M.TECH. (INSTRUMENTATION AND CONTROL ENGINEERING)

Semester-I Aug to Dec (including examination)

S N	Sub Code	Subject Title	L	T	P	Credits
1	IE 8101	Instrumentation System Design	3	1	_	4
2	IE 8102	Micro Controller and Embedded Systems	3	1	_	4
3	IE 8103	Non-linear and Adaptive Control	3	1	_	4
4	IE 8104	Digital Signal Processing	3	1	_	4
5	IE 8105*	Elective-I	3	1	_	4
6	IE 8156	Laboratory-I	_	_	4	2
		Total	15	5	4	22

Semester-II Jan to May (including examination)

S N	Sub Code	Subject Title	L	T	P	Credits
1	IE 8201	Optimal and Robust Control System	3	1	_	4
2	IE 8202	Telemetry and Remote Control	3	1	_	4
3	IE 8203	Industrial Process Control	3	1	_	4
4	IE 8204	Bio-Medical Instrumentation and Telemedicine	3	1	_	4
5	IE 8205*	Elective-II	3	1	_	4
6	IE 8256	Laboratory - II	_	_	4	2
		Total	15	5	4	22

Semester-III Aug to Dec (including examinations)

S N	Sub Code	Subject Title	L	T	P	Credits
1	IE 9101	Virtual Instrumentation and Data Acquisition	3	1	_	4
2	IE 9102*	Elective-III	3	1	_	4
3	IE 9160	Dissertation	_	_	12	-
		Total	6	2	16	8

Semester-IV Jan to May (including examinations)

S N	Sub Code	Subject Title	L	T	P	Credits
1	IE 9260	Dissertation	_	_	24	-
		Total	_	_	24	-

M.TECH. (INSTRUMENTATION AND CONTROL ENGINEERING)

ELECTIVE - I (any one of the following)

SN	Sub Code	Subject Title	L	T	P	Credits
1	IE 8105A	Opto-Electronics	3	1	_	4
2	IE 8105B	Instrumentation for Environmental Engg	3	1	_	4
3	IE 8105C	Analytical Instrumentation	3	1	_	4
4	IE 8105D	Power Plant Instrumentation	3	1	_	4
5	IE 8105E	Energy Management	3	1	_	4
6	IE 8105F	Data Communication	3	1	_	4
7	IE 8105G	Computers in Biomedical Engineering	3	1	_	4

ELECTIVE - II (any one of the following)

1	IE 8205A	Industrial Electronics	3	1	_	4
2	IE 8205B	Robotics Engineering	3	1	_	4
3	IE 8205C	Computational Electromagnetics	3	1	_	4
4	IE 8205D	Optimization Techniques	3	1	_	4
5	IE 8205E	Control System Design	3	1	_	4
6	IE 8205F	Neuro-Fuzzy Control	3	1	_	4
7	IE 8205G	Advanced Microprocessor Based Systems	3	1	_	4

ELECTIVE - III (any one of the following)

1	IE 9102A	Bio-Informatics	3	1	_	4
2	IE 9102B	Drives and Control	3	1	_	4
3	IE 9102C	Random Signals and Stochastic Processes	3	1	_	4
4	IE 9102D	System Identification and Parameter Estimation	3	1	_	4
5	IE 9102E	Reliability Engineering	3	1	_	4
6	IE 9102F	Artificial Intelligence	3	1	_	4
7	IE 9102G	Cryptography	3	1	_	4

M.TECH. (FOOD ENGINEERING & TECHNOLOGY)

Semester-I   Aug to Dec (including examination)

S N	Sub Code	Subject Title	L	T	P	Credits
1	FT 8101	Engineering Properties of Biomaterials & Applications	4	–	–	4
2	FT 8102	Food Rheology and Microstructure	4	–	–	4
3	FT 8103	Advances in Food Process Technology	4	–	–	4
4	FT 8104	Novel Techniques in Food Packaging	4	–	–	4
5	FT 8105	Food Quality and Plant Management	4	–	–	4
6	FT 8156	Lab-I	-	–	4	2
		Total	20	–	4	22

Semester-II   Jan to May (including examination)

