Equivalence of ME (Mechanical) (Automotive Engineering) 2008 course and 2013 course

Sr.	Subject	Subject Name as 2008 course	Subject	Subject Name as 2013 course
No.	Code		Code	
1	502201	Mathematical Modeling and	507201	Advanced Mathematics
		Analysis		
2	502301	Automotive Engine Design	502302	Automotive Engine Design
3	502103	Technology and Financial		As per old syllabus to be conducted
		Management		
4	502302 A	Advanced Heat Transfer		As per old syllabus to be conducted
5	502302 B	Finite Element Method		As per old syllabus to be conducted
6	502302 C	Advanced Hydraulics and		As per old syllabus to be conducted
		Pneumatic Systems		
7	502303 A	Tribology and Preventive		As per old syllabus to be conducted
		Maintenance		
8	502303B	Automotive Safety and	502303	Automotive Safety and Regulations
		Regulations		
9	502303 C	Automobile Air Conditioning		As per old syllabus to be conducted
10	502304	Lab Practice - I		As per old syllabus to be conducted
11	502305	Seminar - I		As per old syllabus to be conducted
12				
13				

Semester – II

14	502306	Automotive Fuels &		As per old syllabus to be conducted
		Emissions		
15	502307	Autotronics	602314	Autotronics
16	502308	Fundamentals of Vehicle		As per old syllabus to be conducted
		Dynamics		
17	502309 A	Noise Vibrations and	502308	Noise Vibration and Harshness
		Harshness		
18	502309 B	Automotive Materials		As per old syllabus to be conducted
19	502309 C	Vehicle Aerodynamics	602313	Vehicle Dynamics
20	502310 A	Computational Fluid		As per old syllabus to be conducted
		Dynamics		
21	502310 B	Automotive Chassis Design	502309	Automotive Chassis Design
22	502310 C	Open Elective (self study)		As per old syllabus to be conducted
23	502311	Lab Practice - II		As per old syllabus to be conducted
24	502312	Seminar - II		As per old syllabus to be conducted
25	602301	Seminar – III		As per old syllabus to be conducted
26	602302	Project workStage – I		As per old syllabus to be conducted
27	602303	Project workStage – II		As per old syllabus to be conducted

Equivalent courses for ME(Computer Aided Design, Manufacture & Engineering) 2008 in 2013 course

Sr No	Subject Code	Subject in 2008	Subject Code	Subject in 20013
1	502401	Advanced Machine Design	502402	Advanced Machine Design
2	502402	Mathematical Modeling	507201	Advanced Mathematics
3	502403	Computer Aided Design	502403	Computer Aided Design
4	502404A	Material for Engineering Applications		As per old syllabus to be conducted
5	502404B	Advanced Manufacturing Processes		As per old syllabus to be conducted
6	502404C	Customization of CAD/CAM Software's		As per old syllabus to be conducted
7	502404D	CAD/CAM Practices in Metal Forming		As per old syllabus to be conducted
8	502405A	Finite Element Analysis		As per old syllabus to be conducted
9	502405B	Integrated Product Design &	502408	Industrial Product Design & Product
		Development		Life Cycle Management
10	502405C	Computational Fluid Dynamics		As per old syllabus to be conducted
11	502405D	Robotics		As per old syllabus to be conducted
12	502406	Lab Practice I		As per old syllabus to be conducted
13	502407	Seminar I		As per old syllabus to be conducted
14	502408	Management of Technology		As per old syllabus to be conducted
15	502409	Computer Aided Manufacturing		As per old syllabus to be conducted
16	502410	Computer Integrated Manufacturing	502407	Computer Integrated Manufacturing
17	502411A	Design for X		As per old syllabus to be conducted
18	502411B	Automated Manufacturing System Modeling	502409	Automated Manufacturing System Modelling
19	502411C	Simulation and Modelling	602413	Simulation Modelling
20	502411D	Optimization Techniques	602414	Optimization Techniques
21	502412A	Product Lifecycle Management	002111	As per old syllabus to be conducted
22	502412B	Rapid Prototyping		As per old syllabus to be conducted
23	502412C	Data Base Management System		As per old syllabus to be conducted
24	502412D	Robust Design Of		As per old syllabus to be conducted
[~ .	30211219	Product/Process		115 per old syllabas to be collabored
25	502413	Lab Practice II		As per old syllabus to be conducted
26	502414	Seminar II		As per old syllabus to be conducted
27	602415	Seminar III		As per old syllabus to be conducted
28	602416	Project Stage I		As per old syllabus to be conducted
29	602417	Project Stage II		As per old syllabus to be conducted
		, <u> </u>		

