1, 7, 10, 12, 17	1, 3, 6, 7, 9
M576	Computer Integrated Manufacturing (C I M)	1, 4, 6, 14, 15, 16, 19	1, 8, 9, 10, 12, 18	2, 5, 6, 14, 17, 19	1, 3, 6, 7, 9
M580a	Elective II	1, 4, 8, 10, 12, 14, 16	1, 2, 5, 6, 11, 12, 13, 16	1, 2, 3, 7, 8, 12, 17	1, 2, 4, 5, 7
M581	Advanced Manufacturing Methods	1, 3, 8, 13, 14	2, 3, 9, 12, 17, 18	1, 2, 6, 8, 14, 17, 19	1, 3, 6, 7
M599	Project II	1, 2, 4, 5, 8, 10, 12, 13, 14, 17, 18, 19	1, 2, 3, 7, 9, 13, 17	1, 2, 4, 5, 7, 12, 13, 14, 16, 17, 19	1, 3, 4, 6, 8, 9

Regarding the previous table we observe the achievement of program intended learning outcomes to be covered by all courses taught:

Comments of external evaluator and other stakeholders

## **1- Basic Information**

### **a) Comments of stakeholders:**

- 1) Full knowledge of relevant scientific methods of the design process of mechanical systems is emphasized.
- 2) A very strong interest in new trends and advanced methods of production which help in manufacturing of precise products of mechanical systems as well as other classical manufacturing means.
- 3) Ergonomics and human needs as a user of space and his comfort is a priority.
- 4) Other important aspects of the educational system is totally regarded, that includes; implementation methods and techniques, computer related use.
- 5) Full knowledge of design process are taught, to provide methods of applying functional, environmental, social and economic aspects of design.
- 6) Development of research skills and team work through the execution of projects during third and fifth years.

### **b) Comments of external evaluator**

#### **1) First Evaluator**

Refer to previous report (2010/2011)

#### **2) Second Evaluator**

Refer to previous report (2010/2011)

## **2- Professional Information**

### **a) Comments of stakeholders:**

The academy is applying a real advanced teaching system, based upon maintaining balance between theoretical fundamentals and practical application, emphasizing coherence and integration among the study, development requirements of products and generally industry, and technological means (classical and/or advanced).

The teaching system is based upon advanced teaching techniques using illustrations and experimental models to clarify the relation between different parameters associated in a certain phenomenon. Manual drawing skills are first developed to help student acquire presentation skills. The academy also develops design skills using computer programs packages starting with Auto Cad up to the very sophisticated levels of 3- D programs.

### **b) Comments of external evaluator**

#### **1) First Evaluator**

Refer to previous report (2010/2011)

#### **2) Second Evaluator**

Refer to previous report (2010/2011)

### **3- Regulation & Evaluation**

#### **a) Comments of stakeholders:**

- 1) The highest failure rate in the department is in the second year - which is the first student's year in studying manufacturing engineering and production technology, this indicates that insertion of student into the department is not an easy process.
- 2) Students of the fifth year received the highest proportions of grade "Excellent" and this is likely to point out the high academic quality of the graduate that is why most of graduates have an excellent chance to work in a closely related work to their discipline.
- 3) There should be an orientation courses for first year student after finishing their academic year to properly guide students to their specialization. Also, student choice of different department should be constrained according to some qualifying courses.

#### **b) Comments of external evaluator**

##### **1) First Evaluator**

Refer to previous report (2010/2011)

##### **2) Second Evaluator**

Refer to previous report (2010/2011)

### **4- Program Courses**

#### **a) Comments of stakeholders:**

Program courses were very well prepared. Courses specifications include listing of lecture notes, in addition to reference books and recommended references.

The data of some references should be updated and be in the standard form according to the formal form used in course specification.

Minor topics should be changed and repetitions of the same topic in different courses should be resolved.

#### **b) Comments of external evaluator**

##### **1) First Evaluator**

Refer to previous report (2010/2011)

##### **2) Second Evaluator**

Refer to previous report (2010/2011)

### **5- Overall Evaluator Opinion & Free Comments**

#### **a) Comments of stakeholders:**

None

#### **b) Comments of external evaluator**

##### **1) First Evaluator**

Refer to previous report (2010/2011)

##### **2) Second Evaluator**

Refer to previous report (2010/2011)

## 2.3 Achievement of program aims

Reviewing the achieved program aims covered by the achievement of the different educational aims in the courses, which vary from one course to another according to the course nature, It has been noticed fully achievement of program aims which are:

- 1- Providing practical professionally-supervised summer training programs.
- 2- Applying and developing advanced teaching methods.
- 3- Considering and implementation of continual development of taught curricula.
- 4- Maintaining balance between theoretical fundamentals and practical application.
- 5- Emphasizing coherence and integration between theoretical and applied courses and the needs of manufacturing engineering and production technology in general and specifically the advanced and new trends.
- 6- Broadening the scope of taught courses, enriching their content by studying some case studies and experiences and preparing seminars.
- 7- Engaging students of third and fifth years in realistic research work through their projects that give a good reflection of student ability to grasp knowledge and different skills from different courses.

## 2.4 Assessment methods

- The department evaluates the students using various methods such as final exam, midterm exam, oral exams, weekly or biweekly assignments, quizzes, practical exam, seminars, and researches, according to the course structure and assessment methods mentioned in courses specifications.
- The assessment methods must cover the intended learning outcomes mentioned in the course specification. The teaching staff and the head of the department are keen on revising the examinations sheets to be sure that they cover at least 80 % of the course content.
- The final grade awarded to student in a course is usually based on the grades for both final exam and semester work and for some courses, the evaluation of practical and/or oral exam is also included

## 2.5 Student achievement

Graduated Students achievement through the program

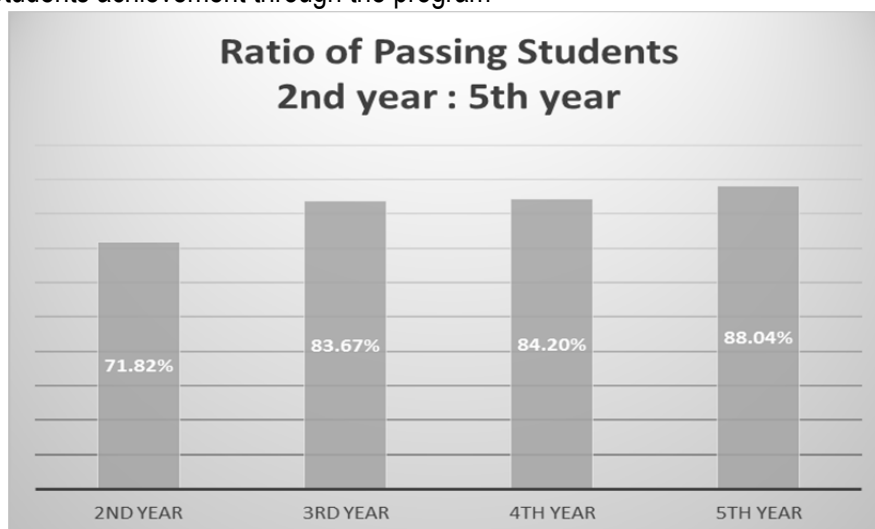


Figure (5): Graduated Students achievement through the program



After reviewing the results of students finishing the program in 2009-2010 regarding their achievements in each grade level throw different years, we can observe the increase in passing ratio for the same students each year.

Comments of external evaluator and other stakeholders on statistics from Section B:

a- Comments of stakeholders:

- Students are coping well with the learning system and, methods implemented at the academy. They became familiar to hard work, libraries, books, periodicals, as well as, to computer use and internet. They present very well seminars, able to work in groups; each member of the group is executing his task efficiently.
- The applied system implies discipline and help student form hard work habit. Libraries, field and research work help developing analytical skills. Seminars help developing presentation skills.

b- Comments of external evaluators :

1- First Evaluator

Refer to previous report (2010/2011)

2- Second Evaluator

Refer to previous report (2010/2011)

## 2.6 Quality of teaching and learning

Comments of external evaluator and other stakeholders including students

a- Comments of stakeholders

- The Academy adopt methods of teaching and learning based on traditional patterns of education courses that meet the goals and targets that are taught in accordance with the approved list.
- The formation of a committee of faculty members to study the distribution of subjects on the staff members in accordance with the teaching specialty to ensure the quality of teaching and learning.
- The diversity in summer training programs according to the variables and labor market needs and requirements of the parties outside the academy.
- The development of strategies and announcements of the Department through regular monthly meetings with faculty members and teaching assistants to develop and discuss the plan of action and put forward solutions to problems that are reviewed.
- Some of the decisions are being taken corrective actions to keep high performance of the teaching process in the department as the results of self-evaluation.
- Ongoing work of the internal audit and continuous assessment tasks.

b- Comments of external evaluators :

1- First Evaluator

Refer to previous report (2010/2011)

Second Evaluator

Refer to previous report (2010/2011)

## 2.7 Effectiveness of student support systems

Commentary on both academic and pastoral/personal support for all students

The department is interested in the students' support through the following:

- Students of the same level are divided into classes; each includes at most 30 students that have exercise for each course in a special class and period. However inside the laboratories the class is divided into groups; each includes no more than 6 students; to carry out the assigned experiment under the supervision of specialized engineers.
- Motivate outstanding students to participate in seminars, cultural activities, and attending scientific conferences. Also, they got additional marks according to the extent of their activities.
- Each level of students has a faculty member as a counselor that helps in solving students' problems (educational, social, economic, etc...) and follow-up the complaints and to respond in a specific period.
- The counselor held a periodic meeting with students to build a good relation and help in solving their problems.
- There is a schedule of final revision for the studied courses at the end of each semester to assist low and middle caliber students.
- Students are helped in the case of special circumstances such as cases of disease, the death of a parent, injuries during an incident, by taking into account the circumstances of each case in providing the requirements of this year, especially in materials that rely on semester marks and attendance.
- Encourage students to manage, and organize cultural activities.
- Establishing a database for students and save all the data and grades of the year in electronic archive for each student

## 2.8 Learning resources

A. Number and ratio of faculty members and their assistants to students

- Staff members and the assistants (Appendix 1 - Program Specification )
- Percentage of staff members to students : 1:25
- Percentage of staff assistants to students : 1:15

B. Matching of faculty members' specialization to program needs.

- All the Staff members are Qualified and they are adapted with the program requirements. (C.V. for all staff members are included in Appendix 1 - Program Specification )

C. Availability and adequacy of program handbook

- The program specification is explained to the students attending the program through interviews with the students, in addition there are lecture notes for most of the courses available to the students.

D. Adequacy of library facilities.

- The academy scientific library is annually refurbished with the books needed for enriching the specialty according to the budget.

E. Adequacy of laboratories

- The department has 18 laboratories serving different courses taught in the department.

- A computer laboratory consists of 60 computers is specified to the department to help in teaching 6 courses.
- The department is going to buy a virtual lab. That can help for teaching the lab for a lot of courses

**F. Adequacy of computer facilities**

- Labs are in need of increase of the instruments to cope with the increasing number of students attending the program and to build virtual labs that help in teaching different courses in the dept.
- Renovation of the design software packages periodically.

**G. Adequacy of field/practical training resources**

- The department is keen on the compatibility of the summer training programs with the program specification and the requirements of the labor market. Care to provide opportunities for all students of the department with the diversity of training sites.

**H. Adequacy of any other program needs**

None

## **2.9 Quality management**

**A. Availability of regular evaluation and revision system for the program**

There is a unit for Quality Assurance in the department began its course of action by doing self-assessment to the department at the end of the academic year 2009/2010, in order to identify and develop the strength points and to identify and treat the weak points (SWOT). The views of all interested parties (faculty members, their assistants, students, the administrative bodies, representatives of civil society, and stakeholders) in the courses and the educational process have been explored, and sample of students has been taken (10%) of the total number of students of the college. As for the faculty members they were asked all and for the administrative apparatus the sample (30%) of the total number has been analyzed. The results of the poll were statistically analyzed then a view of these results was discussed with the College Board to take decisions on further development.

**The results of self-evaluation and quality management**

**Reflection of the results of self-evaluation of the department performance on quality management**

Work is already underway to make some decisions for correcting the overall performance of the department in light of the results of self-evaluation Examples of such decisions:

- The work of the internal audit and continuous assessment with identified tasks.
- Work is permanently and continuously to develop the capacity of faculty members.
- The department is interested in students and alumni, and follows up their proceeding in the labor market, to improve the outcomes and competitive position within the community.

**Strengthening activities for Quality Management**

It was possible to identify some areas for future promotion and development in the light of the results of self-evaluation of the performance of the department and of these areas.

Strengthening the quality management in the department through:

- The continued development of the courses objectives with global trends.
- Developing the skills of the administrative apparatus in the use of technology.
- Prepare an annual plan for periodic maintenance of institutional facilities.

- Preparation of a 3 year plane to hire staff members and assistances to modify the their ratios to the number of students.

#### **B. Effectiveness of the system**

The quality management system is effective since there are:

- Quality management regulations.
- Enforcing and application of the quality measures for all aspects of the teaching process.
- Feedback for the program evaluation.
- Corrective actions for program flaws.
- Recording and listing all these activities in annual course reports and in the program report

#### **C. Effectiveness of Faculty and University laws and regulations for progression and completion**

There is a quality section in the department which is a subordinate from the quality center of the Academy. Its role is not only monitoring and assuring the implementation of the quality measures in the department but also to plane, manage, and help in execution of quality measures of the academy.

#### **D. Effectiveness of program external evaluation system:**

##### **I- External evaluators**

The department program is evaluated by two qualified external evaluators.

##### **II- Students**

The program courses, the teaching methods and the assessment methods are evaluated by the students each semester by questionnaires handed to a sample of students for each course. As for the fifth year students they fill in addition to the courses questionnaires another one concerned with the program questionnaire to evaluate the whole program.

##### **III- Other stakeholders**

At the end of the academic year there is an annual meeting for the stakeholders and representatives of the civil community for the reconnaissance of their evaluation to the academic year.

#### **E. Faculty response to student and external evaluations**

All the external evaluator's comments were taken in consideration and are stated with the department response in the "Program Specification".

There is an action plan set to be implemented in the following academic year.

### **3. Proposals for program development**

#### **A. Program structure (units/credit-hours)**

The credit hours system has been approved by the ministry of high education and will be applied starting the academic year 2012/2013.

#### **B. Courses, deletions, additions, and modifications**

The course coordinator can modify some of the contents of the curriculum without changing the major goals of the course which is approved by the academy and the ministry of high education . This change is done by reference to the department council.

#### **C. Staff development requirements**

According to the plane, two staff members and two assistants have been appointed in the department during the academic year 2011/2012. The department has a plan to increase the number of staff within the next 3 years to reach the ratio 1:25 for the staff to students, and the ratio of 1:15 for the staff assistants to students.

#### 4. Progress of previous year's action plan

Action Identified	Person Responsible	Progress of action
Preparation of the program specification for the credit hour system and reviewing it.	The department and the Administration of the Academy	Done
Specialized training courses for all staff and teaching assistants	Training Sector of the Academy	Two training courses have been held: 1- Use of Technology in teaching (10-11/11/2013) 2- Different methods of examinations and student evaluation(12-14/11/2013)
Complete the shortage in educational staff. (According to the plane one Staff member and 2 teaching assistants).	Administration of the Academy	Two staff members and Also two Assistants (one of them has to be in military service for one year) have been added to the department

#### 5. Action plan

Action required	Person Responsible	Completion Date
Choice of external reviewers to review the program specifications for credit hour system.	The department and the Administration of the Academy	Academic year 2013-2014
Specialized training courses for all staff and teaching assistants	Training Sector of the Academy	During Midterms of 2013/ 2014 semesters
Complete the shortage in educational staff. (According to the plane one Staff member and 2 teaching assistants).	Administration of the Academy	Academic year 2013-2014
Holding the third scientific conference of the academy	Administration of the academy	After finishing the graduation projects.
Scientific conference of the department	The department	Two conferences, one in each semester
Preparation of a plane for developing the department and its laboratories for the next 4 years.	The department	At the beginning of 2013/2014

Program Coordinator Dr. Abdelmagid A. Abdalla

Signature:



## Appendix 1

# Annual Course Report

2012-2013





1<sup>st</sup> year Basic Science

	Code	Name
1	B101	English Language I
2	B111	Mathematics I
3	B121	Mechanics I
4	B131	Physics I
5	B141	Chemistry
6	E111	Introduction to Computer I
7	M150	Engineering Drawing & Projection I
8	M160	Production Engineering I
9	B102	English Language II
10	B112	Mathematics II
11	B122	Mechanics II
12	B132	Physics II
13	B142	Descriptive Geometry
14	E112	Introduction to Computer II
15	M151	Engineering Drawing & Projection II
16	M161	Production Engineering II

## Annual Course Report (Academic Year 2008-2009)

### A- Basic Information

- 1- Title and code: B101: English Language (1)  
 2- Program(s) on which this course is given: Computer and Tech. English  
 3- Year/Level of program: First year / 1<sup>st</sup> Semester  
 4- Unit hours Lectures  Tutorial  2 hrs Total  2 hrs  
 5- Names of lecturers contributing to the delivery of the course  
 Abdel-Hamid Mohammed El-Khoreby  
 Course coordinator : Abdel-Hamid Mohammed El-Khoreby  
 External evaluator Non

### B- Statistical Information

No. of students attending the course:	No.	<input type="text"/> 1309	%	<input type="text"/> 100
No. of students completing the course:	No.	<input type="text"/> 1245	%	<input type="text"/> 95.11
Results:				
	No.	%	Grading of successful students:	
Passed	1110	89.16		
Failed	135	10.84		
			No.	%
			Excellent	109 8.03
			Very Good	150 12.04
			Good	240 19.28
			Pass	620 49.80

### C- Professional Information

#### 1 – Course teaching

Topic Actually taught	No. of hours	Lecturer
• Engineering – what is it all about?	6	Prof. Dr. Abdel – Hamid El- Khoreiby
• Alfred Nobel	10	
• The infinitive and the -ing form	2	
• Subject verb agreement	8	
• Revision	4	
<b>Total hours</b>	<b>30</b>	

Topics taught as a percentage of the content specified:

>90 % ☒ 70-90 % ☐ <70% ☐ 100% ☐

Reasons in detail for not teaching any topic Non

If any topics were taught which are not specified, give reasons in detail Non

#### 2- Teaching and learning methods:

Lectures:  Classical lecturing using the white board

Practical training/ laboratory:  Non

Seminar/Workshop:  Non

Class activity: A monthly discussion of what is given in the previous weeks.

Case Study:  Non

Other assignments/homework:  Bi-weekly assignments

If teaching and learning methods were used other than those specified, list and give reasons:  
Non

**3- Student assessment: Through Quizzes, mid term Exams and attendance reports**

<b>Method of assessment</b>	<b>Percentage of total: 30%</b>
Written examination	70 %
Oral examination	----
Other assignments/class work	10 %
Mid-Term Exam	20 %
<b>Total</b>	<b>100 %</b>
<b>Members of examination committee</b>	Prof. Dr. Abdel-Hamid Mohammed El-Khoreby Prof. Dr. Hassan Awad
<b>Role of external evaluator</b>	Non

**4- Facilities and teaching materials: Dictionaries, Tape recorders....etc**

Totally adequate	.Yes.
Adequate to some extent	.....
Inadequate	.....
List any inadequacies	
Non	

**5- Administrative constraints**

List any difficulties encountered  
➤ Non

**6- Student evaluation of the course:**

List any criticisms	Response of course team
Non	Non

7- Comments from external evaluator(s):	Response of course team
Non	Non

**8- Course enhancement:**

Progress on actions identified in the previous year's action plan: None

Action State whether or not completed and give reasons for any non-completion Non

**9- Action plan for academic year 2009 – 2010**

<b>Actions required</b>	<b>Completion date</b>	<b>Person responsible</b>
Non		

**Course coordinator:** Abdel-Hamid Mohammed El-Khoreby

**Signature:**

**Date:**

## Annual Course Report (Academic Year 2008-2009)

### A- Basic Information

1- Title and code: Math. I, Differential Calculus and Modern Algebra (B111)

2- Program(s) on which this course is given: Basic Science

3- Year/Level of program: 1<sup>st</sup> Year (General) 1<sup>st</sup> Semester

4- Unit hours Lectures  Tutorial  Practical  Total

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

Prof. Dr. M. El-Maddah , Prof Dr. O. Elgayar, Prof Dr. Aly Essway,

A. Prof. Dr. M. Khalifa

Course coordinator A. Prof. Dr. M. Khalifa

External evaluator

### B- Statistical Information

No. of students attending the course: No.1309

%

No. of students completing the course: No.1246

%

Results:

	No.	%
Passed	982	78.8
Failed	264	21.2

Grading of successful students:

	No.	%
Excellent	208	16.7
Very Good	144	11.5
Good	168	13.5
Pass	462	37.1

### C- Professional Information

#### 1 – Course teaching

Topic Actually taught	No. of hours	Lecturer
• Function limit continuity	6	Prof. Dr. M. El-Maddah , Prof Dr. O. Elgayar, Prof Dr. Aly Essway,
• Derivatives	8	
• Inverse function and trigonometric function	6	
• Exponealial and Logarithmic function	6	
• Hyperpolic and inverse hyperbolic functions	7	
• Application of differential calculus	12	
• Sets	6	Prof. Dr. M. Khalifa
• Elements of Mathematical logic	10	
• Relation	8	
• Mappings	9	
• Algebraic structure – Groups - Rings Fields and applications	12	
• Total	90	

Topics taught as a percentage of the content specified:

>90 %

70-90 %

<70%

Reasons in detail for not teaching any topic Non

If any topics were taught which are not specified, give reasons in detail Non

## 2- Teaching and learning methods:

Lectures: Classical lecturing using the white board and computer supported learning

Practical training/ laboratory:

Seminar/Workshop: None

Class activity: Numerical exercises

Case Study: Selected case studies

Other assignments/homework: By-weekly assignments

If teaching and learning methods were used other than those specified, list and give reasons:

Non

## 3- Student assessment:

Method of assessment	Percentage of total
Written examination	70 %
Oral examination	----
Practical/laboratory work	%
Other assignments/class work	10 %
Mid-Term Exam	20%
Total	100 %

Members of examination committee

Prof. Dr. M. Elmaddah

A.Prof. Dr. M. Khalifa

Role of external evaluator

None

## 4- Facilities and teaching materials:

Totally adequate

Yes

Adequate to some extent

.....

Inadequate

.....

List any inadequacies

None

## 5- Administrative constraints

List any difficulties encountered

- Limitation of number of data show in the principal building

## 6- Student evaluation of the course:

Response of course team

List any criticisms

1. Problems with the teaching assistant in exercises
2. A proposal to extend the subject and lecture it in two successive semesters

New teacher assistant will be engaged the next academic year.

The actual content and number of lecturing hours are convenient now, considering the re-determined graduate profile

## 7- Comments from external evaluator(s):

None

Response of course team

None

## 8- Course enhancement:

Progress on actions identified in the previous year's action plan: None

Action State whether or not completed and give reasons for any non-completion

None

**9- Action plan for academic year 2008 – 2009**

**Actions required**  
None

**Completion date**  
Aug. 2009

**Person responsible**  
A.Prof. Dr. M. Khalifa

**Course coordinator:** A.Prof. Dr. M. Khalifa

**Signature:**

**Date: Aug. 2008**

## Annual Course Report (Academic Year 2008-2009)

### A- Basic Information

Title and code: **B121: Mechanics (I)**

2- Program(s) on which this course is given: **General**

3- Year/Level of program: **First year / First term**

4- Unit hours    Lectures 2 hrs    Tutorial 1hrs    Practical 0hr    Total 3hrs

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

:  
Prof. Dr. Hassan Awad  
Prof. Dr. Mahmoud El-Maddah  
Course coordinator: Prof. Dr. Hassan Awad  
External evaluator : Non

### B- Statistical Information

No. of students attending the course: No. 1309    % 100

No. of students completing the course: No. 1239    % 94.65

Results:

	No.	%
Passed	818	66.02
Failed	421	33.98

Grading of successful students:

	No.	%
Excellent	15	1.21
Very Good	50	4.04
Good	176	14.21
Pass	577	46.57

### C- Professional Information

#### 1 – Course teaching

Topic Actually taught	No. of hours	Lecturer
• Basic Concepts of statics	2	Prof. Dr. Hassan Awad Prof. Dr. Mahmoud El-Maddah
• Resultant of concurrent forces in plane		
• Representation of force vector in space	2	
• Resultant of concurrent forces in space		
• Equilibrium of a particle (in plane and in space)	4	
• Different types of support in plane		
• Distributed loads	2	
• Equilibrium of rigid body in plane	4	
• Different types of supports in space		
• Equilibrium of rigid body in space	4	
• Special cases of two, three and four force members	2	
• Graphical solution of mechanisms	2	
• Analysis of Trusses by the method of joints and by the method of sections.	6	
• Final Revision	2	
Total hours	30	

Topics taught as a percentage of the content specified:

>90 % ☒ 100 70-90 % ☐ <70% ☐

Reasons in detail for not teaching any topic

If any topics were taught which are not specified, give reasons in detail

## 2- Teaching and learning methods:

Lectures:

Practical training/ laboratory:

Seminar/Workshop:

Class activity:

Case Study:

Other assignments/homework:

If teaching and learning methods were used other than those specified, list and give reasons:

## 3- Student assessment:

Method of assessment	Percentage of total
Written examination	<input checked="" type="checkbox"/> 70 %
Oral examination	----
Practical/laboratory work	
Other assignments/class work	<input checked="" type="checkbox"/> 15 %
Mid-Term Exam	<input checked="" type="checkbox"/> 15 %
Total	100 %

Members of examination committee

Prof. Dr. Hassan Awad

Prof. Dr. Mahmoud El-Maddah

Role of external evaluator

Non

## 4- Facilities and teaching materials:

Totally adequate	<input checked="" type="checkbox"/> Yes
Adequate to some extent	<input checked="" type="checkbox"/> 100%
Inadequate	<input type="checkbox"/> .....
List any inadequacies	Non

## 5- Administrative constraints

List any difficulties encountered

- New assistants needs more preparation

## 6- Student evaluation of the course:

Response of course team

List any criticisms

- New assistants make some mistakes in solution of problems

New assistants attend lectures and all exercises are Supervised by professors

## 7- Comments from external evaluator(s):

Non

Response of course team

Non

## 8- Course enhancement:

Progress on actions identified in the previous year's action plan: None

Action State whether or not completed and give reasons for any non-completion

Non



**9- Action plan for academic year 2009– 2010**

<b>Actions required</b>	<b>Completion date</b>	<b>Person responsible</b>
Preparation of the course by new assistants	Nov.2009	Prof. Dr. Mahmoud El-Maddah

**Course coordinator:**      **Prof. Dr. Hassan Awad**

**Signature:**

**Date:** Nov.2009

## Annual Course Report (Academic Year 2008-2009)

### A- Basic Information

- 1- Title and code: B131 Physics 1  
 2- Program(s) on which this course is given: General  
 3- Year/Level of program: 1<sup>st</sup>. year , 1<sup>st</sup>. term .  
 4- Unit hours      Lectures 4 hrs    Tutorial 0 -    Practical 2hr    Total 6 hrs  
 5- Names of lecturers contributing to the delivery of the course  
     Prof. Dr. M. El-Tawab Kamal.  
     Prof. Dr. Abo Elyazeed Badawy Abo Elyazeed.  
     Course coordinator : Dr. M. El Tawab Kamal.  
     External evaluator : Non

### B- Statistical Information

No. of students attending the course:	No. 1309	% <span style="border: 1px solid black; padding: 0 5px;">100</span>
No. of students completing the course:	No. 1241	% <span style="border: 1px solid black; padding: 0 5px;">94.81</span>
<b>Results:</b>		
	<b>No.</b>	<b>%</b>
Passed	973	80.02
Failed	248	19.98
<b>Grading of successful students:</b>		
	<b>No.</b>	<b>%</b>
Excellent	38	3.06
Very Good	85	6.85
Good	193	15.55
Pass	677	54.55

### C- Professional Information

#### 1- Course teaching

Topic	Lecture hours	Tutorial hours	Practical hours
• Units and dimensions	4		2
• Properties of matter	4		2
• Gravitation	4		2
• Gravitation, Heat and the First law of thermodynamics	4		2
• Heat and the First law of thermodynamics, The Kinetic theory of gases	4		2
• The Kinetic theory of gases, Entropy and the second law of thermodynamics	4		2
• Entropy and the second law of thermodynamics, Simple, Free damped, Forced Oscillations and circular motion	4		2
• Simple, damped, and Forced Oscillations	4		2
• Simple, damped, and Forced Oscillations Wave Motion,	4		2
• Wave Motion	4		2
• Transverse Mechanical Waves	4		2
• Longitudinal Mechanical waves and sound waves	4		2
• Longitudinal Mechanical Waves and Sound waves	4		2
• Longitudinal mechanical waves and sound waves	4		2
• Ultrasonic Waves	4		2
<b>Total hours</b>	<b>60</b>		<b>30</b>

Topics taught as a percentage of the content specified:

>90 %  70-90 % ☒ <70%

Reasons in detail for not teaching any topic: Permitted hours is not enough.

If any topics were taught which are not specified, give reasons in detail

## 2- Teaching and learning methods:

Lectures:

Laboratory:

Seminar/Workshop:

Class activity:

Case Study:

Other assignments/homework:

If teaching and learning methods were used other than those specified, list and give reasons:

Non

## 3- Student assessment:

Method of assessment	Percentage of total
Written examination	<input type="text" value="60 %"/>
Oral examination	----
Practical/laboratory work	<input type="text" value="20 %"/>
Other assignments/class work	<input type="text" value="10 %"/>
Mid-Term Exam	<input type="text" value="10 %"/>
Total	100 %

Members of examination committee Dr. M. El Tawab Kamal.

Role of external evaluator Non

## 4- Facilities and teaching materials:

Totally adequate

Adequate to some extent

Inadequate

List any inadequacies : Non

## 5- Administrative constraints

List any difficulties encountered

- Limitation of number of data show in the principal building
- Limitation of number of operating experiments in the laboratory

## 6- Student evaluation of the course:

### Response of course team

List any criticisms

1. Laboratory exercises are insufficient
2. Problems with the teaching assistant in exercises
3. A proposal to extend the subject and lecture it in two successive semesters

This insufficiency is due to occasional defect in some experiments. More experiments will be added next year  
New teacher assistant will be engaged the next academic year.  
The actual content and number of lecturing hours are convenient now, considering the re-determined graduate profile

**7- Comments from external evaluator(s):**

Non

**Response of course team**

Non

**8- Course enhancement:**

**Progress on actions identified in the previous year's action plan:** None

**Action State whether or not completed and give reasons for any non-completion** Non

**9- Action plan for academic year 2009– 2010**

<b>Actions required</b>	<b>Completion date</b>	<b>Person responsible</b>
1. Provide more data show apparatuses	Nov.2009	Prof. Dr M. El Tawab Kamal
2. Put more experiments in function in the lab.		

