COMSATS Institute of Information Technology
Registrar Office, Principal Seat, Islamabad

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No: CIIT-Reg/Notif-734 /12/ 1059 July 04, 2012

NOTIFICATION

Scheme of Studies of Bachelor of Science (BS) in Mechanical Engineering, BS(ME)

It is hereby notified that the Academic Council in its 13th Meeting held on June 04, 2012 approved the following scheme of studies of Bachelor of Science (BS) in Mechanical Engineering, BS(ME) with effect from Fall 2012 at CIIT system:

1. Minimum Duration:	04 Years
2. Minimum No. of Semesters:	08
3. No. of Credit Hours in each Semester:	16-19

4. **Course Work**	**Min No. of Courses**
i. Engineering Courses (Core), (List Attached)	33
ii. Humanities /Basic Sciences (Core), (List Attached)	16
iii. Technical Electives, (List Attached)	03
Total No. of Courses of the Program:	**52**
Total No. of Credit Hours of the Program:	**140**

Note:

The Regulations relating to Undergraduate Degree Programs approved by the Competent Authority and amended from time to time shall also be applicable to this program.

This issues with the approval of the Competent Authority.

Nadeem Uddin Qureshi
Additional Registrar

Distribution:

1. Dean, Faculty of Engineering, CIIT
2. Dean of Research, Innovation and Commercialization (DORIC), CIIT
3. All Directors, CIIT System.
4. Incharge, CIIT Islamabad Campus
5. Chairman, Department of Electrical Engineering, CIIT
6. All Incharges, Academic Sections, CIIT Campuses
7. All HoD's/Incharges, Department of Electrical Engineering, CIIT Campuses
8. Controller of Examinations, CIIT.
9. All Incharges, Examination Departments, CIIT Campuses.

CC:

1. PS to Rector.
2. PA to Registrar.

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List of Engineering Courses:

Serial No.	Course Code	Course Title	Cr. Hrs.	Pre-requisite
1	EEE121	Electric Circuits Analysis I	4(3, 1)	PHY132
2	EEE241	Digital Logic Design	4(3, 1)	EEE121
3	MEE100	Engineering Drawing and Graphics	2(1, 1)	
4	MEE101	Engineering Statics	3(3, 0)	PHY132
5	MEE110	Engineering Materials	3(3, 0)	
6	MEE111	Workshop Practice	2(0, 2)	MEE100
7	MEE120	Thermodynamics I	3(3, 0)	PHY132
8	MEE201	Engineering Dynamics	3(3, 0)	MEE101
9	MEE203	Mechanics of Materials I	3(3, 0)	MEE101, MEE110
10	MEE204	Mechanics of Materials II	3(3, 0)	MEE203
11	MEE221	Thermodynamics II	3(3, 0)	MEE120
12	MEE225	Engineering Fluid Mechanics I	3(3, 0)	MEE101
13	MEE305	Mechanics of Machines	3(3, 0)	MEE201
14	MEE306	Machine Design	3(3, 0)	MEE204
15	MEE307	CAD / CAM	3(2, 1)	MEE100
16	MEE312	Manufacturing Processes	3(3, 0)	MEE 110
17	MEE326	Engineering Fluid Mechanics II	3(3, 0)	MEE225
18	MEE327	Heat and Mass Transfer	3(3, 0)	MEE120, MEE326
19	MEE328	Refrigeration and Heat Pumps	2(2, 0)	MEE221
20	MEE401	Mechanical Vibrations	3(3, 0)	MEE201, MTH242
21	MEE402	Experimental Stress Analysis	3(2, 1)	MEE204
22	MEE406	Control Engineering	3(3, 0)	MEE201, MTH242
23	MEE407	Finite Element Analysis	3(3, 0)	MEE204

24	MEE427	IC Engines	3(3, 0)	
25	MEE499	Design Project (Part I)	2(0, 2)	
26	MEE499	Design Project (Part II)	4(0, 4)	
27	MEL151	Mechanical Engineering Lab I	1(0, 1)	
28	MEL251	Mechanical Engineering Lab II	1(0, 1)	
29	MEL252	Mechanical Engineering Lab III	1(0, 1)	
30	MEL351	Mechanical Engineering Lab IV	1(0, 1)	
31	MEL352	Mechanical Engineering Lab V	1(0, 1)	
32	MEL451	Mechanical Engineering Lab VI	2(0, 2)	
33	MEL452	Mechanical Engineering Lab VII	2(0, 2)	

List of Non-Engineering Courses:

Serial No.	Course Code	Course Title	Cr. Hrs.	Pre-requisite
1	CSC105	Fundamentals of Computer Programming	3(3, 0)	
2	CSC106	Fundamentals of Computer Programming Lab	1(0, 1)	
3	CSC114	Data Structures and Algorithms	3(3, 0)	CSC105
4	CSC115	Data Structures and Algorithms Lab	1(0, 1)	CSC105, CSC106
5	ECO300	Engineering Economics	3(3, 0)	
6	HUM100	English Comprehension and Composition	3(3, 0)	
7	HUM110	Islamic Studies	3(3, 0)	
8	HUM111	Pakistan Studies	3(3, 0)	
9	HUM320	Introduction to Sociology	3(3, 0)	
10	MTH262	Statistics and Probability Theory	3(3, 0)	

11	MTH101	Calculus I	3(3, 0)	
12	MTH105	Multivariable Calculus	3(3, 0)	MTH101
13	MTH242	Differential Equations	3(3, 0)	MTH105
14	MTH375	Numerical Computations	3(2, 1)	MTH242
15	PHY132	Physics for Chemical Engineers	4(3, 1)	
16	MGT460	Operations Management	3(3, 0)	

List of Technical Electives

Serial No.	Course Code	Course Title	Cr. Hrs.	Pre-requisite
1	MEE424	Renewable Energy Technology	3(3, 0)	MEE221, MEE326
2	MEE421	Computational Fluid Dynamics	3(3, 0)	MEE326
3	MEE426	HVAC Systems	3(3, 0)	MEE221
4	MEE425	Power Plants	3(3, 0)	MEE221
5	MEE409	Robotics and Automation	3(3, 0)	EEE241, MEE305
6	MEE404	Mechanical Engineering Design Analysis	3(3, 0)	MEE306
7	MEE403	Deformation and Failure	3(3, 0)	MEE204
8	MEE415	Maintenance Engineering	3(3, 0)	MEE312
9	MEE411	Advanced Material Processing	3(3, 0)	MEE312

In a semester system, courses are normally defined in terms of credit hours. Some courses have further subdivision into theory and lab work. One credit hour of theory is normally equal to one lecture hour in the class room per week in the semester. One credit hour of lab work, however, is equivalent to three contact hours in the lab per week in the semester.

Courses with pre-requisite(s) can only be registered if the prerequisite courses have been passed.

Incharge