

# Manufacturing Engineering and Production Technology B.Sc.

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## Program Report

2010-2011

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# Manufacturing Engineering and Production Technology PROGRAM REPORT November 2011

## 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:** Prof. Dr. Abdel Nasser Zayed.
- 5- **Year of operation:** 2002-2003

### 1.2 External Evaluators:

- **Prof. Dr. Tawfik Tawfik M. El-Nadi:** Professor of Production Engineering, Production Engineering and Machine 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

##### 1) First Evaluator

Reviewer Comment	Coordinator Response
<ul style="list-style-type: none"> <li>➤ The basic information included is accurate, specific and consistent with the rest of the program specifications.</li> <li>➤ The program has a designated coordinator/coordinating team.</li> </ul>	<ul style="list-style-type: none"> <li>➤ Basic information listed is according to the decree no. 2003 dated 25/10/2000 and modified by the ministerial decree no. 296 dated 5/3/2002.</li> <li>➤ The program coordinator and the coordinating team has been chosen by the dept. council.</li> </ul>

##### 2) Second Evaluator

Reviewer Comment	Coordinator Response
<ul style="list-style-type: none"> <li>➤ The basic information included is</li> </ul>	<ul style="list-style-type: none"> <li>➤ Basic information listed is according to the decree</li> </ul>

accurate, specific and consistent with the rest of the program specifications. ➤ The program has a designated coordinator/coordinating team.	no. 2003 dated 25/10/2000 and modified by the ministerial decree no. 296 dated 5/3/2002. ➤ The program coordinator and the coordinating team have been chosen by the dept. council.
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## 2. Professional Information

### 2.1 Statistics

- 1-No. of students starting the program at 2007-2008 was 143 (students accepted in the Academy the academic year 2006-2007 were 1314 students with a ratio 10.88 %)
- 2-Ratio of students` attending the program in 2010-2011 to those of accepted in the Academy the academic year 2006-2007:  $103/1314 = 7.84 \%$
- 3-No. and percentage of students passing in each year for the students graduated in 2011

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	2007-2008	143	96	67.13 %
Third	2008-2009	117	92	78.63 %
Fourth	2009-2010	108	96	88.88 %
Fifth	2010-2011	103	89	86.4 %

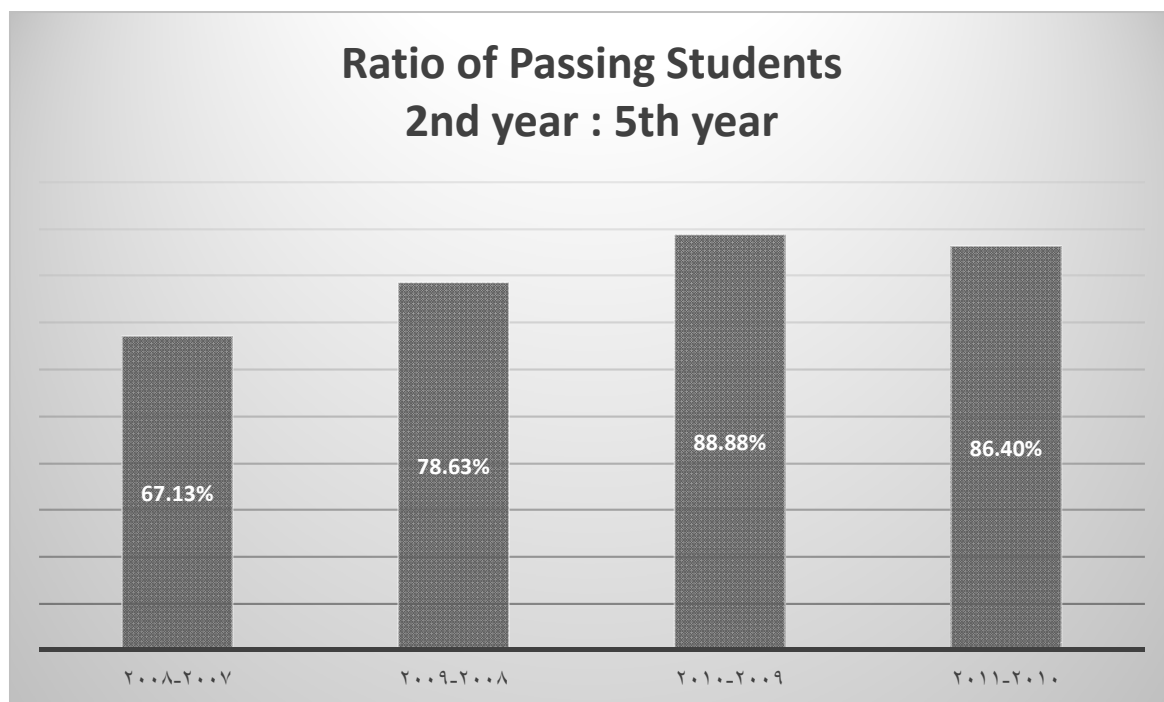


Figure (1): Ratio of students (graduated in 2011) passing in each year/level/semester

4- No. of students completing the program and as a percentage of those who started:  
 $89 / 143 = 62.24 \%$

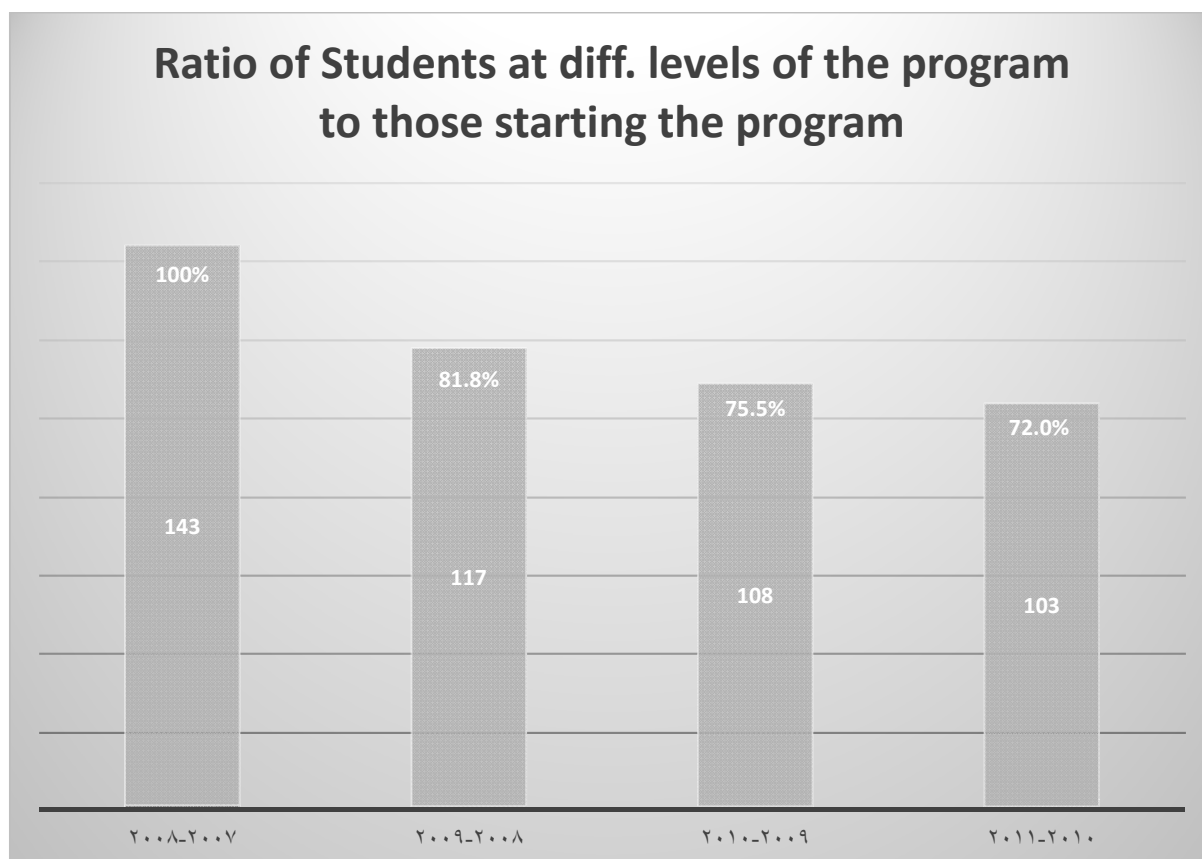


Figure (2): No. of students completing the program and as a percentage of those who started

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
<b>2<sup>nd</sup> year 2007-2008</b>	143	9	16	16	55	47
%	100%	6.3 %	11.19 %	11.19 %	38.5%	32.78 %
<b>3<sup>rd</sup> year 2008-2009</b>	117	14	9	20	49	25
%	100%	12 %	7.79 %	17.09 %	41.86 %	12.37 %
<b>4<sup>th</sup> year 2009-2010</b>	108	7	23	16	50	12
%	100%	6.5 %	21.3 %	14.8 %	46.33 %	11.11 %
<b>5<sup>th</sup> year 2010-2011</b>	103	6	23	20	49	5
%	100%	5.8 %	22.33 %	19.4 %	47.57 %	4.85 %

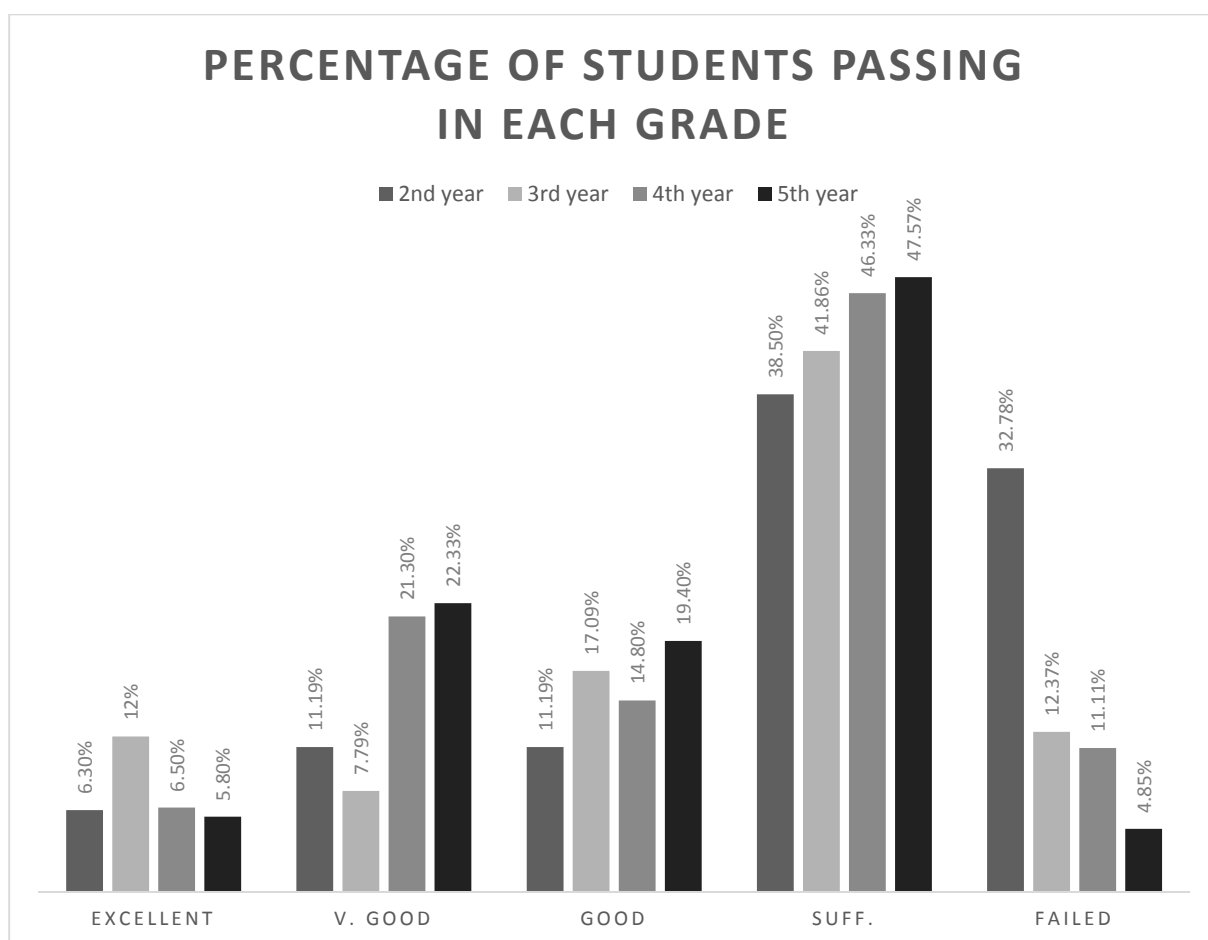


Figure (3): percentage of students passing in each grade

Academic year	Number	Percentage
students joining the program on Sept 2010	103	100%
students completing the program at May 2011	76	73.73%
students completing the program at Nov 2011	22	15.9%
Total Number of students completing the program at 2011	98	95.1%

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 2010-2011 (103 students)	6	5.8	23	22.33	20	19.4	49	47.56	5	4.9

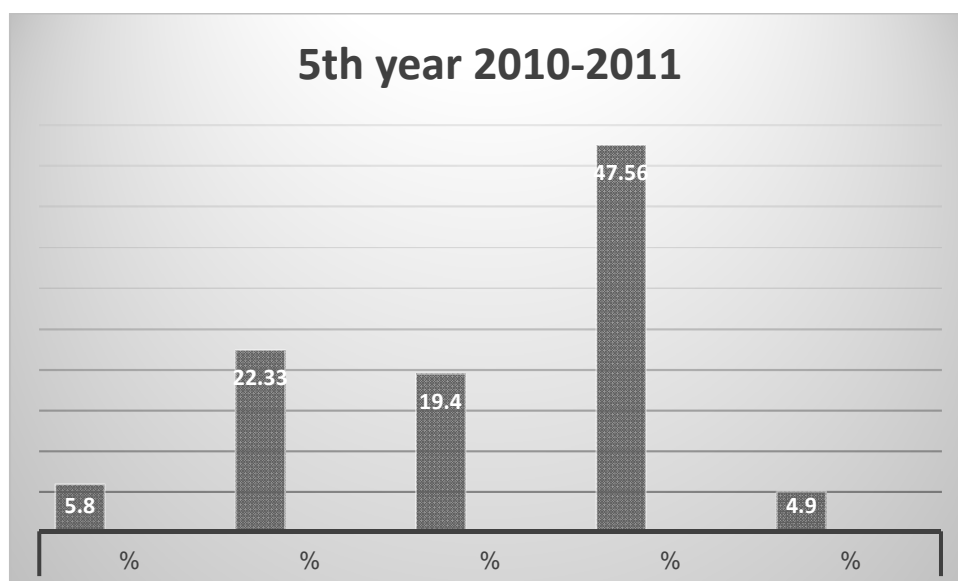


Figure (4): No. and percentage of students passing in each grade 5<sup>th</sup> year

