DUAL DEGREE PROGRAMME

B. Tech & MBA

(2012-13)

Revised

Course Structure

KIIT UNIVERSITY
(Declared U / S 3 of UGC Act , 1956)
Bhubaneswar, Odisha, India

DUAL DEGREE PROGRAMME

B. Tech & MBA

(2012-13)

Course Structure

(For 2012-13 admitted batch and corresponding Lateral entry students)

KiiT KIIT UNIVERSITY
(Declared U / S 3 of UGC Act , 1 9 5 6)
B h u b a n e s w a r , O d i s h a , I n d i a

Total Credits for B. Tech & MBA Course Structure (2012-13)

Name of the Course	B.Tech Credits	MBA Credits	Total Credits
Civil Engineering + MBA	189	92	281
Computer Engineering + MBA	190	92	282
Electrical Engineering + MBA	188	92	280
Electronics & Telecommunication Engineering + MBA	190	92	282
Electronics & Electrical Engineering + MBA	190	92	282
Mechanical Engineering + MBA	187	92	279

COURSE STRUCTURE FOR FIRST YEAR DUAL DEGREE B.TECH & MBA PROGRAMME

AT KIIT UNIVERSITY, BHUBANESWAR

(FOR STUDENTS ADMITTED IN THE SESSION 2012-2013)
(Syllabus common to All Branches of Dual Degree B. Tech & MBA Programme)

FIRST SEMESTER
(SCHEME-I)

Sl. No	Course Code	Subject	L	T	P	Total	Credit
Theory							
1.	MA-101	Mathematics – I	3	1	0	4	4
2.	PH-101	Physics – I	2	1	0	3	3
3.	CH-101/201	Chemistry	3	1	0	4	4
4.	ME-101/201	Engg. Mechanics	3	1	0	4	4
5.	EE-101/201	Electrical Science	2	1	0	3	3
		Total of Theory				**18**	**18**
Practical							
1.	PH-191	Physics Lab – I	0	0	3	3	2
2.	CH-191/291	Chemistry Lab	0	0	3	3	2
3.	EE-191/291	Electrical Science Lab	0	0	3	3	2
		Total of Practical				**9**	**6**
Sessionals							
1.	CE-181/281	Engg. Graphics	0	0	3	3	2
		Total of Sessional				**3**	**2**
		Grand Total				**30**	**26**

SECOND SEMESTER
(SCHEME-I)

Sl. No	Course Code	Subject	L	T	P	Total	Credit
Theory							
1.	MA-201	Mathematics – II	3	1	0	4	4
2.	PH-201	Physics – II	2	1	0	3	3
3.	CS-201/101	Programming in C	3	0	0	3	3
4.	EC-201/101	Basic Electronics	3	0	0	3	3
5.	HU-201/101	Professional Communication	3	0	0	3	3
		Total of Theory				**16**	**16**
Practical							
1.	PH-291	Physics Lab – II	0	0	3	3	2
2.	EC-291/191	Basic Electronics Lab	0	0	3	3	2
3.	CS-291/191	Computer Programming Lab	0	0	3	3	2
		Total of Practical				**9**	**6**
Sessionals							
1.	ME-281/181	Basic Manufacturing Systems	0	0	3	3	2
2.	HU-281/181	Professional Communication Lab	0	0	2	2	1
		Total of Sessional				**5**	**3**
		Grand Total				**30**	**25**
3.	EAA – 1	Extra Academic Activity					P/NP

FIRST SEMESTER
(SCHEME-II)

	Theory						
Sl. No.	**Course Code**	**Subject**	**L**	**T**	**P**	**Total**	**Credit**
1.	MA-101	Mathematics – I	3	1	0	4	4
2.	PH-101	Physics – I	2	1	0	3	3
3.	CS-101/201	Programming in C	3	0	0	3	3
4.	EC-101/201	Basic Electronics	3	0	0	3	3
5.	HU-101/201	Professional Communication	3	0	0	3	3
		Total of Theory				**16**	**16**
	Practical						
1.	PH-191	Physics Lab – I	0	0	3	3	2
2.	EC-191/291	Basic Electronics Lab	0	0	3	3	2
3.	CS-191/291	Computer Programming Lab	0	0	3	3	2
		Total of Practical				**9**	**6**
	Sessionals						
1.	ME-281/181	Basic Manufacturing Systems	0	0	3	3	2
2.	HU-281/181	Professional Communication Lab	0	0	2	2	1
		Total of Sessionals				**5**	**3**
		Grand Total				**30**	**25**

SECOND SEMESTER
(SCHEME-II)

	Theory						
Sl. No.	**Course Code**	**Subject**	**L**	**T**	**P**	**Total**	**Credit**
1.	MA-201	Mathematics – II	3	1	0	4	4
2.	PH-201	Physics – II	2	1	0	3	3
3.	CH-201/101	Chemistry	3	1	0	4	4
4.	ME-201/101	Engg. Mechanics	3	1	0	4	4
5.	EE-201/101	Electrical Science	2	1	0	3	3
		Total of Theory				**18**	**18**
	Practical						
1.	PH-291	Physics Lab – II	0	0	3	3	2
2.	CH-291/191	Chemistry Lab	0	0	3	3	2
3.	EE-291/191	Electrical Science Lab	0	0	3	3	2
		Total of Practical				**9**	**6**
	Sessionals						
1.	CE-281/181	Engg. Graphics	0	0	3	3	2
		Total of Sessional				**3**	**2**
		Grand Total				**30**	**26**
2.	EAA – 1	Extra Academic Activity					P/NP

COURSE STRUCTURE FOR DUAL DEGREE PROGRAMME

(B. Tech in Civil Engineering and MBA)

SEMESTER-III

Theory							
Sl. No.	Course Code	Subjects	L	T	P	Total	Credit
1	MA-301	Mathematics-III	3	1	0	4	4
2	CE-301	Solid Mechanics	3	1	0	4	4
3	CE-302	Fluid Mechanics-I	3	1	0	4	4
4	CE-303	Surveying	3	1	0	4	4
5	CE-304	Civil Engineering Materials & Construction	3	0	0	3	3
6	FM-01	Accounting for Business Manager	3	1	0	4	4
Total of Theory						**23**	**23**
Practical							
1	CE-391	Surveying Field Work	0	0	3	3	2
2	CE-392	Material Testing Lab	0	0	3	3	2
Sessional							
1	CE-381	Building Drawings	-	-	3	3	2
Total Practical & Sessional						**9**	**6**
Semester Total						**32**	**29**

SEMESTER-IV

Theory							
Sl. No.	Course Code	Subjects	L	T	P	Total	Credit
1	MA-402	Numerical Methods	3	1	0	4	4
2	CE-401	Fluid Mechanics-II	3	1	0	4	4
3	CE-402	Structural Analysis-I	3	1	0	4	4
4	CE-403	Transportation Engineering-I	3	0	0	3	3
5	CE-404	Environmental Engineering	3	0	0	3	3
6	ECO-01	Managerial Economics	3	1	0	4	4
Total of Theory						**22**	**22**
Practical							
1	CE-491	Environmental Engg. Lab	0	0	3	3	2
2	CE-492	Transportation Engg. Lab.	0	0	3	3	2
3	CE-493	Fluid Mechanics Lab	0	0	3	3	2
Sessional							
1	CE-482	Estimating and costing	0	0	2	2	1
Total Practical & Sessional						**11**	**7**
Semester Total						**33**	**29**