**Course coordinator:** Prof. Dr M. El Tawab Kamal

**Signature:**

**Date:** Nov.2009

## Annual Course Report (Academic Year 2008-2009)

### A- Basic Information

- 1- Title and code: Chemistry, B141  
 2- Program(s) on which this course is given: Basic Science Courses  
 3- Year/Level of program: First year, First Semester  
 4- Unit hours Lectures  Tutorial  Practical  Total   
 5- Names of lecturers contributing to the delivery of the course  
 Course coordinator Prof. Dr.: Shaban Ragab Gouda  
 External evaluator Non

### B- Statistical Information

No. of students attending the course: No. 1309 %   
 No. of students completing the course: No. 1244 %

#### Results:

	No.	%
Passed	1071	86.09
Failed	173	13.91

#### Grading of successful students:

	No.	%
Excellent	273	21.95
Very Good	213	17.12
Good	188	15.11
Pass	397	31.91

### C- Professional Information

#### 1 – Course teaching

Topic Actually taught	No. of hours	Lecturer
• Gas laws and gas liquifaction	6	Prof. Dr. S. R. Gouda
• Liquid state, Refrigeration & heat pump.	5	
• Electrochemistry & Metallic corrosion.	5	
• Solutions & Antifreezes.	5	
• Thermo chemistry & Fuels & solar heat.	5	
• Water Treatment & Desalination.	5	
• Polymers and Industry	6	
• Fuels and combustion	5	
• Chemistry and Tech. of petroleum	6	
<b>Total hours</b>	<b>48</b>	

#### Topics taught as a percentage of the content specified:

>90 %  70-90 %  <70%

Reasons in detail for not teaching any topic Shortage in Teaching hours available for the course.

If any topics were taught which are not specified, give reasons in detail

Non

#### 2- Teaching and learning methods:

Lectures:

Practical training/ laboratory:

Seminar/Workshop:

Class activity: Numerical exercises;

Case Study: Selected case studies

Other assignments/homework: Bi-weekly assignments

If teaching and learning methods were used other than those specified, list and give reasons:

Non

### 3- Student assessment:

Method of assessment

Percentage of total

Written examination

60 %

Oral examination

----

Practical/laboratory work

20 %

Other assignments/class work

10 %

Mid-Term Exam

10 %

Total

100 %

Members of examination committee

Prof. Dr. S. R. Gouda

Prof. Dr. A. M. Abu Talab

Role of external evaluator

Non

### 4- Facilities and teaching materials:

Totally adequate

Yes

Adequate to some extent

100%

Inadequate

.....

List any inadequacies

Non

### 5- Administrative constraints

List any difficulties encountered

Non

### 6- Student evaluation of the course:

List any criticisms

Response of course team

\* A proposal to extend the subject and lecture in two successive semesters

The actual content and number of lecturing hours are convenient now, considering the re-determined graduate profile

### 7- Comments from external evaluator(s):

Response of course team

Non

Non

### 8- Course enhancement:

Progress on actions identified in the previous year's action plan: None

Action State whether or not completed and give reasons for any non-completion

Non

### 9- Action plan for academic year 2009– 2010

Actions required

Completion date

Person responsible

Provide more data show apparatuses

Nov. 2009

Prof. Dr. S. R. Gouda

Course coordinator: Prof. Dr. S. R. Gouda

Signature:

Date: Nov. 2009

## Annual Course Report (Academic Year 2008-2009)

### A- Basic Information

- 1- **Title and code:** Introduction to Computer I, E111  
 2- **Program(s) on which this course is given:** 1st year General  
 3- **Year/Level of program:** 1<sup>st</sup> year-1<sup>st</sup> semester  
 4- **Unit hours** Lectures 2 hrs Tutorial 0 hrs Practical 2 hr Total 4 hrs  
 5- **Names of lecturers contributing to the delivery of the course**  
     Prof. Dr. Said A. Gawish  
     Course coordinator Prof. Dr. Said A. Gawish  
     External evaluator

### B- Statistical Information

No. of students attending the course: No. 1309 % 100  
 No. of students completing the course: No. 1246 % 95.1  
 Results:

	No.	%	Grading of successful students:		
Passed	1141	89.6		No.	%
Failed	114	10.3	Excellent	137	10.9
			Very Good	182	14.6
			Good	228	18.2
			Pass	594	47.6

### C- Professional Information

#### 1 – Course teaching

Topic Actually taught	No. of hours	Lecturer
• Historical overview	2	Prof. Dr. Said Gawish
• Mathematical topics	8	
• Transfer functions, definition and case studies	10	
• Block diagrams; conventions, block diagram algebra and reduction of block diagrams.	4	
• Signal flow graphs; definition, conventions and Mason's formula	2	
• Time domain analysis		
• Transient response of proportional, integrating and first order elements.	4	
• Transient response of second order elements. Effect of location of roots of characteristic equation on the transient response	10	
• System identification based of the transient response.	21	
• Frequency response		
• Frequency response; Polar plot and Bode plots.	6	
• System identification based of the transient and frequency responses.	4	
• Accuracy of feedback systems; steady state error.	4	
• Stability of feedback systems; Routh-Herwitz and Nyquest stability criteria.	5	
• Root locus analysis	2	
• Compensation of control systems	4	
• Text editing	6	
Total hours	90	

Topics taught as a percentage of the content specified:

>90 % ☒ 70-90 % ☐ <70% ☐

Reasons in detail for not teaching any topic Shortage of time

If any topics were taught which are not specified, give reasons in detail None

## 2- Teaching and learning methods:

Lectures:

Practical training/ laboratory:

Seminar/Workshop:

Class activity: Numerical exercises, computer applications

Case Study:

Other assignments/homework:

If teaching and learning methods were used other than those specified, list and give reasons:

None

## 3- Student assessment:

Method of assessment	Percentage of total
Written examination	<input type="text" value="60 %"/>
Oral examination	<input type="text" value="None"/>
Practical/laboratory work	<input type="text" value="20 %"/>
Other assignments/class work	<input type="text" value="10 %"/>
Mid-Term Exam	<input type="text" value="10 %"/>
Total	<input type="text" value="100 %"/>

Members of examination committee Dr. Said A. Gawish

Dr. Adel Khedr

Role of external evaluator None

## 4- Facilities and teaching materials:

Totally adequate	<input type="text" value="Yes"/>
Adequate to some extent	<input type="text" value="....."/>
Inadequate	<input type="text" value="....."/>
List any inadequacies	

## 5- Administrative constraints

List any difficulties encountered

- Introducing a sound system in computer labs

## 6- Student evaluation of the course:

List any criticisms

Response of course team

1. The theoretical part is to much
2. The student must learn how to read, this is done in second year
3. Some computer language must be tough

## 7- Comments from external evaluator(s):

Response of course team

None

-

## 8- Course enhancement:

Progress on actions identified in the previous year's action plan: None

Action State whether or not completed and give reasons for any none-completion None



9- Action plan for academic year 2009-2010

Actions required		Completion date	Person responsible
1. Provide a sound system in computer labs			
Course coordinator:	Prof. Dr. Said A.Gawish		
Signature:			
Date:	9 / 2008		

## Annual Course Report (Academic Year 2008-2009)

### A- Basic Information

1- Title and code: Engineering Drawing & Projection, M150

2- Program(s) on which this course is given: 1st year General

3- Year/Level of program: 1<sup>st</sup> year , 1<sup>st</sup> semester .

4- Unit hours

Lectures

Tutorial

Practical

Total

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

Prof. Dr. Mamdouh Saber

Course coordinator

External evaluator None

### B- Statistical Information

No. of students attending the course: No.

%

No. of students completing the course: No.

%

Results:

	No.	%
Passed	1031	83.3
Failed	206	16.7

Grading of successful students:		
	No.	%
Excellent	45	3.6
Very Good	103	8.32
Good	203	16.64
Pass	680	55

### C- Professional Information

#### 1 – Course teaching

Topic Actually taught	Lecture hours	Practical hours	Lecturer
• Drawing Instrument ,Drw sheets ,Scale ,Folding ,Lettering	2		Prof. Dr. Mamdouh Saber ELsayed
• Alphabet of line ;Geom,Construction	2		
• Theory of orthographic projection Proj. of Point; line ;true shape	2		
• Projection of geometric solids	2		
• Development	2		
• Cutting geometric solids with planes and its developed surfaces.	2		
• Intersection of surfaces of geometric solids	2		
• Multiview Drawing .	2		
• Revision Problem	2		
Total hours	18		

Topics taught as a percentage of the content specified:

>90 % ☒

70-90 % ☐

<70% ☐

Reasons in detail for not teaching any topic

Actual no. of teaching weeks for 1<sup>st</sup> term was 12 weeks in addition to a midterm exam week

If any topics were taught which are not specified, give reasons in detail Non

#### 2- Teaching and learning methods:

Lectures:

Practical training/ laboratory:

Seminar/Workshop:

Class activity: Drawing of several problem weekly using traditional method and free hand sketches

Case Study:

Other assignments/homework:

If teaching and learning methods were used other than those specified, list and give reasons:  
 Non

### 3- Student assessment:

Method of assessment	Percentage of total
Written examination	<input type="text" value="60 %"/>
Oral examination	<input type="text" value="Non"/>
Practical/laboratory work	
Other assignments/class work	<input type="text" value="20 %"/>
Mid-Term Exam	<input type="text" value="20 %"/>
Total	100 %
Members of examination committee	Prof . Dr. Mamdouh Saber
Role of external evaluator	Non

### 4- Facilities and teaching materials:

Totally adequate	<input type="text" value="Yes"/>
Adequate to some extent	<input type="text" value="....."/>
Inadequate	<input type="text" value="....."/>
List any inadequacies	

### 5- Administrative constraints

List any difficulties encountered

- Limitation of no. of data show in principal building .
- Drawing haul aren't equipped with loudspeakers.
- Admission of students by the ministry of education in delay during the first term

### 6- Student evaluation of the course:

Response of course team

List any criticisms

### 7- Comments from external evaluator(s):

Response of course team

NONE

### 8- Course enhancement:

Progress on actions identified in the previous year's action plan: NO COMMENT

Action State whether or not completed and give reasons for any non-completion Non

### 9- Action plan for academic year 2009 – 2010

Actions required	Completion date	Person responsible
NONE		
Course coordinator: Prof. Dr Mamdouh Saber		
Signature:		
Date: 9/2009		

## Annual Course Report (Academic Year 2008-2009)

### A- Basic Information

- 1- Title and code: *M160: Production Engineering (1)*
  - 2- Program(s) on which this course is given: Manufacturing Eng. & Production Technology.
  - 3- Year/Level of program: 1st year / 1st term
  - 4- Unit hours: Lectures 1 hrs Tutorial -- Practical 4 hrs Total 5 hrs
  - 5- Names of lecturers contributing to the delivery of the course:  

Prof. Dr. M. Merdan  
Prof. Dr. A. Kohail
- Course coordinator: Prof. Dr. M. Merdan  
External evaluator: None

### B- Statistical Information

No. of students attending the course: 1309  
No. of students completing the course: 1242

#### Results:

	No.	%
Passed	1053	84.80
Failed	189	15.20

#### Grading of successful students:

	No.	%
Excellent	136	11.00
Very Good	187	15.10
Good	242	19.50
Pass	488	39.30

### C- Professional Information

#### 1 – Course teaching

Topic	Lecture hours	Tutorial hours	Practical Hours
<b>Lecture Part:</b> Every other week	<b>14</b>	<b>12</b>	<b>44</b>
Role of production engineer, production system, and types of industries.	2		
Classification and properties of Engineering materials	2		
Mechanical testing of engineering materials; tensile, impact tests, hardness, and fatigue tests.	5	4	4
Manufacturing processes classification. Casting processes; definition, advantages, and types. Sand casting process; different elements, advantages and limitations, types and properties of sand, and procedure of sand casting. Pattern design; allowances, sand moulding, and gating system. Die casting (gravity and pressure types), Centrifugal casting (horizontal and vertical axis), and investment casting.	5		
<b>Practical Part:</b>			
Casting Shop			4
Locksmith shop			4
Measurement and Ex Shop			4
Welding shop			4

Turning shop			4
Drilling and shaping shop			4
Milling shop			4
Grinding shop			4
Wood working shop			4
Sheet metal shop			4
Forging shop			4
Practical Exams		8	
<b>Total</b>	<b>14</b>	<b>12</b>	<b>44</b>

- Topics taught as a percentage of the content specified:  
>90 % ☒ 100 70-90 % ☐ <70% ☐
- Reasons in detail for not teaching any topic
- If any topics were taught which are not specified, give reasons in detail

## 2- Teaching and learning methods:

- Lectures: ☒ Classical lecturing using the white board
- Practical training/ laboratory: ☐ None
- Seminar/Workshop: ☒ Workshop
- Class activity:
  - Solving problems concerning the determination of material ultimate stress, yield stress, % elongation, % reduction, and young's modulus
  - Calculation of hardness numbers; HBN, HVN, HRC, and HRB
- Case Study: ☐ None
- Other assignments/homework: ☒ One assignment report at the end of the term
- If teaching and learning methods were used other than those specified, list and give reasons: ☐ None

## 3- Student assessment:

- Method of assessment **Percentage of total**
- Written examination ☒ 60 %
- Oral examination
- Practical/laboratory work
- Other assignments/class work ☒ 40 %
- Mid-Term Exam
- Total 100 %**

Members of examination committee  
Role of external evaluator

Prof. Dr. M. Merdan and Prof. Dr. A. Kohail  
None

## 4- Facilities and teaching materials:

- Totally adequate ☒ Yes
- Adequate to some extent
- Inadequate
- List any inadequacies ☐ None

## 5- Administrative constraints

List any difficulties encountered ☐ None

## 6- Student evaluation of the course:

List any criticisms ☐ Response of course team

None	None	
<b>7- Comments from external evaluator(s):</b>		<b>Response of course team</b>
None		None

**8- Course enhancement:**

- **Progress on actions identified in the previous year's action plan:** None
- **Action State whether or not completed and give reasons for any non-completion**  
None

**9- Action plan for academic year 2008 – 2009**

<b>Actions required</b>	<b>Completion date</b>	<b>Person responsible</b>
Preparation of new materials and cutting tools required for carrying out the practical work in each shop	Feb. 2008	Prof. Dr. B. Sarangawy

**Course coordinator:** Prof. Dr. M. Merdan

**Signature:** M. Merdan

**Date:** 23 / 3 /2009

## Annual Course Report (Academic Year 2008-2009)

### A- Basic Information

- 1- Title and code: B102: English Language (2)  
 2- Program(s) on which this course is given: Computer and Tech. English  
 3- Year/Level of program: First year / 2<sup>nd</sup> Semester  
 4- Unit hours Lectures  Tutorial  Total   
 5- Names of lecturers contributing to the delivery of the course  
     Abdel-Hamid Mohammed El-Khoreby  
     Course coordinator : Abdel-Hamid Mohammed El-Khoreby  
     External evaluator Non

### B- Statistical Information

No. of students attending the course: No.  %   
 No. of students completing the course: No.  %

#### Results:

	No.	%
Passed	1108	91.34
Failed	105	8.65

#### Grading of successful students:

	No.	%
Excellent	148	12.20
Very Good	202	16.65
Good	252	20.77
Pass	507	41.79

### C- Professional Information

#### 1 – Course teaching

Topic Actually taught	No. of hours	Lecturer
• A symphony in Concrete	8	Prof. Dr. Abdel - Hamid El- Khoreiby
• Electricity	10	
• Subjects – verbs and objects	4	
• The verb BE	4	
• Revision	4	
<b>Total hours</b>	<b>30</b>	

#### Topics taught as a percentage of the content specified:

>90 % ☒ 70-90 % ☐ <70%

Reasons in detail for not teaching any topic Non

If any topics were taught which are not specified, give reasons in detail Non

#### 2- Teaching and learning methods:

Lectures:

Practical training/ laboratory:

Seminar/Workshop:

Class activity: A monthly discussion of what is given in the previous weeks.

Case Study:

Other assignments/homework:

If teaching and learning methods were used other than those specified, list and give reasons:  
Non

**3- Student assessment: Through Quizzes, oral participation in class  
mid term Exams and attendance reports**

Method of assessment	Percentage of total: 30%
Written examination	70 %
Oral examination	----
Other assignments/class work	10 %
Mid-Term Exam	20 %
Total	100 %

**Members of examination committee** Abdel-Hamid Mohammed El-Khoreby  
**Role of external evaluator** Non

**4- Facilities and teaching materials: Dictionaries, Tape recorders....etc**

Totally adequate	Yes
Adequate to some extent	.....
Inadequate	.....
List any inadequacies	
Non	

**5- Administrative constraints**

List any difficulties encountered  
➤ Non

**6- Student evaluation of the course: Response of course team**  
List any criticisms  
Non

**7- Comments from external evaluator(s): Response of course team**  
Non

**8- Course enhancement:**

Progress on actions identified in the previous year's action plan: None

Action State whether or not completed and give reasons for any non-completion Non

**9- Action plan for academic year 2009 – 2010**

Actions required	Completion date	Person responsible
Non		
<b>Course coordinator:</b> Abdel-Hamid Mohammed El-Khoreby		
<b>Signature:</b>		
<b>Date:</b>		



## Annual Course Report (Academic Year 2008-2009)

### A- Basic Information

1- Title and code: Math. II, Calculus of Integration – Liner Algebra and Analytic Geometry (B112)

2- Program(s) on which this course is given: Basic Science

3- Year/Level of program: 1<sup>st</sup> Year (General) 2<sup>nd</sup> Semester

4- Unit hours: Lectures  Tutorial  Practical  Total

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

Prof. Dr. Ossama Elgayar, Prof Dr. Aly Essway, A. Prof. Dr. M. Khalifa

Course coordinator A. Prof. Dr. M. Khalifa

External evaluator

### B- Statistical Information

No. of students attending the course: No. 1309 %

No. of students completing the course: No. 1213 %

Results:

	No.	%
Passed	866	71.4
Failed	347	28.6

Grading of successful students:

	No.	%
Excellent	134	11
Very Good	114	9.4
Good	128	10.6
Pass	490	40.4

### C- Professional Information

#### 1 – Course teaching

Topic Actually taught	No. of hours	Lecturer
• Integration (Definite and indefinite)	10	A. Prof. Dr. M. Khalifa
• Techniques of integration	16	
• Applications of definite integrals	10	
• Infinite series with applications	9	
• Matrices	10	
• Vectors in $R^2$ and $R^n$	6	
• Real vector Spaces	6	
• Geometry in three dimensions	6	
• Polar Coordinates	4	
• Complex numbers	5	
• The Conic sections	8	
<b>Total hours</b>	<b>90</b>	

Topics taught as a percentage of the content specified:

>90 %  70-90 %  <70%

Reasons in detail for not teaching any topic None

If any topics were taught which are not specified, give reasons in detail None

## 2- Teaching and learning methods:

**Lectures:** Classical lecturing using the white board and computer supported learning

**Practical training/ laboratory:**

**Seminar/Workshop:** None

**Class activity:** Numerical exercises

**Case Study:** Selected case studies

**Other assignments/homework:** By-weekly assignments

If teaching and learning methods were used other than those specified, list and give reasons:

None

## 3- Student assessment:

Method of assessment	Percentage of total
Written examination	70 %
Oral examination	----
Practical/laboratory work	%
Other assignments/class work	10 %
Mid-Term Exam	20%
<b>Total</b>	<b>100 %</b>

**Members of examination committee** Prof. Dr. Ossama Elgayar,  
A.Prof. Dr. M. Khalifa

**Role of external evaluator** None

## 4- Facilities and teaching materials:

**Totally adequate** Yes

**Adequate to some extent** .....

**Inadequate** .....

**List any inadequacies**

None

## 5- Administrative constraints

**List any difficulties encountered**

- Limitation of number of data show in the principal building
- Limitation of number of operating experiments in the laboratory

## 6- Student evaluation of the course:

**List any criticisms**

1. Problems with the teaching assistant in exercises
2. A proposal to extend the subject and lecture it in two successive semesters

**Response of course team**

New teacher assistant will be engaged the next academic year.

The actual content and number of lecturing hours are convenient now, considering the re-determined graduate profile

## 7- Comments from external evaluator(s):

None

**Response of course team**

**8- Course enhancement:**

Progress on actions identified in the previous year's action plan: None

Action State whether or not completed and give reasons for any None-completion    None

**9- Action plan for academic year 2008 – 2009**

**Actions required**

None

**Completion date**

Aug. 2009

**Person responsible**

A.Prof. Dr. M. Khalifa

**Course coordinator:**        A.Prof. Dr. M. Khalifa

**Signature:**

**Date: Aug. 2008**

## Annual Course Report (Academic Year 2008-2009)

### A- Basic Information

- 1- Title and code: **B122: Mechancis (II)**  
 2- Program(s) on which this course is given: **General**  
 3- Year/Level of program: **First year / second term**  
 4- Unit hours    Lectures  Tutorial  Practical  Total   
 5- Names of lecturers contributing to the delivery of the course

: Prof. Dr. Hassan Awad  
 Prof. Dr. Mahmoud El-Maddah  
 Course coordinator: Prof. Dr. Mahmoud El-Maddah  
 External evaluator : Non

### B- Statistical Information

No. of students attending the course: No.    **1309**    % **100**  
 No. of students completing the course: No.    **1210**    % **92.44**

Results:

	No.	%
Passed	821	67.85
Failed	389	32.15

Grading of successful students:

	No.	%
Excellent	22	1.82
Very Good	50	4.13
Good	107	8.84
Pass	642	53.06

### C- Professional Information

#### 1 – Course teaching

Topic Actually taught	No. of hours	Lecturer
<b>Kinematics of particles</b>	<b>4</b>	Prof. Dr. Hassan Awad Prof. Dr. Mahmoud El-Maddah
• <i>Rectilinear Motion</i>		
• <i>Graphical solution</i>	<b>2</b>	
<i>Curvilinear Motion Cartesian coordinates</i>	<b>2</b>	
• <i>Motion of projectiles</i>		
• <i>Tangential and Normal components</i>	<b>2</b>	
• <i>Radial and Transverse Components</i>	<b>2</b>	
<i>Kinetics of Particles Force and Acceleration method in different Systems of Coordinates</i>	<b>4</b>	
<i>Kinetics of Particles</i>	<b>4</b>	
<i>Work and energy method</i>		
• <i>potential energy, Conservation of energy</i>	<b>4</b>	
• <i>Principle of impulse and momentum</i>		
<i>A- Space mechanics</i>	<b>2</b>	
<i>B- Impact</i>	<b>2</b>	
<i>C- Final Revision</i>	<b>2</b>	
<b>Total hours</b>	<b>30</b>	

Topics taught as a percentage of the content specified:

>90 %  70-90 % ☐ <70% ☐

Reasons in detail for not teaching any topic

If any topics were taught which are not specified, give reasons in detail

## 2- Teaching and learning methods:

Lectures:

Practical training/ laboratory:

Seminar/Workshop:

Class activity: Numerical exercises; solution of problems .

Case Study:

Other assignments/homework:

If teaching and learning methods were used other than those specified, list and give reasons:

Non

## 3- Student assessment:

Method of assessment	Percentage of total
Written examination	<input type="text" value="70 %"/>
Oral examination	----
Practical/laboratory work	
Other assignments/class work	<input type="text" value="15 %"/>
Mid-Term Exam	<input type="text" value="15 %"/>
Total	100 %

Members of examination committee

Prof. Dr. Hassan Awad  
Prof. Dr. Mahmoud El-Maddah

Role of external evaluator

Non

## 4- Facilities and teaching materials:

Totally adequate	<input type="text" value="Yes"/>
Adequate to some extent	<input type="text" value="100%"/>
Inadequate	<input type="text" value="....."/>
List any inadequacies	Non

## 5- Administrative constraints

List any difficulties encountered

- New assistants needs more preparation

## 6- Student evaluation of the course:

List any criticisms

- New assistants make some mistakes in solution of problems

Response of course team

New assistants attend lectures and all exercises are Supervised by professors

## 7- Comments from external evaluator(s):

Non

Response of course team

Non

**8- Course enhancement:**

Progress on actions identified in the previous year's action plan: None

Action State whether or not completed and give reasons for any non-completion Non

**9- Action plan for academic year 2009 – 2010**

<b>Actions required</b>	<b>Completion date</b>	<b>Person responsible</b>
Preparation of the course by new assistants	Nov. 2009	Prof. Dr. Mahmoud El-Maddah

**Course coordinator: Prof. Dr. Mahmoud El- Maddah**

**Signature:**

**Date: Nov. 2009**

## Annual Course Report (Academic Year 2008-2009)

### A- Basic Information

- 1- Title and code: B132Physics II (Electricity, Magnetisms, Optics)
- 2- Program(s) on which this course is given: General
- 3- Year/Level of program: 1<sup>st</sup> Year, 2<sup>nd</sup> term
- 4- Unit hours    Lectures 4 hrs    Tutorial 0 hrs    Practical 2hr    Total 6hrs
- 5- Names of lecturers contributing to the delivery of the course  
     Prof.. Dr. Mohamed El Twab Kamal  
     Prof. Dr. Abo El Yazeed    B. Abo El Yazeed  
     Course coordinator Prof.. Dr. Mohamed El Twab Kamal  
     External evaluator : Non

### B- Statistical Information

No. of students attending the course: No.    1309    % 100  
 No. of students completing the course: No.    1204    % 91.98  
 Results:

	No.	%
Passed	928	77.08
Failed	276	22.92

Grading of successful students:

	No.	%
Excellent	91	7.56
Very Good	77	6.40
Good	184	15.28
Pass	576	47.84

### C- Professional Information

#### 1 – Course teaching

Topic	Lecture hours	Lecture
• Charge and Matter, The Electric Field, Gauss' law	4	Prof. Dr. M. El Tawab
• Gauss's law, Electric Potential	4	
• Gauss's law applications	4	
• Capacitors and Dielectric	4	
• Current and Resistance, Electromotive force and Circuits	4	
• The Magnetic Field, Ampere's Law	4	
• Ampere's law, Inductance	4	
• Magnetic Properties of matter	4	
• Magnetic Properties of matter, Electromagnetic Waves	4	
• Electromagnetic Waves	4	
• Electromagnetic Waves, Physical Optics, Polarization of light	4	
• Polarization of light	4	
• Interference of light	4	
• Interference of light, Diffraction of ligh	4	
• Diffraction of light, Some applications	4	
<b>Total hours</b>	<b>60</b>	

Topics taught as a percentage of the content specified:

>90 % ☒ 70-90 % ☐ <70% ☐

Reasons in detail for not teaching any topic: The no. of Hour Permitted is not enough

If any topics were taught which are not specified, give reasons in detail No

## 2- Teaching and learning methods:

Lectures: Classical lecturing using the white board and computer supported learning

laboratory: Experimental measurements in Lab

Seminar/Workshop: ☐ Non

Class activity: ☒ Yes

Case Study: Take Home Exam

Other assignments/homework: weekly assignments

If teaching and learning methods were used other than those specified, list and give reasons:

Non

## 3- Student assessment:

Method of assessment

Percentage of total

Written examination

60 %

Oral examination

----

laboratory work

20 %

Other assignments/class work

10 %

Mid-Term Exam

10 %

Total

100 %

Members of examination committee

Permanent staff of Physic and Assistants

Role of external evaluator

Non

## 4- Facilities and teaching materials:

Totally adequate

☒ Yes

Adequate to some extent

100%

Inadequate

.....

List any inadequacies

Non

## 5- Administrative constraints

List any difficulties encountered

- Limitation of number of data show in the principal building
- Limitation of number of operating experiments in the laboratory

## 6- Student evaluation of the course:

List any criticisms

Response of course team

1. Laboratory exercises are insufficient
2. Problems with the teaching assistant in exercises
3. A proposal to extend the subject and lecture it in two successive semesters

This insufficiency is due to occasional defect in some experiments. More experiments will be added next year  
New teacher assistant will be engaged the next academic year.  
The actual content and number of lecturing hours are convenient now, considering the re-determined graduate profile



**7- Comments from external evaluator(s):**

**Response of course team**

**Non**

**Non**

**8- Course enhancement:**

**Progress on actions identified in the previous year's action plan:** None

**Action State whether or not completed and give reasons for any non-completion** Non

**9- Action plan for academic year 2009– 2010**

<b>Actions required</b>	<b>Completion date</b>	<b>Person responsible</b>
1. Provide more data show apparatuses	Nov.2009	Prof. Dr M. El Tawab Kamal
2. Put more experiments in function in the lab.		

**Course coordinator:** Prof. Dr M. El Tawab Kamal

**Signature:**

**Date:** Nov.2009

## Annual Course Report (Academic Year 2008-2009)

### A- Basic Information

- 1- **Title and code:** Introduction to Computer II, E112
- 2- Program(s) on which this course is given: 1st year General
- 3- Year/Level of program: 1<sup>st</sup> year , 2<sup>nd</sup> semester .
- 4- Unit hours    Lectures 2 hrs    Tutorial 0 hrs    Practical 2 hr    Total 4 hrs
- 5- Names of lecturers contributing to the delivery of the course  
      Prof. Dr. Said A. Gawish  
      Course coordinator Prof. Dr. Said A. Gawish  
      External evaluator

### B- Statistical Information

No. of students attending the course:    No. 1309    % 100  
 No. of students completing the course:    No. 1219    % 93.1

Results:

	No.	%
Passed	1169	<span style="border: 1px solid black; padding: 0 5px;">95.8</span>
Failed	50	<span style="border: 1px solid black; padding: 0 5px;">4.1</span>

Grading of successful students:

	No.	%
Excellent	226	18.5
Very Good	231	18.9
Good	228	18.7
Pass	484	39.7

### C- Professional Information

#### 1 – Course teaching

Topic Actually taught	Lecture hours	Practical hours	Lecturer
• Information technology	2		Prof. Dr. Said Gawish
• Communications	2		
• Files and databases	2		
• Computer languages (HLL, LLL)	6		
• Compilers	2		
• Operating system (types and functions)	4		
• Application software (Word Processing)	2	4	
• Application software (Spread Sheets)	4	10	
• Application software (Files and Databases)	2	6	
• Writing programs in HLL	4	10	
Total hours	30	30	

Topics taught as a percentage of the content specified:

>90 %    ☒    70-90 %    ☐    <70%    ☐

Reasons in detail for not teaching any topic    Shortage of time

If any topics were taught which are not specified, give reasons in detail Non

#### 2- Teaching and learning methods:

Lectures: Using white board and computer

Practical training/ laboratory: Computer labs

Seminar/Workshop: Non

Class activity: Numerical exercises, computer applications

Case Study:

Other assignments/homework:

If teaching and learning methods were used other than those specified, list and give reasons:  
 Non

**3- Student assessment:**

Method of assessment	Percentage of total
Written examination	<input type="text" value="60 %"/>
Oral examination	<input type="text" value="Non"/>
Practical/laboratory work	<input type="text" value="20 %"/>
Other assignments/class work	<input type="text" value="10 %"/>
Mid-Term Exam	<input type="text" value="10 %"/>
Total	100 %
Members of examination committee	Dr. Said A. Gawish Dr. Adel Khedr
Role of external evaluator	Non

**4- Facilities and teaching materials:**

Totally adequate	<input type="text" value="Yes"/>
Adequate to some extent	<input type="text" value="....."/>
Inadequate	<input type="text" value="....."/>
List any inadequacies	

**5- Administrative constraints**

List any difficulties encountered  
 ➤ Introducing a sound system in computer labs

**6- Student evaluation of the course:**

List any criticisms	Response of course team
1. The theoretical part is too much. This is an introductory course.	
2. Some computer language must be taught. This is done in second year.	