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**

Reviewer Comment	Coordinator Response
<p>➤ <b>Program Aims</b></p> <ul style="list-style-type: none"> <li>- The aims are consistent with the degree awarded by completion of the program.</li> <li>- The program aims are clearly stated.</li> <li>- The aims specify the most important knowledge skills and attitudes students should gain after completing the program.</li> </ul>	<p>➤ The aims of the program were agreed upon by the department council.</p>

**2) Second Evaluator**

Reviewer Comment	Coordinator Response
<p>➤ <b>Program Aims</b></p> <ul style="list-style-type: none"> <li>- The aims are consistent with the degree awarded by completion of the program.</li> <li>- The program aims are clearly stated.</li> <li>- The aims specify the most important knowledge skills and attitudes students should gain after completing the program.</li> </ul>	<p>➤ The aims of the program were agreed upon by the department council.</p>

**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**

Reviewer Comment	Coordinator Response
<p>➤ <b>Intended Learning Outcomes (ILOs)</b></p> <ul style="list-style-type: none"> <li>- The program ILO's are clearly stated.</li> <li>- The program ILO's are appropriately coded.</li> <li>- Consistent with the program aims.</li> <li>- Program ILO's are adequately fulfilled by the program courses.</li> <li>- Cover the minimum requirements in accordance with the awarded degree in terms of : Knowledge, Professional &amp; Practical skills, Intellectual capabilities, and General and transferable skills.</li> <li>- Program ILO's cope with recent advances in the field of specialty.</li> </ul> <p>➤ <b>Academic Standard</b></p> <ul style="list-style-type: none"> <li>- The academic standards of the program are clearly stated.</li> <li>- The reference standards used as a benchmark are specified.</li> <li>- The degree to which the academic standards of the program measure up to the specified benchmark * they fall below it).</li> </ul>	<p>➤ The department adopted the NARS as the academic reference standard and considered the NARS intended learning outcomes as the program ILO's. Moreover, the courses ILO's are stated in detail in the courses specifications. They agree, in general, with the program ILO's</p> <p>➤ The department adopted the NARS standard as a reference academic standard.</p>

<p>➤ <b>Curriculum Structure and Contents</b></p> <p>✓ Program duration</p> <ul style="list-style-type: none"> <li>- The minimum duration specified is adequate to fulfill the program activities &amp; objectives.</li> </ul> <p>✓ Program Structure</p> <ul style="list-style-type: none"> <li>- The number of hours required to complete the program are specified and adequate.</li> <li>- Distribution of the hours as compulsory, elective, and optional is acceptable.</li> <li>- The following areas are adequately covered in the program (Social sciences and humanities, Basic science course. Specialized courses. Practical/Field training).</li> <li>- No other courses should be included in the program.</li> </ul>	<p>➤ The duration of the program has been determined according to NARS standard. Also the number of hours and their distribution to different areas are according to NARS.</p>
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## 2) Second Evaluator

Reviewer Comment	Coordinator Response
<p>➤ <b>Intended Learning Outcomes (ILOs)</b></p> <ul style="list-style-type: none"> <li>- The program ILO's are clearly stated.</li> <li>- The program ILO's are appropriately coded.</li> <li>- Consistent with the program aims.</li> <li>- The program ILO's are adequately fulfilled by the program courses.</li> <li>- Cover the minimum requirements in accordance with the awarded degree in terms of : Knowledge, Professional &amp; Practical skills, Intellectual capabilities, and General and transferable skills.</li> <li>- The program ILO's cope with recent advances in the field of specialty.</li> </ul> <p>➤ <b>Academic Standard</b></p> <ul style="list-style-type: none"> <li>- The academic standards of the program are clearly stated.</li> <li>- The reference standards used as a benchmark are specified.</li> <li>- The degree to which the academic standards of the program measure up to the specified benchmark * they fall below it).</li> </ul> <p>➤ <b>Curriculum Structure and Contents</b></p> <p>✓ Program duration</p> <ul style="list-style-type: none"> <li>- The minimum duration specified is adequate to fulfill the program activities &amp; objectives.</li> </ul> <p>✓ Program Structure</p> <ul style="list-style-type: none"> <li>- The number of hours required to complete the program are specified and adequate.</li> <li>- Distribution of the hours as compulsory, elective, and optional is acceptable.</li> <li>- The following areas are adequately covered in the program (Social sciences and humanities, Basic science course. Specialized courses. Practical/Field training).</li> <li>- No other courses should be included in the program.</li> </ul>	<p>➤ The department adopted the NARS as the academic reference standard and considered the NARS intended learning outcomes as the program ILO's. Moreover, the courses ILO's are stated in detail in the courses specifications. They agree, in general, with the program ILO's</p> <p>➤ The department adopted the NARS standard as a reference academic standard.</p> <p>➤ The duration of the program has been determined according to NARS standard. Also the number of hours and their distribution to different areas are according to NARS.</p>

### 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

Reviewer Comment	Coordinator Response
<ul style="list-style-type: none"> <li>➤ The program admission requirements are clearly specified and matching the school bylaws.</li> <li>➤ The regulation for progression and program completion are clearly specified and matching the school bylaws.</li> <li>➤ The methods used for program evaluation are adequate.</li> </ul>	<ul style="list-style-type: none"> <li>➤ The program admission requirements have been applied according to the law No. 52 of 1970, on the organization of private colleges and institutes regulations issued Ministerial Resolution No. 1088 for the year 1987 and amended decisions.</li> <li>➤ Methods used to evaluate the program are student questionnaire, external reviewers, and stakeholders' comments.</li> </ul>

##### 2) Second Evaluator

Reviewer Comment	Coordinator Response
<ul style="list-style-type: none"> <li>➤ The program admission requirements are clearly specified and matching the school bylaws.</li> <li>➤ The regulation for progression and program completion are clearly specified and matching the school bylaws.</li> <li>➤ The methods used for program evaluation are adequate.</li> </ul>	<ul style="list-style-type: none"> <li>➤ The program admission requirements have been applied according to the law No. 52 of 1970, on the organization of private colleges and institutes regulations issued Ministerial Resolution No. 1088 for the year 1987 and amended decisions.</li> <li>➤ Methods used to evaluate the program are student questionnaire, external reviewers, and stakeholders' comments.</li> </ul>

### 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**

Reviewer Comment	Coordinator Response
<ul style="list-style-type: none"> <li>➤ There are some courses, course notes, required books, , and recommended books not specified or no published date ( ex A060)</li> <li>➤ There is a new edition for the following courses: B112, B131, B132, B211</li> <li>➤ Course B202 "History of Science &amp; Technology" does not include in program sheets. It is Core University.</li> <li>➤ For many books published dates are required.</li> <li>➤ Required books &amp; recommended books must be updated.</li> <li>➤ Published years M360 No references Please see page 358</li> <li>➤ M310&amp; M481 ( Repetition of process of programming of CNC machines)</li> <li>➤ General Note: A lot of books and references should be updated.</li> </ul>	<ul style="list-style-type: none"> <li>➤ Course notes have been added to the course specifications.</li> <li>➤ The mentioned courses are basic science courses; new editions will be added.</li> <li>➤ It is included in page 249.</li> <li>➤ Publishing dates have been added to some books.</li> <li>➤ Updating of references will be carried out.</li> <li>➤ References will be added.</li> <li>➤ The repetitions of some topics are determined and will be corrected at the first chance of correction of the academy regulations.</li> </ul>

**2) Second Evaluator**

Reviewer Comment	Coordinator Response
<ul style="list-style-type: none"> <li>➤ Minor errors found in marking and hours (Pages 12, 13, 14, 237 240, 246, 268, and 277).</li> <li>➤ No need for appendix 3, no added values by this appendix all information included is found in summary, Appendix 4 It is recommended to remove this part from document.</li> <li>➤ Course M400 specifications not included, also the distribution of hours.</li> <li>➤ ILO s of some courses needs to be revised such as B102, B200, B202, B300, B311, E030, and E051.</li> <li>➤ Student's assessment/ILOs matrix in some courses should be corrected (Pages 222, 228, 231, 241, 250, 256, 289, 337, and 379).</li> <li>➤ Student assessment methods are wrong in most of the courses and needed to be revised.(marked in documents).</li> <li>➤ Verbs used to describe ILO's need to be revised ( marked in documents)</li> <li>➤ Facilities required for teaching and learning in many courses need to be completed.</li> <li>➤ Recommended books and required one need to be completed.</li> </ul>	<ul style="list-style-type: none"> <li>➤ The minor errors in pages 12, 13, 14 have been corrected, but in the other mentioned pages, no errors have been noticed.</li> <li>➤ The contents of the program specifications are determined by NARS.</li> <li>➤ The course specification will be added.</li> <li>➤ ILO's have been revised for all courses.</li> <li>➤ The errors which have been found in student assessment methods and ILO's matrix will be corrected.</li> <li>➤ The ILO's have been revised and corrected</li> <li>➤ There are different facilities for teaching and learning and every teaching staff has laid down the facilities that he actually apply.</li> </ul>



➤ ILO's of some courses cannot be measured and need to be revised ( marked in documents)	➤ The ILO's have been revised and corrected
--	---

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

**a) Comments of stakeholders:**

None

**b) Comments of external evaluator**

**1) First Evaluator**

Reviewer Comment	Coordinator Response
➤ Generally this program is considered up to standard if compared with other similar programs, and I am sure that a lot of effort has been carried out to present this report in this honorable form.	➤ The program has been prepared according to NARS.

**2) Second Evaluator**

Reviewer Comment	Coordinator Response
➤ None	

### **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

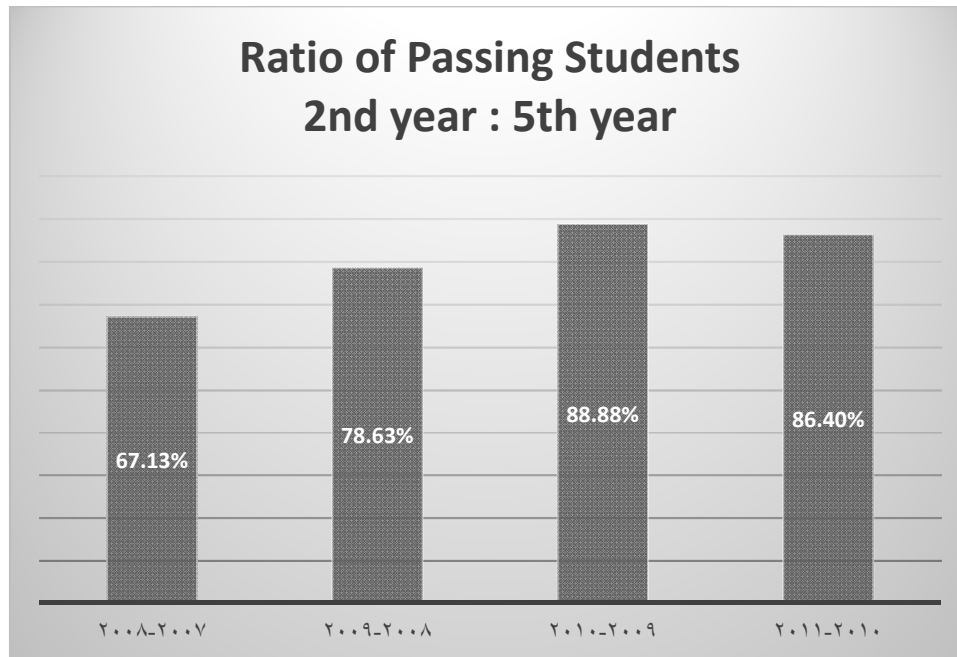


Figure (5): Graduated Students achievement through the program

After reviewing the results of students finishing the program in 2009-2010 regarding their achievements in each grade level through 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**

None

##### **2- Second Evaluator**

None

## 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**

None

##### **2- Second Evaluator**

None

## 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 department has submitted a proposal for credit hours system and pending approval of the application.

**B. Courses, deletions and 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. This change is done by reference to the department council.

**C. Staff development requirements**

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
None		

**5. Action plan**

Action required	Person Responsible	Completion Date
Change to credit hours system	Administration of the Academy	Academic year 2012-2013
Specialized training courses for all staff	Training Sector of the Academy	September 2012
Complete the shortage in education staff	Administration of the Academy	Academic year 2012-2013

**Program Coordinator:** Prof. Dr. Abdel Nasser Zayed.

**Signature:**

**Appendix 1**

**Annual Course Report**

**2010-2011**

**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	E112	Introduction to Computer II
14	M151	Engineering Drawing & Projection II
15	M161	Production Engineering II



## Annual Course Report (Academic Year 2006-2007)

### 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  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	926	77.68
Failed	266	22.31

Grading of successful students:

	No.	%
Excellent	23	1.9
Very Good	59	4.9
Good	104	8.7
Pass	740	62.0

### C- Professional Information

#### 1 – Course teaching

Topic Actually taught	No. of hours	Lecturer
• Engineering – what is it all about?	10	Prof. Dr. Abdel – Hamid El- Khoreiby
• The Computer	8	
• Plural Nouns	4	
• Regular and irregular verbs	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, 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

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

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 2007– 2008

Actions required	Completion date	Person responsible
Non		

Course coordinator: Abdel-Hamid Mohammed El-Khoreby

Signature:

Date:

## Annual Course Report 2006-2007

### 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. 1275	%	<input type="text" value="100"/>		
No. of students completing the course:	No. 1194	%	<input type="text" value="93.36"/>		
<b>Results:</b>					
	No.	%			
Passed	930	77.89			
Failed	264	22.11			
<b>Grading of successful students:</b>					
	No.	%			
Excellent	141	11.8			
Very Good	94	7.9			
Good	129	10.8			
Pass	566	47.4			

### 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	
• Exponential and Logarithmic function	6	
• Hyperbolic 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:

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	<input type="text" value="70 %"/>
Oral examination	----
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. M. Elmaddah

A.Prof. Dr. M. Khalifa

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

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

**Response of course team**

List any criticisms

- |  |   |
|--|---|
| 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**

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 2007 – 2008**

Actions required	Completion date	Person responsible
None	Aug. 2008	A.Prof. Dr. M. Khalifa

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

Signature:

Date: Aug. 2007

## Annual Course Report 2006-2007

### A- Basic Information

- 1- Title and code: B121: Mechancis (I)  
 2- Program(s) on which this course is given: General  
 3- Year/Level of program: First year / first 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. Hassan Awad  
 External evaluator : Non

### B- Statistical Information

No. of students attending the course: No. 1275 % 100  
 No. of students completing the course: No. 1176 %92.24

Results:

	No.	%
Passed	744	63.27
Failed	432	36.73

Grading of successful students:

	No.	%
Excellent	19	1.62
Very Good	45	3.83
Good	96	8.16
Pass	584	49.66

### 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 leads	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: Classical lecturing using the white board and computer supported learning

Practical training/ laboratory: Non

Seminar/Workshop: Non

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:

Non

3- Student assessment:

Method of assessment	Percentage of total
Written examination	70 %
Oral examination	----
Practical/laboratory work	
Other assignments/class work	15 %
Mid-Term Exam	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	Yes
Adequate to some extent	100%
Inadequate	.....
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 2007– 2008**

<b>Actions required</b>	<b>Completion date</b>	<b>Person responsible</b>
Preparation of the course by new assistants	Nov.2007	Prof. Dr. Mahmoud El-Maddah

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

**Signature:**

**Date:** Nov.2007

## Annual Course Report 2006-2007

### A- Basic Information

- 1- **Title and code:** B131 Physics 1 (Properties of matter, heat, thermodynamics and sound waves)  
 2- **Program(s) on which this course is given:** General  
 3- **Year/Level of program:** 1 st. year , 1 st. term .  
 4- **Unit hours** Lectures  Tutorial  - Practical  Total   
 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. 1275 %   
**No. of students completing the course:** No. 1186 %

**Results:**

	No.	%
Passed	975	82.21
Failed	211	17.79

**Grading of successful students:**

	No.	%
Excellent	94	7.93
Very Good	174	14.67
Good	276	23.27
Pass	431	36.34

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

Laboratory: Experimental measurements in Lab

Seminar/Workshop: Non

Class activity: YES

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: 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: Dr. M. El Tawab Kamal.  
 Dr. Abo El Yazeed Badawy Abo El Yazeed.