Equivalence of ME (Mechanical) (Mechatronics) 2008 course and 2013 course

Sr.	Subject	Subject Name as 2008 course	Subject	Subject Name as 2013 course
No.	Code		Code	
1	502801	Applied Numerical Methods and	502801	System Modelling Identification and
		Computational Techniques		Simulation
2	502802	Mechanical & Electronic Measurements	502803	Sensors Transducers and Interfacing
				Techniques
3	502103	Technology and Financial Management		As per old syllabus to be conducted
4	502804	Elective – I		
5	502804 A	A Design of Machine Elements	MT2II-M7,	Theory of Machines II, Theory of III,
			MT2II-M8,	Theory of Machines I
			MT1II-M18	
6	502804 C	Advance Material Science		As per old syllabus to be conducted
7	502804 B	Digital Signal Processing	MT2-III-M1,	Fundamentals of Digital Sampling,
			MT2III-M2,	Discrete Time Signals & Systems and Z
			MT1III-M13	transforms, Discrete Fourier Transformers
		-1		and Linear Time invariant realization
8	502805	Elective – II		
9	502805A	Control Systems	502808	Control Systems II
10	502805B	Theory of machines and Mechanisms	MT2II-M7,	Theory of Machines II, Theory of III,
			MT2II-M8,	Theory of Machines I
			MT1II-M18	
11	502805 C	Instrumentation & Automatic Control		As per old syllabus to be conducted
12	502806	Seminar I	602816	Seminar II
13	502807	Lab Practice I	502806	Lab Practice I

Semester – II

14	502808	Microcontrollers	602813	Microcontroller applications in embedded systems
15	502809	Industrial Automation	502807	PLC Programming
16	502810	Drives & Actuators	502809	Industrial Drives & Actuators

17	502811	Elective – III		
18	502811 A	Computer Aided Design		As per old syllabus to be conducted
19	502811 B	Robotics		As per old syllabus to be conducted
20	502811 C	Automotive Electronics		As per old syllabus to be conducted
21	502812	Elective – IV		
22	502812 A	Embedded Systems	602813	Microcontroller applications in
				embedded systems
23	502812 B	Fuzzy Logic and Neural Networks		As per old syllabus to be conducted
24	502812 C	Open (self study)**		As per old syllabus to be conducted
25	502813	Lab. Practice – II	502812	Lab Practice II
26	502814	Seminar – II	602818	Seminar III

Equivalent courses for ME(Mechanical) (Heat Power Engineering) 2008 course and 2013 course