S N	Sub Code	Subject Title	L	T	P	Credits
1	FT 8201	Food Process Equipment Design	4	1	–	5
2	FT 8202	Technology of Frozen Foods	3	–	–	3
3	FT 8203	Computer Simulation & Modeling in Food Processing	4	1	–	5
4	FT 8204	Flavor Technology	3	–	–	3
5	FT 8205	Nutraceuticals and Functional Foods	4	–	–	4
6	FT 8256	Lab-II	–	–	4	2
		Total	18	2	4	22

Semester-III   Aug to Dec (including examinations)

S N	Sub Code	Subject Title	L	T	P	Credits
1	FT 9101*	Elective -I	3	1	–	4
2	FT 9102*	Elective -II	3	1	–	4
3	FT 9153	Seminar	–	–	4	2
4	FT 9160	Dissertation	–	–	12	-
		Total	6	2	16	10

Semster-IV   Jan to May (including examiantions)

S N	Sub Code	Subject Title	L	T	P	Credits
1	FT 9260	Dissertation	–	–	24	-
		Total	–	–	24	-

M.TECH. (FOOD ENGINEERING & TECHNOLOGY)

ELECTIVE - I (any one of the following)

S N	Sub Code	Subject Title	L	T	P	Credits
1	FT 9101A	Advances in Dairy Engineering and Technology	3	1	_	4
2	FT 9101B	Advances in Meat, Fish and Poultry Technology.	3	1	_	4
3	FT 9101C	Biotechnological Tools in Food Analysis	3	1	_	4
4	FT 9101D	Experimental Design and Statistics	3	1	_	4

ELECTIVE - II (any one of the following)

1	FT 9102A	Advances in Fruits and Vegetables Technology.	3	1	_	4
2	FT 9102B	Advances in Cereal and Pulses Technology.	3	1	_	4
3	FT 9102C	Bioprocess Engineering	3	1	_	4
4	FT 9102D	Advanced Food Process Engineering	3	1	_	4

M.TECH. (POLYMER TECHNOLOGY)

Semester-I   Aug to Dec (including examination)

S N	Sub Code	Subject Title	L	T	P	Credits
1	CH 8101	Advanced Topics in Heat, Mass and Momentum Transfer	3	1	-	4
2	CH 8102	Polymer Reaction Engineering	3	1	-	4
3	CH 8103	Advanced Polymer Science & Engg.	3	1	-	4
4	CH 8104	Process Dynamics & Control	3	1	-	4
5	CH 8105*	Elective-I	3	1	-	4
6	CH 8156	Practical	-	-	4	2
		Total	15	5	4	22

Semester-II   Jan to May (including examination)

S N	Sub Code	Subject Title	L	T	P	Credits
1	AM 8201	Statistics and Numerical Methods	3	1	-	4
2	CH 8202	Process Modeling & Simulation	3	1	-	4
3	CH 8203	Advanced Polymer Characterization	3	1	-	4
4	CH 8204	Advanced Polymer Rheology & Processing	3	1	-	4
5	CH 8205*	Elective-II	3	1	-	4
6	CH 8256	Practical	-	-	4	2
		Total	15	5	4	22

Semester-III   Aug to Dec (including examinations)

S N	Sub Code	Subject Title	L	T	P	Credits
1	CH 9101	Polymer Product Design	3	1	-	4
2	CH 9102	Rubber Technology	3	1	-	4
3	CH 9153	Seminar	-	-	4	2
4	CH 9160	Dissertation	-	-	12	-
		Total	6	2	16	10

Semester-IV   Jan to May (including examinations)

S N	Sub Code	Subject Title	L	T	P	Credits
1	CH 9260	Dissertation	-	-	24	-

M.TECH. (POLYMER TECHNOLOGY)

ELECTIVE - I (any one of the following)

S N	Sub Code	Subject Title	L	T	P	Credits
1	CH 8105A	Advanced Energy Technology	3	1	-	4
2	CH 8105B	Advanced Polymer Material Technology	3	1	-	4
3	CH 8105C	Environmental Engineering	3	1	-	4
4	CH 8105D	Bio-degradable Polymers	3	1	-	4

ELECTIVE - II (any one of the following)

S N	Sub Code	Subject Title	L	T	P	Credits
1	CH 8205A	Applied Thermodynamics	3	1	-	4
2	CH 8205B	Polymers in Bio-medical Applications	3	1	-	4
3	CH 8205C	Polymer Composites and Blends	3	1	-	4

M.TECH. (MANUFACTURING SYSTEMS ENGINEERING)

Semester-I Aug to Dec (including examination)