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**

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):**

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 2007 – 2008**

<b>Actions required</b>	<b>Completion date</b>	<b>Person responsible</b>
1. Provide more data show apparatuses	Nov. 2007	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. 2007

## Annual Course Report 2006-2007

### 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. 1275 %   
 No. of students completing the course: No. 1193 %

**Results:**

	No.	%
Passed	1030	86.34
Failed	163	13.66

**Grading of successful students:**

	No.	%
Excellent	186	15.60
Very Good	178	14.92
Good	198	16.60
Pass	468	39.22

### 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:   
 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	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

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

Response of course team

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 2007 – 2008

Actions required	Completion date	Person responsible
Provide more data show apparatuses	Nov.2007	Prof. Dr. S. R. Gouda

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

Signature:

Date: Nov.2007

## Annual Course Report 2006-2007

### A- Basic Information

- 1- Title and code: E 111 (Introduction to Computer 1)
- 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. Said A. Gawish  
 Course coordinator Prof. Dr. Said A. Gawish  
 External evaluator

### B- Statistical Information

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

#### Results:

	No.	%
Passed	1073	88.5
Failed	149	12.2

#### Grading of successful students:

	No.	%
Excellent	104	8.5
Very Good	139	11.4
Good	210	17.3
Pass	620	51.5

### 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 Nyquist stability criteria.	5	
• Root locus analysis	2	
• Compensation of control systems	4	
• Text editing	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 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	<b>100 %</b>

Members of examination committee Dr. Said A. Gawish

Dr. Adel Khedr

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

- Introducing a sound system in computer labs

6- Student evaluation of the course:

List any criticisms

1. The theoretical part is to much
2. The student must learn how to read
3. Some computer language must be tough

Response of course team

this is done in second 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: None

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

**9- Action plan for academic year 2007-2008**

**Actions required**

**Completion date**

**Person responsible**

1. Provide a sound system in computer labs

**Course coordinator:** Prof. Dr. Said A.Gawish

**Signature:**

**Date:** 9 / 2007

## Annual Course Report 2006-2007

### A- Basic Information

- 1- Title and code: M 150 (Engineering Drawing & Projection 1)
- 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	1011	<input type="text" value="84"/>
Failed	192	<input type="text" value="15.9"/>

Grading of successful students:

	No.	%
Excellent	136	11.3
Very Good	147	12.2
Good	167	13.8
Pass	561	46.6

### C- Professional Information

#### 1 – Course teaching

Topic Actually taught	Lecture 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:

**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	<b>100 %</b>
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 hall isn't equipped with loud speakers.
- Admission of students by the ministry of education in delay during the first term

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

List any criticisms Response of course team

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

**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 2007 – 2008**

**Actions required**

**Completion date**

**Person responsible**

. None

**Course coordinator:** Prof. Dr Mamdouh Saber

**Signature:**

**Date:** 9/2007

## Annual Course Report 2006-2007

### A- Basic Information

- 1- Title and code: M160 (Production Engineering 1)
- 2- Program(s) on which this course is given: General
- 3- Year/Level of program: 1st year / 1st term
- 4- Unit hours

Lectures 1 hrs  
 Practical 4 hrs

Tutorial --  
 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: 1324

No. of students completing the course: 1155

Results:

	No.	%
Passed	1055	91.34
Failed	100	8.66

Grading of successful students:

	No.	%
Excellent	246	21.3
Very Good	180	15,6
Good	184	15.93
Pass	442	38.27

### 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 %       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:**

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:**
- **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** Prof. Dr. M. Merdan and Prof. Dr. A. Kohail  
**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:**

**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**

<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 2006-2007)

### 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.  % 100  
 No. of students completing the course: No.  % 91.05

Results:

	No.	%
Passed	1021	74.6
Failed	140	16.6

Grading of successful students:

	No.	%
Excellent	80	6.8
Very Good	101	8.6
Good	139	11.97
Pass	701	60.37

### C- Professional Information

#### 1 – Course teaching

Topic Actually taught	No. of hours	Lecturer
• The Improper use of Computer	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

<b>Method of assessment</b>	<b>Percentage of total: 30%</b>
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 %"/>
<b>Total</b>	<b>100 %</b>

**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	<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

**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 2007– 2008**

Actions required	Completion date	Person responsible
Non		

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

**Signature:**

**Date:**

## Annual Course Report 2006-2007

### A- Basic Information

- 1- Title and code: (B112) , Calculus of Integration – Linear Algebra and Analytic Geometry  
 2- Program(s) on which this course is given: Basic Science  
 3- Year/Level of program: 1st Year (General ) 2nd 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. 1275	%	<input type="text" value="100"/>		
No. of students completing the course:	No. 1157	%	<input type="text" value="90.74"/>		
<b>Results:</b>					
	<b>No.</b>	<b>%</b>			
Passed	953	82.4			
Failed	204	17.6			
<b>Grading of successful students:</b>					
		<b>No.</b>	<b>%</b>		
Excellent		18	1.6		
Very Good		124	10.7		
Good		345	29.8		
Pass		466	40.3		

### 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:

Practical training/ laboratory:

Seminar/Workshop:



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%
Total	100 %

Members of examination committee Prof. Dr. Osama 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

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 2007 – 2008**

Actions required	Completion date	Person responsible
None	Aug. 2008	A.Prof. Dr. M. Khalifa

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

Signature:

Date: Aug. 2007

## Annual Course Report 2006-2007

### 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: None

### B- Statistical Information

No. of students attending the course:	No.	1275	% 100	
No. of students completing the course:	No.	1158	% 90.82	
Results:				
	No.	%	Grading of successful students:	
Passed	885	76.42		
Failed	273	23.58		
			Excellent	No. %
			Very Good	147 12.69
			Good	93 8.03
			Pass	105 9.07
				540 46.63

### C- Professional Information

#### 1 – Course teaching

Topic Actually taught	No. of hours	Lecturer
Kinematics of particles	4	Prof. Dr. Hassan Awad Prof. Dr. Mahmoud El-Maddah
• Rectilinear Motion		
• Graphical solution	2	
Curvilinear Motion Cartesian coordinates	2	
• Motion of projectiles		
• Tangential and Normal components	2	
• Radial and Transverse Components	2	
Kinetics of Particles Force and Acceleration method in different Systems of Coordinates	4	
Kinetics of Particles- Work and energy method	4	
• potential energy, Conservation of energy		
• Principle of impulse and momentum	4	
A- Space mechanics	2	
B- Impact	2	
C- Final Revision	2	
Total hours	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: 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   
 Adequate to some extent   
 Inadequate   
 List any inadequacies Non

5- Administrative constraints

List any difficulties encountered  
 ➤ New assistants needs more preparation

6- Student evaluation of the course:

<b>List any criticisms</b>	<b>Response of course team</b>
➤ 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 2007 – 2008

Actions required	Completion date	Person responsible
Preparation of the course by new assistants	Nov.2007	Prof. Dr. Mahmoud El-Maddah

Course coordinator: Prof. Dr. Mahmoud El- Maddah

Signature:

Date: Nov.2007

## Annual Course Report 2006-2007

### A- Basic Information

1- **Title and code:** B132 Physics 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  Tutorial  Practical  Total

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: None

### B- Statistical Information

**No. of students attending the course:** No. 1275 %

**No. of students completing the course:** No. 1157 %

**Results:**

	No.	%
Passed	953	82.37
Failed	204	17.63

**Grading of successful students:**

	No.	%
Excellent	18	1.56
Very Good	124	10.72
Good	345	29.82
Pass	466	40.28

### 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

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):

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 2007– 2008**

<b>Actions required</b>	<b>Completion date</b>	<b>Person responsible</b>
1. Provide more data show apparatuses	Nov.2007	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.2007

## Annual Course Report 2006-2007

### A- Basic Information

- 1- Title and code: E 112 (Introduction to Computer 2)
- 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. Said A. Gawish  
 Course coordinator Prof. Dr. Said A. Gawish  
 External evaluator

### B- Statistical Information

No. of students attending the course: No.  %

No. of students completing the course: No.  %

Results:	No.	%	Grading of successful students:	No.	%
Passed	1004	<input type="text" value="87"/>	Excellent	115	9.9
Failed	102	<input type="text" value="13.8"/>	Very Good	122	10.5
			Good	167	14.4
			Pass	600	11.2

### C- Professional Information

#### 1 – Course teaching

Topic Actually taught	Lecture hours	Practical hours	Lecturer
• Information technology	2		Prof. Dr. Said Gawish 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:

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:

**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 %"/>
<b>Total</b>	<b>100 %</b>

Members of examination committee  
 Dr. Said A. Gawish  
 Dr. Adel Khedr

Role of external evaluator

**4- Facilities and teaching materials:**

Totally adequate

Adequate to some extent

Inadequate

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:

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

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

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

Course coordinator: Prof. Dr Said A. Gawish

Signature:

Date:



## Annual Course Report 2006-2007

### A- Basic Information

- 1- Title and code: M 151(Engineering Drawing & Projection 2)
- 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:	
			No.	%
Passed	955	83.2	Excellent	113 9.8
Failed	192	16.7	Very Good	101 8.8
			Good	159 13.8
			Pass	582 50.7

### 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 ; Auxilliary section	2	
• Conventional particle in ED	2	
• Drawing of steel sections	2	
• Steel constructions	2	
• Revision problem	2	
<b>Total hours</b>	<b>18</b>	

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	60 %
Oral examination	None
Practical/laboratory work	None
Other assignments/class work	20 %
Mid-Term Exam	20 %
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	None

**5- Administrative constraints**

List any difficulties encountered

- Drawing haul aren't equipped with loudspeaker

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

None

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: NO comment

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

**9- Action plan for academic year 2007-2008**

Actions required	Completion date	Person responsible
1. None		

Course coordinator: Prof. Dr. Mamdouh Saber

Signature:

Date: 9 / 2007

## Annual Course Report 2006-2007

### A- Basic Information

- 1- Title and code: M161 (Production Engineering 2)
- 2- Program(s) on which this course is given: General
- 3- Year/Level of program: 1st year / 1st term
- 4- Unit hours

Lectures 1 hrs

Tutorial --

Practical 4 hrs

Total 5hrs

- 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: 1324

No. of students completing the course: 1220

Results:

	No.	%
Passed	1057	86.64
Failed	163	13.36

Grading of successful students:

	No.	%
Excellent	138	11.31
Very Good	134	10.98
Good	221	18.11
Pass	564	46.23

### C- Professional Information

#### 1 – Course teaching

Topic	Lecture hours	Tutorial hours	Practical Hours
<b>Lecture Part:</b> Every other week	<b>14</b>	<b>16</b>	<b>40</b>
Metal forming processes; Hot and Cold Forming; Forging, Rolling, Extrusion, and Drawing processes	3		
Machining Processes; Traditional and Non-traditional.	1		
Turning Process; Basic concepts, main and secondary motions, machine tools used, cutting tools types and clamping, workpiece clamping and different turning operations performed, attainable accuracy and surface finish.	4		
Basic concepts of Drilling, Boring,. Production of accurate holes.	2		
Basic concepts of Shaping, and Milling processes	1		
Basic concepts of surface and cylindrical grindings	1		
Introduction into quality management and quality control	2	4	
<b>Practical Part:</b> Revision on the basic concepts, solution of some selective associated questions in turn of each shop. Beside, the student is applying the gained knowledge in carrying out a specially designed product in each one of these shops			

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
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 %       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>	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**
- **Adequate to some extent**
- **Inadequate**
- **List any inadequacies**

**5- Administrative constraints**

<b>List any difficulties encountered</b>	None
--	------

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

<b>List any criticisms</b>	<b>Response of course team</b>
None	None

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

None	<b>Response of course team</b>
	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	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 2007-2008

### A- Basic Information

- 1- Title and code: A 060 (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, eng. Mohamed Gobara  
 Course coordinator Prof. Dr. Adham ELAlfy  
 External evaluator

### B- Statistical Information

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

**Results:**

	No.	%
Passed	104	74.3
Failed	36	25.7

**Grading of successful students:**

	No.	%
Excellent	4	3.8%
Very Good	11	10.6%
Good	25	24%
Pass	64	61.6%

### C- Professional Information

#### 1 – Course teaching

Topic Actually taught	No. of hours	Lecturer
• Introduction	4	Dr. Adham Alalfy
• 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	
<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 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 %"/>
<b>Total</b>	<b>100 %</b>

Members of examination committee Prof. Dr. Adham ELAlfy

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:** 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 2008 – 2009** Non

**Course coordinator:** Prof. Dr. Adham ELAlfy

**Signature:**

**Date:** 20/8/2008



## Annual Course Report (Academic Year 2007-2008)

### A- Basic Information

- 1- Title and code: B200: English Language (3)  
 2- Program(s) on which this course is given: Information systems & Production Engineering  
 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	704	95.14
Failed	36	4.86

**Grading of successful students:**

	No.	%
Excellent	136	18.38
Very Good	99	13.38
Good	141	19.05
Pass	328	44.32

### 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:

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, midterm 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>

**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	.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 2008 – 2009**

Actions required	Completion date	Person responsible
Non		

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

**Signature:**

**Date:**

## Annual Course Report 2007-2008

### 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  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. 729 %

No. of students completing the course: No. 729 %

Results: Electr.