SEMESTER-V

Theory

Sl. No.	Course Code	Subjects	L	T	P	Total	Credit
1	CE-501	Structural Analysis-II	3	1	0	4	4
2	CE-502	Principles of Structural Design(Concrete +Steel)	3	1	0	4	4
3	CE-503	Water Resource Engineering-I	3	1	0	4	4
4	CE-504	Geotechnical Engineering-I	3	1	0	4	4
5	CE-505	Water &Waste Water Engineering	3	0	0	3	3
6	HR01	Organizational Behavior	2	0	0	2	2
7	QM01	Quantitative Methods	2	0	0	2	2
Total of Theory						**23**	**23**
Practical							
1	CE-591	Geotechnical Engineering Lab.	0	0	3	3	2
Sessional							
1	CE-581	Hydrology & Irrigation Design	0	0	3	3	2
2	CE-582	Environmental Design	0	0	3	3	2
Total Practical & Sessional						**9**	**6**
Semester Total						**32**	**29**

SEMESTER-VI

Theory

Sl. No.	Course Code	Subjects	L	T	P	Total	Credit
1	CE-601	Design of Concrete Structures	3	1	-	4	4
2	CE-602	Water Resources Engineering-II	3	1	-	4	4
3	CE-603	Geotechnical Engineering-II	3	1	-	4	4
4	CE-604	Advance Surveying	3	-	-	3	3
5		Engineering Economics	3	1	-	4	4
6	MM-15	Marketing Management-I	2	0	0	2	2
7	MM-16	Marketing Management-I	2	0	0	2	2
Total of Theory						**23**	**23**
Practical							
	CE-691	Advance surveying Field work	0	0	3	3	2
Sessional							
1	CE-681	Water Resources Design	0	0	3	3	2
2	CE-682	Structural Design (RCC)	0	0	3	3	2
Total Practical / Sessional						**9**	**6**
Semester Total						**32**	**29**

SEMESTER-VII

Sl. No.	Course Code	Subjects	L	T	P	Total	Credit
1	CE-701	Design of Steel Structures	3	1	0	4	4
2	CE-702	Transportation Engineering-II	3	0	0	3	3
3		Department Elective-I	3	0	0	3	3
4	IT01	Information Technology for Managers	2	0	0	2	2
5	IT02	Enterprise Information System	2	0	0	2	2
Total Theory						**14**	**14**
Practical							
1	CE-791	Concrete & Structure Lab.	0	0	3	3	2
Sessional							
1	CE-781	Structural Design(Steel)	0	0	3	3	2
2	CE-782	Transportation Design	0	0	3	3	2
3	CE-783	Project Preparation	0	0	6	6	3
4	CE-784	Practical Training	-	-	-	-	2
Total Practical & Sessional						**15**	**11**
Semester Total						**29**	**25**

SEMESTER-VIII

Sl. No.	Course Code	Subjects	L	T	P	Total	Credit
1	CE-801	Construction Planning & Management	3	-	-	3	3
2		Department Elective-II	3	-	-	3	3
3	FM02	Financial Management	4	-	-	4	4
Total Theory						**10**	**10**
Sessional							
1	CE-881	Computer Application in Civil Engineering	0	0	3	3	2
2	CE-882	Seminar	0	0	3	3	2
3	CE-883	Comprehensive Viva-Voce	-	-	-	-	2
4	CE-884	Project	0	0	9	9	5
Total Practical & Sessional						**15**	**11**
Semester Total						**25**	**21**

* **On - the - Job Training (OJT) of 20 Credits is to be covered in the Summer Term after   8th Semester.**

SEMESTER-IX

Sl. No.	Course Code	Subjects	L	T	P	Total	Credit
1	TOM01	Production and Operations Management	4	-	-	4	4
2	SM04	Business Ethics and Corporate Social Responsibility	2	-	-	2	2
3	SM03	Legal Aspects of Business	2	-	-	2	2
4	QM01	Business Research Methods	2	-	-	2	2
5	HR02	Human Resource Management	2	-	-	2	2
6	SM01	Strategic Management	4	-	-	4	4
7		MBA Elective 1	2	-	-	2	2
8		MBA Elective 2	2	-	-	2	2
9		MBA Elective 3	2	-	-	2	2
10		MBA Elective 4	2	-	-	2	2
Total Theory						**24**	**24**
Laboratories & Sessional							
1							
2							
Total laboratories and Sessional							
Semester Total							**24**

SEMESTER-X

Sl. No.	Course Code	Subjects	L	T	P	Total	Credit
1		MBA Elective 5	2	-	-	2	2
2		MBA Elective 6	2	-	-	2	2
3		MBA Elective 7	2	-	-	2	2
4		MBA Elective 8	2	-	-	2	2
5		MBA Elective 9	2	-	-	2	2
6		MBA Elective 10	2	-	-	2	2
7		MBA Elective 11	2	-	-	2	2
8		MBA Elective 12	2	-	-	2	2
9		MBA Elective 13	2	-	-	2	2
10		MBA Elective 14	2	-	-	2	2
11		MBA Elective 15	2	-	-	2	2
12		MBA Elective 16	2	-	-	2	2
Semester Total						**24**	**24**

LIST OF DEPARTMENT ELECTIVES

Department Elective - I

Sl.No.	Subject Code	Subject Name	Credit
1.	CE-711	Concrete Technology	3
2.	CE-712	Open Channel Hydraulics	3
3.	CE-713	Finite Element Methods	3
4.	CE-714	Environmental Impact Assessment & Auditing	3

Department Elective - II

Sl.No.	Subject Code	Subject Name	Credit
1.	CE-811	Traffic Engineering & Transportation Planning	3
2.	CE-812	Pavement Design	3
3.	CE-813	Structural Analysis-III	3
4.	CE-814	Bridge Engineering	3
5.	CE-815	Earthquake Engineering	3

COURSE STRUCTURE FOR DUAL DEGREE PROGRAMME
(B. Tech in Computer Engineering and MBA)

SEMESTER -III

Theory

SI No	Course Code	Subjects	L	T	P	Total	Credit
1	MA-302	Discrete Mathematics	3	I	0	4	4
2	CS-301	Data Structures & Algorithms	3	I	0	4	4
3	IT-301	Object Oriented Programming	3	I	0	4	4
4	MA-301	Mathematics-III	3	I	0	4	4
5	EC-301	Analog Electronics Circuits-I	3	I	0	4	4
6	FM-01	Accounting for Business Manager	3	I	0	4	4
Total of Theory						**24**	**24**
Practical							
1	IT-391	Object Oriented Programming Lab	0	0	3	3	2
2	CS-391	Data Structures Lab	0	0	6	6	4
Total of Practical						**9**	**6**
Total of Semester						**33**	**30**
1	EAA-2	Extra Academic Activity (EAA-II)					**P/NP**

SEMESTER-IV

Theory

SI No	Course Code	Subjects	L	T	P	Total	Credit
1	CS-402	Database Management System	3	I	0	4	4
2	CS-401/501	Operating System	3	I	0	4	4
3	CS-403	Principles of Programming Languages	3	I	0	4	4
4	EC-402	Digital Electronics	3	I	0	4	4
5	MA-401	Mathematics-IV	3	I	0	4	4
6	ECO-01	Managerial Economics	3	I	0	4	4
Total of Theory						**24**	**24**
Practical							
1	CS-492	Database Systems Laboratory	0	0	3	3	2
2	CS-491	Operating System Laboratory	0	0	3	3	2
3	EC-492	Digital Electronics Laboratory	0	0	3	3	2
Total of Practical						**9**	**6**
Semester Total						**33**	**30**

