MAHATMA GANDHI UNIVERSITY

Kottayam, Kerala

B.Tech. –Degree Courses 2010-2011

Revised Scheme and Syllabus

And

Syllabus for Combined I & II Sem

Contents

From,

M.C.Philipose

Chairman

Board of Studies in Engg (UG)

M.G.University

Kottayam

To

The Registrar

M.G.University

Kottayam

Sir,

Sub: Regulation,scheme&syllabus

I am herewith submitting the following approved by the Board of Studies in Engg (UG) held on 31.05.2010 at M.G.university mini conference hall.

1. Regulation for B.Tech degree(2010 onwards)

2. Scheme for first to eighth semesters

3. Syllabus for combined first & second (common for all branches)

I request you to take the necessary action in this regard

Thanking you

Yours sincerely

31.05.2010

Mahatma Gandhi University

Course Regulations

of

B.Tech. –Degree Courses

(With effect from 2010 admissions)

IT010 804L04 Network Administration and Management

IT010 804L05 Enterprise Resource Planning

IT010 804L06 Grid Computing

Electives IV

IT010 805G01 Software Architecture

IT010 805G02 Advanced Mathematics

IT010 805G03 Ad Hoc and Sensor Networks

IT010 805G04 Electronic Business and Services

IT010 805G05 Neural Networks

IT010 805G06 Soft Computing

Mahatma Gandhi University Revised Scheme For

B Tech Syllabus Revision 2010 (Mechanical Engineering)

Common for All Branches

SCHEME S1S2

Code	Subject	Hours/week			Marks		End-sem duration-hours	Credits
		L	T	P/D	Inte-rnal	End-sem		
EN010 101	Engineering Mathematics I	2	1	-	50	100	3	5
EN010 102	Engineering Physics	1	1	-	50	100	3	4
EN010 103	Engineering. Chemistry & Environmental Studies	1	1	-	50	100	3	4
EN010 104	Engineering Mechanics	3	1	-	50	100	3	6

EN010 105	Engineering Graphics	1	3	-	50	100	3	6
EN010 106	Basic Civil Engineering	1	1	-	50	100	3	4
EN010 107	Basic Mechanical Engineering	1	1	-	50	100	3	4
EN010 108	Basic Electrical Engineering	1	1	-	50	100	3	4
EN010 109	Basic Electronics Engineering. & Information Technology	2	1	-	50	100	3	5
EN010 110	*Mechanical Workshop*	0	-	3	50	-	3	1
EN110 111	*Electrical and Civil Workshops*	-	-	3	100	-	3	1
	Total	**13**	**11**	**6**			**30**	**44**

3rd Semester

		Hours/week			Marks		End-sem duration -hours	
Code	**Subject**	**L**	**T**	**P/D**	**Inte-rnal**	**End-sem**		**Credits**
EN010 301	Engineering Mathematics II	2	2	-	50	100	3	4
EN010 302	Economics and Communication Skills	2	2	-	50	100	3	4 (3+1)
ME010 303	Fluid Mechanics	2	2	-	50	100	3	4
ME 010 304	Metallurgy & Material Science	3	1	-	50	100	3	4
ME 010 305	Programming in C	3	1	-	50	100	3	4
ME 010 306(CE)	Strength of Materials & Structural Engineering	3	1	-	50	100	3	4
ME 010 307	*Computer ProgrammingLab*	-	-	3	50	100	3	2
ME 010 308	*Fluid Mechanics Lab*	-	-	3	50	100	3	2
	Total	**15**	**9**	**6**				**28**

4th Semester

Code	Subject	Hours/week			Marks		End-sem duration-hours	Credits
		L	T	P/D	Inte-rnal	End-sem		
EN010 401	Engineering Mathematics III	2	2	-	50	100	3	4
EN010 402(ME)	Principles of Management	3	1	-	50	100	3	4
ME 010 403	Hydraulic Machines	2	2	-	50	100	3	4
ME 010 404	Manufacturing Process	3	1	-	50	100	3	4
ME 010 405	Machine Drawing			4	50	100	3	4
ME 010 406(EE)	Electrical Technology	3	1	-	50	100	3	4
ME 010 407	*Hydraulic Machines Lab*	-	-	3	50	100	3	2
ME 010 408(CE)	*Strength of Materials Lab*	-	-	3	50	100	3	2
	Total	**16**	**8**	**6**				**28**