	No.	%
Passed	488	66.94
Failed	241	33.06

Grading of successful students:

	No.	%
Excellent	48	6.58
Very Good	42	5.76
Good	57	7.82
Pass	341	46.78

### C- Professional Information

#### 1 – Course teaching

Topic	Lecture hours	Tutorial hours	Lecturer
• Classification of Differential equations	4	2	<b>Dr. Ossama El Gayar</b>
• 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:

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

Oral examination

----

Practical/laboratory work

Other assignments/class work

Mid-Term Exam

Total

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

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

Completion date

Person responsible

None

Aug.2009

Prof. Dr. Osama El

Course coordinator:

Prof. Dr. Osama El Gyar

Prof. Dr. Aly M. Essawi

Signature:

Date: Aug. 2008

## Annual Course Report 2007-2008

### A- Basic Information

- 1- Title and code: Computer Programming I, E 210  
 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  
     Prof. Dr. Adel Khedr  
     Course coordinator Prof. Dr. Adel Khedr  
     External evaluator

### B- Statistical Information

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

**Results:**

	No.	%
Passed	128	92.1
Failed	11	7.9

**Grading of successful students:**

	No.	%
Excellent	18	12.9
Very Good	19	13.7
Good	26	18.7
Pass	65	46.8

### 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	
<b>Total hours</b>	<b>30</b>	<b>26</b>	

**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:

**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

Adequate to some extent

Inadequate

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

**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 2008 – 2009**

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 2007-2008

### A- Basic Information

- 1- **Title and code:** Fluid Mechanics, M201  
 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  Tutorial  Practical  Total   
 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.  %   
**No. of students completing the course:** No.  %

**Results:**

	No.	%
Passed	110	79.1
Failed	29	20.9

**Grading of successful students:**

	No.	%
Excellent	8	5.75
Very Good	13	9.35
Good	19	13.7
Pass	70	50.4

### C- Professional Information

#### 1 – Course teaching

Topic Actually taught	No. of hours	Lecturer
<ul style="list-style-type: none"> <li>Introduction Definition of fluids, dimensions and units, fluid properties.</li> </ul>	8	Dr. Abdelmagid A. Abdalla
<ul style="list-style-type: none"> <li>Fluid statics Pressure at a point, pressure field, pressure measurement, hydrostatic forces acting on plane and curved surfaces, buoyancy, floatation, and stability.</li> </ul>	16	
<ul style="list-style-type: none"> <li>Fluid kinematics Velocity field, acceleration field, Reynolds's transport theorem.</li> </ul>	18	
<ul style="list-style-type: none"> <li>Conservation laws Conservation of mass- continuity equation, conservation of linear momentum.</li> </ul>	10	
<ul style="list-style-type: none"> <li>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.</li> </ul>	12	
<ul style="list-style-type: none"> <li>Viscous Flow in Pipes General characteristics of pipe flow, fully developed laminar flow, fully developed turbulent flow, dimensional analysis of pipe flow.</li> </ul>	8	
<b>Total hours</b>	<b>72</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:** Experimental measurements in fluid 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 %
Oral examination	----
Practical/laboratory work	20 %
Other assignments/class work	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** Non

**5- Administrative constraints**

**List any difficulties encountered**

- Limitation of number of operating experiments in the laboratory

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

**List any criticisms**

Insufficient exercises hours.

**Response of course team**

This insufficiency is due to the determined hours for this course. During lecture hours, it will be considered, the increase of the solved examples.

**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 non-completion** None



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

<b>Actions required</b>	<b>Completion date</b>	<b>Person responsible</b>
1. Increase the number of solved examples during the lecture	Sept 2008	Dr. Abdelmagid A. Abdalla
2. An experiment will be added to the lab.	Sept 2008	Abdalla

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

**Signature:**

**Date:** 7/11/2008

## Annual Course Report 2007-2008

### A- Basic Information

- 1- Title and code: Engineering Skills I, M250
- 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 2 hrs Tutorial 4 hrs Practical — Total 6 hrs
- 5- Name of lecturers contributing to the delivery of the Course  
*Prof. Dr. Mamdouh Saber Elsayed*  
 Course coordinator *Prof. Dr. Mamdouh Saber Elsayed*  
 External evaluator

### B-Statistical Information

No. of students attending the course:		No. 137	100 %
No. of students completing the course:		No. 137	100 %
<b>Results:</b>	<b>No.</b>	<b>%</b>	<b>grading of successful students:</b>
Passed	113	82.48	<b>No.</b>
Failed	24	17.52	<b>%</b>
			Excellent
			Very Good
			Good
			Pass
			74
			54.01

### C-Professional Information

#### 1- Course teaching

Topic Actually taught	No. of hours	Exercise
<i>Engineering Materials</i>	2	4
<i>Limits &amp; Fits</i>	2	4
<i>Machining Marks</i>	2	4
<i>Assembly Drawings</i>	2	4
<i>Detail 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 Post</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>	<b>30</b>	<b>60</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 topic were taught which are not specified, give reasons in detail *Non*

#### 2- Teaching and learning methods:

**Lectures:** *Classical lecturing using white board and overhead projector.*

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

**Seminar /Workshop:** *Non*

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

**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:** *Non*

**3-Student assessment:**

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

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

**Role of external evaluator** *Non*

**4-Facilities and teaching materials:**

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

**5-Administrative constraints**

List any difficulties encountered

Limitation of number of data show in the principal building

**6-Students 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: *No Comments*

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

**9-Action plan for academic Year 2007 – 2008**

Actions required	Completion data	Person responsible
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**Course coordinator:** *Prof . Dr. Mamdouh Saber*

**Signature:**

**Date:** 2008

## Annual Course Report 2007-2008

### A- Basic Information

- 1- Title and code: Mechanics of Machines I , M251  
 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 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="143"/>	% <input type="text" value="100"/>		
No. of students completing the course:	No. <input type="text" value="139"/>	% <input type="text" value="97.2"/>		
Results:			Grading of successful students:	
Passed	No. 99	% 71.2	Excellent	No. 18 % 12.95
Failed	No. 40	% 28.8	Very Good	10 7.2
			Good	14 10
			Pass	57 41.0

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

5- Administrative constraints

List any difficulties encountered  
 ➤ no

6- Student evaluation of the course:

List any criticisms

1. More time is requested

Response of course team

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 2007– 2008

Actions required	Completion date	Person responsible
Course coordinator: Prof. Dr Ahmed Sarhan		
Signature:		
Date: 25/6/2008		

## Annual Course Report 2007-2008

### A- Basic Information

- 1- Title and code: Strength of Materials, M261  
 2- Program(s) on which this course is given: Manufacturing Eng. and Prod. Technology.  
 3- Year/Level of program: Second Year/First Semester  
 4- Unit hours      Lectures       Practical       Total   
 5- Names of lecturers contributing to the delivery of the course  
     Prof. Dr. Bakkar Elsarnagawy  
     Course coordinator Prof. Dr. Bakkar Elsarnagawy  
     External evaluator

### B- Statistical Information

No. of students attending the course:	No. <input type="text" value="143"/>	%	<input type="text" value="100"/>	
No. of students completing the course:	No. <input type="text" value="140"/>	%	<input type="text" value="97.9"/>	
<b>Results:</b>				
	No.	%	<b>Grading of successful students:</b>	
Passed	130	92.85		
Failed	10	7.15		
			<b>Excellent</b>	No.    %
			<b>Very Good</b>	37    26.4
			<b>Good</b>	28    20
			<b>Pass</b>	21    15
				44    31.4

### C- Professional Information

#### 1 – Course teaching

	Topic	Lectures	Practical hrs	Lecturer
1	Simple Trusses	2	2	Prof. Dr. Bakkar Elsarnagawy
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	
<i>Total hours</i>		30	30	

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 .  
 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	----
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. 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 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 2008 – 2009

Actions required	Completion date	Person responsible
Non	Non	Non

Course coordinator: Prof. Dr Bakkar Elsarnagawy

Signature:

Date: 1/10/2008

## Annual Course Report (Academic Year 2007-2008)

### 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. 719 % 100%  
 No. of students completing the course: No. 719 % 100%

#### Results:

	No.	%
Passed	701	97.49
Failed	18	2.51

#### Grading of successful students:

	No.	%
Excellent	178	24.76
Very Good	167	23.23
Good	169	23.50
Pass	187	26.01

### 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 المصرىه – جمعيه المهندسين المصرىه	4	
* تطور اوجه النشاط الهندسى والتكنولوجيا	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:

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	<input type="text" value="None"/>
Practical/laboratory work	<input type="text" value="None"/>
Other assignments/class work	<input type="text" value="10%"/>
Mid-Term Exam	<input type="text" value="20 %"/>
Total	<b>100 %</b>
Members of examination committee	Prof. Dr. S. R. Gouda
Role of external evaluator	<input type="text" value="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:

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:

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

9- Action plan for academic year 2008– 2009

Actions required	Completion date	Person responsible
Non	Nov.2008	Non

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

Signature:

Date: Nov.2008

## Annual Course Report 2007-2008

### 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. 711 %

No. of students completing the course: No. 711 %

Results: Electr.

	No.	%
Passed	508	71.45
Failed	203	28.55

Grading of successful students:

	No.	%
Excellent	95	13.36
Very Good	46	6.47
Good	55	7.74
Pass	312	43.88

### 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:

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	----
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  
 None

Role of external evaluator

**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

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 2008 – 2009**

Actions required	Completion date	Person responsible
None	Aug.2009	Prof. Dr. Osama El Gyar

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

Signature:

Date: Aug.2008

## Annual Course Report 2007-2008

### A- Basic Information

- 1- Title and code: Computer Programming II, E213  
 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  
 Prof. Dr. Adel El-Sherif  
 Course coordinator Prof. Dr. Adel El-Sherif  
 External evaluator

### B- Statistical Information

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

Results:

	No.	%
Passed	119	88.1
Failed	16	11.9

Grading of successful students:

	No.	%
Excellent	20	14.8
Very Good	19	14.1
Good	16	11.9
Pass	64	47.4

### 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	
<b>Total hours</b>	<b>30</b>	<b>26</b>	

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:

**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:

**4- Facilities and teaching materials:**

Totally adequate:

Adequate to some extent:

Inadequate:

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

1. The theoretical part is too much
2. The student must learn how to read

Response of course team

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 El-Sherif

Signature: Prof. Dr Said A.Gawish

Date:

## Annual Course Report 2007-2008

### A- Basic Information

- 1- Title and code: Thermodynamics, M222
- 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. 143 % 100  
 No. of students completing the course: No. 136 % 95.1

**Results:**

	No.	%
Passed	99	72.8
Failed	37	27.2

**Grading of successful students:**

	No.	%
Excellent	8	5.9
Very Good	14	10.3
Good	16	11.75
Pass	61	44.85

### C- Professional Information

#### 1 – Course teaching

Topic Actually taught	No. of hours	Lecturer
<ul style="list-style-type: none"> <li>• Introduction Importance of thermodynamics, some applications Mechanisms of heat transfer.</li> </ul>	6	Dr. Abdelmagid A. Abdalla,
<ul style="list-style-type: none"> <li>• 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.</li> </ul>	14	
<ul style="list-style-type: none"> <li>• 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 (<math>C_p</math> &amp; <math>C_v</math>).</li> </ul>	14	
<ul style="list-style-type: none"> <li>• First law of thermodynamics Statement of the first law for cycle &amp; process. Different forms for a control mass &amp; control volume. Special cases (SSSF, USUF). Enthalpy</li> </ul>	16	
<ul style="list-style-type: none"> <li>• 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.</li> </ul>	12	
<ul style="list-style-type: none"> <li>• Entropy Definition, Clausius inequality, entropy of a pure substance, entropy change in a process, entropy relation, entropy generation and principle of increase of it, entropy change of a solid, liquid, and ideal gas. Second law for a control volume, for SSSF, and USUF processes,</li> </ul>	10	
<b>Total hours</b>	<b>72</b>	

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 13 weeks as during the last three weeks practical exams and revisions were carried out, in addition there were about 4 separate vacation days  
 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	60 %
Practical/laboratory work	20 %
Other assignments/class work	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

- Limitation of number of operating heaters in the laboratory
- Lack in the no. of capillary tubes used in the Kinetic Theory Exp.

6- Student evaluation of the course:

List any criticisms

1. Insufficient exercises hours.
2. Problems with some experiments during the lab.

Response of course team

This insufficiency is due to the determined hours for this course. During lecture hours, It will be considered, the increase of the solved examples.

A number of heaters & capillary tubes will be supplied to the lab.

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:

Nonecourse report.