**7- Comments from external evaluator(s):** Response of course team

**8- Course enhancement:**

Progress on actions identified in the previous year's action plan: None  
 Action State whether or not completed and give reasons for any non-completion Non

**9- Action plan for academic year 2009 – 2010**

Actions required	Completion date	Person responsible
1. Provide a sound system in computer labs		

Course coordinator: Prof. Dr Said A. Gawish

Signature:

Date: 9/2009

## Annual Course Report (Academic Year 2008-2009)

### A- Basic Information

- 1- Title and code: Engineering Drawing & Projection II, M151
- 2- Program(s) on which this course is given: 1st year General
- 3- Year/Level of program: 1<sup>st</sup> year-2<sup>nd</sup> semester
- 4- Unit hours    Lectures     Tutorial     Practical     Total
- 5- Names of lecturers contributing to the delivery of the course  
     Prof. Dr. Mamdouh Saber ELSayed  
     Course coordinator  
     External evaluator: Non

### B- Statistical Information

No. of students attending the course:    No.     %   
 No. of students completing the course:    No.     %   
 Results:

	No.	%	Grading of successful students:		
Passed	878	72.6		No.	%
Failed	331	27.4	Excellent	28	2.3
			Very Good	59	4.9
			Good	104	8.6
			Pass	687	56.8

### C- Professional Information

#### 1 – Course teaching

Topic Actually taught	No. of hours	Lecturer
• Importance of drawing section	2	Prof. Dr. Mamdouh Saber El Syed
• Basic type of section :full section ;Imgitidinal; Cross section	2	
• Off-set; aligned sections	2	
• Half-section: Revolved & Removed ; Auxiliary section	2	
• Conventional particle in ED	2	
• Drawing of steel sections	2	
• Steel constructions	2	
• Revision problem	2	
Total hours	18	

Topics taught as a percentage of the content specified:

>90 % ☒    70-90 % ☐    <70% ☐

Reasons in detail for not teaching any topic    Actual no. of teaching weeks for 2<sup>nd</sup> term was 12 weeks in addition to a midterm exam week

If any topics were taught which are not specified, give reasons in detail    None

#### 2- Teaching and learning methods:

Lectures:

Practical training/ laboratory:

Seminar/Workshop:

Class activity: Drawing of several problem weekly using traditional methods and free hand sketch

Case Study:

Other assignments/homework:

If teaching and learning methods were used other than those specified, list and give reasons:  
 None

**3- Student assessment:**

Method of assessment	Percentage of total
Written examination	<input type="text" value="60 %"/>
Oral examination	<input type="text" value="None"/>
Practical/laboratory work	<input type="text" value="None"/>
Other assignments/class work	<input type="text" value="20 %"/>
Mid-Term Exam	<input type="text" value="20 %"/>
Total	100 %
Members of examination committee	Prof .Dr . Mamdouh Saber
Role of external evaluator	None

**4- Facilities and teaching materials:**

Totally adequate	<input type="text" value="Yes"/>
Adequate to some extent	<input type="text" value="....."/>
Inadequate	<input type="text" value="....."/>
List any inadequacies	None

**5- Administrative constraints**

List any difficulties encountered  
 ➤ Drawing haul aren't equipped with loudspeaker

**6- Student evaluation of the course:** Response of course team  
 List any criticisms

**7- Comments from external evaluator(s):** Response of course team  
 None -

**8- Course enhancement:**

Progress on actions identified in the previous year's action plan: NO comment  
 Action State whether or not completed and give reasons for any none-completion None

**9- Action plan for academic year 2009-2010**

	Actions required	Completion date	Person responsible
1. None			
Course coordinator:	Prof. Dr. Mamdouh Saber		
Signature:			
Date:	9 / 2009		



Locksmith shop			4
Measurement and Ex. shop			4
Welding shop			4
Turning shop			4
Drilling and shaping shop			4
Milling shop			4
Grinding shop			4
Wood working shop			4
Sheet metal shop			4
Forging shop			4
Break-Even analysis and calculation of machining time		4	
Practical Exams		8	
<b>Total</b>	<b>14</b>	<b>16</b>	<b>40</b>

- Topics taught as a percentage of the content specified:  
>90 % ☒ 100 70-90 % ☐ <70% ☐
- Reasons in detail for not teaching any topic
- If any topics were taught which are not specified, give reasons in detail

## 2- Teaching and learning methods:

- Lectures:
- Practical training/ laboratory:
- Seminar/Workshop:
- Class activity:
- Case Study:
- Other assignments/homework:
- If teaching and learning methods were used other than those specified, list and give reasons:

## 3- Student assessment:

- | Method of assessment         | Percentage of total               |
|------------------------------|-----------------------------------|
| Written examination          | <input type="text" value="60 %"/> |
| Oral examination             |                                   |
| Practical/laboratory work    |                                   |
| Other assignments/class work | <input type="text" value="40 %"/> |
| Mid-Term Exam                |                                   |
| <b>Total</b>                 | <b>100 %</b>                      |

Members of examination committee  
Role of external evaluator

Prof. Dr. M. Merdan and Prof. Dr. A. Kohail  
None

## 4- Facilities and teaching materials:

- Totally adequate
- Adequate to some extent
- Inadequate
- List any inadequacies

**5- Administrative constraints**

List any difficulties encountered

None

**6- Student evaluation of the course:**

List any criticisms

None

**Response of course team**

None

**7- Comments from external evaluator(s):**

None

**Response of course team**

None

**8- Course enhancement:**

- Progress on actions identified in the previous year's action plan: None
- Action State whether or not completed and give reasons for any non-completion None

**9- Action plan for academic year 2008 – 2009**

Actions required	Completion date	Person responsible
Preparation of new materials and cutting tools required for carrying out the practical work in each shop	Oct. 2008	Prof. Dr. B. Sarangawy

**Course coordinator:** Prof. Dr. M. Merdan

**Signature:**

**Date:** 23/3 /2009



2<sup>nd</sup> year Manufacturing Eng. & Production Tech.

NO.	Code	Course
1	A060	Civil Engineering Technology
2	B200	English Language III
3	B211	Mathematics III
4	E210	Computer Programming I
5	M201	Fluid Mechanics
6	M250	Engineering Skills I
7	M251	Mechanics of Machines I
8	M261	Strength of Materials
9	B202	History of Science & Technology
10	B212	Mathematics IV
11	E213	Computer Programming II
12	M222	Thermodynamics
13	M252	Mechanics of Machines II
14	M253	Engineering Skills II
15	M262	Materials Technology I
16	M271	Principles of Manufacturing

## Annual Course Report (Academic Year 2009-2010)

### A- Basic Information

- 1- Title and code: **A060: Civil Engineering Technology**
- 2- Program(s) on which this course is given: Mechanical Engineering
- 3- Year/Level of program: Second Year, 1<sup>st</sup> semester
- 4- Unit hours    Lectures     Tutorial     Practical     Total
- 5- Names of lecturers contributing to the delivery of the course  
    Prof. Dr. Adham ELAlfy  
    Course coordinator Prof. Dr. Adham ELAlfy  
    External evaluator

### B- Statistical Information

No. of students attending the course:	No. <input type="text" value="110"/>	<input type="text" value="100%"/>
No. of students completing the course:	No. <input type="text" value="104"/>	<input type="text" value="94.5%"/>
Results:		
	No.	%
Passed	100	96.1
Failed	4	3.9
Grading of successful students:		
	No.	%
Excellent	13	13%
Very Good	28	28%
Good	18	18%
Pass	41	41%

### C- Professional Information

#### 1 – Course teaching

Topic Actually taught	No. of hours	Lecturer
• Introduction	4	
• Fundamentals of surveying	4	
• Measurement of areas from maps and measurement of angles	4	
• leveling	4	
• Computation of volumes	4	
• Soil mechanics	4	
• Highway and airports engineering	4	
• Railway engineering	4	
• Environmental engineering	4	
• Building construction	4	
• Foundations	4	
• Building materials	4	
• Quantities and specifications	4	
• Isolating layers	4	
• General revision	4	
Total hours	60	

Topics taught as a percentage of the content specified:

>90 %       70-90 %       <70%

Reasons in detail for not teaching any topic    Non

If any topics were taught which are not specified, give reasons in detail Non

2- Teaching and learning methods:

Lectures:

Practical training/ laboratory:

Seminar/Workshop:

Class activity: exercises, , quizzes, problems

Researches:

Other assignments/homework:

If teaching and learning methods were used other than those specified, list and give reasons:

Non

3- Student assessment:

Method of assessment	Percentage of total
Final examination	<input type="text" value="60 %"/>
Oral examination	<input type="text" value="20%"/>
Practical/laboratory work	<input type="text" value="--%"/>
Assignments/class work	<input type="text" value="10%"/>
Mid-Term Exam	<input type="text" value="10 %"/>
Total	100 %

Members of examination committee Prof. Dr. Adham ELAlfy

Role of external evaluator Non

4- Facilities and teaching materials:

Totally adequate	<input type="text" value="yes"/>
Adequate to some extent	<input type="text" value="--"/>
Inadequate	<input type="text" value="....."/>
List any inadequacies	Non

5- Administrative constraints

List any difficulties encountered

Non

6- Student evaluation of the course: Response of course team

7- Comments from external evaluator(s): Response of course team

8- Course enhancement:

Progress on actions identified in the previous year's action plan:

Action State whether or not completed and give reasons for any non-completion Non

9- Action plan for academic year 2010 – 2011 Non

Course coordinator: Prof. Dr. Adham ELAlfy Signature:

Date: 29/8/2010

## Annual Course Report (Academic Year 2009-2010)

### A- Basic Information

- 1- Title and code: B200: English Language (3)
- 2- Program(s) on which this course is given: Manufacturing Eng. & Production Technology.
- 3- Year/Level of program: 2<sup>nd</sup> year / 1<sup>st</sup> Semester
- 4- Unit hours Lectures  Tutorial  Total
- 5- Names of lecturers contributing to the delivery of the course  
Abdel-Hamid Mohammed El-Khoreby  
Course coordinator : Abdel-Hamid Mohammed El-Khoreby  
External evaluator Non

### B- Statistical Information

No. of students attending the course: No.  %   
No. of students completing the course: No.  %

#### Results:

	No.	%
Passed	650	96.73
Failed	22	3.27

#### Grading of successful students:

	No.	%
Excellent	168	25
Very Good	129	19.19
Good	125	18.60
Pass	228	33.93

### C- Professional Information

#### 1 – Course teaching

Topic Actually taught	No. of hours	Lecturer
• Isaac Newton	6	Prof. Dr. Abdel – Hamid El-Khoreiby
• Making a talkie film	6	
• Three Attitudes towards life	6	
• Plural Nouns	4	
• Regular & Irregular Verbs	6	
• Revision	2	
<b>Total hours</b>	<b>30</b>	

Topics taught as a percentage of the content specified:

>90 % ☒ 70-90 % ☐ <70%

Reasons in detail for not teaching any topic Non

If any topics were taught which are not specified, give reasons in detail Non

#### 2- Teaching and learning methods:

Lectures:

Practical training/ laboratory:

Seminar/Workshop:

Class activity: A monthly discussion of what is given in the previous weeks.

Case Study:

Other assignments/homework: Bi-weekly assignments

If teaching and learning methods were used other than those specified, list and give reasons:  
Non

**3- Student assessment: Through Quizzes, oral participation in class**

**mid-term Exams and attendance reports**

<b>Method of assessment</b>	<b>Percentage of total: 30%</b>
Written examination	<span style="border: 1px solid black; padding: 2px;">70 %</span>
Oral examination	----
Other assignments/class work	<span style="border: 1px solid black; padding: 2px;">10 %</span>
Mid-Term Exam	<span style="border: 1px solid black; padding: 2px;">20 %</span>
<b>Total</b>	<b>100 %</b>

**Members of examination committee** Prof. Dr. Abdel-Hamid Mohammed El-Khoreby  
Prof. Dr Hassan Awad

**Role of external evaluator** Non

**4- Facilities and teaching materials:**

**Dictionaries, Tape recorders....etc**

Totally adequate	<span style="border: 1px solid black; padding: 2px;">.Yes.</span>
Adequate to some extent	<span style="border: 1px solid black; padding: 2px;">.....</span>
Inadequate	<span style="border: 1px solid black; padding: 2px;">.....</span>
List any inadequacies	
Non	

**5- Administrative constraints**

List any difficulties encountered  
➤ Non

**6- Student evaluation of the course:**

List any criticisms Response of course team  
Non Non

**7- Comments from external evaluator(s):**

Non Response of course team  
Non

**8- Course enhancement:**

Progress on actions identified in the previous year's action plan: None

Action State whether or not completed and give reasons for any non-completion Non

**9- Action plan for academic year 2009 – 2010**

<b>Actions required</b>	<b>Completion date</b>	<b>Person responsible</b>
Non		

**Course coordinator:** Abdel-Hamid Mohammed El-Khoreby

**Signature:**

**Date: Nov.2010**

## Annual Course Report (Academic Year 2009-2010)

### A- Basic Information

1- Title and code: Math. III. Ordinary Differential Equations and Advanced Calculus(1), B211

2- Program(s) on which this course is given: Basic Science

3- Year/Level of program: 2nd year, (Elect. Mech.) 1<sup>st</sup> Term

4- Unit hours    Lectures 4 hrs    Tutorial 2 hrs    Practical hr    Total 6 hrs

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

Course coordinator Prof. Dr. Osama El Gyar

Prof. Dr. Aly Essawi

External evaluator

### B- Statistical Information

No. of students attending the course: No. 722      % 100

No. of students completing the course: No. 637

Results: Electr.

	No.	%
Passed	485	76.1
Failed	152	23.9

Grading of successful students:

	No.	%
Excellent	56	8.8
Very Good	50	7.8
Good	68	10.7
Pass	311	48.8

### C- Professional Information

#### 1 – Course teaching

Topic	Lecture hours	Tutorial hours	Lecturer
• Classification of Differential equations	4	2	Dr. Ossama El Gyar
• First order Differential Equation	4	2	
• Separable and homogeneous Differential equations	4	2	
• Exact and linear Equations	4	2	
• N <sup>th</sup> order D.E with constant coefficients	4	2	
• Variation of parameters-Undetermined coefficients	4	2	
• Euler's Equation-Reduction of order	4	2	
• Linear systems of ordinary differential equations	4	2	
• Partial derivatives- directional derivative	6	2	
• Total derivatives-directional derivative	6	2	
• Tangent planes and normal lines	4	2	
• Maxima and minima of function of two variables	4	2	
• Lagrange's multipliers	4	2	
• Series solution of O.D.E.	4	4	
<b>Total hours</b>	<b>60</b>	<b>30</b>	

Topics taught as a percentage of the content specified:

>90 % ☒ 70-90 % ☐ <70% ☐

Reasons in detail for not teaching any topic

If any topics were taught which are not specified, give reasons in detail

## 2- Teaching and learning methods:

Lectures: Classical lecturing using the white board, projectors and data show

Practical training/ laboratory: None

Seminar/Workshop: None

Class activity: Numerical exercises; solution of problems

Case Study: Selected case studies

Other assignments/homework: Bi-weekly assignments

If teaching and learning methods were used other than those specified, list and give reasons:

None

## 3- Student assessment:

Method of assessment	Percentage of total
Written examination	70 %
Oral examination	----
Practical/laboratory work	%
Other assignments/class work	10 %
Mid-Term Exam	20 %
Total	100 %

Members of examination committee

Prof. Dr. Osama El Gyar

Prof Dr. Aly M. Essawi

Role of external evaluator

None

## 4- Facilities and teaching materials:

Totally adequate	Yes
Adequate to some extent	.....
Inadequate	.....
List any inadequacies	
None	

## 5- Administrative constraints

List any difficulties encountered

➤ None

## 6- Student evaluation of the course:

List any criticisms

Response of course team

- |  |   |
|--|---|
| 1- Problems with the teaching assistant in exercises                           | New teacher assistant will be engaged the next academic year.   |
| 2- A proposal to extend the subject and lecture it in two successive semesters | The actual content and number of lecturing hours are convenient now, considering the re-determined graduate profile |

7- Comments from external evaluator(s):                      Response of course team

8- Course enhancement:

Progress on actions identified in the previous year's action plan: None

Action State whether or not completed and give reasons for any None-completion    None

9- Action plan for academic year 2009 – 2010

**Actions required**

None

**Completion date**

**Person responsible**

Prof. Dr. Osama El Gyar

**Course coordinator:**      Prof. Dr. Osama El Gyar  
   Prof. Dr. Aly M. Essawi

**Signature:**

**Date: Nov.2010**



## Annual Course Report (Academic Year 2009-2010)

### A- Basic Information

- 1- Title and code: **E210: Computer Programming I**
- 2- Program(s) on which this course is given: 2nd year Electrical Dept., Mech. Dept.
- 3- Year/Level of program: 2nd year
- 4- Unit hours Lectures 2 hrs Tutorial 0 hrs Practical 2 hr Total 4 hrs
- 5- Names of lecturers contributing to the delivery of the course  

Prof. Dr. Adel Khedr  
Course coordinator Prof. Dr. Adel Khedr  
External evaluator

### B- Statistical Information

No. of students attending the course:	No. <span style="border: 1px solid black; padding: 0 5px;">110</span>	% <span style="border: 1px solid black; padding: 0 5px;">...100.</span>
No. of students completing the course:	No. <span style="border: 1px solid black; padding: 0 5px;">103</span>	% <span style="border: 1px solid black; padding: 0 5px;">93.6</span>
Results:		
	No.	%
Passed	93	90.3
Failed	10	9.7
Grading of successful students:		
	No.	%
Excellent	6	5.8
Very Good	16	15.5
	16	15.5
Good	55	53.3
Pass		

### C- Professional Information

#### 1 – Course teaching

Topic Actually taught	Lecture hours	Practical hours	Lecturer
• Steps for solving problems by comp. programs	2		Prof. Dr. Adel El Sherif Dr. Adel Khedr
• Program documentation and flow charts	2		
• Structured programming and structure charts	6		
• Pascal language program parts	2	2	
• Input / Output in Pascal	2	4	
• Data types and declaration	2	4	
• Operators and precedence	2	6	
• Selection constructs in Pascal language	4	2	
• Loops in Pascal language	4	4	
• Arrays in Pascal language	2	2	
• Procedures and Functions in Pascal language	2	2	
Total hours	30	26	

Topics taught as a percentage of the content specified:

>90 % ☒ 70-90 % ☐ <70% ☐

Reasons in detail for not teaching any topic Shortage of time

If any topics were taught which are not specified, give reasons in detail Non

#### 2- Teaching and learning methods:

Lectures: Using white board and computer

Practical training/ laboratory: Computer labs

Seminar/Workshop:

Class activity: Numerical exercises, computer applications

Case Study:

Other assignments/homework:

If teaching and learning methods were used other than those specified, list and give reasons:

Non

### 3- Student assessment:

Method of assessment	Percentage of total
Written examination	<input type="text" value="60 %"/>
Oral examination	<input type="text" value="Non"/>
Practical/laboratory work	<input type="text" value="20 %"/>
Other assignments/class work	<input type="text" value="10 %"/>
Mid-Term Exam	<input type="text" value="10 %"/>
Total	<input type="text" value="100 %"/>

Members of examination committee Dr. Adel Khedr

Role of external evaluator Non

### 4- Facilities and teaching materials:

Totally adequate	<input type="text" value="Yes"/>
Adequate to some extent	<input type="text" value="....."/>
Inadequate	<input type="text" value="....."/>
List any inadequacies	

### 5- Administrative constraints

List any difficulties encountered

- Introducing a sound system in computer labs

### 6- Student evaluation of the course:

List any criticisms

Response of course team

1. The theoretical part is to much

### 7- Comments from external evaluator(s):

Response of course team

### 8- Course enhancement:

Progress on actions identified in the previous year's action plan: None

Action State whether or not completed and give reasons for any non-completion Non

### 9- Action plan for academic year 200X – 200Y

Actions required	Completion date	Person responsible
1. Provide a sound system in computer labs		

Course coordinator: Prof. Dr. Adel Kheder

Signature: Prof. Dr. Said A.Gawish

Date:

## Annual Course Report 2009/2010

### A- Basic Information

- 1- Title and code: (M201) Fluid Mechanics
- 2- Program(s) on which this course is given: Manufacturing Eng. and Production Technology
- 3- Year/Level of program: Second Year Man. Eng. & Prod. Tech.
- 4- Unit hours    Lectures 4 hrs    Tutorial 1 hr    Practical 1 hr    Total 6 hrs
- 5- Names of lecturers contributing to the delivery of the course  
    Dr. Abdelmagid A. Abdalla  
    Course coordinator Dr. Abdelmagid A. Abdalla  
    External evaluator:    None

### B- Statistical Information

No. of students attending the course:	No. <span style="border: 1px solid black; padding: 0 5px;">100</span>	% <span style="border: 1px solid black; padding: 0 5px;">100</span>		
No. of students completing the course:	No. <span style="border: 1px solid black; padding: 0 5px;">100</span>	% <span style="border: 1px solid black; padding: 0 5px;">100</span>		
Results:	No.	%	Grading of successful students:	
Passed	83	83		
Failed	17	17		
			Excellent	No. 6    % 6
			Very Good	9    9
			Good	12    12
			Pass	56    56

### C- Professional Information

#### 1 – Course teaching

Topic Actually taught	No. of hours			Lecturer
	L	T	P	
• Introduction Definition of fluids, dimensions and units, fluid properties.	4	2	2	Dr. Abdelmagid A. Abdalla
• Fluid statics Pressure at a point, pressure field, pressure measurement, hydrostatic forces acting on plane and curved surfaces, buoyancy, floatation, and stability.	10	2	2	
• Fluid kinematics Velocity field, acceleration field, Reynolds's transport theorem.	12	2	-	
• Conservation laws Conservation of mass- continuity equation, conservation of linear momentum.	6	2	2	
• Similitude, dimensional analysis, and modeling Dimensional analysis, Buckingham Pi theorem, determination of Pi terms by inspection, Common dimensionless groups in fluid mechanics, modeling and similitude.	12	2	2	
• Viscous Flow in Pipes General characteristics of pipe flow, fully developed laminar flow, fully developed turbulent flow, dimensional analysis of pipe flow.	4	2	4	
Total hours	48	12	12	

Topics taught as a percentage of the content specified:

>90 % ---    70-90 % 80    <70% ...

Reasons in detail for not teaching any topic The term actually was 12 weeks as during the last three weeks practical exams and revisions were carried out.

If any topics were taught which are not specified, give reasons in detail None

**2- Teaching and learning methods:**

Lectures:

Practical training/ laboratory:

Seminar/Workshop:

Class activity: Numerical exercises

Case Study:

Other assignments/homework:

If teaching and learning methods were used other than those specified, list and give reasons:  
 None

**3- Student assessment:**

Method of assessment	Percentage of total
Written examination	<input type="text" value="60 %"/>
Oral examination	<input type="text" value="----"/>
Practical/laboratory work	<input type="text" value="20 %"/>
Other assignments/class work& Quizzes	<input type="text" value="10 %"/>
Mid-Term Exam	<input type="text" value="10 %"/>
Total	100 %

Members of examination committee Dr. Abdelmagid A. Abdalla  
 Dr. Metwally H. Metwally

Role of external evaluator None

**4- Facilities and teaching materials:**

Totally adequate

Adequate to some extent

Inadequate

List any inadequacies Non

**5- Administrative constraints**

List any difficulties encountered

- Only two hydraulic benches were working, so, only two experiments were working at the same time.
- No teaching assistant.

**6- Student evaluation of the course:**

NO.	List any criticisms	Response of course team
1	Insufficient exercises hours.	This insufficiency is due to the determined exercise hours of the course. During lecture hours, it will be considered, the increase of the solved examples.
2	No teaching assistant	Next year there will be a teaching assistant

7- Comments from external evaluator(s): Response of course team  
 None

**8- Course enhancement:**

Progress on actions identified in the previous year's action plan:

- The numbers of solved examples have been increased during lecture periods.

- A teaching assistant will be available next year.
- A hydraulic bench has been manufactured and tested through student's projects.

Action State whether or not completed and give reasons for any non-completion None

**9- Action plan for academic year 2010 – 2011**

NO.	Actions required	Completion date	Person responsible
1	Increase the number of solved examples during the lecture	Sept 2010	Dr. Abdelmagid A. Abdalla
2	A hydraulic bench is added to the lab	Sept 2010	
3	A teaching assistant will be available next year	Sept 2010	

Course coordinator: Dr. Abdelmagid A. Abdalla

Signature:

Date: 17/10/2010

## Annual Course Report 2009/2010

### A- Basic Information

- 1- **Title and code:** (M250) Engineering Skills I  
 2- **Program(s)** on which this course is given: *Manufacturing Engineering & Production Tech.*  
 3- **Year/Level of program:** *2<sup>nd</sup> Year Mechanical*  
 4- **Unit hours** Lectures  Tutorial  Practical  Total   
 5- **Names of lecturers contributing to the delivery of the course**  
*Prof. Dr. Mamdouh Saber Elsayed*

Course coordinator  
External evaluator: None

### B- Statistical Information

No. of students attending the course:	No. <input type="text" value="112"/>	% <input type="text" value="100"/>
No. of students completing the course:	No. <input type="text" value="92"/>	% <input type="text" value="82.14"/>
<b>Results:</b>		
	No.	%
Passed	75	81.5
Failed	17	18.5
<b>Grading of successful students:</b>		
	No.	%
Excellent	4	4.35
Very Good	4	4.35
Good	13	14.1
Pass	54	58.7

### C- Professional Information

#### 1 – Course teaching

Topic Actually taught	No. of hours			Lecturer
	L	T	P	
<i>Engineering Materials</i>	2	4		Prof. Dr. Mamdouh Saber Elsayed
<i>Limits &amp; Fits</i>	2	4		
<i>Machining Marks</i>	2	4		
<i>Assembly Drawings</i>	2	4		
<i>Mechanical Joints</i>	2	4		
<i>Threaded Joints</i>	2	4		
<i>Locking of Threaded Joints</i>	2	4		
<i>Vices Clamps (Ass. &amp; Det. drw)</i>	2	4		
<i>Lathe Tool Pos</i>	2	4		
<i>Key Joints</i>	2	4		
<i>Pin joints</i>	2	4		
<i>Couplings (Ass. &amp; Det. drw)</i>	2	4		
<i>Pulley Assembly</i>	2	4		
<i>Belt Tightener</i>	2	4		
<b>Total hours</b>	30	60		

Topics taught as a percentage of the content specified:

>90 %  70-90 %  <70%

Reasons in detail for not teaching any topic:

If any topics were taught which are not specified, give reasons in detail None

2- Teaching and learning methods:

Lectures:

Practical training/ laboratory: *Teaching aids and life components and assembly*

Seminar/Workshop:

Class activity: Weekly exercise of assembly and details drawing; Quizes

Case Study: Selected case studies

Other assignments/homework:

If teaching and learning methods were used other than those specified, list and give reasons: None

3- Student assessment:

Method of assessment	Percentage of total
Written examination	<input type="text" value="70 %"/>
Oral examination	<input type="text" value="----"/>
Practical/laboratory work	<input type="text" value="----"/>
Other assignments/class work & activities	<input type="text" value="20 %"/>
Mid-Term Exam	<input type="text" value="10 %"/>
Total	100 %

Members of examination committee *Prof . Dr. Mamdouh Saber*

Role of external evaluator None

4- Facilities and teaching materials:

Totally adequate	<input type="text" value="Yes"/>
Adequate to some extent	<input type="text" value="----"/>
Inadequate	<input type="text" value="----"/>
List any inadequacies	Non

5- Administrative constraints

List any difficulties encountered

1- Limitation of number of data show in the principal building

6- Student evaluation of the course:

List any criticisms

*Non*

Response of course team

7- Comments from external evaluator(s):

None

Response of course team

8- Course enhancement:

Progress on actions identified in the previous year's action plan:

Action State whether or not completed and give reasons for any non-completion None

9- Action plan for academic year 2010 – 2011

Actions required

*New solving problems*

*More teaching aids*

Completion date

Person responsible

Course coordinator: *Prof . Dr. Mamdouh Saber*

Signature:

Date: 9/2010

## Annual Course Report 2009 - 2010

### A- Basic Information

- 1- Title and code: **M 251:Mechanics of Machines (I)**
- 2- Program(s) on which this course is given: Manufacturing Eng. and Production Technology
- 3- Year/Level of program: third year
- 4- Unit hours Lectures  Tutorial  Practical  Total 4 hrs
- 5- Names of lecturers contributing to the delivery of the course  
 Prof. Dr. Ahmed Sarhan  
 Course coordinator Prof. Dr. Ahmed Sarhan  
 External evaluator Non

### B- Statistical Information

No. of students attending the course:	No. <input type="text" value="112"/>	% <input type="text" value="100"/>
No. of students completing the course:	No. <input type="text" value="103"/>	% <input type="text" value="92"/>
Results:		
	No.	%
Passed	92	89.3
Failed	11	10.7
Grading of successful students:		
	No.	%
Excellent	10	9.7
Very Good	14	13.6
Good	12	11.7
Pass	56	54.4

### C- Professional Information

#### 1 – Course teaching

Topic Actually taught	No. of hours	Lecturer
• Moment of inertia	8	Prof. Sarhan
• System of particles	24	
• Kinematics of rigid bodies	10	
• Plane motion of rigid bodies: force & acceleration	24	
• Plane motion of rigid bodies: Energy & momentum	26	
• Cams	8	
Total hours	60	

Topics taught as a percentage of the content specified:

>90 %  70-90 %  <70%

Reasons in detail for not teaching any topic Non

If any topics were taught which are not specified, give reasons in detail Non

#### 2- Teaching and learning methods:

Lectures:

Practical training/ laboratory:

Seminar/Workshop:



Class activity: Numerical exercises;

Case Study:

Other assignments/homework:

If teaching and learning methods were used other than those specified, list and give reasons: Non

### 3- Student assessment:

Method of assessment	Percentage of total
Written examination	70%
Oral examination	----
Practical/laboratory work	----
Other assignments/class work	10%
Mid-Term Exam	20%
Total	100 %

Members of examination committee Dr. Ahmed Sarhan

Role of external evaluator Non

### 4- Facilities and teaching materials:

Totally adequate	<input type="text" value="Yes"/>
Adequate to some extent	<input type="text" value="-----"/>
Inadequate	<input type="text" value="-----"/>
List any inadequacies	Non

### 5- Administrative constraints

List any difficulties encountered  
➤ no

### 6- Student evaluation of the course:

List any criticisms	Response of course team
1. More time is requested	More problems will be given

7- Comments from external evaluator(s): Non  
Response of course team

### 8- Course enhancement:

Progress on actions identified in the previous year's action plan: yes  
Action State whether or not completed and give reasons for any non-completion Non

### 9- Action plan for academic year 2009 – 2010

Actions required	Completion date	Person responsible
------------------	-----------------	--------------------

Course coordinator: Prof. Dr Ahmed Sarhan

Signature:

Date: 25/10/2010

## Annual Course Report Academic year 2009-2010

### A- Basic Information

- 1- **Title and code:** (M261) Strength of Material  
 2- **Program(s) on which this course is given:** Manufacturing Eng. and Production Technology.  
 3- **Year/Level of program:** Second Year/First Semester  
 4- **Unit hours** Lectures 2 hrs Practical 2 hr Total 4 hrs  
 5- **Names of lecturers contributing to the delivery of the course**  
     Prof. Dr. Ahmed El-Sanabary  
     Course coordinator Prof. Dr. Ahmed El-Sanabary  
     External evaluator

### B- Statistical Information

No. of students attending the course: No. 101 % 100  
 No. of students completing the course: No. 101 % 100  
 Results:

	No.	%
Passed	78	77.23
Failed	23	22.77

**Grading of successful students:**

	No.	%
Excellent	2	1.98
Very Good	5	4.95
Good	10	9.9
Pass	61	60.4

### C- Professional Information

#### 1 – Course teaching

Topic		Lecture hours	Practical Hours	Lecturer
1	Simple Trusses	2	2	Prof. Dr. Ahmed ELSanabary
2	Stress and strain	2	2	
3	Tensile test	2	2	
4	Thin wall Pressure Vessel	2	2	
5	Torsion of circular shafts	2	2	
6	Springs Stresses	2	2	
7	Temperature stresses	2	2	
8	Strain energy due to stresses	2	2	
9	Shear & Bending Moment Diagrams	2	2	
10	Shear & Bending Moment Diagrams	2	2	
11	Centroid & Second moment of area	2	2	
12	Shear & Bending stresses	2	2	
13	Compound stress	2	2	
14	Deflection of beams	2	2	
15	Testing of Materials	2	2	
Total hours		30	30	

Topics taught as a percentage of the content specified:

>90 % ☒ 100 70-90 % ☐ <70% ☐

Reasons in detail for not teaching any topic Non

If any topics were taught which are not specified, give reasons in detail Non

## 2- Teaching and learning methods:

Lectures:

Practical training/ laboratory:

Seminar/Workshop:

Class activity: Numerical exercises; solution of problems .