SEMESTER-V

Theory

SI No	Course Code	Subjects	L	T	P	Total	Credit
1	CS-502	Design and Analysis of Algorithms	3	I	0	4	4
2	CS-505/605	Computer Organization & Architecture	3	I	0	4	4
3	IT-502/602	Computer Graphics & Multimedia	3	I	0	4	4
4	CS-504	Theory of Computation	3	I	0	4	4
5	EC-506/406	Introduction to Digital Communication	3	I	0	4	4
6	HR-01	Organizational Behaviour	2	0	0	2	2
7	QM-01	Quantitative Methods	2	0	0	2	2
Total of Theory						**24**	**24**

Practical

SI No	Course Code	Subjects	L	T	P	Total	Credit
1	CS-592	Algorithms Laboratory	0	0	3	3	2
2	IT-592/692	Computer Graphics Laboratory	0	0	3	3	2
3	CS-594	Advanced Programming Laboratory	0	0	3	3	2
Total of Practical						**9**	**6**
Semester Total						**33**	**30**

SEMESTER-VI

Theory

SI No	Course Code	Subjects	L	T	P	Total	Credit
1	IT-603	Computer Networks	3	I	0	4	4
2	IT-601/501	Software Engineering	3	I	0	4	4
3	CS-603/503	Microprocessors & Interfacing	3	I	0	4	4
4	CS-601	Complier Design	3	I	0	4	4
5		Institute Elective-I	3	I	0	4	4
6	MM-15	Marketing Management-I	2	0	0	2	2
7	MM-16	Marketing Management-II	2	0	0	2	2
Total of Theory						**24**	**24**

Practical

SI No	Course Code	Subjects	L	T	P	Total	Credit
1	CS-691	Complier Design Laboratory	0	0	3	3	2
2	IT-691	Computer Networks Laboratory	0	0	3	3	2
3	CS-693/593	Microprocessors Laboratory	0	0	3	3	2
Total of Practical						**9**	**6**
Semester Total						**33**	**30**

SEMESTER-VII

Theory							
SI No	Course Code	Subjects	L	T	P	Total	Credit
1	IT-703	Object Oriented System Design	3	I	0	4	4
2	CS-701	Artificial Intelligence	3	I	0	4	4
3		Dept. Elective-I/Open Elective	3	I	0	4	4
4		Institute Elective-II	3	0	0	3	3
5	IT-01	Information Technology for Managers	2	0	0	2	2
6	IT-02	Enterprise Information System	2	0	0	2	2
Total of Theory						**19**	**19**
Sessionals							
	CS-782	Project Preparation	0	0	6	6	3
	CS-781	Industrial Training	0	0	0	0	2
Total of Sessionals						**6**	**5**
Semester Total						**25**	**24**

SEMESTER-VIII

Theory							
SI No	Course Code	Subjects	L	T	P	Total	Credit
1		Dept. Elective-IV/Open Elective	3	I	0	4	4
2	CH-801	Environmental Science	2	0	0	2	2
3	FM-02	Financial Management	4	0	0	4	4
Total of Theory						**10**	**10**
Sessionals							
	CS-881	Seminar	0	0	6	6	2
	CS-882	Project	0	0	9	9	5
	CS-883	General Viva Voce	-	-	-	-	2
Total of Sessionals						**15**	**9**
Semester Total						**25**	**19**

*   On - the - Job Training (OJT) of 20 Credits is to be covered in the Summer Term after   8th Semester.

SEMESTER-IX

SI No	Course Code	Subjects	L	T	P	Total	Credit
Theory							
1	TOM-01	Production & Operation Management	4	0	0	4	4
2	SM-04	Business Ethics and Corporate Social responsibility	2	0	0	2	2
3	SM-03	Legal Aspects of Business	2	0	0	2	2
4	QM-01	Business research Methods	2	0	0	2	2
5	HR-02	Human Resources Management	2	0	0	2	2
6	SM-01	Strategic Management	4	0	0	4	4
7		MBA Elective - 01	2	0	0	2	2
8		MBA Elective - 02	2	0	0	2	2
9		MBA Elective - 03	2	0	0	2	2
10		MBA Elective - 04	2	0	0	2	2
Total of Theory						**24**	**24**
Semester Total						**24**	**24**

SEMESTER-X

SI No	Course Code	Subjects	L	T	P	Total	Credit
Theory							
1		MBA Elective - 05	4	0	0	4	4
2		MBA Elective - 06	2	0	0	2	2
3		MBA Elective - 07	2	0	0	2	2
4		MBA Elective - 08	2	0	0	2	2
5		MBA Elective - 09	2	0	0	2	2
6		MBA Elective - 10	4	0	0	4	4
7		MBA Elective - 11	2	0	0	2	2
8		MBA Elective - 12	2	0	0	2	2
9		MBA Elective - 13	2	0	0	2	2
10		MBA Elective - 14	2	0	0	2	2
11		MBA Elective - 15	2	0	0	2	2
12		MBA Elective - 16	2	0	0	2	2
Total of Theory						**24**	**24**
Semester Total						**24**	**24**

LIST OF INSTITUTE ELECTIVES

Institute Elective - I

Sl.No.	Subject Code	Subject Name	Credit
1.	HU-401/501/601	Engineering Economics	4
2.	HU-402/502/602	Public Finance	4
3.	HU-403/503/603	International Trade & Policy	4

Institute Elective - II

Sl.No.	Subject Code	Subject Name	Credit
1.	HU-606/706/806	Entrepreneurship	3
2.	HU-605/705/805	Management Concept & Practices	3
3.	HU-611/711	Human Resources Management	3

LIST OF DEPARTMENT ELECTIVES

Department Elective - I

Sl.No.	Subject Code	Subject Name	Credit
1.	CS-706	Parallel and Distributed Computing	4
2.	CS-711	Bio-Informatics	4
3.	CS-713	Real-Time System	4
4.	IT-710	Mobile Computing	4
5.	IT-702	Computer Security	4

Department Elective - II

Sl.No.	Subject Code	Subject Name	Credit
1.	CS-816	Natural Language Processing	4
2.	IT-815	Soft Computing	4
3.	IT-816	E-Commerce and ERP	4
4.	CS-812	Simulation and Modeling	4
5.	CS-813	Embedded System	4

COURSE STRUCTURE FOR DUAL DEGREE PROGRAMME

(B. Tech in Electrical Engineering and MBA)

SEMESTER-III

Theory

Sl. No.	Course Code	Subjects	L	T	P	Total	Credit
1	MA-301	Mathematics-III	3	1	0	4	4
2	EC-301	Analog Electronics Circuits-I	3	1	0	4	4
3	EE-302	Electrical Measurements	3	1	0	4	4
4	EE-303	Electric Circuit Analysis	3	1	0	4	4
5	ME-311	Thermodynamics	3	1	0	4	4
6	FM-01	Accounting for Business Manager	3	1	0	4	4
Total of Theory						**24**	**24**
Laboratories & Sessionals							
1	EE-393	Electrical Circuit Lab	0	0	3	3	2
2	EE-392	Measurement Lab	0	0	3	3	2
3	EE 391	Analog Electronics Lab-I	0	0	3	3	2
Total Laboratories & Sessionals						**9**	**6**
Semester Total						**33**	**30**
1	EAA-2	Extra Academic activity (EAA-II)					P/NP