**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>
1- Substitute of the male-functioned experiment by supplying two heaters	Feb 2009	Eng./Sabry

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

**Signature:**

**Date:**                      7/11/2008



## Annual Course Report 2007-2008

### A- Basic Information

- 1- **Title and code:** Mechanics of Machines II, M252
- 2- **Program(s) on which this course is given:** Production Engineering and manufacturing Technology
- 3- **Year/Level of program:** second 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. 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	119	87.5
Failed	17	12.5

Grading of successful students:

	No.	%
Excellent	22	16.18
Very Good	17	12.5
Good	20	14.71
Pass	60	44.12

### 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	70%
Oral examination	---
Practical/laboratory work	0%
Other assignments/class work	15%
Mid-Term Exam	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	.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

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 2008 – 2009

Actions required	Completion date	Person responsible
None	None	None

Course coordinator: Prof. Dr Gaafar A. Hussein

Signature:

Date: 25/3/2008

## Annual Course Report 2007-2008

### A- Basic Information

- 1- Title and code: Engineering Skills II, M253
- 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 2 hrs Tutorial 4 hrs Practical — Total 6 hrs
- 5- Name of lecturers contributing to the delivery of the Course  
*Prof. Dr. Mamdouh Saber Elsayed*  
 Course coordinator *Prof. Dr. Mamdouh Saber Elsayed*  
 External evaluator

### B-Statistical Information

No. of students attending the course:			No. 133 100 %		
No. of students completing the course:			No. 133 100 %		
Results:	No.	%	Grading of successful students		
Passed	105	78.95		No.	%
Failed	28	21.05	Excellent	11	8.27
			Very Good	9	6.77
			Good	21	15.79
			Pass	64	48.12

### C-Professional Information

#### 1- Course teaching

Topic Actually taught	No. of hours (Lec.)	No. of hours (Ex)
<i>Welded Joints</i>	2	4
<i>Riveted Joints</i>	2	4
<i>Journal Bearings</i>	2	4
<i>Rolling Bearings</i>		4
<i>Gears – Gear Geometry</i>		4
<i>Spur – Helical Gears</i>	2	4
<i>Bevel Gears</i>		4
<i>Worm Gears</i>		4
<i>Mechanical Transmission</i>	2	4
<i>Mechanical Transmission</i>	2	4
<i>Oil Seals</i>	2	4
<i>Valves</i>	2	4
<i>Springs</i>	2	4
<i>Revision</i>	2	4
<b>Total hours</b>	<b>28</b>	<b>56</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 topic were taught which are not specified, give reasons in detail *Non*

#### 2- Teaching and learning methods:

**Lectures:** *Classical lecturing using white board and OHP.*

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

**Seminar /Workshop:** *Non*

**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	70 %
Oral examination	----
Practical /laboratory work	—
Other assignments /class work	20 %
Mid –Term Exam	10 %
<b>Total</b>	<b>100 %</b>

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

**Role of external evaluator** *Non*

**4-Facilities and teaching materials:**

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

**5-Administrative constraints**

**List any difficulties encountered**

- a. Limitation of number of data show in the principal building

**6-Students 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:** *No Comments*

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

**9-Action plan for academic year 2007 – 2008**

Actions required	Completion data	Person responsible
------------------	-----------------	--------------------

**Course coordinator:** *Prof. Dr. Mamdouh Saber*

**Signature:**

**Date:** 2008

## Annual Course Report 2007-2008

### A- Basic Information

- 1- Title and code: Material Technology I, M262  
 2- Program(s) on which this course is given: Manufacturing Eng. and Production Technology.  
 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 Elsarngawy  
     Course coordinator:      Prof. Dr. Bakkar Elsarngawy  
     External evaluator:      Non

### B- Statistical Information

- 1- No. of students attending the course:      No.      143      100      %  
 2- No. of students completing the course:      No.      136      95.1      %  
 3- Results:

	No.	%
Passed	127	93.38
Failed	9	6.62

Grading of successful students:		
Grade	No.	%
Excellent	44	32.35
Very Good	23	16.91
Good	26	19.12
Pass	34	25.00

### C- Professional Information

#### 1 – Course teaching

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

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  
 Achieved program intended learning outcomes, ILO's:

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

**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 2008 – 2009**

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

**Course coordinator:** Prof. Dr Bakkar Elsarngawy

**Signature:**

**Date:** November, 2008

## Annual Course Report 2007-2008

### A- Basic Information

- 1- Title and code: Principles of Manufacturing, M271
- 2- Program(s) on which this course is given: Manufacture Eng. & Production Technology.
- 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: 143  
 No. of students completing the course: 135  
 Results:

	No.	%	Grading of successful students:	
Passed	106	78.5		
Failed	29	21.5		
			Excellent	No. %
			Very Good	5 3.70
			Good	13 9.60
			Pass	16 11.90
				72 53.30

#### 1 – Course teaching

Topic	Lecture hours	Tutorial hours	Lecturer
Introduction; Definition of technology, production system, manufacturing processes and elements of machining system	2	2	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	
Tools materials and geometry	2	2	
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.	18	18	
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: 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	
▪ Practical/laboratory work	
▪ Other assignments/class work	<input type="text" value="10 %"/>
▪ Mid-Term Exam	<input type="text" value="20 %"/>
<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	2008 / 2009	Dr. M. Merdan Dr. A. Kohail

Course coordinator: Dr. M. Merdan

Signature: M. Merdan

Date: 6/9/2008



**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 2008-2009)

### A- Basic Information

- 1- Title and code: B300: English Language (4)
- 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  hrs Tutorial  hrs Total  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 None

### B- Statistical Information

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

**Results:**

	No.	%
Passed	570	90
Failed	63	10

**Grading of successful students:**

	No.	%
Excellent	90	14.21
Very Good	91	14.37
Good	121	19.11
Pass	268	42.33

### 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%

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  
 midterm Exams and attendance reports

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

List any criticisms  
 Non

Response of course team  
 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**

Actions required	Completion date	Person responsible
Non		

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

**Signature:**

**Date:**

## Annual Course Report 2008-2009

### 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  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. 122 %

No. of students completing the course: No. 118 %

Results: Mech.

	No.	%
Passed	97	82.2
Failed	21	17.8

Grading of successful students:

	No.	%
Excellent	6	5.1
Very Good	8	6.8
Good	20	16.9
Pass	63	53.4

### 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  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- 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 2009 – 2010

Actions required	Completion date	Person responsible
None	Aug. 2009	Prof. Dr. Osama El Gyar

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

Signature:

Date: Aug.2009

## Annual Course Report Academic year 2008-2009

### A- Basic Information

- 1- Title and code: (E030) Electric and Electronic Circuits  
 2- Program(s) on which this course is given: Production Eng. 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. Ir. Mostafa Sayed AFIFI  
 Course coordinator Prof. Dr. Ir. Mostafa Sayed AFIFI  
 External evaluator

### B- Statistical Information

No. of students attending the course:	No. <input type="text" value="122"/>	% <input type="text" value="100"/>		
No. of students completing the course:	No. <input type="text" value="121"/>	% <input type="text" value="99.2"/>		
<b>Results:</b>	<b>No.</b>	<b>%</b>	<b>Grading of successful students:</b>	
Passed	109	90.1	Excellent	No. 13 % 10.7
Failed	12	9.9	Very Good	12 9.9
			Good	25 20.7
			Pass	59 48.8

### 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	
• Kirchoff'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.	6	
• 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>82</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:** 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,  
**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	50.0 %
Attendance	5.0 %
Quizzes	5.0 %
Practical/laboratory work	10 %
Home Work Assignments	10.0 %
Other assignments/class work	10 %
Mid-Term Exam	10 %
<b>Total</b>	<b>100 %</b>
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:  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, 1 Hour LAB.

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

List any criticisms	Response of course team
1. Lab exercises are insufficient, 1 Hr Lab	This insufficiency is also due to occasional defect in some experiments. More experiments will be added next year.
2. A Proposal to extend the subject and use two successive semesters	The actual content and number of lecture hours are now convenient, considering the next credit graduation profile arrangements

**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
None	Course Report	

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

The first term actions might be corrected in the credit hour system and the second term extension needs a department decision

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

<b>Actions required</b>	<b>Completion date</b>	<b>Person responsible</b>
1. Provide more data shows	Sept 2009	Department actions
2. More experiment time in Labs	Jan 2010	Department actions

**Course coordinator:** Prof. Dr Ir Mostafa Afifi

**Signature:**

**Date:** 5/11/2009



## Annual Course Report Academic year 2008-2009

### A- Basic Information

- 1- Title and code: (M310a) Computer Applications 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   
 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.	%	Grading of successful students:		
Passed	108	90.76		No.	%
Failed	11	9.24	Excellent	7	5.9
			Very Good	17	14.3
			Good	23	19.3
			Pass	61	51.3
			Failed	11	9.24

### C- Professional Information

#### 1 – Course teaching

Topic Actually taught	No. of hours	Lecturer
Introduction to computer applications:	2	Prof. Dr. Nabil Gadallah
• Computer graphics (Pro/Engineer)		
• Engineering analysis (Matlab)		
• Solid modelling techniques in art design		
• Extrusion & Revolve	2	
• Applications	6	
• Sweep and blend	2	
• Assemblies	4	
• Detail Drawing (drafting)	4	
Introduction to MATLAB		
• Introduction & basic vector and matrix operations.	2	
• Polynomials and solution of linear equations	2	
• Programming and applications	2	
• Solid modeling techniques in art design	2	
<b>Total</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    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:

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**

- Written examination
- Oral examination
- Practical/laboratory work
- Other assignments/class work
- Mid-Term Exam

**Percentage of total**

-----  
  
  
  
**100 %**

**Total**

**Members of examination committee**

Dr. Nabil Gadallah

**Role of external evaluator**

Non

**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**

There is no lectures	A modification is required for Adding a lectures bi-weekly
Distribution of Marks	-A modification is required for The Distribution of marks to be: Theoretical (60%) and Practical 40%

**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**

Adding a lectures bi-weekly

25/1/2009

Prof. Dr Nabil Gadallah

**Course coordinator:** Prof. Dr Nabil Gadallah

**Signature:** ( )

**Date:** 25/10/2009

## Annual Course Report 2008/2009

### A- Basic Information

- 1- Title and code: (M331) Thermo-Fluid Machinery  
 2- Program(s) on which this course is given: Manufacturing Eng. and Production Technology  
 3- Year/Level of program: third Year Mechanical  
 4- Unit hours Lectures  Tutorial  Practical  Total   
 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.  %   
 No. of students completing the course: No.  %

**Results:**

	No.	%
Passed	77	80
Failed	23	20

**Grading of successful students:**

	No.	%
Excellent	5	4.35
Very Good	6	5.22
Good	13	11.3
Pass	68	59.3

### 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	
<b>Total hours</b>	<b>72</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, 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:**

**Practical training/ laboratory:**

**Seminar/Workshop:**

**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: 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;">66.67 %</span>
Oral examination	----
Practical/laboratory work	<span style="border: 1px solid black; padding: 2px;">13.33 %</span>
Other assignments/class work	<span style="border: 1px solid black; padding: 2px;">13.33 %</span>
Mid-Term Exam	<span style="border: 1px solid black; padding: 2px;">6.67 %</span>
Total	<b>100 %</b>

Members of examination committee  
 Dr. Metwally H. Metwally  
 Dr. Abdelmagid A. Abdalla  
 None

Role of external evaluator

**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

- 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 instrumentation is obsolete.
2. Printing quality of the lecture notes
3. A proposal to extend the subject and lecture it in two successive semesters

**Response of course team**

This defect in some experiments will be eventually taken into consideration. More new experiments will be added next year. This will be ordered to the books preparation department. 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 None

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

Actions required	Completion date	Person responsible
1- Substitute of the male-functioned experiment by supplying two heaters	Sept 2009	Eng./Sabry Eng. Naser
2- Printing quality of the lecture notes.	February 2010	Dr. Metwally

Course coordinator: Prof. Dr Metwally H. Metwally

Signature:

Date: 8/2/2009

## Annual Course Report 2008/2009

### A- Basic Information

- 1- Title and code: (M351) Mechanics of Machines III
- 2- Program(s) on which this course is given: Production Eng. and manufacturing Technology
- 3- Year/Level of program: Third 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. 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	117	99.2
Failed	1	0.8

**Grading of successful students:**

	No.	%
Excellent	32	27.1
Very Good	21	17.8
Good	22	18.6
Pass	42	35.6

### C- Professional Information

#### 1 – Course teaching

Topic Actually taught	No. of hours	Lecturer
• Speed governors	16	Prof. Dr. Gaafar A. Hussein
• Balancing of rotating masses	8	
• Balancing of reciprocating masses	8	
• Engine effort and torque diagrams	8	
• Single degree of freedom vibrations, critical speeds	16	
<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	70%
Oral examination	----
Practical/laboratory work	0%
Other assignments/class work	15%
Mid-Term Exam	15%
Total	100%
Members of examination committee	Dr. Gaafar A. Hussein Dr. Dr. Abdelmagid 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

1. 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 2009 – 2010

Actions required	Completion date	Person responsible
1. Provide more data show apparatuses	None	None

Course coordinator: Prof. Dr Gaafar A. Hussein

Signature:

Date: 25/6/2009

## Annual Course Report 2008/2009

### A- Basic Information

- 1- Title and code: (M360) Industrial Psychology.
- 2- Program(s) on which this course is given: Manufacturing Eng. and Production Technology
- 3- Year/Level of program: third Year/ first Semester
- 4- Unit hours

Lectures	2 hrs	Tutorial	-	hrs	Practical	total	2 hrs
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- 5- Names of lecturers contributing to the delivery of the course:  
 Prof. Dr. Mamdouh Saber El-sayed  
 Course coordinator.  
 External evaluator: None

### B- Statistical Information

No. of students attending the course:	No.	111	100	%
No. of students completing the course:	No.	105	94.6	%

Results:

	No.	%
Passed	57	48.3
Failed	16	126.2

Grading of successful students:		
Grade	No.	%
Excellent	14	12.0
Very Good	13	11.1
Good	18	15.4
Pass	53	45.4

### C- Professional Information

#### 1 – Course teaching

Topic	Lec.	Lecturer
Industrial design- Design concepts	2	Prof. Dr. Mamdouh Saber Elsayed
Ergonomics	2	
Applied ergonomics –instrument-controls-workplace	2	
Aesthetic and ergonomic considerations	2	
Working conditions and environment	2	
Health and ventilation	2	
Industrial ventilation – local ventilation	2	
Air conditioning system	2	
CFC'S – Ozone depletion and Global warming	2	
Noise- Exposure to noise	2	
Noise control technique- vibration	2	
Lighting – level of illumination	2	
Factors affecting the quality of lighting	2	
Human effectiveness	2	
<b>Total hours</b>	<b>28</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: OHP and white board.  
 Practical training/ laboratory: Teaching aids and life components and assembly

Seminar/Workshop: Non  
 Class activity  
 Case Study: Selected case studies  
 Other assignments/homework: Two reports  
 If teaching and learning methods were used other than those specified, give reasons: Non

**3- Student assessment:**

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

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

**Role of external evaluator:**

**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
- Courses are shared between two buildings

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

	List any criticisms	Response of course team
(a)	it is recommended to have exercises	Limited by the superior council of higher education

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

	Comment	Response of course team
(a)	Non	

**8- Course enhancement:**

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

**9- Action plan for academic year 2013 – 2014**

Actions required	Completion date	Person responsible
1. adding more exercises, assignments reports and quizzes for Chapter 10		

**Course coordinator:** Prof. Dr.Mamdouh Saber El-sayed

**Signature:**

**Date:** 2009



## Annual Course Report 2008/2009

### A- Basic Information

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

	Dr. Bakkar Elsarnagawy
Course coordinator	Dr. Bakkar Elsarnagawy
External evaluator	Non

### B- Statistical Information

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

**Results:**

	No.	%
Passed	74	60.66
Failed	44	36.07

**Grading of successful students:**

	No.	%
Excellent	11	9.02
Very Good	8	6.56
Good	15	12.30
Pass	40	32.79

### C- Professional Information

Topic Actually taught	Lecture hours	Tutorial hours	Practical hours
• Introduction; definition of machining system; manufacturing processes and elements of machining system.	4	2	
• Machining deviations; reasons types; dimensional deviations; ISO system of machines; standardization and measurement of surface roughness.	6	1	1
• Cutting tool: failure, material and geometry.	4	2	2
• Chip formation, and effect of cutting conditions on chip formation	4	1	2
• Integrity of machined surface, work hardening, residual stress and surface roughness.	3		2
• Cutting force calculation and the effect of cutting conditions on it	4	2	2
• Heat generations during cutting, source and heat distribution, and effect on cutting	2	1	
• Cutting tool wear; types of wear and its curves; the effect of cutting parameters	4	2	2
• Determining of optimum cutting conditions	4	2	
• Productivity of fine and rough cutting operations	2		2
• Determination of production cost			
• Gears manufacturing	2		2
• Jig and fixture design	4	2	
<b>Total</b>	<b>40</b>	<b>10</b>	<b>10</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. Bakkar Elsarnagawy