Case Study:

Other assignments/homework:

If teaching and learning methods were used other than those specified, list and give reasons:  
Non

## 3- Student assessment:

Method of assessment	Percentage of total
Written examination	<input type="text" value="66.7 %"/>
Oral examination	<input type="text" value="----"/>
Practical/laboratory work	<input type="text" value="13.3 %"/>
Other assignments/class work	<input type="text" value="10 %"/>
Mid-Term Exam	<input type="text" value="10 %"/>
Total	<b>100 %</b>
Members of examination committee	Dr. Bakkar El-Sarnagawy
Role of external evaluator	Non

## 4- Facilities and teaching materials:

Totally adequate

Adequate to some extent

Inadequate

List any inadequacies: Non

## 5- Administrative constraints

List any difficulties encountered

➤ Non

## 6- Student evaluation of the course:

List any criticisms

(a) Non

Response of course team

## 7- Comments from external evaluator(s):

Non

Response of course team

Non

**8- Course enhancement:**

Progress on actions identified in the previous year's action plan:

Actions required	Planned Completion date	Accomplishment
Non	Non	Non
Action State whether or not completed and give reasons for any non-completion		Non

**9- Action plan for academic year 2009 – 2010**

Actions required	Completion date	Person responsible
Non	Non	Non

**Course coordinator:** Prof. Dr Ahmed El-Sanabary

**Signature:**

**Date:** 1/10/2010

## Annual Course Report (Academic Year 2009-2010)

### A- Basic Information

- 1- Title and code: History of Science & Technology, B202  
 2- Program(s) on which this course is given: Com. Eng. & Inf. Tech. Dept.  
 Electronic Eng & Comm. Tech. Dept.  
 Man. Eng. & Prod. Tech. Dept.  
 3- Year/Level of program: 2<sup>nd</sup> year, Second Semester  
 4- Unit hours Lectures  Tutorial  Practical  Total   
 5- Names of lecturers contributing to the delivery of the course  
 Prof. Dr.: Shaban Ragab Gouda  
 Course coordinator Prof. Dr.: Shaban Ragab Gouda  
 External evaluator Non

### B- Statistical Information

No. of students attending the course: No. 722 % 100%

No. of students completing the course: No. 661 %

Results:

	No.	%
Passed	655	99.09
Failed	6	0.91

Grading of successful students:

	No.	%
Excellent	246	37.2
Very Good	162	24.51
Good	117	17.70
Pass	130	19.67

### C- Professional Information

#### 1 – Course teaching

Topic Actually taught	No. of hours	Lecturer
* العلم والهندسة والتكنولوجيا	2	Prof. Dr. S. R. Gouda
* الهندسة والبحث العلمى – منظومه البحث العلمى	4	
* عناصر ومتطلبات البحث العلمى	2	
* الهندسة وخريطه البحث العلمى – مراحل البحث العلمى	2	
* تاريخ الهندسة والتكنولوجيا فى مختلف العصور	4	
* نقل التكنولوجيا	2	
* نشاطات العمل الهندسى ومسئوليه المهندس	2	
* التعليم الهندسى	2	
* نقابه المهندسين المصريه – جمعيه المهندسين المصريه	4	
* تطور اوجه النشاط الهندسى والتكنولوجى	4	
* اشهر علماء الهندسة والتكنولوجيا	2	
<b>Total hours</b>	<b>30</b>	

Topics taught as a percentage of the content specified:

>90 %  70-90 %  <70%

Reasons in detail for not teaching any topic . Non

If any topics were taught which are not specified, give reasons in detail

#### 2- Teaching and learning methods:

Lectures:

Practical training/ laboratory:

None

Seminar/Workshop:

None

Class activity:

None

Case Study:

None

Other assignments/homework:

None

If teaching and learning methods were used other than those specified, list and give reasons:

None

### 3- Student assessment:

Method of assessment

Percentage of total

Written examination

70 %

Oral examination

None

Practical/laboratory work

None

Other assignments/class work

10%

Mid-Term Exam

20 %

Total

100 %

Members of examination committee

Prof. Dr. S. R. Gouda

Role of external evaluator

None

### 4- Facilities and teaching materials:

Totally adequate

Yes

Adequate to some extent

100%

Inadequate

----

List any inadequacies

Non

### 5- Administrative constraints

List any difficulties encountered

None

### 6- Student evaluation of the course:

List any criticisms

None

Response of course team

None

### 7- Comments from external evaluator(s):

None

Response of course team

None

### 8- Course enhancement:

Progress on actions identified in the previous year's action plan: None

Action State whether or not completed and give reasons for any non-completion

None

### 9- Action plan for academic year 2009 – 2010

Actions required

Completion date

Person responsible

Non

Non

Course coordinator:

Prof. Dr. S. R. Gouda

Signature:

Date: Nov.2010

## Annual Course Report (Academic Year 2009-2010)

### A- Basic Information

1- Title and code: Math. IV, Laplace Transform and Advanced Calculus (2), B212

2- Program(s) on which this course is given: Basic Science

3- Year/Level of program: 2nd year, (Elect, Mech.) 2<sup>nd</sup> Term

4- Unit hours Lectures  Tutorial  Practical  Total

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

Course coordinator Prof. Dr. Osama El Gyar

Prof. Dr. Aly Essawi

External evaluator

### B- Statistical Information

No. of students attending the course: No. 722 %

No. of students completing the course: No. 604

Results: Electr.

	No.	%
Passed	437	72.4
Failed	167	27.6

Grading of successful students:

	No.	%
Excellent	51	8.4
Very Good	34	5.6
Good	71	11.8
Pass	281	46.5

### C- Professional Information

#### 1 – Course teaching

Topic Actually taught	No. of hours	Lecturer
• Laplace transform	6	Prof. Dr. Osama El Gyar Prof. Dr. Aly Essawi
• First shift property-Second shift property	6	
• Differentiation of Laplace transform	6	
• Integration of laplace transform	6	
• Solving D.E using laplace transform	6	
• Laplace transform of the derivative	6	
• Laplace transform of the Integral	6	
• The Gamma and Beta function	6	
• Line integral and application	6	
• Double integral and application	6	
• Multiple integral and application	6	
• Surface and volume Integral	6	
• Legendre and Bessel functions	6	
• Cylindrical and spherical polar coordinates	6	
• Final Revision	6	
<b>Total hours</b>	<b>90</b>	

Topics taught as a percentage of the content specified:

>90 % ☒ 70-90 % ☐ <70% ☐

Reasons in detail for not teaching any topic

If any topics were taught which are not specified, give reasons in detail

## 2- Teaching and learning methods:

Lectures: Classical lecturing using the white board, projectors and data show

Practical training/ laboratory: None

Seminar/Workshop: None

Class activity: Numerical exercises; solution of problems

Case Study: Selected case studies

Other assignments/homework: Bi-weekly assignments

If teaching and learning methods were used other than those specified, list and give reasons:

None

## 3- Student assessment:

Method of assessment	Percentage of total
Written examination	70 %
Oral examination	----
Practical/laboratory work	%
Other assignments/class work	10 %
Mid-Term Exam	20 %
Total	100 %

Members of examination committee Prof. Dr. Osama El Gyar  
Prof Dr. Aly M. Essawi

Role of external evaluator None

## 4- Facilities and teaching materials:

Totally adequate	Yes
Adequate to some extent	.....
Inadequate	.....
List any inadequacies	
None	

## 5- Administrative constraints

List any difficulties encountered

➤ None

## 6- Student evaluation of the course:

List any criticisms

1. Problems with the teaching assistant in exercises
2. A proposal to extend the subject and lecture it in two successive semesters

Response of course team

New teacher assistant will be engaged the next academic year.  
The actual content and number of lecturing hours are convenient now, considering the re-determined graduate profile

## 7- Comments from external evaluator(s):

Response of course team



**8- Course enhancement:**

**Progress on actions identified in the previous year's action plan:** None

**Action State whether or not completed and give reasons for any None-completion**      None

**9- Action plan for academic year 2009 – 2010**

**Actions required**

**Completion date**

**Person responsible**

None

Prof. Dr. Osama El Gyar

**Course coordinator:** Prof. Dr. Osama El Gyar

Prof. Dr. Aly M. Essawi

**Signature:**

**Date:** Nov. 2010

## Annual Course Report 2009/2010

### A- Basic Information

- 1- Title and code: (E213) Computer Programming II
- 2- Program(s) on which this course is given: 2nd year Electrical Dept., Mech. Dept.
- 3- Year/Level of program: 2nd year
- 4- Unit hours Lectures  Tutorial  Practical  Total
- 5- Names of lecturers contributing to the delivery of the course  
Course coordinator Prof. Dr. Adel kuder  
External evaluator

### B- Statistical Information

No. of students attending the course: No.  %   
 No. of students completing the course: No.  %

Results:

	No.	%
Passed	93	95.9
Failed	4	4.1

Grading of successful students:

	No.	%
Excellent	10	10.3
Very Good	14	14.4
Good	13	13.4
Pass	56	57.7

### C- Professional Information

#### 1 – Course teaching

Topics Actually Taught	Lecture hours	Practical hours	Lecturer
• Concepts of structured programming	2		Prof. Dr. Said Gawish Prof. Dr. Said Gawish
• Program structure in C++	2		
• Data types and declaration in C++	2		
• Input / Output in C++ and i/o stream class	2	4	
• I/O manipulation	2	4	
• Operators and precedence in C++	6	4	
• Decision (selection) constructs in C++	4	2	
• Loops in C++	4	4	
• Arrays in C++	2	2	
• Functions in C++	2	2	
• Calling functions (by value, by reference)	2	4	
Total hours	30	26	

Topics taught as a percentage of the content specified:

>90 % ☒ 70-90 % ☐ <70% ☐

Reasons in detail for not teaching any topic Shortage of time

If any topics were taught which are not specified, give reasons in detail Non

#### 2- Teaching and learning methods:

Lectures:

Practical training/ laboratory:

Seminar/Workshop:

Class activity: Numerical exercises, computer applications

Case Study:

Other assignments/homework:

If teaching and learning methods were used other than those specified, list and give reasons:

Non

### 3- Student assessment:

Method of assessment	Percentage of total
Written examination	<input type="text" value="60 %"/>
Oral examination	<input type="text" value="Non"/>
Practical/laboratory work	<input type="text" value="20 %"/>
Other assignments/class work	<input type="text" value="10 %"/>
Mid-Term Exam	<input type="text" value="10 %"/>
Total	<input type="text" value="100 %"/>
Members of examination committee	Dr. Said A. Gawish Dr. Adel Khedr
Role of external evaluator	<input type="text" value="Non"/>

### 4- Facilities and teaching materials:

Totally adequate	<input type="text" value="Yes"/>
Adequate to some extent	<input type="text" value="....."/>
Inadequate	<input type="text" value="....."/>
List any inadequacies	

### 5- Administrative constraints

List any difficulties encountered

- Introducing a sound system in computer labs

### 6- Student evaluation of the course:

List any criticisms

Response of course team

1. The theoretical part is to much
2. The student must learn how to read, this is done in second year

### 7- Comments from external evaluator(s):

Response of course team

### 8- Course enhancement:

Progress on actions identified in the previous year's action plan: None

Action State whether or not completed and give reasons for any non-completion

### 9- Action plan for academic year 200X – 200Y

Actions required	Completion date	Person responsible
1. Provide a sound system in computer labs		

Course coordinator: Prof. Dr. Adel kuder

Signature: Prof. Dr Said A.Gawish

Date:

## Annual Course Report 2009/2010

### A- Basic Information

- 1- Title and code: (M222) Thermodynamics  
 2- Program(s) on which this course is given: Manufacturing Eng. and Production Technology  
 3- Year/Level of program: Second Year Man. Eng. & Prod. Tech.  
 4- Unit hours Lectures 4 hrs Tutorial 1 hrs Practical 1 hrs Total 6 hrs  
 5- Names of lecturers contributing to the delivery of the course  
     Dr. Abdelmagid A. Abdalla,  
     Course coordinator Dr. Abdelmagid A. Abdalla  
     External evaluator: None

### B- Statistical Information

No. of students attending the course:	No. <span style="border: 1px solid black; padding: 0 5px;">99</span>	% <span style="border: 1px solid black; padding: 0 5px;">100</span>		
No. of students completing the course:	No. <span style="border: 1px solid black; padding: 0 5px;">99</span>	% <span style="border: 1px solid black; padding: 0 5px;">100</span>		
Results:			Grading of successful students:	
	No.	%		No.    %
Passed	89	89.9	Excellent	11    11.1
Failed	10	10.1	Very Good	12    12.1
			Good	9    9.1
			Pass	57    57.6

### C- Professional Information

#### 1 – Course teaching

Topic Actually taught	No. of hours			Lecturer
	L	T	P	
• Introduction Importance of thermodynamics, some applications Mechanisms of heat transfer.	4	-	-	Dr. Abdelmagid A. Abdalla,
• Concepts and definitions System, boundary, surroundings. Closed, open, and isolated systems. Kinetic, potential, and internal energy. State of a system, process, cycle, reversible, and irreversible processes, and thermodynamic work.	12	4	2	
• Properties of a pure substance Definition, phase diagram of water (p-v), (T-v), Tables of steam. Equation of state, and compressibility factor, specific heats ( $C_p$ & $C_v$ ).	12	4	2	
• First law of thermodynamics Statement of the first law for cycle & process. Different forms for a control mass & control volume. Special cases (SSSF, USUF). Enthalpy	12	4	2	

• Second law of thermodynamics Heat engine and heat pump, Kelvin–Plank and Clausius statements. Reversibility and factors affecting it, Carnot cycle and its efficiency, Thermodynamic temperature scales.	8	2	2
• Entropy Definition, Clausius inequality, entropy of a pure substance, entropy change in a process.	4	2	2
<b>Total hours</b>	<b>52</b>	<b>16</b>	<b>10</b>

Topics taught as a percentage of the content specified:

>90 % ☐ 70-90 % ☒ 87 <70% ☐

Reasons in detail for not teaching any topic The term actually was 13 weeks as during the last two weeks practical exams and revisions were carried out.

If any topics were taught which are not specified, give reasons in detail None

## 2- Teaching and learning methods:

Lectures: Classical lecturing using the white board

Practical training/ laboratory: Experimental measurements in Lab

Seminar/Workshop: None

Class activity: Numerical exercises

Case Study: None

Other assignments/homework: Bi-weekly assignments

If teaching and learning methods were used other than those specified, list and give reasons:  
None

## 3- Student assessment:

Method of assessment	Percentage of total
Written examination	60 %
Practical/laboratory work	20 %
Other assignments/class work & Quizzes	10 %
Mid-Term Exam	10 %
Total	100 %

Members of examination committee Dr. Abdelmagid A. Abdalla

Dr. Metwally H. Metwally

Role of external evaluator None

## 4- Facilities and teaching materials:

Totally adequate ☒ Yes

Adequate to some extent

Inadequate

List any inadequacies

None

## 5- Administrative constraints

List any difficulties encountered

- Inadequate budget for securing the consumables of the thermodynamics laboratory.

**6- Student evaluation of the course:**

NO.	List any criticisms	Response of course team
1	Encouragement of student to prepare reports about general topics in the subject	This will be considered in the academic year 2010/2011.
2	Time table for office hours.	Although all the free periods are considered as office hours, but this criticism will be considered in the academic year 2010/2011.

**7- Comments from external evaluator(s):**

None

**Response of course team**

**8- Course enhancement:**

**Progress on actions identified in the previous year's action plan (2009/2010):**

- The numbers of solved examples during the lecture have been increased.
- Consumable items in the lab as capillary tubes, heaters, etc have been supplied.

**Action State whether or not completed and give reasons for any non-completion**      None

**9- Action plan for academic year 2010– 2011**

Actions required	Completion date	Person responsible
1- Encouragement of student to prepare reports about general topics in the subject	Feb 2011	Dr. Abdelmagid
2- Time table for office hours.	Oct 2010	Dr. Abdelmagid

**Course coordinator:** Dr. Abdelmagid A. Abdalla

**Signature:**

**Date:** 17/10/2010

## Annual Course Report Academic Year 2009-2010

### A- Basic Information

- 1- Title and code: (M252) Mechanics of Machines
- 2- Program(s) on which this course is given: Manufacturing Eng. and Production Technology
- 3- Year/Level of program: second Year, 2<sup>nd</sup> Semester
- 4- Unit hours      Leures       Tutorial       Practical       Total
- 5- Names of lecturers contributing to the delivery of the course  
     Prof. Dr. Gaafar A. Hussein  
     Course coordinator Prof. Dr. Gaafar A. Hussein  
     External evaluator: None

### B- Statistical Information

No. of students attending the course: No. %

No. of students completing the course: No. %

Results:

	No.	%
Passed	95	95.96
Failed	4	4.04

Grading of successful students:

	No.	%
Excellent	19	19.2
Very Good	19	19.2
Good	20	20.2
Pass	37	37.4

### C- Professional Information

#### 1 – Course teaching

Topic Actually taught	No. of hours	Lecturer
• Kinematics of motion	8	Prof. Dr. Gaafar A. Hussein
• Velocity in mechanisms	8	
• Gears and gear trains	20	
• Gyroscopic couple and precessional motion	12	
• Inertia forces in reciprocating parts	8	
<b>Total hours</b>	<b>56</b>	

Topics taught as a percentage of the content specified:

>90 %       70-90 %       <70%

Reasons in detail for not teaching any topic None

If any topics were taught which are not specified, give reasons in detail      None

#### 2- Teaching and learning methods:

Lectures:

Practical training/ laboratory:

Seminar/Workshop:

Class activity: Numerical exercises; solution of problems,  
     Demonstrations by data show.

Case Study:

Other assignments/homework:

If teaching and learning methods were used other than those specified, list and give reasons: None

### 3- Student assessment:

Method of assessment	Percentage of total
Written examination	<input type="text" value="70%"/>
Oral examination	<input type="text" value="----"/>
Practical/laboratory work	<input type="text" value="0 %"/>
Other assignments/class work	<input type="text" value="15 %"/>
Mid-Term Exam	<input type="text" value="15 %"/>
Total	100 %
Members of examination committee	Dr. Gaafar A. Hussein Dr. Abdelmegeed abdella
Role of external evaluator	None

### 4- Facilities and teaching materials:

Totally adequate	<input type="text" value="Yes"/>
Adequate to some extent	<input type="text" value="....."/>
Inadequate	<input type="text" value="....."/>
List any inadequacies	None

### 5- Administrative constraints

List any difficulties encountered

- Limitation of number of data show in the principal building
- Limitation of number of operating experiments in the laboratory

### 6- Student evaluation of the course:

List any criticisms

A proposal to extend the subject in two successive semesters

Response of course team

The actual content and number of lecturing hours are convenient now, considering the pre-determined graduate profile

### 7- Comments from external evaluator(s):

None

Response of course team

None

### 8- Course enhancement:

Progress on actions identified in the previous year's action plan: None

Action State whether or not completed and give reasons for any non-completion None

### 9- Action plan for academic year 2010 – 2011

Actions required  
None

Completion date  
None

Person responsible  
None

Course coordinator: Prof. Dr Gaafar A. Hussein

Signature:

Date: 1/8/2010



## Annual Course Report 2009/2010

### A- Basic Information

- 1- **Title and code:** (M253) Engineering Skills II
- 2- **Program(s) on which this course is given:** *Manufacturing Engineering & Production Tech.*
- 3- **Year/Level of program:** *2<sup>nd</sup> Year Mechanical*
- 4- **Unit hours** Lectures  Tutorial  Practical  Total
- 5- **Names of lecturers contributing to the delivery of the course**  
*Prof. Dr. Mamdouh Saber Elsayed*

Course coordinator  
External evaluator: None

### B- Statistical Information

No. of students attending the course:	No. <input type="text" value="112"/>	% <input type="text" value="100"/>
No. of students completing the course:	No. <input type="text" value="80"/>	% <input type="text" value="71.5"/>
<b>Results:</b>		
	No.	%
Passed	63	79
Failed	17	21
<b>Grading of successful students:</b>		
	No.	%
Excellent	6	7.5
Very Good	15	18.75
Good	7	8.75
Pass	35	44

### C- Professional Information

#### 1 – Course teaching

Topic Actually taught	No. of hours			Lecturer
	L	T	P	
<i>Engineering Materials</i>	2		4	Prof. Dr. Mamdouh Saber Elsayed
<i>Limits &amp; Fits</i>	2		4	
<i>Machining Marks</i>	2		4	
<i>Assembly Drawings</i>	2		4	
<i>Mechanical Joints</i>	2		4	
<i>Threaded Joints</i>	2		4	
<i>Locking of Threaded Joints</i>	2		4	
<i>Vices Clamps (Ass. &amp; Det. drw.)</i>	2		4	
<i>Lathe Tool Pos</i>	2		4	
<i>Key Joints</i>	2		4	
<i>Pin joints</i>	2		4	
<i>Couplings (Ass. &amp; Det. drw.)</i>	2		4	
<i>Pulley Assembly</i>	2		4	
<i>Belt Tightener</i>	2		4	
Total hours	28		56	

Topics taught as a percentage of the content specified:

>90 %  70-90 %  <70%

Reasons in detail for not teaching any topic:

If any topics were taught which are not specified, give reasons in detail None

**2- Teaching and learning methods:**

Lectures: Classical lecturing using white board and OHP

Practical training/ laboratory: *Teaching aids and life components*

Seminar/Workshop: None

Class activity:

Case Study:

Other assignments/homework:

If teaching and learning methods were used other than those specified, list and give reasons:

*None*

**3- Student assessment:**

Method of assessment

Percentage of total

Written examination

70 %

Oral examination

----

Practical/laboratory work

.....

Other assignments/class work & activities

20 %

Mid-Term Exam

10 %

Total

100 %

Members of examination committee

*Prof . Dr. Mamdouh Saber*

Role of external evaluator

*None*

**4- Facilities and teaching materials:**

Totally adequate

Yes

Adequate to some extent

.....

Inadequate

.....

List any inadequacies

Non

**5- Administrative constraints**

List any difficulties encountered

Limitation of number of data show in the principal building

**6- Student evaluation of the course:**

List any criticisms

Response of course team

To join the subjects of the two semesters

*Drawing halls*

(Eng – Skills (1) & (2) in one final exam.

**7- Comments from external evaluator(s):**

Response of course team

*None*

**8- Course enhancement:**

Progress on actions identified in the previous year's action plan:

Action State whether or not completed and give reasons for any non-completion

None

**9- Action plan for academic year 2010 – 2011**

Actions required

Completion date

Person responsible

*New solving problems*

*More teaching aids*

Course coordinator: *Prof . Dr. Mamdouh Saber*

Signature:

Date: 9/2010

## Annual Course Report 2009/2010

### A- Basic Information

- 1- Title and code: (M262) Material Technology I
- 2- Program(s) on which this course is given: Production Engineering and manufacturing Technology BSc Program
- 3- Year/Level of program: Second Year/Second Semester
- 4- Teaching hours  

Total	4 hrs	Lectures	2 hrs	Tutorial	1 hrs	Practical	1 hr
-------	-------	----------	-------	----------	-------	-----------	------
- 5- Names of lecturers contributing to the delivery of the course: Prof. Dr. Bakkar Elsarnagawy
- 6- Course coordinator: Prof. Dr. Bakkar Elsarnagawy
- 7- External evaluator: Non

### B- Statistical Information

- 1- No. of students attending the course: No. 

110	100	%
-----	-----	---
- 2- No. of students completing the course: No. 

100	90.9	%
-----	------	---
- 3- Results:

	No.	%
Passed	95	95
Failed	5	5

Grading of successful students:		
Grade	No.	%
Excellent	23	24.2
Very Good	19	20.0
Good	20	20.0
Pass	33	21.1

### C- Professional Information

#### 1 – Course teaching

Topic	Total hours		Lecturer
	Plan.	Actual	
• Crystal Structure of Metals	2		Prof. Dr. Bakkar Elsarnagawy
• Miller's indices	2	2	
• Solidification of Metals	2		
• Binary Equilibrium Diagrams	2	2	
• Iron-Carbon system	2		
• Steels and microstructure	2	2	
• Cast iron and microstructure	2		
• Heat treatment of steels	2	2	
• Copper and its alloys	2		
• Alluminum and its alloys	2	2	
• Strengthening Mechanisms	2		
• Lead and tin alloys (Babbitts)	2	2	
• Polymers and uses	2		
• Ceramics and composite materials	2	2	
• Revision	2	1	
<b>Total hours</b>	<b>30</b>	<b>15</b>	

Topics taught as a percentage of the content specified: >90 %    70-90 %    <70 %  
Reasons in detail for not teaching any topic: Non  
If any topics were taught which are not specified, give reasons in detail: Non

Knowledge & Understanding a1 to a4	Intellectual skills b1 to b5	Applied Skills c1 to c3	General transferable skills d1 to d3
---------------------------------------	---------------------------------	----------------------------	---

**2- Teaching and learning methods:**

Lectures:	Lecture, discussions, tutorials, problem solving
Practical training/ laboratory:	Practical Training and experimental measurements in Lab
Seminar/Workshop:	Non
Class activity	Numerical exercises; solution of problems by computer and data show.
Case Study:	Selected case studies
Other assignments/homework:	Bi-weekly assignments and reports
If teaching and learning methods were used other than those specified, give reasons:	Non

**3- Student assessment:**

Method of assessment	Points	%
Written examination	60	66.7
Oral examination	Non	Non
Practical/laboratory work	20	13.3
Other assignments/class work	10	10
Mid-Term Exam	10	10
Total	100	100

Members of examination committee: Dr. M. Bakkar Elsarngawy and Dr. -----

Role of external evaluator: Non

**4- Facilities and teaching materials:**

Totally adequate	Yes
Adequate to some extent	
Inadequate	

List any inadequacies: Non

**5- Administrative constraints (List any difficulties encountered)**

➤ Non

**6- Student evaluation of the course:**

	List any criticisms	Response of course team
(a)	Non	

**7- Comments from external evaluator(s):**

	Comment	Response of course team
(a)	Non	

**8- Written Exam Evaluation**

➤ Non

**9- Course enhancement:**

Progress on actions identified in the previous year's action plan. State whether or not completed and give reason for any non-completion:

Actions required	Planned Completion date	Accomplishment
(a) Non		

**9- Action plan for academic year 2010 – 2011**

Actions required	Completion date	Person responsible
1. Non	Non	Prof. Dr. Bakkar Elsarngawy

Course coordinator: Prof. Dr Bakkar Elsarngawy

Signature:

Date: November, 2010

## Annual Course Report 2009/2010

### A- Basic Information

- 1- Title and code: **M271: Principles of Manufacturing**
- 2- Program(s) on which this course is given: **Manufacture**
- 3- Year/Level of program: **2<sup>nd</sup> year Manufacturing Technology / 2<sup>nd</sup> term**
- 4- Unit hours Lectures  Tutorial  Practical  Total
- 5- Names of lecturers contributing to the delivery of the course:  

Prof. Dr. M. Merdan

Course coordinator: Prof. Dr. M. Merdan

External evaluator: None

### B- Statistical Information

No. of students attending the course: **112**

No. of students completing the course: **98**

Results:

	No.	%
Passed	80	81.63
Failed	18	18.37

Grading of successful students:

	No.	%
Excellent	2	2.00
Very Good	7	7.10
Good	5	5.10
Pass	66	67.30

#### 1 – Course teaching

Topic	Lecture hours	Tutorial hours	Practical hours	lecturer
Introduction; Definition of technology, production system, manufacturing processes and elements of machining system	2	2		Prof. Dr. M. Merdan
Machining Deviations; reasons, types, dimensional deviation and ISO system of tolerances, definitions and denotations of geometric deviations, standardization and measurement of surface roughness.	6	6		
Concepts of machining operations; Turning, Drilling and boring, Accurate holes, Milling, Shaping, and Grinding. Concepts include; definition and main and secondary motions, tools and workpiece clamping, machine tool used, performed operations and associated tools and conditions, attainable accuracy and surface finish.	20	20		
General final revision	2	2		
Total	30	30		

- Topics taught as a percentage of the content specified:  

>90 % ☒
70-90 % ☐
<70% ☐
- Reasons in detail for not teaching any topic
- If any topics were taught which are not specified, give reasons in detail

#### 2- Teaching and learning methods:

- Lectures:
- Practical training/ laboratory: ☒

- Seminar/Workshop:
- Class activity:
- Case Study:
- Other assignments/homework:

If teaching and learning methods were used other than those specified, list and give reasons:

### 3- Student assessment:

Method of assessment	Percentage of total
▪ Written examination	<input type="text" value="70 %"/>
▪ Oral examination	
▪ Practical/laboratory work	<input type="text" value="10 %"/>
▪ Other assignments/class work	<input type="text" value="20 %"/>
▪ Mid-Term Exam	
<b>Total</b>	<b>100 %</b>

Members of examination committee

Prof. Dr. M. Merdan

Role of external evaluator

None

### 4- Facilities and teaching materials:

- Totally adequate
- Adequate to some extent
- Inadequate
- List any inadequacies

### 5- Administrative constraints

List any difficulties encountered

None

### 6- Student evaluation of the course:

List any criticisms

None

Response of course team

manufacturing technology (2) has been adjusted according to the last year required modifications

### 7- Comments from external evaluator(s):

None

Response of course team

None

### 8- Course enhancement:

- **Progress on actions identified in the previous year's action plan:** the course is modified as stated, and the above mentioned inadequate topics are shifted to the manufacturing technology (2) of the 3<sup>rd</sup> year.
- **Action State whether or not completed and give reasons for any non-completion** None

### 9- Action plan for academic year 2008 – 2009

Actions required	Completion date	Person responsible
Course modification in coordination with manufacturing technology II	2009 / 2010	Dr. M. Merdan Dr. A. Kohail

Course coordinator: Prof. Dr. M. Merdan

Signature: M. Merdan

Date: 23/10/2010

3<sup>rd</sup> year Manufacturing Eng. & Production Tech.

NO.	Code	Course
1	B300	English Lang IV
2	B311	Mathematics V
3	E030	Electrical & Electronic Circuits
4	M310a	Computer Applications I
5	M331	Thermo-Fluid Machinery
6	M351	Mechanics of Machines III
7	M360	Industrial Psychology
8	M363	Manufacturing Technology I
9	E050	Electrical Power Systems
10	M310b	Computer Applications II
11	M312	Industrial Management
12	M352	Measuring Instruments & Instrumentation
13	M364	Manufacturing Technology II
14	M371	Machine Design I
15	M399	Project1

## Annual Course Report (Academic Year 2010-2011)

### A- Basic Information

- 1- Title and code: B300: English Language (IV)
- 2- Program(s) on which this course is given: Information systems & Production Engineering
- 3- Year/Level of program: 3<sup>rd</sup> year / 1<sup>st</sup> Semester
- 4- Unit hours Lectures  Tutorial  Total
- 5- Names of lecturers contributing to the delivery of the course  
Abdel-Hamid Mohammed El-Khoreby  
Course coordinator : Abdel-Hamid Mohammed El-Khoreby  
External evaluator Non

### B- Statistical Information

No. of students attending the course: No.  %

No. of students completing the course: No.