SEMESTER-IV

Theory

Sl. No.	Course Code	Subjects	L	T	P	Total	Credit
1	HU 401	Engineering Economics	3	1	0	4	4
2	EE 301/401	Electrical Machines-I	3	1	0	4	4
3	EC 402	Digital Electronic Circuits	3	1	0	4	4
4	MA 401	Mathematics-IV	3	1	0	4	4
5	CE 406	Fluid Mechanics & Hydraulics Machines	3	1	0	4	4
6	ECO-01	Managerial Economics	3	1	0	4	4
Total of Theory						**24**	**24**
Laboratories & Sessionals							
1	EE 491	Electrical Machines Lab-I	0	0	3	3	2
2	EC 492	Digital Electronics Lab.	0	0	3	3	2
3	EE 492	Computational Method Lab.	0	0	3	3	1
Total Laboratories & Sessionals						**9**	**5**
Semester Total						**33**	**29**

SEMESTER-V

Theory

Sl. No.	Course Code	Subjects	L	T	P	Total	Credit
1	EE 404/504	Electrical Machines-II	3	1	0	4	4
2	EE 503	Electric Power Transmission & Distribution	3	1	0	4	4
3	EE 505	Electromagnetic Fields	3	1	0	4	4
4	EE 502	Microprocessor & Microcontrollers	3	1	0	4	4
5	EE 502/602	Power Electronics	3	1	0	4	4
6	HR-01	Organization Behaviour	2	0	0	2	2
7	QM-01	Quantitative Methods	2	0	0	2	2
Total of Theory						**24**	**24**
Laboratories & Sessionals							
1	EE 594	Electrical Machines Lab -II	0	0	3	2	2
2	EE 592	Power Electronics Lab	0	0	3	2	2
3	EC 592	Microprocessor Lab	0	0	3	2	2
Total Laboratories & Sessionals						**6**	**6**
Semester Total						**30**	**30**

SEMESTER-VI

Sl. No	Subject Code	Subjects	L	T	P	Total	Credit
1	-	Departmental Elective-I	3	0	0	3	3
2	-	Departmental Elective-II	3	0	0	3	3
3	EC 605	Communication engineering	3	1	0	4	4
4	EE 604	Control system-I	3	1	0	4	4
5	EE 605/805	Switch Gear & Protection	3	0	0	3	3
6	MM-15	Marketing Management-I	2	0	0	2	2
7	MM-16	Marketing Management-II	2	0	0	2	2
Total Theory						**21**	**21**
Laboratories & Sessionals:							
1	EE 694	Control Lab	0	0	3	2	2
2	EE 695	Power System Lab	0	0	3	2	2
3	EE 686	Power Apparatus design	0	0	3	2	2
Total Laboratories & Sessionals						**6**	**6**
Semester Total						**27**	**27**

Sl. No.	Subject Code	Subjects	L	T	P	Total	Credit
1	EE 701	Electric Drives	3	1	0	4	4
2	EE-705	Control System-II	3	1	0	4	4
3		Dept. Elective -III	3	1	0	4	4
4	IT -01	Information Technology for Managers	2	0	0	2	2
5	IT-02	Enterprise Information System	2	0	0	2	2
Total Theory						**16**	**16**
Laboratories & Sessionals:							
1	EE 791	Electric Drives Lab	0	0	3	2	2
2	EE 781	Electrical Installation & Design	0	0	3	2	2
3	EE 782	Practical Training	-	-	-	2	2
4	EE 783	Project Preparation	0	0	6	3	3
Total Laboratories & Sessioinals						**9**	**9**
Semester Total						**25**	**25**

SEMESTER-VIII

Theory							
Sl. No.	Subject Code	Subjects	L	T	P	Total	Credit
1	CH 801	Environmental Science	2	0	0	2	2
2		Department Elective-IV	3	0	0	3	3
3	FM 02	Financial Management	3	1	0	4	4
Total Theory						**9**	**9**
Laboratories & Sessionals:							
1	PGEE 292	Modeling and Simulation Lab	0	0	3	3	3
2	PGEE 197	Energy System Lab.	0	0	3	2	2
3	EE 883	Seminar	0	0	3	2	2
4	EE 881	Project	0	0	9	5	5
Total Laboratories & Sessionals						**12**	**12**
Semester Total						**21**	**21**

*   **On - the - Job Training (OJT) of 20 Credits is to be covered in the Summer Term after   8th Semester.**

SEMESTER-IX

Theory

Sl.No.	Subject Code	Subjects	L	T	P	Total	Credit
1	TOM-01	Production and Operation Management	4	0	0	4	4
2	SM-04	Business Ethics & Corporate Social Responsibility	2	0	0	2	2
3	SM-03	Legal aspects Business	2	0	0	2	2
4	QM-01	Business Research Method	2	0	0	2	2
5	HR-02	Human Resource Management	2	0	0	2	2
6	SM-01	Strategic Management	4	0	0	4	4
7		MBA Elective-01	2	0	0	2	2
8		MBA Elective-02	2	0	0	2	2
9		MBA Elective-03	2	0	0	2	2
10		MBA Elective-04	2	0	0	2	2
Total of Theory						**24**	**24**
Semester Total						**24**	**24**

SEMESTER-X

Theory

Sl.No.	Subject Code	Subjects	L	T	P	Total	Credit
1		MBA Elective 05	2	0	0	2	2
2		MBA Elective 06	2	0	0	2	2
3		MBA Elective 07	2	0	0	2	2
4		MBA Elective 08	2	0	0	2	2
5		MBA Elective 09	2	0	0	2	2
6		MBA Elective 10	2	0	0	2	2
7		MBA Elective 11	2	0	0	2	2
8		MBA Elective 12	2	0	0	2	2
9		MBA Elective 13	2	0	0	2	2
10		MBA Elective 14	2	0	0	2	2
11		MBA Elective 15	2	0	0	2	2
12		MBA Elective 16	2	0	0	2	2
Total of Theory						**24**	**24**
Semester Total						**24**	**24**

LIST OF DEPARTMENT ELECTIVES

Department Elective - I

Sl.No.	Subject Code	Subject Name	Credit
1.	EE 601	Electrical Engineering Materials	3
2.	EE 603	Power Apparatus Design	3

Department Elective - II

Sl.No.	Subject Code	Subject Name	Credit
1.	EE 607	High Voltage AC & DC Transmission	3
2.	EE 606/706	Power Station Engineering	3

Department Elective - III

Sl.No.	Subject Code	Subject Name	Credit
1.	EE 702	Advanced Power Systems	4
2.	EE 609 / 709	Power Systems Operations and Control	4

Department Elective - IV

Sl.No.	Subject Code	Subject Name	Credit
1.	EE 802	Utilization of Electric Power	3
2.	EE 804	Electric Traction	3
3	EE 803	Computer Application in Power System	3

COURSE STRUCTURE FOR DUAL DEGREE PROGRAMME
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SEMESTER-III

Theory							
Sl. No	**Subject Code**	**Course Title**	**L**	**T**	**P**	**Total**	**Credits**
1.	MA 301	Mathematics – III	3	1	0	4	4
2.	EC 301	Analog Electronic Circuits – I	3	1	0	4	4
3.	EC 302	Signals & Networks	3	1	0	4	4
4.	EC 303	Semiconductor Devices	3	0	0	3	3
5.	EC 304/404	Measurements & Instrumentation	3	1	0	4	4
6.	IT- 301	Object Oriented Programming	3	0	0	3	3
7.	FM01	Accounting for Business Managers	3	1	0	4	4
Total of Theory						**26**	**26**
Practical							
7.	EC-391	Analog Electronic Circuits Lab – I	0	0	3	3	2
8.	EC-392	Signals & Networks Lab	0	0	3	3	2
9.	IT-391	OOPS Lab	0	0	3	3	2
Total of Practicals						**9**	**6**
Semester Total						**35**	**32**
1	EAA-2	Extra Academic Activity (EAA-II)					**P/NP**