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

None

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. Bakkar Elsarnagawy		
Signature:		
Date: 2/2009		

## Annual Course Report 2008/2009

### A- Basic Information

- 1- Title and code: (E 050) Electrical Power System.  
 2- Program(s) on which this course is given: Manufacturing Eng. & Production Technology.  
 3- Year/Level of program: Third 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. Said A. Gawish  
 Course coordinator: Prof. Dr. Said A. Gawish  
 External evaluator: None

### B- Statistical Information

No. of students attending the course: No.=122 100%  
 No. of students completing the course: No. =120 98.36%

Results:

	No.	%
Passed	81	66.39
Failed	41	33.61

Grading of successful students:

	No.	%
Excellent	10	8.20
Very Good	11	9.02
Good	20	16.39
Pass	40	32.79

### 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

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):

External evaluator:

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
None		

Course coordinator: Prof. Dr. Said A. Gawish

Signature:

Date: October, 2009

## Annual Course Report 2008/2009

### A- Basic Information

- 1- Title and code: (M310b) Computer Application II.
- 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  hrs Tutorial - hrs Practical  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. <input type="text" value="122"/>	%	<input type="text" value="100"/>	
No. of students completing the course:	No. <input type="text" value="121"/>	%	<input type="text" value="99.18"/>	
<b>Results:</b>	<b>No.</b>	<b>%</b>	<b>Grading of successful students:</b>	
Passed	104	85.25	<b>Excellent</b>	<b>No.</b> 32 <b>%</b> 26.23
Failed	17	13.93	<b>Very Good</b>	24 19.67
			<b>Good</b>	20 16.39
			<b>Pass</b>	28 22.95

### C- Professional Information

Topic Actually taught	Practical hours	Lecturer
<b>Introduction to NC and CNC Machines</b>	2	Dr Atef Afifi
Basic Definitions of G-Codes	2	
Different Types of G-Codes	4	
Basic Terminology of G-Code (FUNOC)	4	
<b>Milling:</b>		
– 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	
<b>Turning:</b>		
– 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	
<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 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/	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 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

➤ 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: 2/2009		

## Annual Course Report 2008/2009

### A- Basic Information

- 1- Title and code: M 312:Industrial Management
- 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.  %   
 No. of students completing the course: No.  %

**Results:**

	No.	%
Passed	110	93
Failed	8	7

**Grading of successful students:**

	No.	%
Excellent	38	32.2
Very Good	17	14.4
Good	13	11
Pass	43	36.4

### C- Professional Information

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

3- Student assessment:

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

Members of examination committee      Dr. Ahmed Sarhan  
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  
➤ no

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

9- Action plan for academic year 2008 – 2009

Course coordinator:      Prof. Dr Ahmed Sarhan  
Signature:  
Date:                              15/2/2009



## Annual Course Report 2008/2009

### A- Basic Information

- 1- Title and code: **M 352: Measuring Methods & Instrumentation**
- 2- Program(s) on which this course is given: Production Eng. & manufacturing 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

### B- Statistical Information

No. of students attending the course:	No. <input type="text" value="122"/>	%	<input type="text" value="100"/>	
No. of students completing the course:	No. <input type="text" value="119"/>	%	<input type="text" value="97.5"/>	
<b>Results:</b>				
	<b>No.</b>	<b>%</b>	<b>Grading of successful students:</b>	
Passed	118	99.2	<b>No.</b>	<b>%</b>
Failed	1	0.8	Excellent	37 40
			Very Good	21 26
			Good	31 17
			Pass	29 16

### C- Professional Information

Topic Actually taught	No. of hours	Lecturer
• Measuring system characteristics	4	Dr.Ahmad Sarhan
• 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	
<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 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	<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:**

**Response of course team**

List any criticisms

1. More experiments are requested More measuring instruments are locally produced as year projects

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

**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 2008 – 2009**

Course coordinator: Prof. Dr Ahmed Sarhan

Signature:

Date: 15/2/2009

## Annual Course Report 2008/2009

### A- Basic Information

- 1- Title and code: M 346- Manufacturing Technology II  
 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:  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: 122  
 No. of students completing the course: 117  
 Results:

	No.	%
Passed	106	90.6
Failed	11	9.4

Grading of successful students:

	No.	%
Excellent	6	5.1
Very Good	20	17.1
Good	23	19.7
Pass	60	56.1

### 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 %  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	60
▪ Oral examination	
▪ Practical/laboratory work	20
▪ Other assignments/class work	10
▪ Mid-Term Exam	10
<b>Total</b>	<b>100</b>

Members of examination committee

Prof. Dr. A.M.Kohail

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	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 2009 – 2010

Actions required

None

Completion date

Person responsible

None

Course coordinator:

Prof. Dr. A.M.Kohail

Signature:

Date: 1/9/2009

## Annual Course Report 2008/2009

### A- Basic Information

- 1- Title and code: (M371) Machine Design (I)  
 2- Program(s) on which this course is given: Manufacturing Eng. and Production Technology.  
 3- Year/Level of program: Third Year Manufacturing Engineering, 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. Serage Eldin Khalifa  
 Course coordinator: Prof. Dr. Serage Eldin Khalifa

### B- Statistical Information

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

Results:

			Grading of successful students:		
	No.	%		No.	%
Passed	97	82.2			
Failed	21	17.8	Excellent	7	5.9
			Very Good	8	6.8
			Good	21	17.8
			Pass	61	51.7

### C- Professional Information

#### 1 – Course teaching

Topic Actually taught	No. of hours	Lecturer
• Introduction	5	Prof. Dr. Serage Eldin Khalifa
• Stresses at a Point	6	
• Principal Stresses	8	
• Design for Static Strength	11	
• Design for Dynamic Strength	16	
• Design of Shafts	8	
• Design of Keys, Feathers, and Splines	6	
• Design of Threaded Joints, Fasteners and Connections	12	
• Design of Welded Joints	6	
• Design of Helical Springs	6	
• Design of Pressed –on Joints	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 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 and data show, using computer programs.

**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	60 %
Oral examination	15 %
Practical/laboratory work	----
Other assignments/class work	10 %
Mid-Term Exam	15 %
<b>Total</b>	<b>100 %</b>

**Members of examination committee** Prof. Dr. Serage Eldin 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 None

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

List any criticisms	Response of course team
Books( Text or Exercises ) are not well organized.	New good organized books will be presented in the next academic 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:** None

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

**Course coordinator:** Prof. Dr Serage Eldin Khalifa

**Signature:**

**Date:** 8/7/2008

## Annual Course Report 2008/2009

### 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. <input type="text" value="122"/>	%	<input type="text" value="100"/>	
No. of students completing the course:	No. <input type="text" value="122"/>	%	<input type="text" value="100"/>	
<b>Results:</b>				
	No.	%	<b>Grading of successful students:</b>	
Passed	116	95.08	No.	%
Failed	6	4.92	Excellent	79    64.75
			Very Good	26    21.31
			Good	4    3.28
			Pass	7    5.74

### 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		

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, seminars, reports, & presentations

Practical training/ laboratory: Testing & calibration

Seminar/Workshop: 3 seminars in addition to final presentation

Class activity: brain storming, & discussions

Case Study:

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	50%
Oral examination	25%
Practical/laboratory work	25%
Other assignments/class work	50%
Mid-Term Exam	5%
Total	100 %

Members of examination committee All members of the

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
- It is difficult to arrange meetings with the supervisors during the periods. Most of the groups meet with their supervisor during the break.	- This will be considered in the following years.

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 2009 – 2010

Actions required	Completion date	Person responsible
Students of each project should be in the same class	Sept. 2009	Chief of chair

Course coordinator: Dr. Bakkar Elsarnagawy

Signature:

Date: 1/11/2009



**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 2009/2010

### 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  Tutorial  Practical  Total

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

Course coordinator Prof. Dr. Osama El Gyar

Prof. Dr. Aly M. Essawy

External evaluator

### B- Statistical Information

No. of students attending the course: No. 558 %

No. of students completing the course: No. 548

Results: Electr.

	No.	%
Passed	532	97
Failed	16	3

Grading of successful students:

	No.	%
Excellent	269	49.1
Very Good	68	12.4
Good	57	10.4
Pass	138	25.2

### C- Professional Information

#### 1 – Course teaching

Topic Actually taught	No. of hours	Lecturer
• Least Square approximation	2	Dr. Osama El Gyar Dr Aly Essawy
• 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	
<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:

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	----
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  
 None

Role of external evaluator

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

- Problems with the teaching assistant in exercises
- 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	Aug. 2009	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: M454: Production Management  
 2- Program(s) on which this course is given: Manufacturing Eng. & production Technology  
 3- Year/Level of program: 4<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:  
   Prof. Dr. A.M. Kohail  
   Course coordinator: Prof. Dr. A.M..Kohail  
   External evaluator:       None

### B- Statistical Information

No. of students attending the course: 109  
 No. of students completing the course: 107  
 Results:

	No.	%
Passed	89	83.2
Failed	18	16.8

Grading of successful students:

	No.	%
Excellent	6	5.6
Very Good	11	10.3
Good	12	11.2
Pass	60	56.1

### C- Professional Information

#### 1- Course teaching

Topic	Lecture hours	Tutorial hours	Practical hours
• Product and service design	3	-	-
• Forecasting Techniques	6	3	2
• Productivity and competitiveness	2	-	-
• Capacity Planning	6	2	-
• Cost Analysis	3	-	2
• Break-Even-analysis	4	2	4
• Design of work systems	4		-
• Learning curves	2	1	-
• Reliability and Maintenance	4	1	2
• Decision Theory	4	2	2
• Inventory Management	4	2	3
• Stochastic Inventory Model	3	2	-
• Total hours	45	15	15

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:** 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
<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
- 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 2009 – 2010**

Actions required	Completion date	Person responsible
None		None

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

**Signature:**

**Date:** 1/9/2009

## Annual Course Report 2009/2010

### A- Basic Information

- 1- **Title and code:** (M461) System Dynamics and Vibrations
- 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  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	105	98.13
Failed	2	1.96

**Grading of successful students:**

	No.	%
Excellent	25	23.4
Very Good	21	19.6
Good	17	15.9
Pass	42	39.3

### C- Professional Information

#### 1 – Course teaching

Topic Actually taught	Lecture hours	Tutorial hours	Practical hours	Lecturer
• Introduction to System dynamics: System Classification , System Models	3	3		Prof. Dr. Gaafar A. Hussein
• Multipart Systems, Bond Graph, Source-Load Synthesis	3	3		
• Basic Component Models 1-Port, 2-Port, 3-Port Junction Elements	3	3		
• System Models, Construction Method for Various Domains (Electric, Mechanical, Hydraulic)	3	3		
• State Space Equations, Analysis of System Models, (First and Second Order Systems)	6	3	4	
• Simulation with MATLAB (Vibration of Single DOF Systems)	6	3	4	
• Applications	6	6		
• Vibration Measurement	6		4	
• Vibration of Two and Multi-DOF Systems	6	6		
• MATLAB Simulation	3		3	
<b>Total hours</b>	<b>45</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** 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, using computer programs; MATLAB, SIMULINK

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="66.7%"/>
Oral examination	----
Practical/laboratory work	<input type="text" value="13.3 %"/>
Other assignments/class work	<input type="text" value="6.7 %"/>
Mid-Term Exam	<input type="text" value="13.3 %"/>
Total	<b>100 %</b>

Members of examination committee Prof. Dr. Gaafar Ahmed Hussein

Prof. Dr. Abdelmagid Abdalla

Role of external evaluator None

4- Facilities and teaching materials:

Totally adequate	<input checked="" type="checkbox"/>
Adequate to some extent	<input type="checkbox"/>
Inadequate	<input type="checkbox"/>
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

Laboratory experiments are insufficient

Response of course team

This insufficiency is due to the lack of vibration lab. This is replaced by simulation

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	Completion date	Person responsible
1. Provide more data show apparatuses	None	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: (M471) Machine Design (II)
- 2- Program(s) on which this course is given: Production Eng. and manufacturing 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	85	79.4		No.	%
Failed	22	20,56	Excellent	3	2.8
			Very Good	10	9.3
			Good	10	9.3
			Pass	62	57.9

### 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:



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	13.3 %
Practical/laboratory work	-----
Other assignments/class work	10 %
Mid-Term Exam	10 %
Total	100 %

Members of examination committee Prof. Dr. Serage Eldin 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 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

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	Completion date	Person responsible
None		
Course coordinator: Prof. Dr Serage Eldin Khalifa		
Signature:		
Date: 5/7/2010		

## Annual Course Report 2009/2010

### A- Basic Information

- 1- Title and code: M481: Manufacturing Technology (3)  
 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  Tutorial  Practical  Total   
 5- Names of lecturers contributing to the delivery of the course:  
     Prof. Dr. M. Merdan  
     Prof. Dr. A. Afifi  
 Course coordinator: Prof. Dr. M. Merdan  
 External evaluator: None

### B- Statistical Information

No. of students attending the course: 108  
 No. of students completing the course: 107

Results:

	No.	%
Passed	101	94.40
Failed	6	5.60

Grading of successful students:

	No.	%
Excellent	16	15.00
Very Good	17	15.90
Good	21	19.60
Pass	47	43.90

### 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
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	Prof. Dr. A. Afifi + CNC Lab
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 %  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:  
 None

**3- Student assessment:**

Method of assessment	Percentage of total
▪ Written examination	<input type="text" value="66.66 %"/>
▪ Oral examination	
▪ Practical/laboratory work	<input type="text" value="13.33 %"/>
▪ Other assignments/class work	<input type="text" value="6.66 %"/>
▪ Mid-Term Exam	<input type="text" value="13.33 %"/>
<b>Total</b>	<b>100 %</b>

Members of examination committee Prof. Dr. M. Merdan and Prof. Dr. A.Affif  
 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	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 2009 – 2010**

Actions required	Completion date	Person responsible
None		None

Course coordinator: Prof. Dr. M. Merdan

Signature: M. Merdan

Date: 23/10/2010

## Annual Course Report 2009/2010

### A- Basic Information

- 1- Title and code: (E051) Signal Processing  
 2- Program(s) on which this course is given: Manufacturing Eng. and Production Technology  
 3- Year/Level of program: Fourth Year Second Semester  
 4- Unit hours Lectures  Tutorial  Practical  Total   
 5- Names of lecturers contributing to the delivery of the course  
 Prof. Dr. Ir. Mostafa Saied AFIFI  
 Course coordinator Prof. Dr. Ir. Mostafa Saied AFIFI  
 External evaluator

### B- Statistical Information

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

**Results:**

	No.	%
Passed	87	93.55
Failed	6	6.5

**Grading of successful students:**

	No.	%
Excellent	14	15
Very Good	17	18.3
Good	27	29
Pass	29	31.2

### C- Professional Information

#### 1 – Course teaching

Topic Actually taught	No. of hours	Lecturer
• Introduction, signal processing requirements for mechanics	3	Prof. Dr. Ir. Mostafa Afifi
• Signal Processing, Analog and Digital Signal advantages	5	
• Amplifiers, Diodes, JBTs, FETs and Op Amps	8	
• Frequency Response and Feed Back in Amplifiers.	6	
• Fourier Series and Fourier Transforms	5	
• Low and High Pass Filters using RC and RL circuits	4	
* Band Pass and Band Stop Filters using RLC circuits	4	
* Signal Generators and Power Supplies	6	
• Wien-bridge, RF Hartley Oscillators, Function Generators, Pulse Generators and Power Supplies	8	
• Logic Gates and Switching Circuits	4	
• Boolean Algebra	4	
• Switching Circuits and De-Morgan's Theorems	4	
• Combinational Logic and Arithmetic Circuits	6	
• Flip Flops and timing Circuits	5	
• Micro Computers and Micro-Controllers	4	
• Virtual Machines and Lab-VIEW Processing	4	
• Digital Filtering and Graphical Coding Analysis	6	
<b>Total hours</b>	<b>86</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:** 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 and Graphical Coding.