Results:

	No.	%
Passed	461	86.17
Failed	74	13.83

Grading of successful students:

	No.	%
Excellent	42	7.9
Very Good	80	14.95
Good	88	16.44
Pass	251	46.92

### C- Professional Information

#### 1 – Course teaching

Topic Actually taught	No. of hours	Lecturer
• Murder	10	Prof. Dr. Abdel - Hamid El- Khoreiby
• A false Charge	2	
• Interviewing Preparation	10	
• Writing a C.V / Resumé	4	
• Revision	4	
<b>Total hours</b>	<b>30</b>	

Topics taught as a percentage of the content specified:

>90 % ☒ 70-90 % ☐ <70% ☐ 100% ☐

Reasons in detail for not teaching any topic Non

If any topics were taught which are not specified, give reasons in detail Non

#### 2- Teaching and learning methods:

Lectures:

Practical training/ laboratory:

Seminar/Workshop:

Class activity: A monthly discussion of what is given in the previous weeks.

Case Study:



Other assignments/homework:

If teaching and learning methods were used other than those specified, list and give reasons:  
Non

3- Student assessment: Through Quizzes, oral participation in class

mid term Exams and attendance reports

Method of assessment	Percentage of total: 30%
Written examination	<input type="text" value="70 %"/>
Oral examination	----
Other assignments/class work	<input type="text" value="10 %"/>
Mid-Term Exam	<input type="text" value="20 %"/>
Total	100 %

Members of examination committee Prof. Dr. Abdel-Hamid Mohammed El-Khoreby  
Prof. Dr Hassan Awad

Role of external evaluator Non

4- Facilities and teaching materials:

Dictionaries, Tape recorders....etc

Totally adequate	<input type="text" value=".Yes."/>
Adequate to some extent	<input type="text" value="....."/>
Inadequate	<input type="text" value="....."/>
List any inadequacies	Non

5- Administrative constraints

List any difficulties encountered  
➤ Non

6- Student evaluation of the course:

Response of course team

List any criticisms

Non

Non

7- Comments from external evaluator(s):

Response of course team

Non

Non

8- Course enhancement:

Progress on actions identified in the previous year's action plan: None

Action State whether or not completed and give reasons for any non-completion Non

9- Action plan for academic year 2010– 2011

Actions required	Completion date	Person responsible
Non		

Course coordinator: Abdel-Hamid Mohammed El-Khoreby

Signature:

Date: Nov.2011

## Annual Course Report 2010-2011

### A- Basic Information

1- **Title and code:** Math. V', Complex Analysis, Partial Differential Equations, B311

2- **Program(s) on which this course is given:** Basic Science

3- **Year/Level of program:** 3rd year, 1<sup>st</sup> Term, Mech.

4- **Unit hours** Lectures 2 hrs Tutorial 2 hrs Practical hr Total 4 hrs

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

Course coordinator Prof. Dr. Osama El Gyar

Prof. Dr. Aly Essawi

External evaluator

### B- Statistical Information

No. of students attending the course: No. 98 % 100

No. of students completing the course: No. 93

Results: Mech.

	No.	%
Passed	78	83.9
Failed	15	16.1

Grading of successful students:

	No.	%
Excellent	9	9.7
Very Good	9	9.7
Good	13	14
Pass	47	50.5

### C- Professional Information

#### 1 – Course teaching

Topic Actually taught	No. of hours	Lecturer
• Complex numbers	2	
• Cauchy, Riemann, theorem	3	
• Analytic functions	4	
• Conformal mapping	4	
• Integration of complex functions	6	
• Taylor series	2	
• Laurent series	2	
• Residues, poles	4	
• Integration by residue theorem, application	3	
• Definition of P.D.E , solution	4	
• Classification and types	2	
• Solution of linear P.D.E with constant clefts.	4	
• Canonical and standard forms	4	
• Solutions of boundary value problems	4	
• Heat flow and steady state heat distribution	4	
• Vibration of a string	4	
• Vibration of membrane	4	
<b>Total hours</b>	<b>60</b>	

Topics taught as a percentage of the content specified:

>90 % ☒ 70-90 % ☐ <70% ☐

Reasons in detail for not teaching any topic

If any topics were taught which are not specified, give reasons in detail

## 2- Teaching and learning methods:

Lectures: Classical lecturing using the white board, projectors and data show

Practical training/ laboratory: None

Seminar/Workshop: None

Class activity: Numerical exercises; solution of problems

Case Study: Selected case studies

Other assignments/homework: Bi-weekly assignments

If teaching and learning methods were used other than those specified, list and give reasons:

None

## 3- Student assessment:

Method of assessment	Percentage of total
Written examination	70 %
Oral examination	----
Practical/laboratory work	%
Other assignments/class work	10 %
Mid-Term Exam	20 %
Total	100 %

Members of examination committee Prof. Dr. Osama El Gyar  
Prof Dr. Aly M. Essawi

Role of external evaluator None

## 4- Facilities and teaching materials:

Totally adequate ☒  
Adequate to some extent ☐  
Inadequate ☐  
List any inadequacies  
None

## 5- Administrative constraints

List any difficulties encountered

➤ None

## 6- Student evaluation of the course:

List any criticisms

Response of course team

- Problems with the teaching assistant in exercises
- A proposal to extend the subject and lecture it in two successive semesters

New teacher assistant will be engaged the next academic year.  
The actual content and number of lecturing hours are convenient now, considering the re-determined graduate profile

**7- Comments from external evaluator(s):** **Response of course team**

**8- Course enhancement:**

**Progress on actions identified in the previous year's action plan:** None

**Action State whether or not completed and give reasons for any None-completion** None

**9- Action plan for academic year 2010 – 2011**

<b>Actions required</b>	<b>Completion date</b>	<b>Person responsible</b>
<b>Course coordinator:</b>	Prof. Dr. Osama El Gyar	
	Prof. Dr. Aly M. Essawi	

**Signature:**

**Date: Nov. 2011**

## Annual Course Report 2010-2011

### A- Basic Information

- 1- **Title and code:** Electrical & Electronic Circuits, E030
- 2- **Program(s) on which this course is given:** Production Engineering and manufacturing Technology
- 3- **Year/Level of program:** Third Year
- 4- **Unit hours**    Lectures 3 hrs    Tutorial 2 hrs    Practical 1 hr    Total 6 hrs
- 5- **Names of lecturers contributing to the delivery of the course**  
     Prof. Dr. Ir. Mostafa Sayed AFIFI  
     Course coordinator Prof. Dr. Ir. Mostafa Sayed AFIFI  
     External evaluator

### B- Statistical Information

No. of students attending the course:	No. <span style="border: 1px solid black; padding: 0 5px;">98</span>	% <span style="border: 1px solid black; padding: 0 5px;">100</span>
No. of students completing the course:	No. <span style="border: 1px solid black; padding: 0 5px;">97</span>	% <span style="border: 1px solid black; padding: 0 5px;">99</span>
<b>Results:</b>		
	No.	%
Passed	97	100
Failed	0	0
<b>Grading of successful students:</b>		
	No.	%
Excellent	8	8.2
Very Good	12	12.4
Good	19	19.6
Pass	58	59.8

### C- Professional Information

#### 1 – Course teaching

Topic Actually taught	No. of hours	Lecturer
• Introduction: Needs for electric circuits and fluid flow analogy	4	Prof. Dr. Ir. Mostafa Sayed AFIFI
• Electric Circuits, Currents and Potentials	6	
• Power, Energy and basic Units and Dimensions	4	
• Kirchhoff's Current and Voltage conservation of energy, resistances and conductance.	4	
• Resistance physical parameters and power computations.	6	
• Resistive networks and strain measurements.		
• Strain Gauges.	4	
• Parallel and Series connections, Thevenin's and Norton	4	
• Voltage dividers and Current dividers	6	
• Network Analysis		
• Wheatstone Bridge	6	
• Node Voltages and Mesh Currents	8	
• Operational Amplifiers, Inversion, non-inversion, Adders and subtractions.	6	
• Capacitance and Inductance, its construction, calculations and first order transients. Applications and second order transients.	8	
• Vector concepts in Alternating current (AC) analysis	6	
• Semiconductor systems, and junction diodes, with applications.	6	
• Bipolar Junctions (BJT) and Field Effect (FETs)	6	
<b>Total hours</b>	<b>84</b>	

Topics taught as a percentage of the content specified:

>90 % ☒ 70-90 % ☐ <70% ☐

Reasons in detail for not teaching any topic Semiconductors were shortened

If any topics were taught which are not specified, give reasons in detail Non

## 2- Teaching and learning methods:

Lectures: Classical lecturing using the white board and computer supported learning

Practical training/ laboratory: Practical training and experimental measurements in Lab

Seminar/Workshop: Non

Class activity:

Numerical exercises; solution of problems by computer and data show, using computer programs; MATLAB.

Case Study: Selected case studies

Other assignments/homework: Bi-weekly and weekly assignments

If teaching and learning methods were used other than those specified, list and give reasons:

Non

## 3- Student assessment:

Method of assessment

Percentage of total

Written examination

60 %

Oral examination

----

Practical/laboratory work

20 %

Other assignments/class work

10 %

Mid-Term Exam

10 %

Total

100 %

Members of examination committee

Prof. Dr. Ir. Mostafa S. Afifi

Role of external evaluator

Non

## 4- Facilities and teaching materials:

Totally adequate

Yes

Adequate to some extent

.....

Inadequate

.....

List any inadequacies: Non

## 5- Administrative constraints

List any difficulties encountered

- Limitation of number of data show projectors in the principal building
- Limitation of number of operating experiments in the laboratory, due to scheduled one hour per week for the LAB.

## 6- Student evaluation of the course:

List any criticisms

Response of course team

- (a) Less response from the Industrial Engineering Students to electronic courses.

The introduction of the course is directed to explanation of the importance of electronic engineering to mechanical applications. Also more applications are directed to mechanical facilities, such as the strain gauges, electronic ignition and power steering with modeling of mechanical system with electric circuits.

7- Comments from external evaluator(s):                      Response of course team

8- Course enhancement:

Progress on actions identified in the previous year's action plan:

Actions required	Planned Completion date	Accomplishment
1. Provide more data show projectors	in 2011	
2. Put more experiments in function in the lab.	2011	Try to increase the LAB hrs
Action State whether or not completed and give reasons for any non-completion		Non

9- Action plan for academic year 2011 – 2012

Actions required	Completion date	Person responsible
1. Try to increase of Lab hours		Department actions

Course coordinator:      Prof. Dr Ir Mostafa Afifi

Signature:

Date:                              25/7/2011

## Annual Course Report 2010-2011

### A- Basic Information

- 1- Title and code: Computer Applications I, M310 a
- 2- Program(s) on which this course is given: Production Engineering and manufacturing Technology
- 3- Year/Level of program: Third Year
- 4- Unit hours    Lectures Tutorial Practical     Total
- 5- Names of lecturers contributing to the delivery of the course  
                  Prof. Dr. Nabil Gadallah  
                  Course coordinator Prof. Dr. Nabil Gadallah  
                  External evaluator

### B- Statistical Information

No. of students attending the course:    No.                       %   
 No. of students completing the course:    No.                       %

Results:

	No.	%
Passed	83	84.69
Failed	13	13.27

Grading of successful students:		
	No.	%
Excellent	12	12.24
Very Good	12	12.24
Good	17	17.35
Pass	42	42.86
Failed	12	12.24

### C- Professional Information

#### 1 – Course teaching

Topic Actually taught	No. of hours	Lecturer
Introduction to computer applications:	4	Prof. Dr. Nabil Gadallah
• Computer graphics (Pro/Engineer)		
• Engineering analysis (Matlab)		
• Solid modelling techniques in art design		
• Extrusion & Revolve	4	
• Applications	12	
• Sweep and blend	4	
• Assemblies	8	
• Detail Drawing (drafting)	8	
Introduction to MATLAB		
• Introduction & basic vector and matrix operations.	4	
• Polynomials and solution of linear equations	4	
• Programming and applications	8	
• Solid modelling techniques in art design	4	
Total	60	

Topics taught as a percentage of the content specified:

>90 %                       70-90 %                       <70%

Reasons in detail for not teaching any topic    None



If any topics were taught which are not specified, give reasons in detail None

**2- Teaching and learning methods:**

Lectures:

Practical training/ laboratory:

Seminar/Workshop:

Two Seminars were arranged by the students:

(a) MATLAB Applications

(b) Computer graphics (Pro/Engineer)

Class activity: Solid Modeling Graphics & MatLab Applications

Case Study:

Other assignments/homework:

If teaching and learning methods were used other than those specified, list and give reasons:

**3- Student assessment:**

Method of assessment	Percentage of total
Written examination	<input type="text" value="66.7 %"/>
Oral examination	----
Practical/laboratory work	<input type="text" value="13.3 %"/>
Other assignments/class work	<input type="text" value="10 %"/>
Mid-Term Exam	<input type="text" value="10 %"/>
Total	100 %

Members of examination committee

Dr. Nabil Gadallah

Role of external evaluator

Non

**4- Facilities and teaching materials:**

Totally adequate	<input type="text" value="Yes"/>
Adequate to some extent	<input type="text" value="....."/>
Inadequate	<input type="text" value="....."/>
List any inadequacies	<input type="text" value="Non"/>

**5- Administrative constraints**

List any difficulties encountered

**6- Student evaluation of the course:**

None

Response of course team

**7- Comments from external evaluator(s):**

Non

Response of course team

**8- Course enhancement:**

Progress on actions identified in the previous year's action plan: No previous comments

Action State whether or not completed and give reasons for any non-completion Non

**9- Action plan for academic year 2011 – 2012**

Actions required	Completion date	Person responsible
Adding a lectures bi-weekly	1/2011	Prof. Dr Nabil Gadallah

Course coordinator: Prof. Dr Nabil Gadallah

Signature:

Date: 1/2011

## Annual Course Report 2010-2011

### A- Basic Information

- 1- Title and code: Thermo-fluid machinery, M331
- 2- Program(s) on which this course is given: Production Engineering and manufacturing Technology
- 3- Year/Level of program: third Year Mechanical
- 4- Unit hours    Lectures 4 hrs    Tutorial 1 hr    Practical 1    Total 6 hrs
- 5- Names of lecturers contributing to the delivery of the course  
     Prof. Dr. Metwally H. Metwally  
     Course coordinator Prof. Dr. Metwally H. Metwally  
     External evaluator

### B- Statistical Information

No. of students attending the course:    No. 98    % 100  
 No. of students completing the course:    No. 89    % 90.82

Results:

	No.	%
Passed	62	69.66
Failed	27	30.34

Grading of successful students:

	No.	
Excellent	4	4.49%
Very Good	4	4.49%
Good	10	11.24%
Pass	44	49.44%

### C- Professional Information

#### 1 – Course teaching

Topic Actually taught	No. of hours	Lecturer
• Introduction to Thermo-Fluid Machinery	8	Prof. Dr. Metwally H. Metwally
• Fundamentals of Heat Exchangers	12	
• Mixture of Gases	8	
• Combustion and Internal Combustion Chamber	12	
• Air Compressors	12	
• Gas Turbines	12	
• Fluid Machinery	8	
Total hours	72	

Topics taught as a percentage of the content specified:

>90 % ...    70-90 % 80    <70% ...

Reasons in detail for not teaching any topic    The term actually was 12 weeks, taking into consideration, the last three weeks are planned as practical exams and revisions.

If any topics were taught which are not specified, give reasons in detail None

#### 2- Teaching and learning methods:

Lectures: Classical lecturing using the white board and overhead projector learning

Practical training/ laboratory: Practical training and experimental measurements in Laboratory

Seminar/Workshop: None

Class activity:

Numerical exercises; solution of problems by computer and data show, using computer programs; MATLAB, SIMULINK, and power point.

Case Study:

Other assignments/homework:

If teaching and learning methods were used other than those specified, list and give reasons:  
 None

**3- Student assessment:**

Method of assessment	Percentage of total
Written examination	<input type="text" value="66.67 %"/>
Oral examination	<input type="text" value="----"/>
Practical/laboratory work	<input type="text" value="13.33 %"/>
Other assignments/class work	<input type="text" value="13.33 %"/>
Mid-Term Exam	<input type="text" value="6.67 %"/>
Total	100 %
Members of examination committee	Dr. Metwally H. Metwally Dr. Abd El-Magid A. Abd Allah
Role of external evaluator	None

**4- Facilities and teaching materials:**

Totally adequate	<input type="text" value="Yes"/>
Adequate to some extent	<input type="text" value="....."/>
Inadequate	<input type="text" value="....."/>
List any inadequacies	None

**5- Administrative constraints**

List any difficulties encountered

- Limitation of number of data show in the principal building
- Limitation of number of operating experiments in the laboratory

**6- Student evaluation of the course:**

List any criticisms Response of course team

7- Comments from external evaluator(s): Response of course team

**8- Course enhancement:**

Progress on actions identified in the previous year's action plan: Non

Action State whether or not completed and give reasons for any non-completion Non

**9- Action plan for academic year 2011 – 2012**

	Actions required	Completion date	Person responsible
	Non	Non	Non
Course coordinator:	Prof. Dr Metwally H. Metwally		
Signature:			
Date:	2/2011		

## Annual Course Report 2010-2011

### A- Basic Information

- 1- **Title and code:** Mechanics of Machines III, M351
- 2- **Program(s)** on which this course is given: Manufacturing Engineering and Production Technology
- 3- **Year/Level of program:** third Year/ 1<sup>st</sup> Semester
- 4- **Credit hours**  

2	Lectures	2 hrs	Tutorial	02 hrs	Practical	- hr
---	----------	-------	----------	--------	-----------	------
- 5- **Names of lecturers** contributing to the delivery of the course: Prof. Dr. Gaafar A. Hussein
- 6- **Course coordinator:** Prof. Dr. Gaafar A. Hussein
- 7- **External evaluator:** Non

### B- Statistical Information

No. of students attending the course:	No.	98	100	%
No. of students completing the course:	No.	95	96.94	%

Results:

	No.	%
Passed	94	95.92
Failed	4	4.08

Grading of successful students:		
Grade	No.	%
Excellent	18	18.37
Very Good	22	22.45
Good	20	20.41
Pass	34	34.7

### C- Professional Information

#### 1 – Course teaching

Topic	Total hours	Lecturer
• Speed governors	16	Prof. Dr. Gaafar Hussein
• Balancing of rotating masses	8	
Balancing of reciprocating masses	8	
• Engine effort and torque diagrams	8	
• Complete balancing of different engine arrangements	16	
• Total hours	56	

Topics taught as a percentage of the content specified: >90 % 100 70-90 % <70%

Reasons in detail for not teaching any topic: Non

If any topics were taught which are not specified, give reasons in detail: Non

#### 2- Teaching and learning methods:

Lectures:	Classical Lectures using the white board and computer supported learning.
Practical training/ laboratory:	Non
Seminar/Workshop:	Non
Class activity	Numerical exercises; solution of problems, demonstrations by data show,
Case Study:	Selected case studies
Other assignments/homework:	Weekly assignments.
If teaching and learning methods were used other than those specified, give reasons: Non	

**3- Student assessment:**

Method of assessment	%
Written examination	70
Oral examination	0
Practical/laboratory work	0
Other assignments/class work	15
Mid-Term Exam	15
Total	100

Members of examination committee: Prof. Dr. Gaafar A. Hussein

Role of external evaluator: None

**4- Facilities and teaching materials:**

Totally adequate	Yes
Adequate to some extent	
Inadequate	

List any inadequacies: Non

**5- Administrative constraints (List any difficulties encountered)**

- Limitation of number of data show in the principle building.
- Limitation of number of operating experiments in the laboratory.

**6- Student evaluation of the course:**

	List any criticisms	Response of course team
(a)	A proposal to extend the subject in two successive semesters	The actual content and number of lectures hours are convenient now, considering the pre-determined gradual profile.

**7- Comments from external evaluator(s):**

	Comment	Response of course team
(a)	Non	non

**8- Course enhancement:**

Progress on actions identified in the previous year's action plan. Non

State whether or not completed and give reasons for any non-completion: Non

**9- Action plan for academic year 2011 – 2012**

Actions required: Provide more data show apparatuses

Completion data: Non

Action Response: Non

Course coordinator: Prof. Dr Gaafar Hussein

Signature:

Date: September, 2011

## Annual Course Report 2010-2011

### A- Basic Information

- 1- **Title and code:** Industrial Psychology, M360
- 2- **Program(s) on which this course is given:** Manufacturing Eng. & Production Tech.
- 3- **Year/Level of program:** 3rd year, 1<sup>st</sup> Term, Mech.
- 4- **Unit hours**    Lectures 2 hrs.    Tutorial ---    Practical ---    Total 2 hrs.
- 5- **Names of lecturers contributing to the delivery of the course**  

Course coordinator  
External evaluator

Prof. Dr. Mamdouh Saber  
Prof. Dr. Mamdouh Saber

### B- Statistical Information

No. of students attending the course:	No.	98	%	<span style="border: 1px solid black; padding: 0 5px;">100</span>
No. of students completing the course:	No.	85	%	<span style="border: 1px solid black; padding: 0 5px;">86.75</span>
Results: Mech.				
	No.	%	Grading of successful students:	
Passed	69	81.2		
Failed	16	18.8		
	No.	%	Excellent	13    15.3
			Very Good	9    10.6
			Good	16    18.8
			Pass	31    36.5

### C- Professional Information

#### 1 – Course teaching

Topic Actually taught	No. of hours	Lecturer
• Industrial Design, Design Concept	2	Dr. Mamdouh Saber
• Ergonomics	2	
• Application of ergonomics- Instruments- Controls- Workplace.	2	
• Aesthetics and ergonomics consideration.	2	
• Working conditions and Environment.	2	
• Heating and Ventilation.	2	
• Industrial Ventilation- Local Ventilation.	2	
• Air condition systems.	2	
• CFC'S- Ozone depletion and Global warming.	2	
• Noise – Exposure to noise.	2	
• Noise Control Technique – Vibration.	2	
• Lightening- Level of illuminance.	2	
• Factors affecting the quality of lightening.	2	
• Human Effectiveness.	2	
• Heat flow and steady state heat distribution	4	
Total hours	28	

Topics taught as a percentage of the content specified:

>90 % 100      70-90 %         <70% ....

Reasons in detail for not teaching any topic

If any topics were taught which are not specified, give reasons in detail: None

**2- Teaching and learning methods:**

Lectures:

Practical training/ laboratory:

Seminar/Workshop:

Class activity:

Case Study:

Other assignments/homework:

If teaching and learning methods were used other than those specified, list and give reasons:  
 None

**3- Student assessment:**

Method of assessment	Percentage of total
Written examination	<input type="text" value="70 %"/>
Oral examination	----
Practical/laboratory work	<input type="text" value=" %"/>
Other assignments/class work	<input type="text" value="20 %"/>
Mid-Term Exam	<input type="text" value="10 %"/>
Total	100 %

Members of examination committee Prof. Dr. Mamdouh Saber

Role of external evaluator None

**4- Facilities and teaching materials:**

Totally adequate	<input type="text" value="Yes"/>
Adequate to some extent	<input type="text" value="....."/>
Inadequate	<input type="text" value="....."/>
List any inadequacies	None

**5- Administrative constraints**

List any difficulties encountered

- Limitation of number of data show in the principal building,
- Courses are shared between two buildings.

**6- Student evaluation of the course:**

List any criticisms

1. It is recommended to have exercise.

Response of course team

Limited by the super council of higher education hero

**7- Comments from external evaluator(s):**

Response of course team

**8- Course enhancement:**

Progress on actions identified in the previous year's action plan: None

Action State whether or not completed and give reasons for any None-completion None

**9- Action plan for academic year 2011 – 2012**

Actions required	Completion date	Person responsible
Course coordinator: Prof. Dr. Mamdouh Saber		
Signature:		
Date: Sept.2011		

## Annual Course Report 2010-2011

### A- Basic Information

- 1- **Title and code:** Manufacturing Technology I, M363
- 2- **Program(s) on which this course is given:** Production Engineering and manufacturing Technology
- 3- **Year/Level of program:** third year
- 4- **Unit hours**    Lectures 3 hrs    Tutorial 2 hrs    Practical 1    Total 6 hrs
- 5- **Names of lecturers contributing to the delivery of the course**  

Course coordinator  
External evaluator

Dr. M. Merdan  
Dr. M. Merdan  
Non

### B- Statistical Information

No. of students attending the course:	No. <span style="border: 1px solid black; padding: 0 5px;">98</span>	% <span style="border: 1px solid black; padding: 0 5px;">100</span>
No. of students completing the course:	No. <span style="border: 1px solid black; padding: 0 5px;">94</span>	% <span style="border: 1px solid black; padding: 0 5px;">95.92</span>
<b>Results:</b>		
	No.	%
Passed	94	100
Failed	0	0
<b>Grading of successful students:</b>		
	No.	
Excellent	21	22.34%
Very Good	15	15.96%
Good	28	29.79%
Pass	30	31.91%

### C- Professional Information

#### 1- Contents

Topic Actually taught	Lecture hours	Tutorial hours	Practical Hours
• Introduction; definition of machining system; manufacturing processes and elements of machining system.	3	4	
• Machining deviations; reasons types; dimensional deviations; ISO system of machines; standardization and measurement of surface roughness.	3	2	1
• Cutting tool: failure, material and geometry.	2	4	2
• Chip formation, and effect of cutting conditions on chip formation	2	2	2
• Integrity of machined surface, work hardening, residual stress and surface roughness.	2		2
• Cutting force calculation and the effect of cutting conditions on it	3	4	2
• Heat generations during cutting, source and heat distribution, and effect on cutting	2	2	
• Cutting tool wear; types of wear and its curves; the effect of cutting parameters	3	4	2
• Determining of optimum cutting conditions	3	4	
• Productivity of fine and rough cutting operations	2		2
• Determination of production cost	1		
• Gears manufacturing	2		2
• Jig and fixture design	2	4	
<b>Total</b>	<b>30</b>	<b>30</b>	<b>15</b>



Topics taught as a percentage of the content specified:

>90 %  70-90 %  <70%

Reasons in detail for not teaching any topic Non

If any topics were taught which are not specified, give reasons in detail Non

## 2- Teaching and learning methods:

Lectures:

Practical training/ laboratory:

Seminar/Workshop:

Class activity: Solutions of problems

Case Study:

Other assignments/homework:

If teaching and learning methods were used other than those specified, list and give reasons:

None

## 3- Student assessment:

Method of assessment	Percentage of total
Written examination	60%
Oral examination	----
Practical/laboratory work	20%
Other assignments/class work/	5%
Mid-Term Exam	15%
Total	100 %

Members of examination committee

Dr. M. Merdan

Role of external evaluator

Non

## 4- Facilities and teaching materials:

Totally adequate

Adequate to some extent

Inadequate

List any inadequacies

Non

## 5- Administrative constraints

List any difficulties encountered

➤ none

## 6- Student evaluation of the course:

List any criticisms

Response of course team

## 7- Comments from external evaluator(s):

Response of course team

## 8- Course enhancement:

Progress on actions identified in the previous year's action plan: none

Action State whether or not completed and give reasons for any non-completion Non

## 9- Action plan for academic year 2011 – 2012

Actions required	Completion date	Person responsible
Course coordinator: Dr. M. Merdan		
Signature:		
Date: 2/2011		

## Annual Course Report 2010-2011

### A- Basic Information

- 1- **Title and code:** Electric Power Systems, E050  
 2- **Program(s)** on which this course is given: Manufacturing Eng. & Production Technology  
 Electronic Eng. & Communications Tech. Dpt. -  
 Computer Engineering & Information Technology Dpt.  
 3- **Year/Level of program:** Third year / 2<sup>nd</sup> Semester  
 4- **Unit hours** Lectures 2 hrs Tutorial 2 hrs Practical 1 hrs Total 5 hrs  
 5- **Names of lecturers contributing to the delivery of the course:** Prof. Dr. Said A. Gawish  
**Course coordinator:** Prof. Dr. Said A. Gawish  
**External evaluator:** None

### B- Statistical Information

No. of students attending the course:	No.=98	100%		
No. of students completing the course:	No. =92	94 %		
Results:	No.	%	Grading of successful students:	
Passed	78	79.6		No. %
Failed	20	20.4	Excellent	20 20.41
			Very Good	16 16.33
			Good	16 16.33
			Pass	26 26.53

### C- Professional Information

#### 1 – Course teaching:

Topic	Lecture hours	Lecturer
• Circuit analysis of transformers	4	Prof. Dr. Said A. Gawish
• Transformer construction	2	
○ Equivalent circuit of a transformer	2	
• Transformer test	2	
• Construction of dc machines	2	
• Classification of dc machines	2	
• Circuit equations of dc machines	2	
• DC machine efficiency	2	
• Construction of induction motors	2	
• Torque-speed characteristics	2	
• Efficiency of induction motors	2	
• Circuit equations of synchronous machines	2	
• Construction of synch machines	2	
• Operation of synch machines	2	
<b>Total hours</b>	<b>30</b>	

Percentage of the content specified:

>90 % ☒ 70-90 % ☐ <70% ☐ 100%

Reasons in detail for not teaching any topic None

If any topics were taught which are not specified, give reasons in detail None

**2- Teaching and learning methods:**

Lectures:

Practical training/ laboratory:

Seminar/Workshop:

Class activity: A monthly discussion of what is given in the previous weeks.