SEMESTER-IV

Theory							
Sl. No	**Subject Code**	**Course Title**	**L**	**T**	**P**	**Total**	**Credits**
1.	MA-401	Mathematics – IV	3	1	0	4	4
2.	EC-402	Digital Electronic Circuits	3	1	0	4	4
3.	EC-401	Analog Electronic Circuits – II	3	1	0	4	4
4.	EC-403	Electromagnetic Theory	3	1	0	4	4
5.	EC-405	Analog Communication Techniques	3	1	0	4	4
6.		Institute Elective - I	3	1	0	4	4
7.	ECO-01	Managerial Economics	3	1	0	4	4
Total of Theory						**28**	**28**
Practical							
7.	EC-492	DEC Lab	0	0	3	3	2
8.	EC-491	Analog Electronic Circuits Lab - II	0	0	3	3	2
Total of Practicals						**6**	**4**
Semester Total						**34**	**32**

SEMESTER-V

Theory

Sl. No	Subject Code	Course Title	L	T	P	Total	Credits
1.	EC-501	Digital Communication Techniques	3	1	0	4	4
2.	EC-502	Microprocessors & Microcontrollers	3	1	0	4	4
3.	EC-503	Optical & Satellite Communication	3	1	0	4	4
4.	E&E-501	Control Systems	3	1	0	4	4
5.	EC-504	Digital Signal Processing	3	1	0	4	4
6.	HR01	Organizational Behavior	2	0	0	2	2
7.	QM01	Quantitative Methods	2	0	0	2	2
Total of Theory						**24**	**24**
Practical							
6.	E&E-591	Control & Instrumentation Lab	0	0	3	3	2
7.	EC-595	Communication Engg. Lab	0	0	3	3	2
8.	EC-592	Microprocessor Lab	0	0	3	3	2
Total of Practicals						**9**	**6**
Semester Total						**33**	**30**

SEMESTER-VI

Theory

Sl. No	Subject Code	Course Title	L	T	P	Total	Credits
1.	EC-601	Antenna & Wave Propagation	3	1	0	4	4
2.	EC-602	VLSI Design	3	0	0	3	3
3.	CS-650	Computer Organisation & Operating Systems	3	1	0	4	4
4.		Dept. Elective –I/Open Elective	3	0	0	3	3
5.		Institute Elective–II	3	0	0	3	3
6.	MM-15	Marketing Management - I	2	0	0	2	2
7.	MM-16	Marketing Management - II	2	0	0	2	2
Total of Theory						**21**	**21**
Practical							
6.	EC-694	DSP Lab	0	0	3	3	2
7.	EC-693	Design & Simulation Lab	0	0	3	3	2
8.	EC-692	VLSI Lab	0	0	3	3	2
Total of Practicals						**9**	**6**
Semester Total						**30**	**27**

SEMESTER-VII

Theory

Sl. No	Subject Code	Course Title	L	T	p	Total	Credits
1.	EC-701	RF & Microwave Engg.	3	1	0	4	4
2.	EC-703	Computer & Communication Networks	3	1	0	4	4
3.	IT01	Information Technology for Managers	2	0	0	2	2
4.	IT02	Enterprise Information System	2	0	0	2	2
Total of Theory						**12**	**12**
Practical							
5.	EC-792	Wireless Communication & Networking Lab	0	0	3	3	2
6.	EC-791	MW & Antenna Lab	0	0	3	3	2
Total of Practical						**6**	**4**
Sessional							
7.	EC-781	Project Preparation	0	0	6	6	3
8.	EC-782	Practical Training	-	-	-	-	2
Total of Sessional						**6**	**5**
Semester Total						**24**	**21**

SEMESTER-VIII

Theory

Sl. No	Subject Code	Course Title	L	T	P	Total	Credits
1.		Dept. Elective – II/Open Elective	3	0	0	3	3
2.		Dept. Elective – III/Open Elective	3	0	0	3	3
3.	CH-801	Environmental Science	2	0	0	2	2
4.	FM02	Financial Management	3	1	0	4	4
Total of Theory						**12**	**12**
Sessionals							
5.	EC-881	Project	0	0	9	9	5
6.	EC-882	Seminar	0	0	3	3	2
7.	EC-883	General Viva- voce	-	-	-	-	2
Total of Sessionals						**12**	**9**
Semester Total						**24**	**21**

* **On - the - Job Training (OJT) of 20 Credits is to be covered in the Summer Term after 8th Semester.**

SEMESTER-IX

Theory

Sl. No	Subject Code	Course Title	L	T	P	Total	Credits
1.	TOM01	Production and Operation Management	3	1	0	4	4
2.	SM 04	Business ethics and Corporate Social Responsibility	2	0	0	2	2
3.	SM 03	Legal Aspect of Business	2	0	0	2	2
4.	QM02	Business Research Methods	2	0	0	2	2
5.	HR02	Human Resource Management	2	0	0	2	2
6.	SM01	Strategic Management	4	0	0	4	4
7.		MBA Elective-1	2	0	0	2	2
8.		MBA Elective-2	2	0	0	2	2
9.		MBA Elective-3	2	0	0	2	2
10.		MBA Elective-4	2	0	0	2	2
Total of Theory						**24**	**24**
Semester Total						**24**	**24**

SEMESTER-X

Theory

Sl. No	Subject Code	Course Title	L	T	P	Total	Credits
1.		MBA Elective-5	2	0	0	2	2
2.		MBA Elective-6	2	0	0	2	2
3.		MBA Elective-7	2	0	0	2	2
4		MBA Elective-8	2	0	0	2	2
5.		MBA Elective-9	2	0	0	2	2
6.		MBA Elective-10	2	0	0	2	2
7.		MBA Elective-11	2	0	0	2	2
8.		MBA Elective-12	2	0	0	2	2
9.		MBA Elective-13	2	0	0	2	2
10.		MBA Elective-14	2	0	0	2	2
11.		MBA Elective-15	2	0	0	2	2
12.		MBA Elective-16	2	0	0	2	2
Total of Theroy						**24**	**24**
Semester Total						**24**	**24**

LIST OF INSTITUTE ELECTIVES

Institute Elective - I

Sl.No.	Subject Code	Subject Name	Credit
1.	HU-401/501/601	Engineering Economics	4
2.	HU-402/502/602	Public Finance	4
3.	HU-403/503/603	International Trade & Policy	4

Institute Elective - II

Sl.No.	Subject Code	Subject Name	Credit
1.	HU-606/706/806	Entrepreneurship	3
2.	HU-605/705/805	Management Concept & Practices	3
3.	HU-611/711	Human Resources Management	3
4.	HU-304/604	Organization Behavior	3

LIST OF DEPARTMENT ELECTIVES

Department Elective - I

Sl.No.	Subject Code	Subject Name	Credit
1.	EC-616	Mobile Communication Engg.	3
2.	EC-606/806	Advanced Microprocessors	3
3.	EC-608	Optoelectronics and Photonics	3
4.	EC-607/707	Adaptive Systems & Signal Processing	3