**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:

Non

**3- Student assessment:**

Method of assessment	Percentage of total
Written examination	60 %
Attendance	5 %
Practical/laboratory work & Exam	20 %
Other assignments/class work	10 %
Mid-Term Exam	5 %
<b>Total</b>	<b>100 %</b>
<b>Members of examination committee</b>	Prof Dr Ir Mostafa Saied Abd-El-Rah man AFIFI
<b>Role of external evaluator</b>	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

Limitation of number of data show projectors in the main building

Limitation of number of operating experiments in the laboratory; due to one hour Lab. Only.

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

List any criticisms

- (a) It is recommended to increase the teaching hours of this course
- (b) Students of Production Engineering need more contact with the material

Response of course team

The teaching hours are determined by the curriculum approved by the supreme council of higher institutes  
 The laboratory exercises need more than one engineer supervisor

**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	Sept. 2010	Done
2. Put more experiments in function in the lab.	January 2011	More experiments are planned

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

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

<b>Actions required</b>	<b>Completion date</b>	<b>Person responsible</b>
1. None		

**Course coordinator:** Prof. Dr. Ir. Mostafa Saied AFIFI  
**Signature:**  
**Date:** 10/4/2010

## Annual Course Report 2009/2010

### A- Basic Information

- 1- Title and code: Summer Training, M 400
- 2- Program(s) on which this course is given: Manufacturing Eng. and Production Technology
- 3- Year/Level of program: Fourth Year Second Semester
- 4- Unit hour's summer trainings during first, second, and third years (2 weeks each)
- 5- Names of lecturers contributing to the delivery of the course  
 Dr Bakkar Elsarnagawy  
 Course coordinator Dr Bakkar Elsarnagawy  
 External evaluator None

### B- Statistical Information

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

Results:

	No.	%
Passed	108	100
Failed	0	0

Grading of successful students:

	No.	%
Excellent	56	51.85
Very Good	29	26.85
Good	3	2.78
Pass	20	18.52

### C- Professional Information

#### 1 – Course teaching

Topic	Lecture hours	Tutorial hours	Practical hours
Practicing the actual production cycle			48
<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 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: 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

Attendance

Practical training & delivering a report

Other assignments/class work

**Mid-Term Exam**

**Total** 100 %

**Members of examination committee** All the 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**

None

**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:**

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

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

Actions required	Completion date	Person responsible
1. None		

**Course coordinator:** Prof. Dr. Bakkar Elsarnagawy

**Signature:**

**Date:** 15/11/2010



## Annual Course Report 2009/2010

### 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     Total
- 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.     %   
 No. of students completing the course:    No.     %

**Results:**

	No.	%
Passed	100	95.24
Failed	5	4.76

**Grading of successful students:**

	No.	%
Excellent	3	2.86
Very Good	13	12.38
Good	32	30.47
Pass	52	49.52

### 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	
<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, 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**

List any criticisms Response of course team

**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: 1/10/2010

## Annual Course Report 2009/2010

### A- Basic Information

- 1- Title and code: (M472) Computer Aided Design  
 2- Program(s) on which this course is given: Manufacturing Eng. and Production Technology  
 3- Year/Level of program: 4<sup>th</sup>. Year  
 4- Unit hours Lectures 3hr Tutorial Practical  Total   
 5- Names of lecturers contributing to the delivery of the course  
 Prof. Abdel-Nasser Zayed  
 Course coordinator: Prof. Abdel-Nasser Zayed  
 External evaluator

### B- Statistical Information

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

Results:

	No.	%
Passed	100	93.5
Failed	7	6.5

Grading of successful students:

	No.	%
Excellent	26	24.3
Very Good	18	16.8
Good	20	18.7
Pass	36	33.7
Failed	7	6.5

### C- Professional Information

#### 1 – COURSE TEACHING

Topic Actually taught	No. of hours	Lecturer
CHAPTER 1: An Overview of Computer-Aided Design & Analysis	2	Prof. Dr. Abdel-Nasser Zayed
CHAPTER 2 : Review of Numerical Techniques for CAD	4	
CHAPTER 3 : Principles of Computer Graphics	12	
CHAPTER 4: Computer Graphics and Design	8	
CHAPTER 5: Introduction to Design Databases	4	
CHAPTER 6 : Overview of the Finite Element Method	8	
CHAPTER 7: Elastic Stress Analysis by the Finite Element Method	4	
CHAPTER 8 : Design Optimization	3	
Total	45	

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, 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:

Practical training/ laboratory:

Seminar/Workshop: Two Seminars were arranged by the students:

- (a) Computer graphics, Design (Pro/Engineer Mechanical)
- (b) Computer graphics, Stress Analysis (Pro/Engineer Mechanical)

Class activity: Solid Modeling Graphics & Mechanica

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 2009 – 2010**

Actions required	Completion date	Person responsible
Non		

Course coordinator: Prof. Abdel-Nasser Zayed

Signature:

Date: 1/10/2010

## Annual Course Report 2009/2010

### A- Basic Information

- 1- Title and code: (M474) Machine Tool Design  
 2- Program(s) on which this course is given: Manufacturing Engineering and Production Technology  
 3- Year/Level of program: 4<sup>th</sup>. Year  
 4- Unit hours      Lectures 4hrs      Tutorial 2hrs      Practical      Total 6 hrs  
 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. <span style="border: 1px solid black; padding: 0 2px;">107</span>	%	<span style="border: 1px solid black; padding: 0 2px;">100</span>	
No. of students completing the course:	No. <span style="border: 1px solid black; padding: 0 2px;">107</span>	%	<span style="border: 1px solid black; padding: 0 2px;">100</span>	
<b>Results:</b>	<b>No.</b>	<b>%</b>	<b>Grading of successful students:</b>	
Passed	71	66.36		<b>No.</b>
Failed	36	33.64		<b>%</b>
			<b>Excellent</b>	0      0
			<b>Very Good</b>	5      4.67
			<b>Good</b>	10      9.35
			<b>Pass</b>	64      52.34
			<b>Failed</b>	36      33.64

### 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	4	2	
Chapter 2: Regulation of Speed & Feed Rates	12	6	
Chapter 3: Design of Machine Tool Structures	12	6	
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	
<b>Total</b>	<b>56</b>	<b>28</b>	<b>84</b>

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: 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	In Points
Written examination	100
Oral examination	----
Practical/laboratory work	
Other assignments/class work	30
Mid-Term Exam	20
<b>Total</b>	<b>150</b>

Members of examination committee Dr. Nabil Gadallah

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:

List any criticisms

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: 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

Non

Completion date

Non

Person responsible

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: (M482) Automatic Control
- 2- Program(s) on which this course is given: Production Engineering and manufacturing Technology
- 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  
     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 2px;">108</span>	100 %
No. of students completing the course:	No. <span style="border: 1px solid black; padding: 0 2px;">106</span>	98.1 %
<b>Results:</b>		
	No.	%
Passed	95	98.6
Failed	11	10.4
<b>Grading of successful students:</b>		
	No.	%
Excellent	8	7.5
Very Good	18	17
Good	18	17
Pass	51	48.1

### 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	8	
• Transfer functions, definition and case studies	10	10	
• Block diagrams; conventions, block diagram algebra and reduction of block diagrams.	4	4	
• 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	10	
➤ System identification based of the transient response.	4	4	
○ Instruments, sensors and controllers	10	10	
○ 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	6	
➤ System identification based of the transient and frequency responses.	4	4	

• Accuracy of feedback systems; steady state error.	4	4
• Stability of feedback systems; Routh-Herwitz and Nyquist stability criteria.	5	5
• Root locus analysis	2	2
• Compensation of control systems	4	4
• Design and tuning of P, PI and PID controllers	6	6
<b>Total hours</b>	105	105

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 c5	d1 to d3

**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 packages; 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
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. M. Galal RABIE and Dr. Metwally Hussein

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**

- (a) it is recommended to solve more examples in the exercises
- (b) The assignment are corrected without giving detailed comments concerning the correct answers
- (c) It is recommended to announce the points of mid- term, rather than the grades.

**Response of course team**

Only a balanced proportion of numerical exercises are solved in the class, the rest are presented as assignments  
The correct results of solutions of problems will be presented during the exercises periods  
The form and timing of declaration of year work evaluation results follow the Academy policy.

**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:**

**Actions required**

Non

**Planned Completion date**

**Accomplishment**

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

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

**Actions required**

1. None

**Completion date**

**Person responsible**

**Course coordinator:** Prof. Dr M. Galal RABIE

**Signature:**

**Date:** August 2, 2010

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 (Production Planning & Control)
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 (Simulation & Modeling)
13	M581	Advanced Manufacturing Processes
14	M599	Project 2

## Annual Course Report 2010/2011

### A- Basic Information

- 1- Title and code: (M552) Operation 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  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:			103			
No. of students completing the course:			101			
<b>Results:</b>	<b>No.</b>	<b>%</b>	<b>Grading of successful students:</b>			
Passed	97	96.04		<b>No.</b>	<b>%</b>	
Failed	4	3.96		<b>Excellent</b>	19	18.8
				<b>Very Good</b>	13	12.9
				<b>Good</b>	23	22.8
				<b>Pass</b>	42	41.6

### C- Professional Information

#### 1 – Course teaching

Topic	Lecture hours	Tutorial hours	Lecturer
1. Introduction; Origins of Operations Research (OR), Nature and Phases of OR, and Impact of OR.	2	-	Dr. M Merdan
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 %  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:**  
 None

**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="10 %"/>
▪ Mid-Term Exam	<input type="text" value="20 %"/>
<b>Total</b>	<b>100 %</b>

**Members of examination committee**  
**Role of external evaluator**

Prof. Dr. M. Merdan  
 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:**
- **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**  
None

**Person responsible**  
None

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

**Signature:** M. Merdan

**Date:** 6/3/2011

## Annual Course Report 2010/2011

### 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, C.E., Comp.E.)  
 4- **Unit hours** Lectures  Tutorial  Practical  Total   
 5- **Names of lecturers contributing to the delivery of the course**  
 Dr. Abdelmagid A. Abdalla, Dr. Metwally H. Metwally  
 Course coordinator Dr. Abdelmagid A. Abdalla  
 External evaluator: None

### B- Statistical Information

No. of students attending the course:	No. <input type="text" value="101"/>	% <input type="text" value="100"/>		
No. of students completing the course:	No. <input type="text" value="101"/>	% <input type="text" value="100"/>		
Results:			Grading of successful students:	
	No.	%		
Passed	99	98	Excellent	No. 29 % 28.7
Failed	2	2	<b>Very Good</b>	17 16.8
			<b>Good</b>	25 24.8
			<b>Pass</b>	28 27.7

### C- Professional Information

#### 1 – Course taught

Topic Actually taught	No. of hours	Lecturer
• Cash Flow	4	Dr. Abdelmagid A. Abdalla, Dr. Metwally H. Metwally
• Compound Interest:	12	
• Time Value of Money	4	
• Nominal and Effective Interest	4	
• Engineering Problem Analysis:	12	
• Depreciation	8	
• Tax effects	4	
<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 12 weeks

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="70 %"/>
Oral examination	----
Practical/laboratory work	----
Other assignments/class work	<input type="text" value="10 %"/>
Quizzes	<input type="text" value="20 %"/>
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 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

**8- Course enhancement:**

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

- The course notes have been printed in the MAM press

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: Dr. Abdelmagid A. Abdalla

Signature:

Date: 5/10/2011

## Annual Course Report 2010/2011

### A- Basic Information

- 1- Title and code: (M571) Computer Aided Manufacturing (CAM).  
 2- Program(s) on which this course is given: Manufacturing Engineering and Production 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="103"/>	%	<input type="text" value="100"/>	
No. of students completing the course:	No. <input type="text" value="101"/>	%	<input type="text" value="100"/>	
<b>Results:</b>				
	No.	%		
Passed	90	89.2		
Failed	11	10.8		
<b>Grading of successful students:</b>				
	No.	%		
Excellent	8	7.9		
Very Good	10	9.9		
Good	13	12.9		
Pass	59	58.4		

### 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 %       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: 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	66.7 %
Practical	13.3 %
Other assignments/class work	10%
Mid-Term Exam	10%

Total

Members of examination committee

Prof. Dr. Atef 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 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: 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

Course coordinator: Prof. Dr. Atef Afifi

Signature:

Date: 25/4/2011

## Annual Course Report 2010/2011

### A- Basic Information

- 1- Title and code: (M573) Automation.  
 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: 103  
 No. of students completing the course: 102  
 Results:

	No.	%
Passed	98	96.07
Failed	4	3.92

Grading of successful students:

	No.	%
Excellent	4	3.9
Very Good	7	6.9
Good	17	16.7
Pass	70	68.6

### C- Professional Information

#### 1- 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 %  95 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: 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="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

Prof. Dr. A.M.Kohail

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
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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 2010– 2011

Actions required

None

Completion date

Person responsible

None

Course coordinator: Prof. Dr. A.M.Kohail

Signature:

Date: 1/4/2011

## Annual Course Report 2010/2011

### A- Basic Information

- 1- Title and code: (M578) Hydraulic Power System.  
 2- Program(s) on which this course is given: Manufacturing Engineering and Production Technology  
 3- Year/Level of program: Fifth Year  
 4- Unit hours Lectures 4 hrs Tutorial 2 hrs Practical 1 hr Total 7 hrs  
 5- Names of lecturers contributing to the delivery of the course  
     Course coordinator Prof. Dr. M. Galal RABIE  
     External evaluator

### B- Statistical Information

No. of students attending the course: No. 103 % 100  
 No. of students completing the course: No. 102 % 97.5

**Results:**

	No.	%
Passed	95	93.1
Failed	7	6.9

**Grading of successful students:**

	No.	%
Excellent	10	9.8
Very Good	8	7.8
Good	17	16.7
Pass	60	58.8

### C- Professional Information

#### 1 – Course teaching

Topic Actually taught	No. of hours	Lecturer
• Power systems, classification, operation, and comparison.	2	Prof. Dr. M Galal RABIE
• Introducing hydraulic power systems, standard symbols	6	
• Hydraulic fluids; properties and effect on system performance.	6	
• Hydraulic transmission lines and connectors	4	
• Hydraulic pumps:	4	
Classification, basic mathematical relations, ideal and real pumps, displacement pump characteristics and specification, flow pulsation and cavitation.	4	
• Gear pumps, vane pumps and piston pumps	8	
• Fixed and variable displacement pumps and pump control	4	
• Control valves	6	
• Classification and basic design	2	
• Pressure control valves (direct/pilot operated); relief valves, pressure reducers, sequence and accumulator charging valves	8	
• Directional control valves	4	
• Flow control valves	2	
• Check valves	2	
• Hydraulic actuators; cylinders, motors and rotary actuators	6	
• Accessories; accumulators, filters, reservoirs, pressure switches,...etc	8	
• Case studies; design and analysis of function of hydraulic circuits of industrial and mobile systems.	11	
Introduction to electrohydraulic servo and proportional valves technology.	18	
<b>Total</b>	<b>105</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: Five seminars were arranged by the students:

(a) Hydraulic Actuators

(b) Hydraulic pumps

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:

**3- Student assessment:**

Method of assessment	Percentage of total
Written examination	<input type="text" value="66.7 %"/>
Oral examination	Non
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. M. Galal RABIE

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 Non.