Case Study:

Other assignments/homework:

If teaching and learning methods were used other than those specified, list and give reasons:

None

**3- Student assessment: Through Quizzes, oral participation in class, midterm exams and attendance reports**

Written examination	<input type="text" value="60 %"/>
Practical examination	<input type="text" value="20 %"/>
Other assignments/class work	<input type="text" value="10 %"/>
Mid-Term Exam	<input type="text" value="10 %"/>
Total	<input type="text" value="100 %"/>

Members of examination committee

Prof. Dr. Said A. Gawish

Role of external evaluator

None

**4- Facilities and teaching materials:**

Dictionaries, Tape recorders....etc

Totally adequate

Adequate to some extent

Inadequate

List any inadequacies

**5- Administrative constraints**

List any difficulties encountered

➤ None

**6- Student evaluation of the course:**

List any criticisms

None

Response of course team

None

**7- Comments from external evaluator(s):**

**8- Course enhancement:**

Progress on actions identified in the previous year's action plan: None

Action State whether or not completed and give reasons for any none-completion None

**9- Action plan for academic year 2011 – 2012**

Actions required

Completion date

Person responsible

None

Course coordinator: Prof. Dr. Said A. Gawish

Signature:

Date: October, 2011

## Annual Course Report 2010-2011

### A- Basic Information

- 1- **Title and code:** Computer Applications II, M310 b
- 2- **Program(s)** on which this course is given: Production Engineering and manufacturing Technology
- 3- **Year/Level** of program: third year
- 4- **Unit hours** Lectures 6 hrs Tutorial - hrs Practical 4 Total 4 hrs
- 5- **Names of lecturers** contributing to the delivery of the course  

Dr. Atef Afifi

Course coordinator Dr. Atef Afifi

External evaluator None

### B- Statistical Information

No. of students attending the course: No. 98 % 100  
 No. of students completing the course: No. 91 % 92.86%

Results:

	No.	%
Passed	76	96.94
Failed	15	3.06

Grading of successful students:

	No.	%
Excellent	17	18.68
Very Good	19	20.88
Good	15	16.48
Pass	25	27.47

### C- Professional Information

1 – Course teaching:

Topic Actually taught	Practical hours	Lecturer
Introduction to NC and CNC Machines	2	Dr Atef Afifi
Basic Definitions of G-Codes	2	
Different Types of G-Codes	4	
Basic Terminology of G-Code (FUNOC)	4	
Milling:		
– Work piece Installation	4	
– Determination of Zero Position	4	
– Definition and Applications of G58 , G52	4	
– Definition and Applications of G00	4	
– Definition and Applications of G01	4	
– Definition and Applications of G02 , G03	8	
Turning:		
– Definition and Applications of G58 , G52	4	
– Definition and Applications of G00	4	
– Definition and Applications of G01	4	
– Definition and Applications of G02 , G03	4	
Revisions	4	
Total Hours	60	

Topics taught as a percentage of the content specified:

>90 % ☒ 100 70-90 % ☐ <70% ☐

Reasons in detail for not teaching any topic Non

If any topics were taught which are not specified, give reasons in detail Non

## 2- Teaching and learning methods:

Lectures:

Practical training/ laboratory: ☒ Yes

Seminar/Workshop: ☒ Yes

Class activity: Solutions of problems

Case Study: ☐ None

Other assignments/homework:

If teaching and learning methods were used other than those specified, list and give reasons:

None

## 3- Student assessment:

Method of assessment	Percentage of total
Written examination	60%
Oral examination	----
Practical/laboratory work	20%
Other assignments/class work/	10%
Mid-Term Exam	10%
Total	100 %

Members of examination committee

Dr. Atef Afifi

Role of external evaluator

None

## 4- Facilities and teaching materials:

Totally adequate	<input checked="" type="checkbox"/> Yes
Adequate to some extent	<input type="checkbox"/>
Inadequate	<input type="checkbox"/>
List any inadequacies	Non

## 5- Administrative constraints

List any difficulties encountered

➤ none

## 6- Student evaluation of the course:

List any criticisms

Response of course team

## 7- Comments from external evaluator(s):

Response of course team

## 8- Course enhancement:

Progress on actions identified in the previous year's action plan: none

Action State whether or not completed and give reasons for any non-completion Non

## 9- Action plan for academic year 2009 – 2010

Actions required

Completion date

Person responsible

None

Course coordinator: Dr Atef Afifi

Signature:

Date: November 2011

## Annual Course Report 2010-2011

### A- Basic Information

- 1- **Title and code:** Industrial Management, M312
- 2- Program(s) on which this course is given: Manufacturing Eng. and Production Technology
- 3- Year/Level of program: third year
- 4- Unit hours    Lectures     Tutorial 2 hrs    Practical     Total 4 hrs
- 5- Names of lecturers contributing to the delivery of the course  
     Prof. Dr. Ahmed Sarhan  
     Course coordinator Prof. Dr. Ahmed Sarhan  
     External evaluator

### B- Statistical Information

No. of students attending the course:	No. <input type="text" value="98"/>	% <input type="text" value="100"/>
No. of students completing the course:	No. <input type="text" value="95"/>	% <input type="text" value="96.9"/>
Results:		
	No.	%
Passed	92	93.88
Failed	3	3.06
Grading of successful students:		
	No.	%
Excellent	28	28.57
Very Good	18	18.37
Good	19	19.39
Pass	27	27.55

### C- Professional Information

#### 1 – Course teaching

Topic Actually taught	No. of hours	Lecturer
• Introduction	4	4
• Feasibility study	10	8
• Project management	12	10
• Linear Programming	14	2
• Transportation Problems	8	2
• Assignment Problems	8	2
<b>Total hours</b>	<b>56</b>	<b>14 lec.</b>

Topics taught as a percentage of the content specified:

>90 %       70-90 %       <70%

Reasons in detail for not teaching any topic    Non

If any topics were taught which are not specified, give reasons in detail Non

#### 2- Teaching and learning methods:

Lectures:

Practical training/ laboratory:

Seminar/Workshop:

Class activity: Numerical exercises;

Case Study:

Other assignments/homework:

If teaching and learning methods were used other than those specified, list and give reasons:

Non

Method of assessment	Percentage of total
Written examination	70%
Oral examination	----
Practical/laboratory work	----
Other assignments/class work/	10%
project report and presentation	10%
Mid-Term Exam	10%
Total	100 %
Members of examination committee	Dr. Ahmed Sarhan
Role of external evaluator	Non

Totally adequate	Yes
Adequate to some extent	-----
Inadequate	-----
List any inadequacies	Non

List any difficulties encountered

no

List any criticisms	Response of course team
None	None

Response of course team

Progress on actions identified in the previous year's action plan: yes  
Action State whether or not completed and give reasons for any non-completion Non

Actions required	Completion date	Person responsible
------------------	-----------------	--------------------

Course coordinator: Prof. Dr Ahmed Sarhan  
Signature:  
Date: 2/2011

## Annual Course Report 2010-2011

### A- Basic Information

- 1- **Title and code:** Measuring Instruments & Instrumentations, M352
- 2- Program(s) on which this course is given: Manufacturing Eng. and Production Technology
- 3- Year/Level of program: third year
- 4- Unit hours Lectures 2 hrs Tutorial 1 hrs Practical 1 hrs Total 4 hrs
- 5- Names of lecturers contributing to the delivery of the course  
Prof. Dr. Ahmed Sarhan  
Course coordinator Prof. Dr. Ahmed Sarhan  
External evaluator

### B- Statistical Information

No. of students attending the course:	No. <span style="border: 1px solid black; padding: 0 5px;">98</span>	% <span style="border: 1px solid black; padding: 0 5px;">100</span>
No. of students completing the course:	No. <span style="border: 1px solid black; padding: 0 5px;">95</span>	% <span style="border: 1px solid black; padding: 0 5px;">96.9</span>
Results:		
	No.	%
Passed	94	95.92
Failed	4	4.08
Grading of successful students:		
	No.	%
Excellent	26	26.5
Very Good	20	20.4
Good	21	21.4
Pass	27	27.6

### C- Professional Information

#### 1- Course teaching

Topic Actually taught	No. of hours	Lecturer
• Measuring system characteristics	4	
• Traceability, uncertainty & calibration	2	
• Strain measurements: Wire strain gauges	2	
• Strain measurements: Extensometers	2	
• Stress measurements: Photo-elasticity	2	
• Time and speed (linear and angular) measurements	2	
• Acceleration and frequency measurements	2	
• Force and torque measurements	2	
• Power measurements	2	
• Pressure measurements	2	
• Temperature measurements	2	
• Solid and fluid level measurements	1	
• Viscosity measurements	1	
• Fluid flow measurements( velocity, rate of discharge, pressure and temperature)	4	
Total hours	28	

Topics taught as a percentage of the content specified:

>90 % 100 70-90 % ☐ <70% ....

Reasons in detail for not teaching any topic Non

If any topics were taught which are not specified, give reasons in detail Non



2- Teaching and learning methods:

Lectures:

Practical training/ laboratory:

Seminar/Workshop:

Class activity: Numerical exercises;

Case Study:

Other assignments/homework:

If teaching and learning methods were used other than those specified, list and give reasons:

Non

3- Student assessment:

Method of assessment	Percentage of total
Written examination	60%
Oral examination	----
Practical/laboratory work	20
Other assignments/class work	
Mid-Term Exam	20%
Total	100 %

Members of examination committee

Dr. Ahmed Sarhan

Role of external evaluator

Non

4- Facilities and teaching materials:

Totally adequate

Adequate to some extent

Inadequate

List any inadequacies

Non

5- Administrative constraints

List any difficulties encountered

➤ Non

6- Student evaluation of the course:

List any criticisms

None

Response of course team

None

7- Comments from external evaluator(s):

Response of course team

8- Course enhancement:

Progress on actions identified in the previous year's action plan: Non

Action State whether or not completed and give reasons for any non-completion Non

9- Action plan for academic year 2011 – 2012

Actions required	Completion date	Person responsible
Course coordinator: Prof. Dr Ahmed Sarhan		
Signature:		
Date: 15/2/2011		

## Annual Course Report 2010-2011

### A- Basic Information

- 1- Title and code: Manufacturing Technology II, M364
- 2- Program(s) on which this course is given: Manufacturing Eng. And production Technology
- 3- Year/Level of program: 3rd year Manufacturing Technology / 2<sup>nd</sup> term
- 4- Unit hours Lectures: 3 hrs Tutorial: 1hrs Practical: 1hrs Total: 5 hrs
- 5- Names of lecturers contributing to the delivery of the course:  

Course coordinator:

Prof. Dr. A.M. Kohail

External evaluator:

None

### B- Statistical Information

No. of students attending the course: 98

100 %

No. of students completing the course: 91

92.86 %

Results:	No.	%
Passed	75	82.42
Failed	16	17.58

Grading of successful students:

	No.	
Excellent	11	12.09%
Very Good	8	8.79%
Good	14	15.38%
Pass	42	46.15%

### C- Professional Information

#### 1. Course teaching

Topic	Lecture hours	Tutorial hours	Practical hours
• Cutting tools materials and geometry	3	2	-
• Turning operation, machines and cut. parameters	6	2	4
• Milling operation, machines and cut. parameters	4	-	2
• Shaping and Planning operation, machines and cut. parameters	4	2	2
• Drilling operation, machines and cut. parameters	2	1	1
• Boring operation, machines and cut. parameters	2	-	-
• Grinding operation, machines and cut. parameters	4	1	2
• Thread cutting methods	2	1	
• Gear cutting methods	4	2	2
• Finishing operations	4	-	-
• Process planning and process sheet preparation	4	2	2
• Jig and fixtures design	6	2	-
• Total hours	45	15	15

- Topics taught as a percentage of the content specified:  

>90 % 100
70-90 % ☐
<70% ....
- Reasons in detail for not teaching any topic
- If any topics were taught which are not specified, give reasons in detail

#### 2- Teaching and learning methods:

- Lectures: Classical lecturing using the white board

- Practical training/ laboratory: Computer lab. with software
- Seminar/Workshop: None
- Class activity: Solution of Problems
- Case Study: None
- Other assignments/homework: Assignment report each 4 weeks

If teaching and learning methods were used other than those specified, list and give reasons:  
None

### 3- Student assessment:

Method of assessment	Percentage of total
▪ Written examination	<span style="border: 1px solid black; padding: 2px;">60</span>
▪ Oral examination	
▪ Practical/laboratory work	20
▪ Other assignments/class work	<span style="color: blue;">10</span>
▪ Mid-Term Exam	<span style="border: 1px solid black; padding: 2px;">10</span>
Total	100

Members of examination committee

Prof. Dr. A.M.Kohail

Role of external evaluator

None

### 4- Facilities and teaching materials:

- Totally adequate Yes
- Adequate to some extent .....
- Inadequate .....
- List any inadequacies None

### 5- Administrative constraints

List any difficulties encountered	Software is not available
-----------------------------------	---------------------------

### 6- Student evaluation of the course:

List any criticisms

None

Response of course team

None

### 7- Comments from external evaluator(s):

None

Response of course team

None

### 8- Course enhancement:

- Progress on actions identified in the previous year's action plan: None
- Action State whether or not completed and give reasons for any non-completion: None

### 9- Action plan for academic year: 2011 – 2012

Actions required

None

Completion date

Person responsible

None

Course coordinator:

Prof. Dr. A.M.Kohail

Signature:

Date: 1/9/2011

## Annual Course Report (2010/2011)

### A- Basic Information

- 1- Title and code: (M371) Machine Design (I)
- 2- Program(s) on which this course is given: Production Eng. & manufacturing Technology Dpt.
- 3- Year/Level of program: Third Year Manufacturing Engineering, 2<sup>nd</sup> Semester
- 4- Unit hours      Lectures 3hrs      Tutorial -      Practical 3 hrs      Total 6 hrs
- 5- Names of lecturers contributing to the delivery of the course  
Prof. Dr. Serage Eldin Khalifa  
Course coordinator: Prof. Dr. Serage Eldin Khalifa

### B- Statistical Information

No. of students attending the course:      No. 98      % 100  
No. of students completing the course:      No. 93      % 94.9

Results:

	No.	%		Grading of successful students:	
Passed	85	91.4		No.	%
Failed	8	8.6		Excellent	13      14
				Very Good	14      15.1
				Good	16      17.2
				Pass	42      45.2

### C- Professional Information

#### 1 – Course teaching

Topic Actually taught	No. of hours		Lecturer
	Lec	Tut	
• Introduction	2	1	Prof. Dr. Serage Eldin Khalifa
• Stresses at a Point	2	2	
• Principal Stresses	4	4	
• Design for Static Strength	6	6	
• Design for Dynamic Strength	9	10	
• Design of Shafts	3	5	
• Design of Keys, Feathers, and Splines	3	3	
• Design of Threaded Joints, Fasteners and Connections	6	6	
• Design of Welded Joints	2	2	
• Design of Helical Springs	4	4	
• Design of Pressed –on Joints	4	2	
Total hours	45	45	

Topics taught as a percentage of the content specified:

>90 % 100      70-90 % -      <70% ....

Reasons in detail for not teaching any topic      None

If any topics were taught which are not specified, give reasons in detail None

#### 2- Teaching and learning methods:

Lectures: Classical lecturing using the white board and computer supported learning

Tutorials: Classical Exercises using the white board and computer supported learning

Practical training/ laboratory:

Seminar/Workshop:

Class activity: Numerical exercises; solution of problems by calculator or computer and data show, using computer programs.

Case Study:

Other assignments/homework:

If teaching and learning methods were used other than those specified, list and give reasons:  
 None

### 3- Student assessment:

Method of assessment	Percentage of total
Written examination	<input type="text" value="60 %"/>
Oral examination	<input type="text" value="15 %"/>
Practical/laboratory work	<input type="text" value="----"/>
Other assignments/class work	<input type="text" value="10 %"/>
Mid-Term Exam	<input type="text" value="15 %"/>
Total	100 %

Members of examination committee Prof. Dr. Serage Eldin Khalifa  
 Role of external evaluator None

### 4- Facilities and teaching materials:

Totally adequate   
 Adequate to some extent   
 Inadequate   
 List any inadequacies None

### 5- Administrative constraints

List any difficulties encountered None

### 6- Student evaluation of the course:

List any criticisms Response of course team  
 None

### 7- Comments from external evaluator(s):

None

### 8- Course Enhancement:

Progress on actions identified in the previous year's action plan: None  
 Action State whether or not completed and give reasons for any non-completion None

### 9- Action plan for academic year 2011 – 2012

Actions required	Completion date	Person responsible
None		
Course coordinator: Prof. Dr Serage Eldin Khalifa		
Signature:		
Date: 15/7/2011		

## Annual Course Report 2010-2011

### A- Basic Information

- 1- Title and code: (M399) Project I.
- 2- Program(s) on which this course is given: Manufacturing Eng. and Production Technology
- 3- Year/Level of program: Fifth Year Manufacturing Eng. & Prod. Tech,
- 4- Unit hours    Lectures     Tutorial     Practical     Total  First Term  
                          Lectures     Tutorial     Practical     Total  Second Term
- 5- Names of lecturers contributing to the delivery of the course  
     All the teaching Staff of the department  
     Course coordinator Dr. Abdelmagid A. Abdalla  
     External evaluator: None

### B- Statistical Information

No. of students attending the course:    No.     %   
 No. of students completing the course:    No.     %

Results:

	No.	%
Passed	96	97.95
Failed	2	2.05

Grading of successful students:

	No.	%
Excellent	66	67.34
Very Good	13	13.265
Good	13	13.265
Pass	4	4.08

### C- Professional Information

#### 1 – Course teaching

Topic Actually taught	No. of hours	Lecturer
Collection of technical data	According to the subject of the project	All the teaching staff of the department
Technical report		
Design and technological procedure		
Presentation of Problem		
Problem solving		
Realization of design		
Testing and inspection		
Writing of technical report		
Follow up of technical work		
Assembly of components		
Presentation of producer		
Evaluation of producer quality		
Total Hours	60	

Topics taught as a percentage of the content specified:

>90 %       70-90 %       <70%

Reasons in detail for not teaching any topic

If any topics were taught which are not specified, give reasons in detail None

**2- Teaching and learning methods:**

Lectures:

Practical training/ laboratory:

Seminar/Workshop:

Class activity:

Case Study:

Other assignments/homework:

If teaching and learning methods were used other than those specified, list and give reasons:

None

**3- Student assessment:**

Method of assessment	Percentage of total
Written examination	<input type="text" value="----%"/>
Oral examination	25%
Practical/laboratory work	25%
Other assignments/class work	<input type="text" value="50 %"/>
Mid-Term Exam	<input type="text" value="----"/>
Total	100 %

Members of examination committee All members of the

Role of external evaluator None

**4- Facilities and teaching materials:**

Totally adequate	<input type="text" value="Yes"/>
Adequate to some extent	<input type="text" value="....."/>
Inadequate	<input type="text" value="....."/>
List any inadequacies	None

**5- Administrative constraints**

List any difficulties encountered None

**6- Student evaluation of the course:**

List any criticisms	Response of course team
- It is difficult to arrange meetings with the supervisors during the periods. Most of the groups meet with their supervisor during the break.	- Advisors arrange the classes of the project group.

**7- Comments from external evaluator(s):** Response of course team

None

**8- Course enhancement:**

Progress on actions identified in the previous year's action plan:

Action State whether or not completed and give reasons for any non-completion None

**9- Action plan for academic year 2011 – 2012**

Actions required	Completion date	Person responsible
Students of each project should be in the same class	Sept. 2012	Chief of chair
Course coordinator: Dr. Bakkar Elsarnagawy		
Signature:		
Date:	1/11/2011	

4<sup>th</sup> year Manufacturing Eng. & Production Tech.

NO.	Code	Course
1	B411	Mathematics VI
2	M454	Production Management
3	M461	System Dynamics & Vibrations
4	M471	Machine Design II
5	M481	Manufacturing Technology III
6	E051	Signal Processing
7	M400	Summer Training
8	M462	Materials Technology II
9	M472	Computer Aided Design (CAD)
10	M474	Machine Tool Design
11	M482	Automatic Control



## *Annual Course Report (Academic Year 2011-2012)*

### A- Basic Information

- 1- Title and code: Math. VI, Numerical Analysis and Probability Theory, B411
- 2- Program(s) on which this course is given: Basic Science
- 3- Year/Level of program: 4th year, 1<sup>st</sup> Term, (Elect. Mech.)
- 4- Unit hours    Lectures 2hrs    Tutorial 2 hrs    Practical hr    Total 4 hrs
- 5- Names of lecturers contributing to the delivery of the course  
         Course coordinator Prof. Dr. Osama El Gayar  
         External evaluator

### B- Statistical Information

No. of students attending the course:    No.    530    % 100  
 No. of students completing the course:    No.    517    % 97.54  
 Results: Electr. 100

	No.	%
Passed	313	60.54
Failed	13	2.51

Grading of successful students:

	No.	%
Excellent	181	21.1
Very Good	96	11
Good	36	13
Pass	204	39.45

### C- Professional Information

#### 1 – Course teaching

Topic Actually taught	No. of hours	Lecturer
• Least Square approximation	2	
• Netton interpolation	2	
• Differentiation of Laplace transform	4	
• Integration of laplace transform	4	
• Solving D.E using laplace transform	4	
• Laplace transform of the derivative	4	
• Laplace transform of the Integral	4	
• The Gamma and Beta function	4	
• Line integral and application	4	
• Double integral and application	4	
• Multiple integral and application	4	
• Surface and volume Integral	4	
• Legendre and Bessel functions	4	
• Cylindrical and spherical polar coordinates	4	
• Final Revision	4	
Total hours	60	

Topics taught as a percentage of the content specified:

>90 % ☒    70-90 % ☐    <70% ☐

Reasons in detail for not teaching any topic

If any topics were taught which are not specified, give reasons in detail

#### 2- Teaching and learning methods:

Lectures: Classical lecturing using the white board, projectors and data show

Practical training/ laboratory:

Seminar/Workshop:

Class activity: Numerical exercises; solution of problems

Case Study:

Other assignments/homework:

If teaching and learning methods were used other than those specified, list and give reasons:  
None

### 3- Student assessment:

Method of assessment	Percentage of total
Written examination	<input type="text" value="70 %"/>
Oral examination	<input type="text" value="----"/>
Practical/laboratory work	<input type="text" value="%"/>
Other assignments/class work	<input type="text" value="10 %"/>
Mid-Term Exam	<input type="text" value="20 %"/>
Total	100 %
Members of examination committee	Prof. Dr. Osama El Gyar Prof Dr. Aly M. Essawi
Role of external evaluator	None

### 4- Facilities and teaching materials:

Totally adequate	<input type="text" value="Yes"/>
Adequate to some extent	<input type="text" value="....."/>
Inadequate	<input type="text" value="....."/>
List any inadequacies	None

### 5- Administrative constraints

List any difficulties encountered  
➤ None

### 6- Student evaluation of the course:

List any criticisms	Response of course team
2. Problems with the teaching assistant in exercises	New teacher assistant will be engaged the next academic year.
3. A proposal to extend the subject and lecture it in two successive semesters	The actual content and number of lecturing hours are convenient now, considering the re-determined graduate profile

7- Comments from external evaluator(s):      Response of course team

### 8- Course enhancement:

Progress on actions identified in the previous year's action plan:  
Action State whether or not completed and give reasons for any None-completion      None

### 9- Action plan for academic year 2011– 2012

Actions required	Completion date	Person responsible
None	Aug. 2012	Prof. Dr. Osama El Gyar
Course coordinator: Prof. Dr. Osama El Gyar Prof. Dr. Aly M. Essawi		

Signature:

Date:



- Seminar/Workshop:
- Class activity:
- Case Study:
- Other assignments/homework:

If teaching and learning methods were used other than those specified, list and give reasons:  
 None

**3- Student assessment:**

Method of assessment	Percentage of total
▪ Written examination	<input type="text" value="100"/>
▪ Oral examination	
▪ Practical/laboratory work	20
▪ Other assignments/class work	10
▪ Mid-Term Exam	<input type="text" value="20"/>
Total	150

Members of examination committee  
 Role of external evaluator

Prof. Dr. A.Sarhan  
 None

**4- Facilities and teaching materials:**

- Totally adequate
- Adequate to some extent
- Inadequate
- List any inadequacies

**5- Administrative constraints**

List any difficulties encountered	Software is not available
-----------------------------------	---------------------------

**6- Student evaluation of the course:**

List any criticisms  
 None

Response of course team  
 None

7- Comments from external evaluator(s):  
 None

Response of course team  
 None

**8- Course enhancement:**

- Progress on actions identified in the previous year's action plan: None
- Action State whether or not completed and give reasons for any non-completion: None

**9- Action plan for academic year 2011 – 2012**

Actions required

Completion date

Person responsible

None

None

Course coordinator: Prof. Dr. A.Sarhan

Signature:

Date: 1/9/2011

## *Annual Course Report (Academic Year 2011-2012)*

### A- Basic Information

- 1- Title and code: System Dynamics & Vibrations, M461
- 2- Program(s) on which this course is given: Manufacturing Eng. and Production Technology
- 3- Year/Level of program: Fourth Year, 1<sup>st</sup> Semester
- 4- Unit hours    Lectures 3 hrs    Tutorial 2 hrs    Practical 1 hr    Total 6 hrs
- 5- Names of lecturers contributing to the delivery of the course  

Prof. Gaafar A. Hussein

Course coordinator Prof. Gaafar A. Hussein

External evaluator: None

### B- Statistical Information

No. of students attending the course:			No.	<div>95%</div>	<div>100</div>
No. of students completing the course:			No.	<div>94%</div>	<div>98.95</div>
Results:	No.	%	Grading of successful students:		
Passed	89	98.94		No.	%
Failed	1	1.06	Excellent	17	18.09
			Very Good	17	18.09
			Good	25	26.60
			Pass	34	36.17

### C- Professional Information

#### 1 – Course teaching

Topic Actually taught	Lecture hours	Tutorial hours	Practical hours	Lecturer
• Introduction to system dynamics System Classifications and basic functions	3	3		Prof. Dr. Gaafar A. Hussein
• Basic concepts of vibrating systems and the equations of motion of the vibrating elements.	4	3		
• Response of free vibrating systems with single and multiple degree of freedom.	8	6		
• Response of single and multiple degree of freedom systems undergoing different forcing functions.	10	8		
• MATLAB simulation of single degree of freedom systems.			6	
• Mechanical-electrical and mechanical-hydraulic analogies.	6	6		
• Vibration absorbing techniques.	4	4		
• Vibration Measurements	4		3	
• Machine monitoring conditions using system dynamic analysis.	6		3	
• MATLAB Simulation of multiple degree of freedom systems			3	
Total hours	45	30	15	

Topics taught as a percentage of the content specified:

>90 % 100      70-90 %         <70% ...

Reasons in detail for not teaching any topic None  
 If any topics were taught which are not specified, give reasons in detail None

**2- Teaching and learning methods:**

Lectures: Classical lecturing using the white board and computer supported learning

Practical training/ laboratory: None

Seminar/Workshop: None

Class activity:

Numerical exercises; solution of problems, demonstrations by data show, using computer programs; MATLAB, SIMULINK

Case Study: Selected case studies

Other assignments/homework: Weekly assignments

If teaching and learning methods were used other than those specified, list and give reasons:  
 None

**3- Student assessment:**

Method of assessment	Percentage of total
Written examination	66.7%
Oral examination	----
Practical/laboratory work	13.3 %
Other assignments/class work	6.7 %
Mid-Term Exam	13.3 %
Total	100 %

Members of examination committee Prof. Gaafar Ahmed Hussein

Prof. Abdelmegid Abdalla

Role of external evaluator None

**4- Facilities and teaching materials:**

Totally adequate	Yes
Adequate to some extent	.....
Inadequate	.....
List any inadequacies	None

**5- Administrative constraints**

List any difficulties encountered

- Limitation of number of data show in the principal building
- Limitation of number of operating experiments in the laboratory

**6- Student evaluation of the course:**

List any criticisms	Response of course team
Laboratory experiments are insufficient	This is due to the lack of vibration lab. This is replaced by simulation

**7- Comments from external evaluator(s):** Response of course team

None

None

**8- Course enhancement:**

Progress on actions identified in the previous year's action plan: None

Action State whether or not completed and give reasons for any non-completion None

9- Action plan for academic year 2012 – 2013

Actions required	Completion date	Person responsible
1. Provide more data show apparatuses	None	None

Course coordinator: Prof. Dr Gaafar A. Hussein

Signature:

Date: 1/8/2012

## Annual Course Report (Academic Year 2011-2012)

### A- Basic Information

- 1- Title and code: Machine Design II, M471
- 2- Program(s) on which this course is given: Manufacturing Eng. and Production Technology
- 3- Year/Level of program: Fourth Year Manufacturing Engineering, 1<sup>st</sup> Semester
- 4- Unit hours    Lectures     Tutorial     Practical     Total
- 5- Names of lecturers contributing to the delivery of the course  
Prof. Dr. Serage Eldin Khalifa

### B- Statistical Information

No. of students attending the course:    No.     %   
 No. of students completing the course:    No.     %

Results:

	No.	%		Grading of successful students:	
Passed	69	76.66		No.	%
Failed	21	23.34		Excellent	1    1.11
				Very Good	4    4.44
				Good	12    13.33
				Pass	52    57.78

### C- Professional Information

1 – Course teaching

Topic Actually taught	No. of hours		Lecturer
	Lec	Tut	
• Hydrodynamic bearings theory	6	8	Prof. Dr. Serage Eldin Khalifa
• Hydrodynamic bearings design	6	4	
• Rolling contact bearings	6	12	
• Involute gear tooth	3	4	
• Spur gears	6	8	
• Helical gears	6	8	
• Bevel gears	6	8	
• Worm gearing	6	8	
Total hours	45	60	

Topics taught as a percentage of the content specified:

>90 %     70-90 %     <70%

Reasons in detail for not teaching any topic    None

If any topics were taught which are not specified, give reasons in detail None

2- Teaching and learning methods:

Lectures:

Tutorials:

Practical training/ laboratory:

Seminar/Workshop:

Class activity: Numerical exercises; solution of problems by calculator or computer, drawing by AutoCAD 2004

Case Study:



Other assignments/homework: Bi-weekly assignments

If teaching and learning methods were used other than those specified, list and give reasons:

None

3- Student assessment:

Method of assessment	Percentage of total
Written examination	<span style="border: 1px solid black; padding: 2px;">66.7 %</span>
Oral examination	<span style="border: 1px solid black; padding: 2px;">13.3 %</span>
Practical/laboratory work	-----
Other assignments/class work	<span style="border: 1px solid black; padding: 2px;">10 %</span>
Mid-Term Exam	<span style="border: 1px solid black; padding: 2px;">10 %</span>
Total	100 %
Members of examination committee	Prof. Dr. Serage Eldin Khalifa
Role of external evaluator	None

4- Facilities and teaching materials:

Totally adequate	<span style="border: 1px solid black; padding: 2px;">Yes</span>
Adequate to some extent	<span style="border: 1px solid black; padding: 2px;">.....</span>
Inadequate	<span style="border: 1px solid black; padding: 2px;">.....</span>
List any inadequacies	None

5- Administrative constraints

List any difficulties encountered      None

6- Student evaluation of the course:

List any criticisms      Response of course team  
None

7- Comments from external evaluator(s):      Response of course team  
None

8- Course Enhancement:

Progress on actions identified in the previous year's action plan:      None  
Action State whether or not completed and give reasons for any non-completion      None

9- Action plan for academic year 2012– 2013

Actions required	Completion date	Person responsible
None		
Course coordinator: Prof. Dr Serage Eldin Khalifa		
Signature:		
Date: 15/7/2012		

## Annual Course Report (Academic Year 2011-2012)

### A- Basic Information

- 1- **Title and code:** Manufacturing Technology III, M481
- 2- **Program(s)** on which this course is given: Manufacturing Eng. & Production Technology
- 3- **Year/Level of program:** 4<sup>th</sup> year Manufacturing / 1<sup>st</sup> term
- 4- **Unit hours** Lectures 4 hrs Tutorial 2 hrs Practical 2 hrs Total 8 hrs
- 5- **Names of lecturers** contributing to the delivery of the course:  

Dr. M. Merdan

Dr. A. Afifi

Course coordinator: Dr. M. Merdan

External evaluator: None

### B- Statistical Information

No. of students attending the course: 83  
 No. of students completing the course: 78  
 Results:

	No.	%
Passed	74	88.50
Failed	9	11.50

Grading of successful students:

	No.	%
Excellent	15	19.20
Very Good	14	17.90
Good	15	19.20
Pass	27	34.60

### C- Professional Information

#### 1 – Course teaching

Topic	Lecture hours	Tutorial hours	Practical hours	Lecturer
Definition, classification, and properties of plastic materials,	2	2		Prof. Dr. M. Merdan Eng. Eati mad
Design considerations of plastic products,	2			
Plastics molding processes, and types of plastic molds,	4	2		
Plastic injection molds design,	18			
Sheet metals dies design,	2	18		
Forging and deep drawing dies.	2	8		
Programming of CNC lathes,	12	5	5	
Programming of CNC milling machines.	12	5	5	
Using the available software packages, in design and manufacture of molds and dies	6	5	5	
Total	60	45	15	

- Topics taught as a percentage of the content specified:  
 >90 % 100      70-90 %         <70% ...
- Reasons in detail for not teaching any topic
- If any topics were taught which are not specified, give reasons in detail

#### 2- Teaching and learning methods:

- Lectures: Classical lecturing using the white board
- Practical training/ laboratory: CNC Lab
- Seminar/Workshop: None
- Class activity: Assignments on design of molds and dies

- Case Study:
- Other assignments/homework:

If teaching and learning methods were used other than those specified, list and give reasons:  
 None

**3- Student assessment:**

Method of assessment	Points of total
▪ Written examination	<input type="text" value="100"/>
▪ Oral examination	
▪ Practical/laboratory work	<input type="text" value="20"/>
▪ Other assignments/class work	<input type="text" value="10"/>
▪ Mid-Term Exam	<input type="text" value="20"/>
Total	150

Members of examination committee  
 Role of external evaluator

Dr. M. Merdan and Dr. A.Affi  
 None

**4- Facilities and teaching materials:**

- Totally adequate
- Adequate to some extent
- Inadequate
- List any inadequacies

**5- Administrative constraints**

List any difficulties encountered None

**6- Student evaluation of the course:**

List any criticisms Response of course team  
 None None

**7- Comments from external evaluator(s):**

None Response of course team  
None

**8- Course enhancement:**

- Progress on actions identified in the previous year's action plan: None
- Action State whether or not completed and give reasons for any non-completion None

**9- Action plan for academic year 2013 – 2014**

Actions required	Completion date	Person responsible
None		None

Course coordinator: Dr. M. Merdan  
 Signature: M. Merdan  
 Date: 6/11/2013

## Annual Course Report (Academic Year 2011-2012)

### A- Basic Information

- 1- **Title and code:** Digital Signal Processing, E051  
 2- Program(s) on which this course is given: Manufacturing Engineering and Production Technology  
 3- Year/Level of program: Fourth Year                      Second Semester  
 4- Credit hours  
     Credit      3 hrs      Lectures      3 hrs      Tutorial      2 hrs      Practical      1 hr  
 5- Course coordinator: Prof. Dr. Mostafa Afifi  
 6- External evaluator: Non

### B- Statistical Information

No. of students attending the course:	No.	95	100	%
No. of students completing the course:	No.	91	95.8	%

Results:

	No.	%
Passed	89	97.8
Failed	2	2.2

Grading of successful students:		
Grade	No.	%
Excellent	7	7.69
Very Good	17	18.68
Good	17	18.68
Pass	48	52.75

### C- Professional Information

#### 1 – Course teaching

Topic	Total hours		Lecturer
	Plan.	Actual	
• Introduction, signal processing requirements for mechanics	3	3	Prof. Dr. Mostafa Afifi
• Signal Processing, Analog and Digital Signal advantages	5	4	
• Amplifiers, Diodes, JBTs, FETs and Op Amps	8	8	
• Frequency Response and Feed Back in Amplifiers.	6	5	
• Fourier Series and Fourier Transforms	5	5	
• Low and High Pass Filters using RC and RL circuits	4	4	
* Band Pass and Band Stop Filters using RLC circuits	4	4	
* Signal Generators and Power Supplies	6	6	
• Wienbridge, RF Hartly Oscillators, Function Generators, Pulse Generators and Power Supplies	8	8	
• Logic Gates and Switching Circuits	4	4	
• Boolean Algebra	4	4	
• Switching Circuits and DeMorgans Theorems	4	4	
• Combinational Logic and Arithmetic Circuits	6	5	
• Flip Flops ant timing Circuits	5	4	
• Micro Computers and Micro-Controllers	4	4	
• Virtual Machines and LabVIEW Processing	4	3	
• Digital Filtering and Graphical Coding Analysis	6	5	
<b>Total hours</b>	<b>86</b>	<b>80</b>	

Topics taught as a percentage of the content specified:                      >90 %      85-90 %      90%

Reasons in detail for not teaching any topic: Non

If any topics were taught which are not specified, give reasons in detail: Non

Achieved program intended learning outcomes, ILO's:

Knowledge & Understanding	Intellectual skills	Applied Skills	General transferable skills
a1 to a10	b1 to b5	c1 to c4	d1 to d3

**2- Teaching and learning methods:**

Lectures:	Lecture, discussions, tutorials, problem solving and modeling
Practical training/ laboratory:	Practical Training and experimental measurements in circuit Lab & LabVIEW
Seminar/Workshop:	Numerical exercises; solution of problems by computer and data show, using computer packages; MATLAB, and LabVIEW.
Class activity	Selected case studies
Case Study:	Bi-weekly assignments and reports
Other assignments/homework:	
If teaching and learning methods were used other than those specified, give reasons:	Non

**3- Student assessment:**

Method of assessment	Points	%
Written examination		65
Oral examination		0
Practical/laboratory work		15
Other assignments/class work		10
Mid-Term Exam		10
Total		100

Members of examination committee: Prof. Dr. Mostafa AFIFI

Role of external evaluator: Non

**4- Facilities and teaching materials:**

Totally adequate	Yes
Adequate to some extent	
Inadequate	

List any inadequacies: Non

**5- Administrative constraints (List any difficulties encountered)**

➤ Non

**6- Student evaluation of the course:**

	List any criticisms	Response of course team
(a)	it is recommended to solve more examples in the exercises	Only a balanced proportion of numerical exercises are solved in the class, the rest are presented as solved assignments
(b)	The assignments are corrected giving detailed correct answers	The correct results of problems solutions are presented during the exercises periods
(c)	It is recommended to announce the points of mid- term, rather than the grades.	The form and timing of declaration of year work evaluation results follow the Academy policy.