S N	Sub Code	Subject Title	L	T	P	Credits
1	ME 8101	Design of Experiments	3	1	-	4
2	ME 8102	Advanced Manufacturing Science	3	1	-	4
3	ME 8103	IT in Manufacturing	3	1	-	4
4	ME 8104	Metal Forming Analysis & Technology	3	1	-	4
5	ME 8105*	Elective-I	3	1	-	4
6	ME 8156	Lab-I	-	-	4	2
		Total	15	5	4	22

Semester-II Jan to May (including examination)

S N	Sub Code	Subject Title	L	T	P	Credits
1	ME 8201	Mechatronics	3	1	-	4
2	ME 8202	Advanced Machining Processes and Analysis	3	1	-	4
3	ME 8203	Modeling and simulation of Manufacturing systems	3	1	-	4
4	ME 8204*	Elective-II	3	1	-	4
5	ME 8205*	Elective-III	3	1	-	4
6	ME 8256	Lab-II	-	-	4	2
		Total	15	5	4	22

Semester-III Aug to Dec (including examinations)

S N	Sub Code	Subject Title	L	T	P	Credits
1	ME 9101	Advanced Welding Processes	3	1	-	4
2	ME 9102	Industrial Engg. & Management	3	1	-	4
3	ME 9160	Dissertation	-	-	16	-
		Total	6	2	16	8

Semester-IV Jan to May (including examinations)

S N	Sub Code	Subject Title	L	T	P	Credits
1	ME 9260	Dissertation	-	-	24	-
		Total	-	-	24	-

M.TECH. (MANUFACTURING SYSTEMS ENGINEERING)

ELECTIVE - I (any one of the following)

S N	Sub Code	Subject Title	L	T	P	Credits
1	ME 8105A	Robotics	3	1	-	4
2	ME 8105B	Quality Engg. & Management	3	1	-	4
3	ME 8105C	Diagnostic Maintenance & Monitoring	3	1	-	4
4	ME 8105D	Finite Element Methods	3	1	-	4

ELECTIVE - II (any one of the following)

1	ME 8204A	Tool & Cutter Design	3	1	-	4
2	ME 8204B	Composite Materials & their Manufacturing	3	1	-	4
3	ME 8204C	Advanced Optimization Techniques	3	1	-	4
4	ME 8204D	Control Systems in Manufacturing	3	1	-	4

ELECTIVE - III (any one of the following)

1	ME 8205A	Machine Tool Design	3	1	-	4
2	ME 8205B	Tribology	3	1	-	4
3	ME 8205C	Product Design & Development	3	1	-	4
4	ME 8205D	System Analysis	3	1	-	4

M.TECH. MECHANICAL ENGINEERING
(SPECIALIZATION IN WELDING AND FABRICATION)

Semester-I Aug to Dec (including examination)

S N	Sub Code	Subject Title	L	T	P	Credits
1	ME 8101	Design of Experiments	3	1	-	4
2	ME 8111	Physical Metallurgy	3	1	-	4
3	ME 8112	Conventional Welding Processes	3	1	-	4
4	ME 8113	Inspection and testing of Welds	3	1	-	4
5	ME 8105*	Elective-I	3	1	-	4
6	ME 8151	Lab-I	-	-	4	2
		Total	15	5	4	22

Semester-II Jan to May (including examination)

S N	Sub Code	Subject Title	L	T	P	Credits
1	ME 8211	Welding Metallurgy	3	1	-	4
2	ME 8212	Repair, Reclamation and Surfacing	3	1	-	4
3	ME 8213	Advanced Welding Process	3	1	-	4
4	ME 8204*	Elective-II	3	1	-	4
5	ME 8205*	Elective-III	3	1	-	4
6	ME 8251	Lab-II	-	-	4	2
		Total	15	5	4	22

Semester-III Aug to Dec (including examinations)

S N	Sub Code	Subject Title	L	T	P	Credits
1	ME 9111	Welding codes and standards	3	1	-	4
2	ME 9112	Design of Welded Structures	3	1	-	4
3	ME 9151	Dissertation	-	-	16	-
		Total	6	2	16	8

Semester-IV Jan to May (including examinations)

S N	Sub Code	Subject Title	L	T	P	Credits
1	ME 9251	Dissertation	-	-	24	-
		Total	-	-	24	-