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

List any criticisms Response of course team

(a) 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: No items recommended.

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

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

<b>Actions required</b>	<b>Completion date</b>	<b>Person responsible</b>
Non		
<b>Course coordinator:</b> Prof. Dr M. Galal Rabie		
<b>Signature:</b>		
<b>Date:</b> 25/8/2011		

## Annual Course Report 2010/2011

### A- Basic Information

- 1- Title and code: (M580c) Elective I.(Production Planning & Control)
- 2- Program(s) on which this course is given: **Manufacture**
- 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. M. Merdan  
 Course coordinator: Prof. Dr. M. Merdan  
 External evaluator: None

### B- Statistical Information

No. of students attending the course: 103

No. of students completing the course: 102

Results:

	No.	%
Passed	97	95.09
Failed	5	4.9

Grading of successful students:

	No.	%
Excellent	9	8.8
Very Good	12	11.8
Good	19	18.6
Pass	57	55.9

### C- Professional Information

#### 1 – Course teaching

Topic	Lecture hours	Tutorial 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 %            <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: Solving managerial problems that might face operations managers in planning and control business organizations.
- 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	10 %
▪ Mid-Term Exam	20 %
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 2011 – 2012

Actions required

None

Completion date

Person responsible

None

Course coordinator: Prof. Dr. M. Merdan

Signature: M. Merdan

Date: 6/3/2011



## Annual Course Report 2010/2011

### A- Basic Information

- 1- Title and code: (M598) Technical Report Writing.  
 2- Program(s) on which this course is given: Manufacturing Engineering 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  
    Prof. Dr. Nabil Gadalla  
    Course coordinator Prof. Dr. Nabil Gadalla  
    External evaluator: None

### B- Statistical Information

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

	No.	%
Passed	100	98.04
Failed	2	1.96

Grading of successful students:		
	No.	%
Excellent	4	3.9
Very Good	10	9.8
Good	22	21.6
Pass	64	62.7

### C- Professional Information

#### 1 – Course teaching

Topic Actually taught	No. of hours	Lecturer
• Introduction	2	Prof. Dr. Nabil Gadalla
• 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:

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="30 %"/>
Other assignments/class work	<input type="text" value="30 %"/>
<b>Total</b>	<b>100 %</b>

Members of examination committee Prof. Dr. Nabil Gadalla  
 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

- Limitation of number of operating experiments in the laboratory

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

List any criticisms

Response of course team

1. No student evaluation report

**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 2011– 2012**

Actions required	Completion date	Person responsible
None		

Course coordinator: Prof. Dr. Nabil Gadalla

Signature:

Date: 1/4/2011

## Annual Course Report 2010/2011

### A- Basic Information

- 1- Title and code: Laws and Regulations For Engineers, B 512  
 2- Program(s) on which this course is given: Comp. Eng & Inf. Tech. Dept.  
 Electronic Eng & Com. Tech Dept.  
 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: - None

### B- Statistical Information

No. of students attending the course:	No.	538	%	<input type="text" value="100"/>
No. of students completing the course:	No.	530		
<b>Results:</b>				
	No.	%	<b>Grading of successful students:</b>	
Passed	529	99.8	No.	%
Failed	1	0.2	Excellent	78 14.71
			Very Good	130 24.52
			Good	170 32.07
			Pass	151 28.49

### 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 بيئيه لحمايه البيئه المصريه	0	
● المناقصات والعطاءات	0	
● قانون تنظيم المناقصات والمزايدات	0	
● العقود الهنديه 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: Some Assignments

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 %
<b>Total</b>	<b>100 %</b>

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

Person responsible

Non

Course coordinator: Prof. Dr S. R. Gouda

Signature:

Date: Nov.2011

## Annual Course Report 2010/2011

### A- Basic Information

- 1- Title and code: B572 : Pollution and Society  
 2- Program(s) on which this course is given: Man. Eng.& Prod. Tech. Dept.  
 3- Year/Level of program: five Year  
 4- Unit hours Lectures  Tutorial  Practical  Total   
 5- Names of lecturers contributing to the delivery of the course  
 Dr. A. M. Aboutaleb Prof. Dr. S. Guoda  
 Course coordinator Dr. A. M. Aboutaleb  
 External evaluator Non

### B- Statistical Information

No. of students attending the course: No. 103  
 No. of students completing the course: No. 101

Results:

Passed	101	100%
Failed	0	0%

Grading of successful students:

	No.	%
Excellent	16	15.8
Very Good	37	36.6
Good	34	33.7
Pass	14	13.9

### C- Professional Information

#### 1 – Course teaching

Topic Actually taught	No. of hours	Lecturer
• The concept of the Ecosystem	4	Prof>Dr. A.M. Abu Taleb
• Population Growth and the Environment.	4	
• Air Pollution	5	
• Water pollution	3	
• Noise pollution	4	
• Solid wastes	4	
• Environmental Impact Assessment and the Egypt law No.4 of 1994 on the Environment	4	
• Final Revision	2	
<b>Total hours</b>	<b>30</b>	

Topics taught as a percentage of the content specified: > 90%  
 Reasons in detail for not teaching any topic Non  
 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:

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 %
<b>Total</b>	<b>100 %</b>

Members of examination committee Dr. A. M. Aboutaleb  
Dr. S.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:**

List any criticisms 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: Non  
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		Non
Course coordinator: Prof. Dr. Aboutaleb		
Signature:		
Date: Nov 2011		

## Annual Course Report 2010/2011

### A- Basic Information

- 1- **Title and code:** M576: Computer Integrated Manufacturing (CIM)  
 2- **Program(s) on which this course is given:** Manufacturing Engineering and Production Technology  
 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**  
 Prof. Dr. Atef Afifi  
 Course coordinator Prof. Dr. Atef Afifi  
 External evaluator

### B- Statistical Information

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

	No.	%
Passed	93	100
Failed	8	8

**Grading of successful students:**

	No.	%
Excellent	13	12.9
Very Good	11	10.9
Good	13	12.9
Pass	56	55.4

### 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	
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:** 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	66.7 %
Practical	13.3 %
Other assignments/class work	10%
Mid-Term Exam	10%
Total	100

**Members of examination committee**

Prof. Dr. Atef Afifi

**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

**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: Prof. Dr. Atef Afifi		
Signature:		
Date: 25/7/2011		



## Annual Course Report 2010/2011

### A- Basic Information

- 1- Title and code: M574: Quality Control  
 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:  
 Prof. Dr. A.M. Kohail  
 Course coordinator: Prof. Dr. A.M..Kohail  
 External evaluator: None

### B- Statistical Information

No. of students attending the course: 103  
 No. of students completing the course: 101

**Results:**

	No.	%
Passed	100	99
Failed	1	1

**Grading of successful students:**

	No.	%
Excellent	24	23.8
Very Good	20	19.8
Good	24	23.8
Pass	32	31.7

### C- Professional Information

#### 1- Course teaching

Topic	Lecture hours	Tutorial hours	Practical hours	Lecturer
• Introduction to quality	2			Prof. A.Kohail
• Quality improvement techniques	2		2	
• Quality improvement monitoring	2			
• Quality cost	2		-	
• Fundamentals of statistics and quality	2	4	2	
• Control charts for variables	7	8	8	
• Fundamentals of probability and quality	4	2	2	
• Control charts for attributes	2	6	6	
• Acceptance sampling plans	3	6	6	
• Acceptance sampling systems	2	2	-	
• Reliability and quality	2	2	-	
• Computers and quality control	2	-	4	
• <b>Total hours</b>	30	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: 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	40
▪ Oral examination	
▪ Practical/laboratory work	
▪ Other assignments/class work	20
▪ Mid-Term Exam	20
<b>Total</b>	<b>100 %</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
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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 2010 – 2011

Actions required

Completion date

Person responsible

None

None

Course coordinator: Prof. Dr. A.M.Kohail

Signature:

Date: 1/8/2011

## Annual Course Report 2010/2011

### A- Basic Information

- 1- Title and code: M580a: (Simulation & Modelling) Elective II  
 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:  
 Prof. Dr. Bakr M. Rabeeh  
 Course coordinator: Prof. Dr. Bakr M. Rabeeh  
 External evaluator: None

### B- Statistical Information

No. of students attending the course:		103		
No. of students completing the course:		101		
Results:	No.	%	Grading of successful students:	
Passed	85	100		
Failed	0	0		
			Excellent	18      17.8
			Very Good	21      20.8
			Good	34      33.7
			Pass	28      27.7

### C- Professional Information

#### 1- 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	
<b>Total hours</b>	<b>30</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: - reduced hours due to extra vacations

#### 2- Teaching and learning methods:

- Lectures:
- Practical training/ laboratory:
- Seminar/Workshop:
- Class activity: 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	60
▪ Oral examination	
▪ Practical/laboratory work	
▪ Other assignments/class work	20
▪ Mid-Term Exam	20
Total	100 %

Members of examination committee

Prof. Dr. Bakr M. Rabeeh

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 2010 – 2011

Actions required

None

Completion date

Person responsible

None

Course coordinator: Prof. Dr. Bakr M. Rabeeh

Signature:

Date: 1/8/2011

## Annual Course Report 2010/2011

### A- Basic Information

- 1- Title and code: M581: Advanced Manufacturing Processes  
 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:  
 Prof. Dr. A.M. Kohail  
 Course coordinator: Prof. Dr. A.M. Kohail  
 External evaluator: None

### B- Statistical Information

No. of students attending the course: 103  
 No. of students completing the course: 101  
 Results:

	No.	%
Passed	97	96.03
Failed	4	3.96

Grading of successful students:

	No.	%
Excellent	4	4
Very Good	16	15.8
Good	19	18.8
Pass	58	57.4

### C- Professional Information

#### 1- Course teaching

Topic	Lecture hours	Tutorial hours	Practical hours
• Introduction to Non-Traditional Machining	3	-	-
• Electro-Discharge Machining (EDM)	10	3	26
• Electro Chemical Machining (ECM)	6	3	-
• Laser beam Machining (LBM)	6	1	2
• Electron beam Machining (EBM)	3	-	-
• Ultrasonic Machining (USM)	3	1	-
• Abrasive jet Machining (AJM)	2	1	2
• Water jet Machining (WJM)	4	2	-
• Abrasive water jet Machining (AWJM)	3	2	-
• Chemical Machining (CHM)	3	1	-
• Plasma Arc Machining (PAM)	2	1	-
•			
• Total hours	45	15	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
- -the lab is equipped only with EDM machine

#### 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="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.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

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

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

Actions required	Completion date	Person responsible
None		

Course coordinator: Prof. Dr. A.Kohail

Signature:

Date: 1/8/2011

## Annual Course Report 2010/2011

### A- Basic Information

- 1- Title and code: (M599) Project 2  
 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  hrs First Term  
                   Lectures  Tutorial  Practical  Total  hrs Second Term  
 In addition to (2-3) weeks (5 days per week / six hours per day ) after written final exams  
 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. <input type="text" value="103"/>	%	<input type="text" value="100"/>	
No. of students completing the course:	No. <input type="text" value="103"/>	%	<input type="text" value="100"/>	
<b>Results:</b>	<b>No.</b>	<b>%</b>	<b>Grading of successful students:</b>	
Passed	100	97.08		
Failed	3	2.92		
			<b>Excellent</b>	<b>No. 43    % 41.74</b>
			<b>Very Good</b>	<b>38    36.9</b>
			<b>Good</b>	<b>17    16.5</b>
			<b>Pass</b>	<b>2    1.94</b>

### C- Professional Information

#### 1 – Course teaching

Topic Actually taught	No. of hours	Lecturer
Collection & technical data	According to the subject of the project	All the teaching staff of the department
Collection & theoretical background		
Design and Technological procedures		
Problem solving		
Realization & design		
Testing and inspection		
Design & experiment		
Writing technical report		
Follow up & technical work		
Assembly & components		
Presenting the product data		
Evaluation & product efficiency		
Collection & technical data		
Total Hours	<b>108</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 None

2- Teaching and learning methods:

Lectures: Classical lecturing, seminars, reports, & presentations

Practical training/ laboratory: Testing & calibration

Seminar/Workshop: 3 seminars in addition to final presentation

Class activity: brain storming, & discussions

Case Study:

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	25%
Oral examination	25%
Practical/laboratory work	50%
Other assignments/class work	
Mid-Term Exam	
Total	100 %

Members of examination committee All members of the

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
- It is difficult to arrange meetings with the supervisors during the periods. Most of the groups meet with their supervisor during the break.	- This will be considered in the following years.

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 2012 – 2013

Actions required	Completion date	Person responsible
Students of each project should be in the same class	Sept. 2012	Chef of chair

Course coordinator: Dr. Abdel Nasser Zayed

Signature:

Date: 1/11/2011