5th Semester

Code	Subject	Hours/week			Marks		End-sem duration-hours	Credits
		L	T	P/D	Inte-rnal	End-sem		
EN010 501A	Engineering Mathematics IV N	**2**	**2**	-	**50**	**100**	3	4
ME 010 502	Computer Aided Design & Manufacturing	**3**	**1**		**50**	**100**	3	4
ME 010 503	Advanced Mechanics of Materials	2	2	-	50	100	3	4
ME 010 504	Kinematics of Machinery	3	1	-	50	100	3	4
ME 010 505	I.C.Engines & Combustion	3	1	-	50	100	3	4

ME 010 506	Thermodynamics	3	1	-	50	100	3	4
ME 010 507	*Computer Graphics & Drafting*	-	-	3	50	100	3	2
ME 010 508	*Electrical & Electronics Lab*	-	-	3	50	100	3	2
	Total	**16**	**8**	**6**				**28**

6th Semester

		Hours/week			Marks		End-sem duration -hours	
Code	**Subject**	**L**	**T**	**P/D**	**Inte-rnal**	**End-sem**		**Credits**
ME 010 601	Mechanics of Machines	2	2	-	50	100	3	4
ME 010 602	Heat & Mass transfer	2	2	-	50	100	3	4
ME 010 603	Thermal Systems & Applications	3	1	-	50	100	3	4
ME 010 604	Metrology & Machine Tools	3	1	-	50	100	3	4
ME 010 605	Mechatronics & Control System	3	1	-	50	100	3	4
ME 010 606Lxx	Elective I	2	2	-	50	100	3	4
ME 010 607	Heat Engines Lab	-	-	3	50	100	3	2
ME 010 608	*Machine Tools Lab*	-	-	3	50	100	3	2
	Total	**15**	**9**	**6**				**28**

Elective I

ME 010 606L01 Computational Fluid Dynamics

ME 010 606L02 Composite Matérials Technology

ME 010 606L03 Automobile engineering

ME 010 606L04 Advanced strength of materials

ME 010 606L05 Industrial Hydraulics

ME 010 606L06 Project management

7th Semester

Code	Subject	Hours/week			Marks		End-sem duration -hours	Credits
		L	T	P/D	Inte-rnal	End-sem		
ME 010 701	Design of Machine Elements	2	2	-	50	100	3	4
ME 010 702	Dynamics of Machines	2	2	-	50	100	3	4
ME 010 703	Gas Dynamics & Jet Propulsion	2	1	-	50	100	3	3
ME 010 704	Refrigeration & Air Conditioning	2	1	-	50	100	3	3
ME 010 705	Industrial Engineering	2	1	-	50	100	3	3
ME 010 706Lxx	Elective II	2	2	-	50	100	3	4
ME 010 707	Mechanical Measurements Lab	-	-	3	50	100	3	2
ME 010 708	*Advanced Machine Tools Lab*	-	-	3	50	100	3	2
ME 010 709	Seminar	-	-	2	50	-	-	2
ME 010 710	*Project*	-	-	1	50	-	-	1
	Total	**12**	**9**	**9**				**28**

Elective II

ME010 706L01 Plant Engineering & Maintenance

ME010 706L02 Turbomachines

ME010 706L03 Theory of vibration

ME010 706L04 Sales & Marketing Management

ME010 706L05 Failure analysis & design

ME010 706L06 Foundary & Welding Technology

8th Semester

Code	Subject	Hours/week			Marks		End-sem duration-hours	Credits
		L	T	P/D	Inte-rnal	End-sem		
ME010 801	Design of Transmission Elements	3	2	-	50	100	3	4
ME010 802	Operations Management	2	2	-	50	100	3	4
ME010 803	Production Engineering	2	2	-	50	100	3	4
ME010 804Lxx	Elective III	2	2	-	50	100	3	4
ME010 805Gxx	Elective IV	2	2	-	50	100	3	4
ME010 806	Mechanical Systems Lab	-	-	3	50	100	3	2
ME010 807	Project	-	-	6	100	-	-	4
ME010 808	Viva Voce	-	-	-	-	50	-	2
	Total	**11**	**10**	**9**				**28**

Electives III

ME010 804L01	Aerospace Engineering
ME010 804L02	Advanced Machining Process
ME010 804L03	Cryogenics
ME010 804L04	Acoustics & noise control
ME010 804L05	Non Destructive Testing
ME010 804L06	Advanced operations research

Electives IV

ME010 805G01 Industrial Safety

ME010 805G02 Disaster Management

ME010 805G03 Nano Technology

ME010 805G04 Finite element analysis

ME010 805G05 Optimization methods in design

ME010 805G06 Petrochemical Engineering

Mahatma Gandhi University Revised Scheme For

B Tech Syllabus Revision 2010

(Instrumentation & Control Engineering)

Common for All Branches

SCHEME S1S2

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EN010 110	*Mechanical Workshop*	0	-	3	50	-	3	1