Sr No	Code of	Subject in 2008	Code of	Equivalent subject in 20013
	Subject		Subject	
1	502101	Numerical Methods in Thermal	507101	Advanced Mathematics and
		Fluid Engineering		Numerical Methods
2	502102	Advanced Thermodynamics	502102	Advanced Thermodynamics and
				Combustion Technology
3	502103	Technology and Financial		As per old syllabus to be conducted
		Management		
4	502104 A	Performance Assessment		As per old syllabus to be conducted
		of MechanicalEquipments		
5	502104 B	Refrigeration Technology		As per old syllabus to be conducted
6	502104 C	Energy Conservation and		As per old syllabus to be conducted
		management		
7	502104 D	Convective Heat Transfer		As per old syllabus to be conducted
		Analysis		
8	502105A	Internal Combustion		As per old syllabus to be conducted
		Engines		
9	502105 B	Advanced Air conditioning		
		and Heating and	502108	Air Conditioning Technology
		Ventilation		
10	502105C	Conventional Power Plants		As per old syllabus to be conducted
11	502105 D	Advanced Gas Dynamics		As per old syllabus to be conducted
	502106	Lab. Practice – I		As per old syllabus to be conducted
	502107	Seminar- I		As per old syllabus to be conducted
12	502108	Advanced Heat Transfer	502107	Advanced Heat Transfer
13	502109	Measurement Techniques and	502109	Measurements and Controls
		Data Analysis		
14	502110	Advanced Fluid Mechanics	502103	Advanced Fluid Mechanics
15	502111 A	Internal Combustion		As per old syllabus to be conducted
		Engines – fuels		
	502111 B	Cryogenic Engineering		As per old syllabus to be conducted
	502111 C	Non Conventional		As per old syllabus to be conducted
		Power Plants		
	502112A	Heat Exchanger System	602114	Design of Heat Transfer Equipments
		Design and Performance		
	502112B	Computational Fluid	602113	Computational Fluid Dynamics
		Dynamics		
	502112 C	OPEN (SELF STUDY)		As per old syllabus to be conducted
11	502113	Lab. Practice – II		As per old syllabus to be conducted
12	502114	Seminar – II		As per old syllabus to be conducted
	602115	Seminar – III		As per old syllabus to be conducted
	602116	Project Stage – I		As per old syllabus to be conducted
	602117	Project Stage – II		As per old syllabus to be conducted

Equivalence of ME (Mechanical) (Energy Engineering) 2008 course and 2013 course

Sr.	Code of	Name of subject 2008 course	Code of	Name of Subject 2013 course
No.	Subject		Subject	
1	502501	Advanced Engineering Mathematics	502101	Advanced Mathematics and Numerical Methos
2	502502	Advanced Thermodynamics	502502	Advanced Thermodynamics
3	502503	Energy Conversion Systems	502508	EnergyConversion Systems
4	502504 A	Nuclear Materials and Reactor Fundamentals	602513	Nuclear Materials and ReactorFundamentals
5	502504 B	Process Optimization		As per old syllabus to be conducted
6	502504 C	Plant Operation, Dynamics and Control		As per old syllabus to be conducted
7	502505 A	Electromechanical and Reactor Systems		As per old syllabus to be conducted
8	502505 B	Process Integration		As per old syllabus to be conducted
9	502505 C	Non Conventional Energy Sources		As per old syllabus to be conducted
10	502506	Lab Practice – I	502506	LabPractice I
11	502507	Seminar – I	502507	As per old syllabus to be conducted
12	502508	Convective Heat Transfer		As per old syllabus to be conducted
13	502509	Energy Systems Modeling and Analysis	602514	Energy Systems Modelling and Analysis
14	502510	Energy Management	502509	Energy Management
15	502511 A	Radiation Safety and Shielding		As per old syllabus to be conducted
16	502511 B	Energy and Climate		As per old syllabus to be conducted
17	502511 C	Energy Regulatory Frameworks		As per old syllabus to be conducted
18	502512 A	Nuclear Measurement and Detection.		As per old syllabus to be conducted
19	502512 B	Energy Resources and Economics		As per old syllabus to be conducted
20	502512 C	Processing Storage and Disposal of Nuclear Waste		As per old syllabus to be conducted
21	502512 D	Open Elective		As per old syllabus to be conducted
22	502513	Lab. Practice – II	502511	LabPractice II
23	502514	Seminar – II	502514	As per old syllabus to be conducted
24	602515	Seminar – III	602515	As per old syllabus to be conducted
25	602516	Project Stage – I	602516	As per old syllabus to be conducted
26	602517	Project Stage – II	602517	As per old syllabus to be conducted