Department Elective - II

Sl.No.	Subject Code	Subject Name	Credit
1.	EC-820	Telecom Switching Networks & Protocols	3
2.	EC-821	Radar & Television Engg.	3
3.	EC-822	Computational Intelligence	3
4.	EC-709/809	Embedded Systems	3

Department Elective - III

Sl.No.	Subject Code	Subject Name	Credit
1.	EC-805	Digital Image Processing	3
2.	EC-810	Information Theory & Coding	3
3.	EC-811	Communication & Network Security	3
4.	Ec-815	Modern Digital Communication Techniques	3

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(B. Tech in Electronics & Electrical Engineering and MBA)

SEMESTER-III

Sl.No.	Subject Code	Course Title	L	T	P	Total	Credits
Theory							
1.	MA-301	Mathematics – III	3	1	0	4	4
2.	EC-301	Analog Electronic Circuits - I	3	1	0	4	4
3.	EC-302	Signals & Networks	3	1	0	4	4
4.	EC-303	Semiconductor Devices	3	0	0	3	3
5.	IT-301	Object Oriented Programming	3	0	0	3	3
6.	EE-301/ 401	Electrical Machine - I	3	1	0	4	4
7.	FM01	Accounting for Business Managers	3	1	0	4	4
Total of Theory						**26**	**26**
Practical							
7.	EC-391	Analog Electronic Circuits Lab –I	0	0	3	3	2
8.	EC-392	Signals & Networks Lab	0	0	3	3	2
9	IT-391	OOPS Lab	0	0	3	3	2
Total of Practicals						**9**	**6**
Semester Total						**35**	**32**
1	EAA-2	Extra Academic Activity (EAA-II)					**P/NP**

SEMESTER-IV

Sl.No.	Subject Code	Course Title	L	T	P	Total	Credits
Theory							
1.	MA-401	Mathematics – IV	3	1	0	4	4
2.	EC-402	Digital Electronic Circuits	3	1	0	4	4
3.	EC-401	Analog Electronic Circuits – II	3	1	0	4	4
4.	EC-403	Electromagnetic Theory	3	1	0	4	4
5.	EE-404/ 504	Electrical Machine – II	3	1	0	4	4
6.	EC-404/304	Measurements & Instrumentation	3	1	0	4	4
7.	ECO-01	Managerial Economics	3	1	0	4	4
Total of Theory						**28**	**28**
Practical							
7.	EC-491	Digital Electronics Lab	0	0	3	3	2
8.	EE-494	Electrical Machines Lab	0	0	3	3	2
Total of Practicals						**6**	**4**
Semester Total						**34**	**32**

SEMESTER-V

Theory

Sl.No	Subject Code	Course Title	L	T	P	Total	Credits
1.	EC-505	Communication Engg	3	1	0	4	4
2.	EC-502	Microprocessors & Microcontrollers	3	1	0	4	4
3.	E&E-501	Control Systems	3	1	0	4	4
4.	EE-503	Electric Power Transmission & Distribution	3	1	0	4	4
5.		Institute Elective – I	3	1	0	4	4
6.	HR01	Organizational Behavior	2	0	0	2	2
7.	QM01	Quantitative Methods	2	0	0	2	2
Total of Theory						**24**	**24**
Practical							
6.	E&E-591	Control & Instrumentation Lab	0	0	3	3	2
7.	EC-595	Communication Engg. Lab	0	0	3	3	2
8.	EC-592	Microprocessor Lab	0	0	3	3	2
Total of Practicals						**9**	**6**
Semester Total						**33**	**30**

SEMESTER-VI

Theory

Sl.No	Subject Code	Course Title	L	T	P	Total	Credits
1.	EC-604/504	Digital Signal Processing	3	1	0	4	4
2.	EE-602	Power Electronics	3	1	0	4	4
3.	EE-609	Power System Operation & Control	3	1	0	4	4
4.		Dept. Elective – I/Open Elective	3	0	0	3	3
5.		Institute Elective – II	3	0	0	3	3
6.	MM-15	Marketing Management - I	2	0	0	2	2
7.	MM-16	Marketing Management - II	2	0	0	2	2
Total of Theory						**22**	**22**
Practical							
6.	EC-694	DSP Lab	0	0	3	3	2
7.	EE-692	Power Electronics Lab	0	0	3	3	2
8.	EE-695	Power Systems Lab	0	0	3	3	2
Total of Practicals						**9**	**6**
Semester Total						**31**	**28**

SEMESTER-VII

Theory

Sl.No	Subject Code	Course Title	L	T	P	Total	Credits
1.	EE-701	Electric Drives	3	1	0	4	4
2.	E&E-701	Industrial Automation & Control	3	0	0	3	3
3.	IT01	Information Technology for Managers	2	0	0	2	2
4.	IT02	Enterprise Information System	2	0	0	2	2
Total of Theory						**11**	**11**
Practical							
5.	EE-791	Electric Drives Lab	0	0	3	3	2
Total of Practical						**3**	**2**
Sessional							
6.	EE-784	Electrical Machine Design	0	0	3	3	2
7.	E&E-781	Project Preparation	0	0	6	6	3
8.	E&E-782	Practical Training	-	-	-	-	2
Total of Sessional						**9**	**7**
Semester Total						**23**	**20**

SEMESTER-VIII

Theory

Sl.No	Subject Code	Course Title	L	T	P	Total	Credits
1.		Dept. Elective – II/Open Elective	3	0	0	3	3
2.		Dept. Elective – III/Open Elective	3	0	0	3	3
3.	CH-801	Environmental Science	2	0	0	2	2
4.	FM02	Financial Management	3	1	0	4	4
Total of Theory						**12**	**12**
Sessionals							
1.	E&E-881	Project	0	0	9	9	5
2..	E&E-882	Seminar	0	0	3	3	2
3.	E&E-883	General Viva-Voce	-	-	-	-	2
Total of Sessionals						**12**	**9**
Semester Total						**24**	**21**

*   On - the - Job Training (OJT) of 20 Credits is to be covered in the Summer Term after   8th Semester.

SEMESTER-IX

Theory

Sl. No	Subject Code	Course Title	L	T	P	Total	Credits
1.	TOM01	Production and Operation Management	3	1	0	4	4
2.	SM 04	Business ethics and Corporate Social Responsibility	2	0	0	2	2
3.	SM 03	Legal Aspect of Business	2	0	0	2	2
4.	QM02	Business Research Methods	2	0	0	2	2
5.	HR02	Human Resource Management	2	0	0	2	2
6.	SM01	Strategic Management	4	0	0	4	4
7.		MBA Elective-1	2	0	0	2	2
8.		MBA Elective-2	2	0	0	2	2
9.		MBA Elective-3	2	0	0	2	2
10.		MBA Elective-4	2	0	0	2	2
Total of Theory :						**24**	**24**
Semester Total						**24**	**24**

SEMESTER-X

Theory

Sl. No	Subject Code	Course Title	L	T	P	Total	Credits
1.		MBA Elective-5	2	0	0	2	2
2.		MBA Elective-6	2	0	0	2	2
3.		MBA Elective-7	2	0	0	2	2
4		MBA Elective-8	2	0	0	2	2
5.		MBA Elective-9	2	0	0	2	2
6.		MBA Elective-10	2	0	0	2	2
7.		MBA Elective-11	2	0	0	2	2
8.		MBA Elective-12	2	0	0	2	2
9.		MBA Elective-13	2	0	0	2	2
10.		MBA Elective-14	2	0	0	2	2
11.		MBA Elective-15	2	0	0	2	2
12.		MBA Elective-16	2	0	0	2	2
Total of Theroy :						**24**	**24**
Semester Total						**24**	**24**