**7- Comments from external evaluator(s):**

	Comment	Response of course team
(a)	Non	

**8- Written Exam Evaluation**

- Low success percentage in question 3 and 4 of the final written exam implies the need to revise the teaching and learning activity of the advanced system analysis and adding more exercises, assignments reports and quizzes.
- The whole exam result shows normal weakness in writing and English language level.

**9- Course enhancement:**

Progress on actions identified in the previous year's action plan. State whether or not completed and give reason for any non-completion:

Actions required	Planned Completion date	Accomplishment
(b) Add more experiments to Electronics Laboratory	December 2012	More is planned for May 2013

**10- Action plan for academic year 2013 – 2014**

Actions required	Completion date	Person responsible
1. adding more exercises, assignments reports and quizzes.	December 2012	Prof. Dr. Mostafa AFIFI

Course coordinator: Prof. Dr Mostafa Afifi

Signature:

Date: September 24, 2012



Practical training & delivering a report

100 %

Other assignments/class work

Mid-Term Exam

Total

100 %

Members of examination committee: All staff members of the dept.

Role of external evaluator

Non

**4- Facilities and teaching materials:**

Totally adequate

Yes

Adequate to some extent

.....

Inadequate

.....

List any inadequacies: None

**5- Administrative constraints**

List any difficulties encountered

None

**6- Student evaluation of the course:**

List any criticisms

Response of course team

None

**7- Comments from external evaluator(s):**

Response of course team

**8- Course enhancement:**

Progress on actions identified in the previous year's action plan:

Actions required	Planned Completion date	Accomplishment
Action State whether or not completed and give reasons for any non-completion		Non

**9- Action plan for academic year 2011– 2012**

Actions required	Completion date	Person responsible
1. None		

Course coordinator: Prof. Dr. Abdel Nasser Zayed

Signature:

Date: 1/11/2012



## Annual Course Report (Academic Year 2011-2012)

### A- Basic Information

- 1- Title and code: Material Technology II, M462
- 2- Program(s) on which this course is given: Manufacturing Eng. & Production Technology
- 3- Year/Level of program: 4<sup>th</sup>. Year
- 4- Unit hours    Lectures 3hr    Tutorial 1 hr    Practical 2 hr    Total 6 hrs
- 5- Names of lecturers contributing to the delivery of the course  
    Dr. Bakr Rabieh  
    Course coordinator: Dr. Bakr Rabieh  
    External evaluator

### B- Statistical Information

No. of students attending the course: No. 95                      % 100  
 No. of students completing the course: No. 93                      % 97.9

#### Results:

	No.	%
Passed	93	93.54
Failed	6	6.46

#### Grading of successful students:

	No.	%
Excellent	20	21.51
Very Good	23	24.73
Good	16	17.2
Pass	28	30.11

### C- Professional Information

#### 1 – COURSE TEACHING

Topic Actually Taught	Lecture hours	Lecturer
• Engineering materials (Types and applications)	7	Dr. Bakr Rabieh
• Materials selections	5	
• Quantitative material selection	4	
• Concept of cost per unit property	4	
• Case study of metal substitutions	4	
• Materials for low temperature applications	5	
• Composite materials	6	
• Raw materials for part fabrications	8	
• Product development & Product life cycle	4	
• design for Manufacturing	11	
• Manufacturing techniques	4	
• Composite manufacturing	8	
• Joining of Composite	8	
• Recycling of composites	4	
• New trends in material technology	8	
Total hours	90	

Topics taught as a percentage of the content specified:

>90 % 100                      70-90 %                         <70%   

Reasons in detail for not teaching any topic: None

If any topics were taught which are not specified, give reasons in detail all of the missed teaching hours were substituted.

## 2- TEACHING AND LEARNING METHODS:

Lectures: Classical lecturing using the white board and computer supported learning

Practical training/ laboratory: Some samples of composite materials were prepared and tested in material lab.

Seminar/Workshop: None

Class activity: Preparing and testing of composite material samples

Case Study: None

Other assignments/homework: Bi-weekly assignments

If teaching and learning methods were used other than those specified, list and give reasons:

None

## 3- STUDENT ASSESSMENT:

Method of assessment

Percentage of total

Written examination

66.7 %

Oral examination

----

Practical/laboratory work

13.3 %

Other assignments/class work

6.7%

Mid-Term Exam

13.3 %

Total

100 %

Members of examination committee

Dr. Bakr M. Rabieh

Role of external evaluator

None

## 4- FACILITIES AND TEACHING MATERIALS:

Totally adequate

Yes

Adequate to some extent

.....

Inadequate

.....

List any inadequacies

Non

## 5- ADMINISTRATIVE CONSTRAINTS

List any difficulties encountered

## 6- STUDENT EVALUATION OF THE COURSE

Response of course team

List any criticisms

## 7- COMMENTS FROM EXTERNAL EVALUATOR(S)

Response of course team

Non

## 8- COURSE ENHANCEMENT

Progress on actions identified in the previous year's action plan: No previous comments

Action State whether or not completed and give reasons for any non-completion Non

## 9- ACTION PLAN FOR ACADEMIC YEAR 2009 – 2010

Actions required

Completion date

Person responsible

Non

Course coordinator: Dr. Bakr M. Rabieh

Signature:

Date: 1/10/2012



## 2- TEACHING AND LEARNING METHODS:

**Lectures:** Classical lecturing using the white board and computer supported learning

**Practical training/ laboratory:** Pro Eng Packages in Lab

**Seminar/Workshop:**

Two Seminars were arranged by the students:

(c) Computer graphics, Design (Pro/Engineer Mechanical)

(d) Computer graphics, Stress Analysis (Pro/Engineer Mechanical)

**Class activity:** Solid Modeling Graphics & Mechanical

**Case Study:** Selected case studies

**Other assignments/homework:** Bi-weekly assignments

If teaching and learning methods were used other than those specified, list and give reasons:

Non

## 3- STUDENT ASSESSMENT:

Method of assessment	Percentage of total
Written examination	66.7 %
Oral examination	----
Practical/laboratory work	13.3 %
Other assignments/class work	6.7%
Mid-Term Exam	13.3 %
Total	100 %

**Members of examination committee**

Prof. Abdel-Nasser Zayed

**Role of external evaluator**

Non

## 4- FACILITIES AND TEACHING MATERIALS:

Totally adequate	Yes
Adequate to some extent	.....
Inadequate	.....
List any inadequacies	Non

## 5- ADMINISTRATIVE CONSTRAINTS

List any difficulties encountered

## 6- STUDENT EVALUATION OF THE COURSE

Response of course team

List any criticisms

## 7- COMMENTS FROM EXTERNAL EVALUATOR(S)

Response of course team

Non

## 8- COURSE ENHANCEMENT

Progress on actions identified in the previous year's action plan: No previous comments

Action State whether or not completed and give reasons for any non-completion Non

**9- ACTION PLAN FOR ACADEMIC YEAR 2012 – 2013**

<b>Actions required</b>		<b>Completion date</b>	<b>Person responsible</b>
Non			
<b>Course coordinator:</b>	Prof. Abdel-Nasser Zayed		
<b>Signature:</b>			
<b>Date:</b>	1/10/2012		

## Annual Course Report Academic year 2011-2012

### A- Basic Information

- 1- Title and code: (M474) Machine Tool Design
- 2- Program(s) on which this course is given: Production Engineering and manufacturing Technology
- 3- Year/Level of program: 4<sup>th</sup>. Year
- 4- Unit hours  

Lectures 4hrs	Tutorial 2hrs	Practical	Total <span style="border: 1px solid black; padding: 0 5px;">6 hrs</span>
---------------	---------------	-----------	---
- 5- Names of lecturers contributing to the delivery of the course  
 Prof. Dr. Ahmed Elsanabary  
 Course coordinator Prof. Dr. Ahmed Elsanabary  
 External evaluator

### B- Statistical Information

No. of students attending the course: No. 91 % 100  
 No. of students completing the course: No. 91 % 100  
 Results:

	No.	%		Grading of successful students:		
Passed	65	71.44			No.	%
Failed	26	28.56		Excellent	4	4.40
				Very Good	3	3.30
				Good	13	14.29
				Pass	45	49.45
				Failed	26	28.56

### C- Professional Information

#### 1 – Course teaching

Topic Actually taught	Lecture hours	Tutorial hours	Lecturer
Introduction to Machine Tool Systems	4	2	Prof. Dr. Ahmed ELSanabary
Chapter 1: Machine Tool Drives & Mechanisms	8	4	
Chapter 2: Regulation of Speed & Feed Rates	16	8	
Chapter 3: Design of Machine Tool Structures	8	4	
Chapter 4: Design of Guide ways & Power Screws	12	6	
Chapter 5: Design of Spindles and Spindle Supports	8	4	
Chapter 6: Control Systems in Machine Tools	4	2	
Total	60	30	90

Topics taught as a percentage of the content specified:

>90 % 100      70-90 % ☐      <70% ...

Reasons in detail for not teaching any topic None

If any topics were taught which are not specified, give reasons in detail None, all of the missed teaching hours were substituted, in addition to the seminars arranged during the students free day.

#### 2- Teaching and learning methods:

Lectures: Classical lecturing using the white board and computer supported learning

Practical training/ laboratory: ☐

Seminar/Workshop:

Two Seminars were arranged by the students:

- (a) Regulation of Speed & Feed Rates
- (b) Design of Spindle & Power Screws

Class activity: -

Case Study:

Other assignments/homework:

If teaching and learning methods were used other than those specified, list and give reasons:

3- Student assessment:

Tools	Time schedule	Grading in points
Assignments and quizzes	weekly	20
Mid-Term Exam	sixth week	30
Final Written exam	Sixteenth Week	100
Total		150

Members of examination committee

Dr. Nabil Gadallah

Role of external evaluator

None

4- Facilities and teaching materials:

Totally adequate

Adequate to some extent

Inadequate

List any inadequacies

5- Administrative constraints

List any difficulties encountered

6- Student evaluation of the course:

Response of course team

List any criticisms

7- Comments from external evaluator(s):

Response of course team

None

None

8- Course enhancement:

Progress on actions identified in the previous year's action plan: No previous comments

Action State whether or not completed and give reasons for any non-completion

None

9- Action plan for academic year 2012 – 2013

Actions required

Completion date

Person responsible

None

None

None

Course coordinator: Prof. Dr. Ahmed El Sanabary

Signature:

Date: 3/08/2011

## Annual Course Report

### Academic year 2011-2012

#### A- Basic Information

- 1- **Title and code:** (M482) Automatic Control  
 2- **Program(s)** on which this course is given: Manufacturing Eng. and Production Technology BSc Program  
 3- **Year/Level of program:** Fourth Year/Second Semester  
 4- **Unit hours**      Lectures 3 hrs      Tutorial 2 hrs      Practical 2 hr      Total 7 hrs  
 5- **Names of lecturers contributing to the delivery of the course:**  
    Prof. Dr. M. Galal RABIE  
    Dr Metwally Hussein  
**Course coordinator:**      Prof. Dr. M. Galal RABIE  
**External evaluator:**      Non

#### B- Statistical Information

No. of students attending the course:	No. <span style="border: 1px solid black; padding: 0 5px;">95</span>	100 %
No. of students completing the course:	No. <span style="border: 1px solid black; padding: 0 5px;">92</span>	96.8 %
<b>Results:</b>		
	No.	%
Passed	84	91.3
Failed	8	8.7
<b>Grading of successful students:</b>		
	No.	%
Excellent	9	9.78
Very Good	9	9.78
Good	8	8.7
Pass	58	63.04

#### C- Professional Information

##### 1 – Course teaching

Topic	Total hours		Lecturer
	Plan.	Actual	
• Introduction, basic definitions and terminology	2	2	Prof. Dr. M Galal Rabie
• Mathematical topics	8	4	
• Transfer functions, definition and case studies	10	8	
• Block diagrams; conventions, block diagram algebra and reduction of block diagrams.	4	5	
• Signal flow graphs; definition, conventions and Mason's formula	2	2	
• Time domain analysis			
➤ Transient response of proportional, integrating and first order elements.	4	4	
➤ Transient response of second order elements. Effect of location of roots of characteristic equation on the transient response	10	6	
➤ System identification based of the transient response.	4	4	
○ Instruments, sensors and controllers	10	7	
○ Level control	4	4	
○ Flow control	4	4	
○ Speed control	4	4	
○ Temperature control	4	4	
○ Robotic arm control	4	4	
• Frequency response			
➤ Frequency response; Polar plot and Bode plots.	6	5	



➤ System identification based of the transient and frequency responses.	4	5
• Accuracy of feedback systems; steady state error.	4	4
• Stability of feedback systems; Routh-Herwitz and Nyquest stability criteria.	5	4
• Root locus analysis	2	2
• Compensation of control systems	4	4
• Design and tuning of P, PI and PID controllers	6	5
Total hours	105	91

Topics taught as a percentage of the content specified:

>90 % ☒ 100 70-90 % ☐ <70% ☐

Reasons in detail for not teaching any topic Non

If any topics were taught which are not specified, give reasons in detail Non

Achieved program intended learning outcomes, ILO's:

Knowledge and Understanding	Intellectual skills	Applied Skills	General transferable skills
a1 to a10	b1 to b5	c1 to c4	d1 to d3

## 2- Teaching and learning methods:

Lectures: Lecture, discussions, tutorials, problem solving and modeling

Practical training/ laboratory: Practical training and experimental measurements in Lab

Seminar/Workshop: Non

Class activity: Numerical exercises; solution of problems by computer and data show, using computer packages; MATLAB, SIMULINK and CODAS.

Case Study: Selected case studies

Other assignments/homework: Bi-weekly assignments

If teaching and learning methods were used other than those specified, list and give reasons:  
Non

## 3- Student assessment:

Method of assessment	Percentage of total
Written examination	100 points = 66.7 %
Oral examination	----
Practical/laboratory work	20 points = 13.3%
Other assignments/class work	15 points = 10 %
Mid-Term Exam	15 points = 10 %
Total	150 points = 100 %
Members of examination committee	Dr. M. Galal RABIE and Dr. Metwally Hussein
Role of external evaluator	Non

## 4- Facilities and teaching materials:

Totally adequate	<input checked="" type="checkbox"/> Yes
Adequate to some extent	<input type="checkbox"/> .....
Inadequate	<input type="checkbox"/> .....
List any inadequacies:	Non

## 5- Administrative constraints

List any difficulties encountered Non

6- Student evaluation of the course: Response of course team

List any criticisms

(a) Non

7- Comments from external evaluator(s): Response of course team

Non

The analysis of written exam results revealed the following weak points:

- \* The exam level is convenient, considering the percentage of success and high grades.
- \* Low success percentage in question 3 implies the need to revise the teaching and learning activity of the system frequency and time domain analysis and closed loop system precision
- \* The whole exam result shows considerable weakness in report writing and organization in addition to the English language level and.

8- Course enhancement:

Progress on actions identified in the previous year's action plan:

Actions required	Planned Completion date	Accomplishment
1. Non		

Action State whether or not completed and give reasons for any non-completion Non

9- Action plan for academic year 2011 – 2012

Actions required	Completion date	Person responsible
1. adding more exercises, assignments reports and quizzes	End of summer term 2011-2012	Prof. M Galal Rabie

Course coordinator: Prof. Dr M. Galal RABIE

Signature:

Date: August 2, 2011

5<sup>th</sup> year Manufacturing Eng. & Production Tech.

NO.	Code	Course
1	M552	Operations Research
2	M561	Engineering Economy
3	M571	Computer Aided Manufacturing (CAM)
4	M573	Automation
5	M578	Hydraulic Power Systems
6	M580c	Elective I
7	M598	Report
8	B512	Laws and Regulations for Engineers
9	B572	Pollution and Society
10	M576	Computer Integrated Manufacturing (CIM)
11	M574	Quality Control
12	M580a	Elective II
13	M581	Advanced Manufacturing Processes
14	M599	Project 2

### A- Basic Information

- 1- Title and code: *M552: Operations Research*  
 2- Program(s) on which this course is given: Manufacturing Eng. & Production Technology.  
 3- Year/Level of program: 5<sup>th</sup> year Manufacturing Technology / 1<sup>st</sup> term  
 4- Unit hours Lectures 2 hrs Tutorial 2hrs Practical 0 hrs Total 4hrs  
 5-Names of lecturers contributing to the delivery of the course:  
    Prof. Dr. M. Merdan  
 Course coordinator:                 Prof. Dr. M. Merdan  
 External evaluator:         None

No. of students attending the course: 92  
No. of students completing the course: 91  
Results:

Passed	No.	%	Grading of successful students:		
Failed	82	90.1		No.	%
	9	9.9	Excellent	9	9.90
			Very Good	19	20.90
			Good	25	27.50
			Pass	37	40.70

## C- Professional Information

## 1 – Course teaching

Topic	Lecture hours	Tutorial hours	Practical hours
1. Introduction; Origins of Operations Research (OR), Nature and Phases of OR, and Impact of OR.	2	-	-
2. Linear Programming (LP) – Graphical Solution; LP models, Common characteristics, Model formulation with single and double subscript variables. Graphical Solution of 2 variables LP problems; Solved Examples. Other Objective Function – Minimization.	6	4	-
3. Solution of LP Problems Using Simplex Method; General form of the LP model, Possible Initial Basic Solution, Better basic solution. Other forms of the LP model; Objective function in the Minimization form – Big M Methodology, Maximize the quantity of products produced, Full utilization of all departments' production capacity in the plant.	8	8	-
4. Assignment problem; Hungarian method. Problems with assignment problems	4	4	-
5. Transportation problem; Mathematical model of the problem; Graphical Solution of the transportation problem, Algebraic Solution of Balanced Transportation Problem; Problem formulation, Initial solution: North-West Corner Method, Index Method, and Vogel's Approximation Method. Optimum Solution; Steppingstone Method, and Modified Distribution Index Method (MODI). Remarks on the transportation problems; Degenerate solution, Unbalanced Transportation Problem, and Objective function in the form of Maximization instead of Minimization	8	8	-

6. Transportation problem; Mathematical model of the problem; Graphical Solution of the transportation problem, Algebraic Solution of Balanced Transportation Problem; Problem formulation, Initial solution: North-West Corner Method, Index Method, and Vogel's Approximation Method. Optimum Solution; Steppingstone Method, and Modified Distribution Index Method (MODI). Remarks on the transportation problems; Degenerate solution, Unbalanced Transportation Problem, and Objective function in the form of Maximization instead of Minimization	8	8	-
7. Network Scheduling; Importance and network scheduling, Construction of a CPS Network, use of CPM to solve project management problems; Network construction, ESs determination by solving the network from R to L. LSs determination by solving the network from R to L. determination of the project completion time, and boundary times calculation and determination of the slacks of the non-critical activities.	2	4	-
8. General revision for final Exams	-	2	-
Total	30	30	

- Topics taught as a percentage of the content specified:  
>90 % ☒ 100 70-90 % ☐ <70% ☐
- Reasons in detail for not teaching any topic
- If any topics were taught which are not specified, give reasons in detail

### 3- Teaching and learning methods:

- Lectures:
- Practical training/ laboratory:
- Seminar/Workshop:
- Class activity:
- Case Study:
- Other assignments/homework:

If teaching and learning methods were used other than those specified, list and give reasons:  
None

### 4- Student assessment:

Method of assessment	Percentage of total
Written examination	<input type="text" value="70 %"/>
Oral examination	
Practical/laboratory work	
Other assignments/class work	<input type="text" value="10 %"/>
Mid-Term Exam	<input type="text" value="20 %"/>
Total	100 %
Members of examination committee	Prof. Dr. M. Merdan
Role of external evaluator	None

### 5- Facilities and teaching materials:

- Totally adequate ☒ Yes
- Adequate to some extent
- Inadequate
- List any inadequacies

### 6- Administrative constraints

List any difficulties encountered None

### 7- Student evaluation of the course:

List any criticisms Response of course team  
None None

8- Comments from external evaluator(s):

None

Response of course team

None

9- Course enhancement:

- Progress on actions identified in the previous year's action plan:
- Action State whether or not completed and give reasons for any non-completion    None

10- Action plan for academic year 2012 – 2013

Actions required

None

Completion date

None

Person responsible

None

Course coordinator:    Prof. Dr. M. Merdan

Signature: M. Merdan

Date:    6/11/2013

## Annual Course Report 2012/2013

### A- Basic Information

1- Title and code: (M561) Engineering Economics

2- Program(s) on which this course is given:

- Manufacturing Engineering and Production Technology
- Communication Engineering Technology
- Computer Engineering Technology

3- Year/Level of program: Fifth Year (Man.Eng, Comm., Comp.)

4- Unit hours Lectures  Tutorial  Practical  Total

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

Dr. Abdelmagid A. Abdalla, Dr. Ahmad Sarhan

Course coordinator Dr. Abdelmagid A. Abdalla

External evaluator: None

### B- Statistical Information

No. of students attending the course: No.  %

No. of students completing the course: No.  %

Results: (Man. Eng.)

	No.	%
Passed	84	94.4
Failed	5	5.6

Grading of successful students:

	No.	%
Excellent	18	20.2
Very Good	18	20.2
Good	17	19.1
Pass	31	34.8

### C- Professional Information

#### 1 – Course teaching

Topic Actually taught	No. of hours	Lecturer
• Cash Flow	4	Dr. Abdelmagid A. Abdalla, Dr. Ahmad Sarhan
• Compound Interest:	12	
• Time Value of Money	4	
• Nominal and Effective Interest	4	
• Engineering Problem Analysis:	12	
• Depreciation	8	
• Tax effects	4	
• Breakeven point & payback period	-	
<b>Total hours</b>	<b>48</b>	

Topics taught as a percentage of the content specified:

>90 %  70-90 %  <70%

Reasons in detail for not teaching any topic The term actually was 13 weeks

If any topics were taught which are not specified, give reasons in detail None

**2- Teaching and learning methods:**

Lectures: Classical lecturing using the white board

Practical training/ laboratory: None

Seminar/Workshop: None

Class activity: Numerical exercises.

Case Study: None

Other assignments/homework: Weekly assignment

If teaching and learning methods were used other than those specified, list and give reasons:  
None

**3- Student assessment:**

Method of assessment	Percentage of total
Written examination	70 %
Oral examination	----
Practical/laboratory work	----
Other assignments/class work	10 %
Mid-Term Exam	20 %
Total	100 %

Members of examination committee Dr. Abdelmagid A. Abdalla,  
Dr. Dr. Ahmad Sarhan

Role of external evaluator: None

**4- Facilities and teaching materials:**

Totally adequate	Yes
Adequate to some extent	.....
Inadequate	.....
List any inadequacies	None

**5- Administrative constraints**

List any difficulties encountered: None

**6- Student evaluation of the course:**

List any criticisms	Response of course team
- The lecturer assistant has different points of view concerning the topics of the course	- The lecturer assistant will be changed next year

**7- Comments from external evaluator(s):** None  
**Response of course team**

**8- Course enhancement:**

Progress on actions identified in the previous year's action plan:

Action State whether or not completed and give reasons for any non-completion: None



**9- Action plan for academic year 2012– 2013**

<b>Actions required</b>	<b>Completion date</b>	<b>Person responsible</b>
Change of the lecturer assistant	September 2013	Dr. Abdelmagid A. Abdalla

**Course coordinator:** Dr. Abdelmagid A. Abdalla

**Signature:**

**Date:** 1/11/2013

## Annual Course Report 2012/2013

### A- Basic Information

- 1- **Title and code:** (M571) Computer Aided Manufacturing (CAM)
- 2- Program(s) on which this course is given: Production Engineering and manufacturing Technology
- 3- Year/Level of program: 5<sup>th</sup> Year
- 4- Unit hours    Lectures 3 hrs    Tutorial 1 hrs    Practical 2 hr    Total 6 hrs
- 5- Names of lecturers contributing to the delivery of the course  
                  Prof. Dr. Atef Afifi  
                  Course coordinator Prof. Dr. Atef Afifi  
                  External evaluator

### B- Statistical Information

No. of students attending the course:	No. <span style="border: 1px solid black; padding: 0 5px;">92</span>	% <span style="border: 1px solid black; padding: 0 5px;">100</span>	
No. of students completing the course:	No. <span style="border: 1px solid black; padding: 0 5px;">90</span>	% <span style="border: 1px solid black; padding: 0 5px;">100</span>	
Results:	No.	%	Grading of successful students:
Passed	72	80	No.    %
Failed	17	18.8	Excellent    7    7.8
			Very Good    12    13.3
			Good    15    16.7
			Pass    39    43.3

### C- Professional Information

#### 1 – Course teaching

Topic	Lecture hours	Tutorial hours	Practical hours
Fundamentals of CAM	3		
Part programming using tool compensation (length and radius)	4	1	2
Canned cycles of CNC milling	6	2	4
Canned cycles of CNC turning	6	2	4
Subprogram techniques for CNC part programming	5	2	4
Introduction to computer Aided Part Programming	3	1	2
Computer Aided Part Programming of Milled parts	6	2	4
Computer Aided Part Programming of Turned parts	6	2	4
Computer Aided Process Planning	6	3	6
<b>Total hours</b>	<b>45</b>	<b>15</b>	<b>30</b>

Topics taught as a percentage of the content specified:

>90 % 100      70-90 % ☐      <70%

Reasons in detail for not teaching any topic    Non

If any topics were taught which are not specified, give reasons in detail Non

#### 2- Teaching and learning methods:

Lectures: Classical lecturing using the white board and computer supported learning

Practical training/ laboratory: Practical training and experimental measurements in Lab

Seminar/Workshop: Non

Class activity: Numerical exercises; solution of problems by computer and data show, using computer programs; MATLAB, SIMULINK and CODAS.

Case Study: Selected case studies

Other assignments/homework: Bi-weekly assignments

If teaching and learning methods were used other than those specified, list and give reasons:

Non

**3- Student assessment:**

Method of assessment	Percentage of total
Oral examination	----
Final examination	<span style="border: 1px solid black; padding: 2px;">66.7 %</span>
Practical	<span style="border: 1px solid black; padding: 2px;">13.3 %</span>
Other assignments/class work	<span style="border: 1px solid black; padding: 2px;">10%</span>
Mid-Term Exam	<span style="border: 1px solid black; padding: 2px;">10%</span>
Total	100
Members of examination committee	Prof. Dr. Atef Afifi
Role of external evaluator	Non

**4- Facilities and teaching materials:**

Totally adequate	<span style="border: 1px solid black; padding: 2px;">Yes</span>
Adequate to some extent	<span style="border: 1px solid black; padding: 2px;">.....</span>
Inadequate	<span style="border: 1px solid black; padding: 2px;">.....</span>
List any inadequacies	Non

**5- Administrative constraints**

List any difficulties encountered

- Limitation of number of data show in the principal building
- Limitation of number of operating experiments in the laboratory

**6- Student evaluation of the course:**

List any criticisms	Response of course team
1. Laboratory exercises are insufficient	This insufficiency is due to occasional defect in some experiments. More experiments will be added next year
2. Problems with the teaching assistant in exercises	New teacher assistant will be engaged the next academic year.
3. A proposal to extend the subject and lecture it in two successive semesters	The actual content and number of lecturing hours are convenient now, considering the re-determined graduate profile

**7- Comments from external evaluator(s):**      **Response of course team**

**8- Course enhancement:**

Progress on actions identified in the previous year's action plan: None

Action State whether or not completed and give reasons for any non-completion      Non

**9- Action plan for academic year 2012– 2013**

Actions required	Completion date	Person responsible
1. Provide more data show apparatuses		
2. Put more experiments in function in the lab.		