Equivalence of ME (Mechanical) (Design Engineering) 2008 course and 2013 course

Sr.	Subject	Subject Name as 2008 course	Subject	Subject Name as 2013 course
No.	Code		Code	
1	502201	Mathematical Modeling and	507201	Advanced Mathematics
		Analysis		
2	502202	Advanced Stress Analysis	502203	Advanced Stress Analysis
3	502103	Technology and Financial Management		As per old syllabus to be conducted
4	502204 A	Instrumentation & Automatic Control	602214	Measurements and Controls
5	502204 B	Advance Material Science	502202	Material Science and Mechanical
				Behavior of Materials
6	502204 C	Optimization Techniques	602213	Optimization Techniques
7	502205 A	Material Handling Equipment		As per old syllabus to be conducted
		Design		
8	502205 B	Process Equipment Design		As per old syllabus to be conducted
9	502205 C	Robotics		As per old syllabus to be conducted
10	502206	Lab. Practice – I		As per old syllabus to be conducted
11	502207	Seminar I		As per old syllabus to be conducted
12				
13				

Semester – II

14	502208	Vibration & Noise Control	502208	Advanced Mechanical Vibrations
15	502209	Advance Machine Design		As per old syllabus to be conducted
16	502210	Analysis & Synthesis	502207	Analysis and Synthesis of Mechanisms
		ofMechanisms		
17	502211 A	Reliability Engineering		As per old syllabus to be conducted
18	502211 B	Engineering Fracture Mechanics		As per old syllabus to be conducted
19	502211 C	Computer Aided Engineering		As per old syllabus to be conducted
20	502212 A	Vehicle dynamics		As per old syllabus to be conducted
21	502212 B	Industrial Tribology		As per old syllabus to be conducted
22	502212 C	OPEN (SELF STUDY)		As per old syllabus to be conducted
23	602215	Seminar – III		As per old syllabus to be conducted
24	602216	Project Stage – I		As per old syllabus to be conducted
25	602217	Project Stage – II		As per old syllabus to be conducted
26				

M E Civil Structures Subjects equivalence from 2008 course to 2013 course

	Subjects equivalence from 20		
Code	J	Code	Subjects in 2013 Course
	Semeste	<u>er I</u>	
501401	Structural Mathematics		No equivalence : Same to be
			continued
501402	Advanced Solid Mechanics	501001	Advanced Mechanics of Solids
501403	Structural Dynamics (100)	501002	Structural Dynamics
501404	Elective I		
a	Advanced Design of Concrete		No equivalence : Same to be
	Structure		continued
b	Structural Design of Concrete Bridges		
С	Design of Composite Construction		
d	Design of Foundations		
501405	Elective II		
a	Advanced Design of Metal Structures		No equivalence : Same to be
b	Structural Design of Steel Bridges		continued
С	Plastic Analysis and Design of Steel		
	Structures		
d	Design of Industrial Steel Structures.		
	Semester		-
501408	Theory of Plates and Shells	501008	•
501409	Finite Element Method	501007	Finite Element Analysis
501410	Management in Structural Engineering		No equivalence : Same to be
			continued
501411	Elective III		
a	Earthquake Resistant Design of		No equivalence : Same to be
	Structures		continued
b	Structural Stability		
c	Structural Reliability		
d	Non-linear Analysis of Structures		
501412	Elective IV (Open)		
a	Mechanics of Modern Materials		No equivalence : Same to be
b	Theory of Plasticity		continued
с	Bio Mechanics and Bio Materials		
d	Optimization Techniques		

M E Civil Geotechnical Engineering Subjects equivalence from 2008 course to 2013 course