LIST OF INSTITUTE ELECTIVES

Institute Elective - I

Sl.No.	Subject Code	Subject Name	Credit
1.	HU-401/501	Engineering Economics	4
2.	HU-402/502	Public Finance	4
3.	HU-403/503	International Trade & Policy	4

Institute Elective - II

Sl.No.	Subject Code	Subject Name	Credit
1.	HU-603	Entrepreneurship	3
2.	HU-605	Management Concept & Practices	3
3.	HU-611/711	Human Resources Management	3
4.	HU-604	Organization Behavior	3

LIST OF DEPARTMENT ELECTIVES

Department Elective - I

Sl.No.	Subject Code	Subject Name	Credit
1.	EC 602	VLSI Design	3
2.	E&E-601	Advanced Control Systems	3
3.	CS 651	Computer Architecture	3
4.	EE 606	Power Station Engg.	3

Department Elective - II & III

Sl.No.	Subject Code	Subject Name	Credit
1.	EE 805	Switch Gear & Protection	3
2.	EE 803	Computer Application in Power System	3
3.	EC 816	Mobile Communication Engg.	3
4.	EC 805	Digital Image Processing	3
5.	EC 809/709/609	Embedded Systems	3
6.	EI 806/706	Bio-medical Instrumentation	3

COURSE STRUCTURE FOR DUAL DEGREE PROGRAMME

(B. Tech in Mechanical Engineering and MBA)

SEMESTER-III

Theory							
Sl No.	Course Code	Subject	L	T	P	Total	Credit
1	ME-301	Engineering Thermodynamics-I	3	0	0	3	3
2	ME-302	Engineering Metallurgy	3	0	0	3	3
3	ME-303	Mechanics of Materials-I	3	1	0	4	4
4	ME-304	Fluid Mechanics	3	1	0	4	4
5	MA-301	Mathematics-III	3	1	0	4	4
6	HU-303	Organizational Behavior	3	0	0	3	3
7	FM-01	Accounting for Business Manager	3	1	0	4	4
Total of Theory						25	25
Practical							
1	ME-391	Fluid Mechanics Lab	0	0	2	2	1
2	ME-392	Material Testing Lab	0	0	2	2	1
Total of Practical						4	2
Sessional							
1.	ME-381	Machine Drawing	0	0	3	3	1
2.	ME-382	MP Lab-I	0	0	3	3	1
Total of Sessional						6	2
Semester Total						35	29
1	EAA-2	Extra Academic Activity (EAA-II)					**P/NP**

SEMESTER-IV

Theory							
Sl No.	Course Code	Subject	L	T	P	Total	Credit
1	ME-401	Engineering Thermodynamics-II	3	0	0	3	3
2	ME-402	Manufacturing Technology-I	3	0	0	3	3
3	ME-403	Mechanics of Materials-II	3	1	0	4	4
4	ME-404	Machine Dynamics-I	3	1	0	4	4
5	MA-402	Numerical Methods	3	1	0	4	4
6	EE-403	Electrical Machines	3	0	0	3	3
7	ECO-01	Managerial Economics	3	1	0	4	4
Total of Theory						25	25
Practical							
1	ME-491	Applied Mechanics Lab	0	0	3	3	1
2	EE-493	Electrical Machines Lab	0	0	3	3	2
Total of Practical						6	3
Sessional							
1	ME-481	CAD Lab	0	0	3	**3**	**1**
2	ME-482	MP Lab-II	0	0	3	**3**	**1**
Total of Sessional						6	2
Semester Total						37	30

SEMESTER-V

Theory

Sl No.	Course Code	Subject	L	T	P	Total	Credit
1	ME-501	Heat Transfer	3	1	0	4	4
2	ME-502	Manufacturing Technology-II	3	0	0	3	3
3	ME-503	Design of Machine Elements-I	3	0	0	3	3
4	ME-504	Machine Dynamics-II	3	1	0	4	4
5	ME-505	Mechanical Measurements	3	0	0	3	3
6	ME-506	Metrology, Quality Assurance & Reliability	3	0	0	3	3
7	HR-01	Organizational Behaviour	2	0	0	2	2
8	QM-01	Quantitative Methods	2	0	0	2	2
Total of Theory						**24**	**24**
Practical							
1	ME-591	Heat Transfer Lab.			2	2	1
2	ME-592	Measurement & Instrumentation Lab.			2	2	1
3	ME-593	Machine Dynamics Lab.			3	3	1
Total of Practical						**7**	**3**
Sessional							
1	ME-581	Design of Machine Elements -I			3	3	2
Total of Sessional						**3**	**2**
Semester Total						**34**	**29**

SEMESTER-VI

Theory

Sl No.	Course Code	Subject	L	T	P	Total	Credit
1	ME-601	Internal Combustion Engine & Gas Turbine	3	0	0	3	3
2	ME-602	Metal Cutting & Tool Design	3	1	0	4	4
3	ME-603	Design of Machine Elements-II	3	0	0	3	3
4	ME-604	Fluid Dynamics & Hydraulic Machines	3	1	0	4	4
5	ME-605	Advance Manufacturing Process	3	0	0	3	3
6		Department Elective-I/Open elective	3	0	0	3	3
7	MM-15	Marketing Management - I	2	0	0	2	2
8	MM-16	Marketing Management - II	2	0	0	2	2
Total of Theory						**24**	**24**
Practical							
1	ME-691	Hydraulic Machines Lab.	0	0	2	2	1
2	ME-692	IC Engine Lab	0	0	2	2	1
Total of Practical						**4**	**2**
Sessional							
1	ME-681	Design of Machine Elements- II	0	0	3	3	2
2	ME-682	Metal Cutting & Tool Design	0	0	3	3	2
Total of Sessional						**6**	**4**
Semester Total						**34**	**30**

SEMESTER-VII

Theory

Sl No.	Course Code	Subject	L	T	P	Total	Credit
1	ME-701	Refrigeration & Air Conditioning	3	0	0	3	3
2	HU-701	Engineering Economics	3	0	0	3	3
3		Department Elective-II	3	0	0	3	3
4	IT-01	Information and Technology for Managers	2	0	0	2	2
5	IT-02	Enterprise Information System	2	0	0	2	2
Total of Theory						**13**	**13**
Practical							
1	ME-791	Refrigeration & Air Conditioning Lab.			2	2	1
2	ME-792	Modeling & Simulation Lab			2	2	1
Total of Practical						**4**	**2**
Sessional							
1	ME-784	Project Preparation			6	6	3
2	ME-783	Practical Training					2
Total of Sessional						**6**	**5**
Semester Total						**23**	**20**

SEMESTER-VIII

Theory

Sl No.	Course Code	Subject	L	T	P	Total	Credit
1	CH-801	Environmental Science	2	0	0	2	2
2	ME-702	Operation Research	3	1	0	4	4
3		Department Elective-III	3	0	0	3	3
4	FM-02	Financial Management	4	0	0	4	4
Total of Theory						**13**	**13**
Sessional							
1	ME-884	Seminar			2	2	2
2	ME-882	Project			9	9	5
3	ME-883	Comprehensive Viva					2
Total of Sessional						**11**	**9**
Semester Total						**24**	**22**