M.TECH. MECHANICAL ENGINEERING
(SPECIALIZATION IN WELDING AND FABRICATION)

ELECTIVE - I (any one of the following)

S N	Sub Code	Subject Title	L	T	P	Credits
1	ME 8105A	Robotics	3	1	-	4
2	ME 8105D	Finite Element Methods	3	1	-	4
3	ME 8105E	Welding Automation	3	1	-	4
4	ME 8105F	Computer Aided Engineering	3	1	-	4

ELECTIVE - II (any one of the following)

1	ME 8204B	Composite Materials & their Manufacturing	3	1	-	4
2	ME 8204C	Advanced Optimization Techniques	3	1	-	4
3	ME 8204E	Welding cost and economics	3	1	-	4
4	ME 8204F	Physics of Welding	3	1	-	4

ELECTIVE - III (any one of the following)

1	ME 8205C	Product Design & Development	3	1	-	4
2	ME 8205D	System Analysis	3	1	-	4
3	ME 8205E	Safety in Welding	3	1	-	4
4	ME 8205F	Welding Application Technology	3	1	-	4

M.TECH. ELECTRONICS AND COMMUNICATION ENGINEERING

Semester-I Aug to Dec (including examination)

S N	Sub Code	Subject Title	L	T	P	Credits
1	EC 8101	Digital Signal Processing & app.	3	1	-	4
2	EC 8102	Optical Communication Systems	3	1	-	4
3	EC 8103	Microcontroller and Embedded Systems	3	1	-	4
4	EC 8104	Data & Computer Communication Networks	3	1	-	4
5	EC 8105*	Elective-I	3	1	-	4
6	EC 8153	Seminar	-	-	4	2
		Total	15	5	4	22

Semester-II Jan to May (including examination)

S N	Sub Code	Subject Title	L	T	P	Credits
1	EC 8211	VLSI Technology & Design	3	1	-	4
2	EC 8212	Microwave Theory and Techniques	3	1	-	4
3	EC 8213	Wireless and Mobile communication	3	1	-	4
4	EC 8204	Soft Computing	3	1	-	4
5	EC 8205*	Elective-II	3	1	-	4
6	EC 8251	Lab	-	-	4	2
		Total	15	5	4	22

Semester-III Aug to Dec (including examinations)

S N	Sub Code	Subject Title	L	T	P	Credits
1	EC 9111	Information Theory and coding	3	1	-	4
2	EC 9112	Elective-III	3	1	-	4
3	EC 9151	Dissertation	-	-	16	-
		Total	6	2	16	8

Semester-IV Jan to May (including examinations)

S N	Sub Code	Subject Title	L	T	P	Credits
1	EC 9260	Dissertation	-	-	24	-
		Total	-	-	24	-

M.TECH. ELECTRONICS AND COMMUNICATION ENGINEERING

ELECTIVE - I (any one of the following)

S N	Sub Code	Subject Title	L	T	P	Credits
1	EC 8105A	Antenna System Engineering	3	1	-	4
2	EC 8105B	Peripheral System Design and Interfacing	3	1	-	4
3	EC 8105C	Parallel Processing	3	1	-	4
4	EC 8105D	Multimedia Communications Systems	3	1	-	4

ELECTIVE - II (any one of the following)

1	EC 8205A	Modeling and Simulation of Communication Systems	3	1	-	4
2	EC 8205B	Microelectronics Technology	3	1	-	4
3	EC 8205C	Digital Image Processing	3	1	-	4
4	EC 8205D	Telecommunication switching systems and networks	3	1	-	4

ELECTIVE - III (any one of the following)

1	EC 9102A	Reliability of Electronics Communication Systems	3	1	-	4
2	EC 9102B	Detection, Estimation and Modulation Theory	3	1	-	4
3	EC 9102C	Remote Sensing	3	1	-	4
4	EC 9102D	Computational methods	3	1	-	4

MASTER OF BUSINESS ADMINISTRATION(MBA)

Semester-I Aug to Dec (including examination)

S N	Sub Code	Subject Title	L	T	P	Credits
1	MGT 8101	Management of Organizations	3	1	-	4
2	MGT 8102	Quantitative Techniques & Methods	3	1	-	4
3	MGT 8103	Managerial Economics	3	1	-	4
4	MGT 8154	Corporate Environment	0	0	8	4
5	MGT 8105*	Business Skills Development	2	0	2	3
6	MGT 8106	Corporate legal Environment	3	1	-	4
7	MGT 8107	Accounting for Managers	3	1	-	4
		Total	17	5	10	27