Course coordinator: Prof. Dr. Atef Afifi

Signature:

Date: 25/4/2013

## Annual Course Report For Academic year 2012/2013

### A- Basic Information

- 1- Title and code: **Automation: M573**
- 2- Program(s) on which this course is given: Manufacturing Eng. And production Technology
- 3- Year/Level of program: 5<sup>th</sup> year Manufacturing Technology / 1<sup>st</sup> term
- 4- Unit hours Lectures:  Tutorial:  Practical:  Total:
- 5- Names of lecturers contributing to the delivery of the course:  
Prof. Dr. A.M. Kohail
- Course coordinator: Prof. Dr. A.M. Kohail
- External evaluator: None

### B- Statistical Information

No. of students attending the course: 92

No. of students completing the course: 90

Results:

	No.	%
Passed	89	98.88
Failed	3	3.33

Grading of successful students:

	No.	%
Excellent	19	21.1
Very Good	13	14.4
Good	21	23.3
Pass	34	37.8

### C- Professional Information

#### 3. Course teaching

Topic	Lecture hours	Tutorial hours	Practical hours	Lecturer
• Automation economics	4			Prof. A.Kohail
• Analysis of automated lines	10	4	-	
• Line balancing	2	4	-	
• Assembly lines	6	2	-	
• CNC and robot applications	4	4	2	
• Group technology	6	4	-	
• FMS and prod. cells	4	2	-	
• Linear feed-back control systems	2	2	1	
• PLC applications	6	4	4	
• Sensors types and applications in prod.lines	6	2	2	
• Sequential control applications	6	2	3	
• Applications for automatic filling systems	4	-	3	
• Total hours	60	30	15	

- Topics taught as a percentage of the content specified:  
>90 %  70-90 %  <70%
- Reasons in detail for not teaching any topic: - reduced hours due to extra vacations

2- Teaching and learning methods:

- Lectures: Classical lecturing using the white board
- Practical training/ laboratory: Computer lab. with software
- Seminar/Workshop: None
- Class activity: Solution of Problems
- Case Study: None
- Other assignments/homework: Assignment report each 4 weeks

If teaching and learning methods were used other than those specified, list and give reasons:

None

3- Student assessment:

Method of assessment	Percentage of total
▪ Written examination	100
▪ Oral examination	
▪ Practical/laboratory work	20
▪ Other assignments/class work	10
▪ Mid-Term Exam	20
Total	150

Members of examination committee

Prof. Dr. A.M.Kohail

Role of external evaluator

None

4- Facilities and teaching materials:

- Totally adequate Yes
- Adequate to some extent .....
- Inadequate .....
- List any inadequacies None

5- Administrative constraints

List any difficulties encountered	None
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6- Student evaluation of the course:

List any criticisms

None

Response of course team

None

7- Comments from external evaluator(s):

None

Response of course team

None

8- Course enhancement:

- Progress on actions identified in the previous year's action plan: None
- Action State whether or not completed and give reasons for any non-completion None

9- Action plan for academic year 2012– 2013

Actions required

None

Completion date

Person responsible

None

Course coordinator: Prof. Dr. A.M.Kohail

Signature:

Date: 1/4/2013

## Annual Course Report For Academic year 2012/2013

### A- Basic Information

- 1- **Title and code:** Hydraulic Power System: M578  
 2- **Program(s)** on which this course is given: Manufacturing Eng. and Production Technology BSc Program  
 3- **Year/Level** of program: Fourth Year/Second Semester  
 4- **Credit hours**  
     Total      7hrs      Lectures      3 hrs      Tutorial      2 hrs      Practical      2 hr  
 5- **Names of lecturers** contributing to the delivery of the course: Prof. Dr. M Galal Rabie  
 6- **Course coordinator:** Prof. Dr. M Galal Rabie  
 7- **External evaluator:** Non

### B- Statistical Information

No. of students attending the course:	No.	92	100	%
No. of students completing the course:	No.	91	94.6	%

Results:

	No.	%
Passed	84	92.31
Failed	7	7.60

Grading of successful students:		
Grade	No.	%
Excellent	11	12.09
Very Good	11	12.09
Good	20	21.98
Pass	42	46.15

### C- Professional Information

#### 1 – Course teaching

Topic	Total hours		Lecturers
	Plan.	Actual	
➤ Power systems, classification, operation, and comparison.	4	4	Prof. Dr. M Galal Rabie
➤ Introduction to hydraulic power systems and standard symbols	10	6	
➤ Hydraulic fluids; properties and their effect on the system performance.	4	4	
➤ Hydraulic transmission lines and connectors	10	7	
➤ Hydraulic pumps:	4	4	
• Classification and basic mathematical relations	4	4	
• Gear pumps, vane pumps and piston pumps	4	4	
• Fixed and variable displacement pumps and pump control	4	4	
➤ Control valves	4	4	
• Classification and basic design			
• Pressure control valves (direct/pilot operated); relief valves, pressure reducers, sequence valves and accumulator charging valves	6	5	
• Directional control valves	4	5	
• Flow control valves	4	4	
• Check valves	5	4	
➤ Hydraulic actuators; cylinders, motors and rotary actuators	2	2	
➤ Accessories; accumulators, filters, reservoirs, pressure switches,...etc	4	4	
➤ Small project; design and analysis of the hydraulic system for an industrial application. Analysis of the possible operational problems...	6	5	
<b>Total hours</b>	<b>105</b>	<b>91+12*</b>	

- Topics taught as a percentage of the content specified: >90 %    70-90 %    <70%

\*One additional lecturing hour was added to the teaching time table, which compensated for the disturbance occurring due to the national situation.

- Reasons in detail for not teaching any topic: Non
- If any topics were taught which are not specified, give reasons in detail: Non
- Achieved program intended learning outcomes, ILO's:

Knowledge & Understanding	Intellectual skills	Applied Skills	General transferable skills
a1 to a6	b1 to b3	c1 to c5	d1 to d4

## 2- Teaching and learning methods:

lecture, presentations & movies, discussions & seminars, tutorials, problem solving and self-learning, modeling

If teaching and learning methods were used other than those specified, give reasons: Non

Seminar/Workshop:

The following are two seminars arranged by 8 students and 13 Technical Reports by 66 students:

Seminars

No.	Title	Number of students
1	Using Automation Studio in hydraulic System Design	4
3	Reading data sheets of hydraulic elements	4

## Technical Reports

SN	Title	No. of students
1.	Hydraulic power educational and training sites on the internet	1
2.	Possible applications of hydraulic power systems	2
3.	Roto-dynamic pumps	2
4.	Displacement pumps	3
5.	Control valves, general	3
6.	Pressure control valves	3
7.	Flow rate control valves	2
8.	Directional control valves	3
9.	Check valves and accessories	2
10.	Hydraulic cylinders	3
11.	Hydraulic Motors	5
12.	Hydraulic systems of mobile equipment	1
13.	Hydraulic systems of industrial machines	3

## 3- Student assessment:

Tools	To measure the content of	Time schedule	Grading	%
Mid-Term Exam	a1 to a6, b1 to b3 and c1 to c4	sixth week	15	10
Term papers, quizzes and seminars	a1 to a5, b1 to b3, c1, c2 and c4 and d1 to d4	Bi-weekly	15	10
Practical exams	a3, c1 and c5	Fifteenth week	20	13.3
Written exam	a1 to a6, b1 to b3 and c1 to c4 and d2	Sixteenth week	100	66.7
Total			150	100

Members of examination committee:

Dr. M. Galal RABIE and Dr. Abdelmegid Abdellatif

Role of external evaluator:

Non

## 4- Facilities and teaching materials:

Totally adequate	Yes
Adequate to some extent	
Inadequate	

List any inadequacies:

Non

**5- Administrative constraints (List any difficulties encountered)**

➤ Non

**6- Student evaluation of the course:**

	List any criticisms	Response of course team
(a)	It is recommended to avoid giving two consequent lectures.	The lectured will be separated in the future semester's
(b)	More Numerical exercises are required for better practice and understanding	More exercises and examinations collections will be handed to the students.

**7- Comments from external evaluator(s):**

	Comment	Response of course team
(a)	Non	

**8- Written Exam Evaluation**

- The exam level is practically convenient, considering the percentage of success.
- High success in Questions 1 and 2 indicate good understanding of the course fundamentals. It may be attributed to the continuous revision of these topics during the semester, as they are lectured at the semester beginning.
- Low success percentage in question 3 implies the need to revise the teaching and learning activity topics lectured at the semester last weeks. Moreover it is necessary to develop new plans to encourage the students, or oblige them, to attend the last term activities considering the low attendance (53% only in the 11<sup>th</sup> week as shown by the following figure).
- Low success percentage in question 4 may be attributed to a problem of the majority of students with English language.
- The whole exam result shows considerable weakness hand sketching and in report writing and English language level. It is recommended to search for solutions to these persisting problems.

**9- Course enhancement:**

Progress on actions identified in the previous year's action plan. State whether or not completed and give reason for any non-completion:

Actions required	Planned Completion date	Accomplishment
Non		

**9- Action plan for academic year 2013 – 2014**

Actions required	Completion date	Person responsible
Avoid planning two consequent lectures.	September 2013	Department chairman
Add more numerical exercises for better practice and understanding	September 2013	Prof. Dr M Galal Rabie

Course coordinator: Prof. Dr M Galal Rabie

Signature:

Date: September 24, 2013



## Annual Course Report 2012/ 2013

### A- Basic Information

- 1- Title and code: M580: Production Planning & Control
- 2- Program(s) on which this course is given: Manufacture Eng. & Production Technology.
- 3- Year/Level of program: 5<sup>th</sup> year Manufacturing technology / 1<sup>st</sup> term
- 4- Unit hours Lectures 2 hrs Tutorial 2 hrs Practical --- Total 4 hrs
- 5- Names of lecturers contributing to the delivery of the course: Prof. Dr. M. Merdan  
Course coordinator: Prof. Dr. M. Merdan  
External evaluator: None

### B- Statistical Information

No. of students attending the course: 92 100%  
No. of students completing the course: 91 99%

Results:

	No.	%
Passed	90	98.90
Failed	1	1.10

Grading of successful students:

	No.	%
Excellent	15	16.50
Very Good	22	34.20
Good	27	29.70
Pass	26	28.60

### C- Professional Information

#### 1 – Course teaching

Topic	Lecture hours	Tutorial hours	Practical hours	Lecturer
Functions within business organizations, management processes, productivity, competitiveness, and strategy	2	2		Prof. Dr. M. Merdan
Forecasting techniques, seasonality, accuracy, and control	4	4		
Aggregate planning, and materials requirement plan (MRP),	4	4		
Assignment and manufacture scheduling techniques,	4	4		
Work systems design,	4	4		
Choice of site location, facilities selection and layout techniques.	4	4		
Quality definitions and control techniques,	4	4		
Inventory management principles and controlling models,	4			
Total	30	30		

- Topics taught as a percentage of the content specified:  

>90 %
70-90 %
80%
<70%
- Reasons in detail for not teaching any topic None.
- If any topics were taught which are not specified, give reasons in detail None

#### 2- Teaching and learning methods:

- Lectures: Classical lecturing using the white board
- Practical training/ laboratory: None
- Seminar/Workshop:
- Class activity: Solving managerial problems that might face operations managers in planning and control business organizations.
- Case Study: view case studies were been used

- Other assignments/homework: solution of managerial problems were been assigned and given as home works
- If teaching and learning methods were used other than those specified, list and give reasons: None

3- Student assessment:

▪ Method of assessment	Percentage of total
▪ Written examination	<span style="border: 1px solid black; padding: 2px;">70%</span>
▪ Oral examination	
▪ Practical/laboratory work	
▪ Other assignments/class work	<span style="border: 1px solid black; padding: 2px;">10%</span>
▪ Mid-Term Exam	<span style="border: 1px solid black; padding: 2px;">20 %</span>
Total	100 %

Members of examination committee

Prof. Dr. M. Merdan

Role of external evaluator

None

4- Facilities and teaching materials:

- Totally adequate Yes
- Adequate to some extent
- Inadequate
- List any inadequacies

5- Administrative constraints

List any difficulties encountered

Improper timing of teaching operations research (OR) course. OR course is a prerequisite to this course and should be taught by a qualified mathematician before teaching this course.

6- Student evaluation of the course:

List any criticisms  
None

Response of course team

7- Comments from external evaluator(s):  
None

Response of course team  
None

8- Course enhancement:

- Progress on actions identified in the previous year's action plan: None
- Action State whether or not completed and give reasons for any non-completion: Completed

9- Action plan for academic year 2013 – 2014

Actions required

Completion date

Person responsible

None

None

Course coordinator: Prof. Dr. M. Merdan

Signature: M. Merdan

Date: 6/11/2013

## Annual Course Report 2012/2013

### A- Basic Information

- 1- Title and code: (M598) Reports  
 2- Program(s) on which this course is given: Manufacturing Eng. and Production Technology  
 3- Year/Level of program: Fifth Year Man. Eng. & Prod. Technology.  
 4- Unit hours Lectures  Total   
 5- Names of lecturers contributing to the delivery of the course  
     Dr. Elsayed kamar  
     Course coordinator Dr. Elsayed kamar  
     External evaluator: None

### B- Statistical Information

No. of students attending the course: No.	<input type="text" value="92"/>	%	<input type="text" value="100"/>
No. of students completing the course: No.	<input type="text" value="90"/>	%	<input type="text" value="98"/>
<b>Results:</b>			
	No.	%	
Passed	89	98.9	
Failed	1	1.1	
<b>Grading of successful students:</b>			
	No.	%	
Excellent	12	13.5	
Very Good	16	18.0	
Good	21	23.6	
Pass	40	44.9	

### C- Professional Information

#### 1 – Course teaching

Topic Actually taught	No. of hours	Lecturer
• Introduction	2	Dr. Elsayed kamar
• Report	4	
• Typing instruction	4	
• References	4	
• Writing common engineering documents	4	
• Curriculum vitae (CV) and resume	4	
• Graduation projects	6	
<b>Total hours</b>	<b>28</b>	

Topics taught as a percentage of the content specified:

>90 %  70-90 %  <70%

Reasons in detail for not teaching any topic. The term actually was 12 weeks as during the last three weeks practical exams and revisions were carried out.

If any topics were taught which are not specified, give reasons in detail None

2- Teaching and learning methods:

Lectures: Classical lecturing using the white board

Practical training/ laboratory:

Seminar/Workshop: None

Class activity:

Case Study: None

Other assignments/homework: Writing a report and a resume

If teaching and learning methods were used other than those specified, list and give reasons:

None

3- Student assessment:

Method of assessment	Percentage of total
Written examination	70 %
Oral examination	----
Practical/laboratory work	----
Other assignments/class work	30 %
Total	100 %

Members of examination committee Dr. Elsayed kamar

Role of external evaluator None

4- Facilities and teaching materials:

Totally adequate	Yes
Adequate to some extent	.....
Inadequate	.....
List any inadequacies	Non

5- Administrative constraints

List any difficulties encountered  
None

6- Student evaluation of the course:

List any criticisms Response of course team  
None

7- Comments from external evaluator(s): Response of course team

None

8- Course enhancement:

Progress on actions identified in the previous year's action plan: None

Action State whether or not completed and give reasons for any non-completion None

9- Action plan for academic year 2013 – 2014

Actions required	Completion date	Person responsible
None		

Course coordinator: Dr. Elsayed kamar

Signature:

Date: 1/8/2013

## Annual Course Report 2012/2013

### A- Basic Information

1. **Title and code:** (B512) Laws and Regulation for Engineers
2. **Program(s)** on which this course is given: Man. Eng. & Prod. Tech. Dept.
3. **Year/Level** of program: 5<sup>th</sup> year, 2<sup>nd</sup> Term
4. **Unit hours** Lectures  Tutorial  Practical  Total
5. **Names of lecturers** contributing to the delivery of the course  
Course coordinator Prof. Dr. Shaban Ragab Gouda.  
External evaluator:- Non

### B- Statistical Information

No. of students attending the course: No. 92 %   
No. of students completing the course: No. 91 %

Results:

	No.	%
Passed	89	97.8
Failed	2	2.2

Grading of successful students:

	No.	%
Excellent	19	20.9
Very Good	25	27.5
Good	21	23.1
Pass	24	26.4

### C- Professional Information

#### 1 – Course teaching

Topic Actually taught	No. of hours	Lecturer
● مصطلحات ومفاهيم قانونيه	0	Prof. Dr> S.R. Gouda
● التشريعات الصناعيه المصريه	0	
● قوانين وتشريعات اعمال البناء والتخطيط العمرانى	0	
● قوانين وتشريعات بنيه لحمايه البيئه المصريه	0	
● المناقصات والعطاءات	0	
● قانون تنظيم المناقصات والمزايدات	0	
● العقود الهندسيه المحليه	0	
● العقود الهندسيه الدوليه	0	
● المطالبات والتحكيم	0	
<b>Total hours</b>	<b>45</b>	

Topics taught as a percentage of the content specified:

>90 % ☒ 70-90 % ☐ <70% ☐

Reasons in detail for not teaching any topic: Non

#### 2- Teaching and learning methods:

Lectures:

Practical training/ laboratory:

Seminar/Workshop:

Class activity:

Case Study:

Other assignments/homework:

If teaching and learning methods were used other than those specified, list and give reasons:

Non

**3- Student assessment:**

Method of assessment	Percentage of total
Written examination	70 %
Oral examination	-
Practical/laboratory work	- %
Other assignments/class work	10 %
Mid-Term Exam	20 %
Total	100 %
Members of examination committee	Prof. Dr. S. R. Gouda
Role of external evaluator	Non

**4- Facilities and teaching materials:**

Totally adequate	Yes
Adequate to some extent	100%
Inadequate	-
List any inadequacies	Non

**5- Administrative constraints**

List any difficulties encountered

➤ Non

**6- Student evaluation of the course:**

Non

Response of course team

Non

**7- Comments from external evaluator(s):**

Non

Response of course team

Non

**8- Course enhancement:**

Progress on actions identified in the previous year's action plan:

Action State whether or not completed and give reasons for any non-completion Non

**9- Action plan for academic year 2011– 2012**

Actions required  
Non

Completion date  
Nov.2012

Person responsible  
Non

Course coordinator: Prof. Dr S. R. Gouda

Signature:

Date: Nov.2012

## Annual Course Report 2012/2013

### A- Basic Information

- 1- Title and code: (B572) Pollution and Society.  
 2- Program(s) on which this course is given: Manufacturing Eng. and Prod. Technology  
 3- Year/Level of program: Fifth Year (Man. E)  
 4- Unit hours: Lectures  Tutorial  Practical  Total   
 5- Names of lecturers contributing to the delivery of the course  
     Dr. Shaaban R. Gouda  
     Course coordinator Dr. Shaaban R. Gouda  
     External evaluator: None

### B- Statistical Information

No. of students attending the course: No.  %   
 No. of students completing the course: No.  %

Results:

	No.	%
Passed	90	100
Failed	0	0

Grading of successful students:

	No.	%
Excellent	38	42.2
Very Good	23	25.6
Good	17	18.9
Pass	11	12.2

### C- Professional Information

#### 1 – Course teaching

Topic Actually taught	No. of hours	Lecturer
• The concept of ecosystem	4	Dr. Shaaban R. Gouda
• Population growth and environment.	4	
• Air pollution	5	
• Water Pollution	3	
• Noise pollution	4	
• Solid wastes	4	
• Environmental Impact assessment and the Egypt law No.	4	
• Final revision	2	
<b>Total hours</b>	<b>30</b>	

Topics taught as a percentage of the content specified:

>90 %  70-90 %  <70%

Reasons in detail for not teaching any topic None

If any topics were taught which are not specified, give reasons in detail None

#### 2- Teaching and learning methods:

Lectures:

Practical training/ laboratory:

Seminar/Workshop:

Class activity: Some assignments.

Case Study: Selected case studies

Other assignments/homework: Bi-Weekly assignments

If teaching and learning methods were used other than those specified, list and give reasons:  
None

### 3- Student assessment:

Method of assessment	Percentage of total
Written examination	70 %
Oral examination	----
Practical/laboratory work	----
Other assignments/class work	10 %
Mid-Term Exam	20 %
Total	100 %

Members of examination committee Dr. Shaaban Ragab Gouda,

Role of external evaluator None

### 4- Facilities and teaching materials:

Totally adequate	Yes
Adequate to some extent	.....
Inadequate	.....
List any inadequacies	None

### 5- Administrative constraints

List any difficulties encountered None

### 6- Student evaluation of the course:

List any criticisms	Response of course team
- None	- None

7- Comments from external evaluator(s): Response of course team  
None

### 8- Course enhancement:

Progress on actions identified in the previous year's action plan:

Action State whether or not completed and give reasons for any non-completion None

### 9- Action plan for academic year 2013– 2014

Actions required	Completion date	Person responsible
None	None	None

Course coordinator: Dr. Shaaban R. Gouda

Signature:

Date: 1/11/2013



## Annual Course Report 2012/2013

### A- Basic Information

- 1- **Title and code:** (M576) Computer Integrated Manufacturing
- 2- Program(s) on which this course is given: Production Engineering and manufacturing Technology
- 3- Year/Level of program: 5<sup>th</sup> Year
- 4- Unit hours      Lectures       Tutorial       Practical       Total
- 5- Names of lecturers contributing to the delivery of the course  
     Prof. Dr. Atef Afifi  
     Course coordinator Prof. Dr. Atef Afifi  
     External evaluator

### B- Statistical Information

No. of students attending the course:	No. <input type="text" value="92"/>	% <input type="text" value="100"/>
No. of students completing the course:	No. <input type="text" value="90"/>	% <input type="text" value="100"/>
Results:		
	No.	%
Passed	85	94.4
Failed	5	5.5
Grading of successful students:		
	No.	%
Excellent	14	15.6
Very Good	17	18.9
Good	21	23.3
Pass	33	36.7

### C- Professional Information

#### 1 – Course teaching

Topic Actually taught	No. of hours	Lecturer
Fundamentals of CIM	2	Prof. Dr. Atef Afifi
Material Handling Systems	8	
Automatic Guided vehicles	6	
Robotics	18	
Flexible Manufacturing systems	10	
Adaptive control of manufacturing systems (FMS)	6	
On-Line Monitoring	6	
Just-In-Time (JIT)	6	Prof. Dr. Atef Afifi
Direct Numerical Control (DNC)	2	
Part programming using different controller	16	
Computer aided part programming	18	
<b>Total hours</b>	<b>98</b>	

Topics taught as a percentage of the content specified:

>90 %       70-90 %       <70%

Reasons in detail for not teaching any topic    Non

If any topics were taught which are not specified, give reasons in detail Non

#### 2- Teaching and learning methods:

Lectures:

Practical training/ laboratory:

Seminar/Workshop:

Class activity:

Numerical exercises; solution of problems by computer and data show, using computer programs; MATLAB, SIMULINK and CODAS.

Case Study:

Other assignments/homework:

If teaching and learning methods were used other than those specified, list and give reasons:

Non

### 3- Student assessment:

Method of assessment	Percentage of total
Oral examination	----
Final examination	<input type="text" value="66.7 %"/>
Practical	<input type="text" value="13.3 %"/>
Other assignments/class work	<input type="text" value="10%"/>
Mid-Term Exam	<input type="text" value="10%"/>
Total	

Members of examination committee Prof. Dr. Atef Afifi

Role of external evaluator Non

### 4- Facilities and teaching materials:

Totally adequate	<input type="text" value="Yes"/>
Adequate to some extent	<input type="text" value="....."/>
Inadequate	<input type="text" value="....."/>
List any inadequacies	Non

### 5- Administrative constraints

List any difficulties encountered

- Limitation of number of data show in the principal building
- Limitation of number of operating experiments in the laboratory

### 6- Student evaluation of the course:

List any criticisms

1. Laboratory exercises are insufficient
2. Problems with the teaching assistant in exercises
3. A proposal to extend the subject and lecture it in two successive semesters

Response of course team

This insufficiency is due to occasional defect in some experiments. More experiments will be added next year  
 New teacher assistant will be engaged the next academic year.

The actual content and number of lecturing hours are convenient now, considering the re-determined graduate profile

7- Comments from external evaluator(s): Response of course team

### 8- Course enhancement:

Progress on actions identified in the previous year's action plan: None

Action State whether or not completed and give reasons for any non-completion Non

9- Action plan for academic year 2013 – 2014

Actions required		Completion date	Person responsible
1. Provide more data show apparatuses			
2. Put more experiments in function in the lab.			
Course coordinator:	Prof. Dr. Atef Afifi		
Signature:			
Date:	25/7/2013		



- Practical training/ laboratory:
- Seminar/Workshop:
- Class activity:
- Case Study:
- Other assignments/homework:

If teaching and learning methods were used other than those specified, list and give reasons:  
 None

**3- Student assessment:**

Method of assessment	Percentage of total
▪ Written examination	<input type="text" value="40"/>
▪ Oral examination	
▪ Practical/laboratory work	
▪ Other assignments/class work	<input type="text" value="20"/>
▪ Mid-Term Exam	<input type="text" value="20"/>
Total	100 %

Members of examination committee  
 Role of external evaluator

Prof. Dr. A.M.Kohail  
 None

**4- Facilities and teaching materials:**

- Totally adequate
- Adequate to some extent
- Inadequate
- List any inadequacies

**5- Administrative constraints**

List any difficulties encountered	<input type="text" value="None"/>
-----------------------------------	-----------------------------------

**6- Student evaluation of the course:**

List any criticisms  
 None

Response of course team  
 None

7- Comments from external evaluator(s):  
 None

Response of course team  
 None

**8- Course enhancement:**

- Progress on actions identified in the previous year's action plan: None
- Action State whether or not completed and give reasons for any non-completion: None

**9- Action plan for academic year 2011 – 2012**

Actions required  
 None

Completion date

Person responsible  
 None

Course coordinator: Prof. Dr. A.M.Kohail

Signature:

Date: 1/8/2012

## Annual Course Report 2012/2013

### A- Basic Information

- 1- Title and code: Modeling & Simulation (Elective II): M580a
- 2- Program(s) on which this course is given: Manufacturing Eng. And production Technology
- 3- Year/Level of program: 5<sup>th</sup> year Manufacturing Technology / 2<sup>nd</sup> term
- 4- Unit hours Lectures:  Tutorial:  Practical:  Total:
- 5- Names of lecturers contributing to the delivery of the course:  

Course coordinator:

Prof. Dr. Bakr M. Rabeeh

External evaluator:

None

### B- Statistical Information

No. of students attending the course:		92				
No. of students completing the course:		90				
Results:	No.	%	Grading of successful students:			
Passed	85	94.5			No.	%
Failed	5	5.5		Excellent	21	23.3
				Very Good	13	14.4
				Good	11	12.2
				Pass	40	44.4

### C- Professional Information

#### 6- Course teaching

Topic	Lecture hours	Tutorial hours	Practical hours
• Continuous and Discrete system simulation	2	-	
• Development of simulation models	6	6	
• Random number generation	4	4	
• Model Validation, and analysis of model output	4	4	
• Impact of nonlinearity and transient behavior	4	4	
• Dynamic system analysis	4	4	
• Application of simulation packages.	4	6	
• Revision	2	2	
Total hours	30	30	

Topics taught as a percentage of the content specified:

>90 %  70-90 %  <70%

- Reasons in detail for not teaching any topic: - reduced hours due to extra vacations

#### 2- Teaching and learning methods:

- Lectures:
- Practical training/ laboratory:
- Seminar/Workshop:
- Class activity:
- Case Study:
- Other assignments/homework:

If teaching and learning methods were used other than those specified, list and give reasons:  
 None

**3- Student assessment:**

Method of assessment	Percentage of total
▪ Written examination	<input type="text" value="70"/>
▪ Oral examination	
▪ Practical/laboratory work	10
▪ Other assignments/class work	<input type="text" value="20"/>
▪ Mid-Term Exam	
Total	100 %

Members of examination committee  
 Role of external evaluator

Prof. Dr. Bakr M. Rabeeh  
 None

**4- Facilities and teaching materials:**

▪ Totally adequate	<input type="text" value="Yes"/>
▪ Adequate to some extent	<input type="text" value="....."/>
▪ Inadequate	<input type="text" value="....."/>
▪ List any inadequacies	None

**5- Administrative constraints**

List any difficulties encountered	None
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**6- Student evaluation of the course:**

List any criticisms  
 None

Response of course team  
 None

7- Comments from external evaluator(s):  
 None

Response of course team  
 None

**8- Course enhancement:**

- Progress on actions identified in the previous year's action plan: None
- Action State whether or not completed and give reasons for any non-completion None

**9- Action plan for academic year 2012 – 2013**

Actions required

Completion date

Person responsible

None

None

Course coordinator: Prof. Dr. Bakr M. Rabeeh

Signature:

Date: 1/8/2013





2- Teaching and learning methods:

- Lectures: Classical lecturing using the white board
- Practical training/ laboratory: EDM machine
- Seminar/Workshop: None
- Class activity: Solution of problems
- Case Study: Non-traditional machining methods
- Other assignments/homework: Assignment report each 4 weeks

If teaching and learning methods were used other than those specified, list and give reasons:

None

3- Student assessment:

Method of assessment	Points of total
▪ Written examination	100
▪ Oral examination	
▪ Practical/laboratory work	20
▪ Other assignments/class work	10
▪ Mid-Term Exam	20
<b>Total</b>	<b>150</b>

Members of examination committee

Prof. Dr.A.M.Kohail

Role of external evaluator

None

4- Facilities and teaching materials:

- Totally adequate Yes
- Adequate to some extent
- Inadequate
- List any inadequacies None

5- Administrative constraints

List any difficulties encountered

None

6- Student evaluation of the course:

List any criticisms

None

Response of course team

None

7- Comments from external evaluator(s):

None

Response of course team

None

8- Course enhancement:

- Progress on actions identified in the previous year's action plan: None
- Action State whether or not completed and give reasons for any non-completion  
None

9- Action plan for academic year 2012 – 2013

Actions required

Completion date

Person responsible

None

Course coordinator: Prof. Dr. A.Kohail

Signature:

Date: 1/8/2013



Topics taught as a percentage of the content specified:

>90 %  70-90 %  <70%

Reasons in detail for not teaching any topic

If any topics were taught which are not specified, give reasons in detail

## 2- Teaching and learning methods:

Lectures:

Practical training/ laboratory:

Seminar/Workshop:

Class activity:

Case Study:

Other assignments/homework:

If teaching and learning methods were used other than those specified, list and give reasons:

## 3- Student assessment:

Method of assessment	Percentage of total
Written examination	<input type="text" value="-----%"/>
Oral examination	25%
Practical/laboratory work	25%
Other assignments/class work	<input type="text" value="50 %"/>
Mid-Term Exam	<input type="text" value="----"/>
Total	100 %

Members of examination committee

Role of external evaluator

## 4- Facilities and teaching materials:

Totally adequate	<input type="text" value="Yes"/>
Adequate to some extent	<input type="text" value="....."/>
Inadequate	<input type="text" value="....."/>
List any inadequacies	<input type="text" value="None"/>

## 5- Administrative constraints

List any difficulties encountered

## 6- Student evaluation of the course:

List any criticisms	Response of course team
- Neither the number of students was equal nor their grades in different projects.	- Some actions will be considered to overcome these cases.

## 7- Comments from external evaluator(s):

Response of course team

## 8- Course enhancement:

Progress on actions identified in the previous year's action plan:

Action State whether or not completed and give reasons for any non-completion

9- Action plan for academic year 2013 – 2014

Actions required

None

Completion date

Person responsible

**Course coordinator:** Dr. Abdelmagid A. Abdalla

**Signature:**

**Date:** 1/11/2013