***	On - the - Job Training (OJT) of 20 Credits is to be covered in the Summer Term after 8th Semester.**

SEMESTER-IX

Theory

Sl No.	Course Code	Subject	L	T	P	Total	Credit
1	TOM-01	Production and Operation Management	4	0	0	4	4
2	SM-04	Business Ethics and Corporate Social Responsibility	2	0	0	2	2
3	SM-03	Legal Aspects of Business	2	0	0	2	2
4	QM-01	Business Research Methods	2	0	0	2	2
5	HR-02	Human Resource Management	2	0	0	2	2
6	SM-01	Strategic Management	4	0	0	4	4
7		MBA ELECTIVE-1	2	0	0	2	2
8		MBA ELECTIVE-2	2	0	0	2	2
9		MBA ELECTIVE-3	2	0	0	2	2
10		MBA ELECTIVE-4	2	0	0	2	2
Total of Theory						**24**	**24**
Semester Total						**24**	**24**

SEMESTER-X

Theory

Sl No.	Course Code	Subject	L	T	P	Total	Credit
Sessional							
1		MBA ELECTIVE-5	2	0	0	2	2
2		MBA ELECTIVE-6	2	0	0	2	2
3		MBA ELECTIVE-7	2	0	0	2	2
4		MBA ELECTIVE-8	2	0	0	2	2
5		MBA ELECTIVE-9	2	0	0	2	2
6		MBA ELECTIVE-10	2	0	0	2	2
7		MBA ELECTIVE-11	2	0	0	2	2
8		MBA ELECTIVE-12	2	0	0	2	2
9		MBA ELECTIVE-13	2	0	0	2	2
10		MBA ELECTIVE-14	2	0	0	2	2
11		MBA ELECTIVE-15	2	0	0	2	2
12		MBA ELECTIVE-16	2	0	0	2	2
Total of Theory						**24**	**24**
Semester Total						**24**	**24**

LIST OF DEPARTMENT ELECTIVES

Department Elective - I

Sl.No.	Subject Code	Subject Name	Credit
1.	ME 610	Industry Safety	3
2.	ME 611	Total Quality Management	3
3.	ME 612	Competitive Manufacturing Strategies	3
4.	ME 613	Industrial Engg. & Industrial Management	3

Department Elective - II

Sl.No.	Subject Code	Subject Name	Credit
1.	ME 705	Tribology	3
2.	ME 706	Mechanical Vibration and Noise Engineering	3
3.	ME 708	Finite element Analysis	3
4.	ME 710	Gas Dynamics & Jet Propulsion	3
5.	ME 711	Machine Tools Technology	3
6.	ME 712	Introduction to Composite Materials	3

Department Elective - III

Sl.No.	Subject Code	Subject Name	Credit
1.	ME 808	Mechatronics	3
2.	ME 809	Production Planning & Control	3
3.	ME 810	Machine Maintenance & Condition Monitoring	3
4.	ME 811	Fundamentals of CFD	3
5.	ME 813	Computer Integrated Manufacturing	3
6.	ME 815	Advanced Material Processing Technology	3

MBA - Course & Elective

(Common to all Branches)

Business Environment Course List

Sl. No	Code	Course	Credits
1	ECO01	Managerial Economics	4

Decision Sciences Course List

Sl. No	Code	Course	Credits
1	QM01	Quantitative Techniques	2
2	QM02	Business Research Methodology	2

Finance Course List

Sl. No	Code	Course	Credits
1	FM01	Accounting for Business Managers	4
2	FM02	Corporate Finance	4
3	FM03	International Financial Management	2
4	FM04	Corporate Governance	2
5	FM05	Financial Services	2
6	FM06	Mergers, Acquisitions and Corporate Restructuring	2
7	FM07	Project Finance	2
8	FM08	Security Analysis & Portfolio Management	2
9	FM09	Derivatives and Risk Management	2
10	FM10	Corporate Tax Planning	2
11	FM 11	Banking Operation & Regulations	2
12	FM12	Business Analysis and Valuation	2
13	FM13	Management Control Systems	2
14	FM14	Infrastructure Development and Financing	2

Human Resources Course List

Sl. No	Code	Course	Credits
1	HR01	Organizational Behavior and Structure	2
2	HR02	Human Resource Management	2
3	HR03	Labour Laws	2
4	HR04	Training and Development	2
5	HR05	Performance and Compensation Management	2
6	HR06	Manpower planning	2
7	HR07	Organization Development and Change	2
8	HR08	Managing Employee Relations	2
9	HR09	Leadership for Corporate Excellence	2
10	HR10	Managerial Effectiveness	2
11	HR11	Assessment Development Centre	2
12	HR12	Recruitment and Selection	2

Information Technology Course List

Sl. No	Code	Course	Credits
1	IT01	Information Technology for Managers	2
2	IT02	Enterprise Information Systems	2
3	IT03	Data Mining and Business Intelligence	2
4	IT04	KM and DSS	2
5	IT05	Information Security and Risk Management	2
6	IT06	Software Project Management	2
7	IT07	Information Technology Infrastructure Management	2
8	IT08	Planning and Implementing IT Strategies	2
9	IT09	ERPS	2
10	IT10	Service Oriented Architecture and Web Services	2
11	IT11	Cyber Law and Ethics in Information Technology	2
12	IT13	E-Business	2

Marketing Course List

Sl. No	Code	Course	Credits
1	MM01	Marketing Management	4
2	MM02	Consumer Behavior	2
3	MM03	Product & Brand Management	2
4	MM04	Services Marketing	2
5	MM05	Sales & Distribution Management	2
6	MM06	Retail Management	2
7	MM07	B2B Marketing	2
8	MM08	Real Estate Marketing	2
9	MM09	Customer Relationship Management	2
10	MM10	Integrated Marketing Communications	2
11	MM11	Hospitality & Tourism Marketing	2
12	MM12	Marketing Research	2
13	MM13	Digital and Social Media Marketing	2

Strategy and General Management Course List

Sl. No	Code	Course	Credits
1	SM01	Strategic Management	4
3	SM03	Legal Aspects of Business	2
4	SM04	Business Ethics and Corporate Social Responsibility	2

Technology and Operations Management Course List

Sl. No.	Code	Course	Credits
1	TOM01	Production and Operations Management	4
Elective Courses: Manufacturing & Technology Management Concentration (MTM)			
2	TOM02	Fundamentals of Product Lifecycle Management *{also under OM group}*	2 [Lab]
3	TOM03	Product Lifecycle Management and Product Data Management	2
4	TOM04	Product Design and Development	2
5	TOM05	Digital Manufacturing and Virtual Factory	2
6	TOM06	Customer Response to Manufactured Products	2
7	TOM07	Enterprise Resource Planning Systems *{also under the OM sub-group & ITM Area}*	2
8	TOM08	Service Oriented Architecture and Web Services	2
Elective Courses: Operations Management Concentration(OM)			
9	TOM09	Total Quality Management	2
10	TOM10	Supply Chain Management	2
11	TOM11	Project Management	2
12	TOM12	Technology Management *{also under the MTM group}*	2
13	TOM13	Managing Service Operations	2
14	TOM14	Innovation and Business Sustainability	2
15	TOM15	Business by Design	2

❖ One Credit is equivalent to 15 contact hours in MBA.
❖ For detailed Syllabus refer to :
   (i) Syllabus of Bachelor Degree Programme, 2012-13 of KIIT University for Engineering.
   (ii) Syllabus of MBA programme of School of Management, KIIT University for Management.

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