Semester-I Jan to May (including examination)

S N	Sub Code	Subject Title	L	T	P	Credits
1	MGT 8201	Management of Organizations	3	1	-	4
2	MGT 8202	Quantitative Techniques & Methods	3	1	-	4
3	MGT 8203	Managerial Economics	3	1	-	4
4	MGT 8204	Corporate Environment	3	1	-	4
5	MGT 8205	Business Skills Development	3	1	-	4
6	MGT 8206	Corporate legal Environment	3	1	-	4
7	MGT 8207	Accounting for Managers	3	1	-	4
		Total	21	7	-	28

Semester-III Aug to Dec (including examination)

S N	Sub Code	Subject Title	L	T	P	Credits
1	MGT 9101	Management of International Business	3	1	-	4
2	MGT 9102	Business Policy and Strategic Management	3	1	-	4
3	MGT 9153	Summer Training Project	-	-	4	2
4	MGT 9154	Seminar	-	-	4	2
5	MGT 9105	Specialization Group A(Two paper from each spl will be offered)	3	1	-	4+4
6	MGT 9106	Specialization Group B(Two paper from each spl will be offered)	3	1	-	4+4
7	MGT 9107	Specialization Group C(Two paper from each spl will be offered)	3	1	-	4+4
8	MGT 9108	Specialization Group D(Two paper from each spl will be offered)	3	1	-	4+4
9	MGT 9109	Specialization Group E(Two paper from each spl will be offered)	3	1	-	4+4
		Total	21	7	8	28

In semester three any two electives each to be selected from only two specialization groups A,B,C,D and E.

Semester-IV Jan to May (including examination)

SN	Sub Code		Subject Title	L	T	P	Credits
1	MGT	9201	Management of International Business	3	1	-	4
2	MGT	9202	Business Policy and Strategic Management	3	1	-	4
3	MGT	9253	Summer Training Project	-	-	6	3
4	MGT	9254	Seminar	-	-	4	2
5	MGT	9205	Specialization Group A(Two paper from each spl will be offered)	3	1	-	4+4
6	MGT	9206	Specialization Group B(Two paper from each spl will be offered)	3	1	-	4+4
7	MGT	9207	Specialization Group C(Two paper from each spl will be offered)	3	1	-	4+4
8	MGT	9208	Specialization Group D(Two paper from each spl will be offered)	3	1	-	4+4
9	MGT	9209	Specialization Group E(Two paper from each spl will be offered)	3	1	-	4+4
			Total	21	7	8	28

In semester fourth any two electives each to be selected from only two specialization groups A,B,C,D and E.

Semester III Electives

Group A: HUMAN RESOURCE MANAGEMENT(9105)

      A. Human Resource Planning And Development
      B. Management of Industrial Relations
      C. Compensation Management
      D. Organizational Change and Development

Group B: Marketing (9106)

      A. Services Marketing
      B. Marketing Research
      C. Sales and Distribution management
      D. Retail Marketing Management

Group C: Finance (9107)

      A. Management of Financial Institution
      B. Financial Markets and Services
      C. Security Analysis and Portfolio management
      D. Derivatives and Risk Management

Group D: Information Technology (9108)

      A. Database Management System

B. System Analysis and Design
C. Communication Networks for Business
D. Electronic Commerce

Group E : Operation Management/Material Management (9109)

A. Production Planning & Control
B. Total Quality Management
C. Inventory Management
D. Service Operation Management

Semester IV Electives

Group A: HUMAN RESOURCE (9205)

A. Training and Development
B. Labour Laws
C. Industrial Psychology
D. Performance Management

Group B: Marketing (9206)

A. Industrial Marketing
B. Consumer Behavior
C. International Marketing
D. Advertising and Sales Management

Group C: Finance (9207)

A. Management Control Systems
B. International financial Management
C. Working Capital Management
D. Corporate Taxation and Tax Planning

Group D: Information Technology (9208)

A. Enterprise Resource Planning
B. Strategic Information Systems
C. Data Warehousing and Data Mining
D. Software Engineering

Group E : Operation Management/Material Management (9209)

A. Purchase Management
B. Management of Logistics
C. Plant Design and layout
D. Computer Aided Design & Manufacturing`