





## **Mansoura University Faculty of Engineering**

### **Production and Mechanical Design Engineering Department**

Postgraduate Program Report M.Sc.: Mechanical Design





## Postgraduate Program Report M.Sc.: Mechanical Design



# Production and Mechanical Design Engineering Department Postgraduate Program Report M.Sc.: Mechanical Design

#### A. BASIC INFORMATION

Program Title	Master: Mechanical Design
Field of the program	Mechanical Design
System applied for the program	Courses (One Year) + Thesis
Department offering the program	Production and Mechanical Design Engineering
Date of curriculum approval	1984

Academic Year / Level	2013/2014
Number of Courses	9 + Technical English Language
Number of Weeks	40
Lecture Hours/Week	20 hrs (2hrs/Course)
Total Hours	80×9
Credit Hours	50×9

#### **B. SPECIALIZED INFORMATION**

#### **B.1. Statistics**

Element	Number	Percent
Number of student <i>Enrolled</i> in the program	12	
Number of student <i>Completing</i> the program	12	100
Number of students <i>Passed</i> the program	3	25
Number of Excellent graded students	0	0
Number of Very Good graded students	1	8.33
Number of <i>Good</i> graded students	2	16.67
Number of <i>Pass</i> graded students	0	0

#### Courses' Details

No.	Course	Code	Excel.	V.G.	Good	Pass	Fail
1	Mechanical Vibration	PRE4781	0	0	6	3	1
2	Mechanics of Elasticity and Plasticity	PRE4784	0	1	3	4	2
3	Tribology	PRE4786	1	1	0	3	4
4	Numerical Stress Analysis	PRE4787	1	1	2	1	0
5	Design of Mechanical Systems	PRE4790	1	2	1	1	0
6	Machine Tool Design	PRE4791	1	0	1	2	1
7	Optimum Design of Mechanical Units	PRE4792	0	0	0	3	2
8	Material Technology (2)	PRE4794	0	0	1	2	2
9	Computer Applications	PRE4795	0	2	3	5	1
10	Research Seminar	PRE4796	3	2	2	1	2
11	Technical English Language		0	2	4	1	3

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Coordinator: Prof. Dr. Hassan Ali Soltan Department Head: Prof. Dr. Hassan Ali Soltan



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## Postgraduate Program Report M.Sc.: Mechanical Design



#### **B.2. Academic Standards**

National Academic Reference Standards (NARS) for Engineering

#### **B.3. Standard Measurement Reference for the Program**

Questionnaire

#### **B.4. Program Guide**

Available

#### **B.5.** Periodic Review of the Program

Not available

## **B.6.** Compatibility of the Academic Structure of the Program with Education Target Moderate

**B.7. Regulatory and Administrative Constraints** 

Constraint	Intensity			
Constraint	High	Moderate	Low	
Shortage of staff members		*		
Lack of communication with industry	*			
Lack of coordination between the faculty sectors	*			
Ineffective acceptance rules for the students	*			
Bad utilization of the available facilities	*			

#### **B.8. Students' Evaluation of the Program**

**Global Benefit Value** (25%)

#### **Methods of Evaluation**

Questionnaire and Interview

#### **Evaluation s' Details:**

No practical application is established for the program

No real communication with industries and other societies

Time schedules aren't suitable

Shortage of education facilities while Staffs' load is high

Students' motivation is low

No effective rules for students' selection to evaluate their abilities for joining the program

**B.9. Program Enhancement Suggestions** 

Suggested Enhancement	Necessity			
Suggested Enhancement	High	Moderate	Low	
Developing training arrangements with industry	*			
Adding new education facilities	*			
Developing the programs to accommodate market needs	*			
Establishing serious rules for student acceptance	*			
Emphasizing the cooperation between departments	*			
Reconstructing the current program	*			

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#### **B.10.** Comments from External Evaluators

Not available

**B.11. Students' Suggestions** 

Suggestion		Implemented?		
		No		
Developing training arrangements with business sectors and industry		*		
Reconstructing the current program and adding new courses				
Developing the program to accommodate market needs and technology	*			
Actuate the internal training classes and workshops				

#### **B.12.** Cooperation with Industry

Not available

#### **B.13. Quality Management and Development**

Follow up (Not enough)

Effectiveness of Internal Auditing System (Not enough)

**Observations of the External Auditing System** (Not available)

**B.14. Program Development Proposals** 

Area	Description	Completion	Responsible
Program	Reconstruction of current program	Done	Department
External training	External training Making arrangements with industry		Department
Labs/Workshops Modernizing the labs and workshops		One year	Management
Library Adding new books		Done	Department
Other Facilities Adding additional education facilities		One year	Management
Methods Modernizing the teaching methods		One year	Lecturers

#### **B.15. Instructors**

No.	Name	Position	Courses
1	Prof. Dr. Hassan Ali Soltan	Professor	Technical English Language
2	Dr. Mohamed Samy Algyaar	Associate Professor Emeritus	Mechanical Vibration Design of Mechanical Systems Research Seminar
3	Prof. Dr. Mohamed Ahmed Shabara	Professor Emeritus	Mechanics of Elasticity and Plasticity Research Seminar
4	Prof Dr. Ahmed Mostafa Albahloul	Professor Emeritus	Machine Tool Design Tribology Research Seminar
5	Dr. Noha Foda Ibrahim	Assistant Professor	Optimum Design of Mechanical Units Numerical Stress Analysis Research Seminar
6	Dr. Ahmed Mohamed Galal	Assistant Professor	Computer Applications Research Seminar

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