Code	Subjects in 2008 Course	Code	Subjects in 2013 Course
	Sei	nester I	
8101	Mathematics		No equivalence : Same to be continued
8102	Systems Approach to management and		No equivalence : Same to be continued
	Development of Human Resources		
8103	Engineering Behavior of Soils	501121	Advanced Soil Mechanics
8104	Elective I		
	i) Applied Soil Mechanics	501128	No equivalence:Same to be continued
	ii) Rock Mechanics and Tunneling	501123	Rock Mechanics
	iii) Site Investigation and Ground	501122	Ground Improvement Techniques
	Improvement Techniques		
	iv)Shallow and Deep foundation	501126	Advanced Foundation Engineering
8105	Elective II		
	i) Soil Stabilization	601134B	i) Soil Stabilization
	ii) Soil Structure Interaction	501124B	ii) Soil Structure Interaction
	iii) Geotechnical Engineering	601133	iii) Geoenvironmental Engineering
	iv) Earth Pressure and Retaining Wall	601134A	iv)Earth Pressure and Retaining
			Structures
	Sen	nester II	
8208	Finite Element Methods in	501129B	Finite Element Methods in Geotechnical
	Geotechnical Engg.		Engg.
8209	Reinforce Earth and Geosynthetics	501124E	Reinforce Earth and Geosynthetics
8210	Foundation Design and Detailing	501129C	Foundation Design and Detailing
8211	Elective III		
	i) Slope Stability and earth Dams	501128	Stability of Slopes and earth dam
	ii) Geosynthetics	501124E	No equivalence : Same to be continued
	iii) Geotechnical Earthquake Engg.	601132	Geotechnical Earthquake Engineering
	iv) Foundation of Offshore Structures	501129D	Foundation of Offshore Structures
8212	Elective IV (Open)		
	i) Geotechnical Engineering Survey		No equivalence : Same to be continued
	ii) Slopes and foundations	501129C	No equivalence : Same to be continued
	iii) Geotechnical Process in Rock	501129F	Geotechnical Techniques in Rock
	Engineering		Engineering
	iv) Numerical Methods		No equivalence : Same to be continued

M.E. (CIVIL) (CONSTRUCTION AND MANAGEMENT) Subjects equivalence from 2008 course to 2013 course

Subject	of 2008 Course	Equivalent Subject of 2013 Course		
CODE	Subject	CODE	Subject	
	Mathematics	501021	Application of Statistical Methods in	
501101			Construction	
501102	Management and Project	501022	Management and Project Planning in	
	Planning in Construction		Construction	
501103	Construction Technology	501023	Construction Technology	
501104	Elective I			
	a)New Construction	501024B	Sustainable Construction Materials	
	Materials			
	b)Disaster Management	501024C	Disaster Management	
	c) Repairs, Rehabilitation,	501024 D	Retrofitting of Structures	
	Retrofitting of Structures			
	d) Construction Safety	501024E	Construction Safety	
501105	Elective II			
	a) Resources Management	501029 B &	Human Resources Development &	
		501029 C	Material Management	
	b) TQM in Construction	601033	TQM in Construction	
	c)Value Engineering	501029 D	Value Engineering	
	d)Project Risk Analysis	601034	Project Risk Analysis and Mitigation	
	and Mitigation Techniques		Techniques	
701100		501026		
501108		501026	Construction Contracts Administration	
	Administration and		and Management	
501100	Management Drainet Francoics and	501027	Ducingt Engageies and Einemain!	
501109	3	501027	Project Economics and Financial	
501110	Financial Management	501028	Management Operation Research	
501110	Operation Research Elective III	501028	Operation Research	
501111		CO1024 A	Advanced Construction Technology	
	a)Advanced Construction	601034 A	Advanced Construction Technology	
	Technology	601024 D	In fine et my et you Develop me ent	
	b)Infrastructure	601034 B	Infrastructure Development	
	Development	601024 C	Intermetional Contraction	
501110	c)International Contracting	601034 C	International Contracting	
501112	Elective IV (Open)		No equivalence : Same to be continued	

ME (Civil) Hydraulics

Subjects equivalence from 2008 course to 2013 course

2008 Course		Equivalent in 2013 Course Equivalence	
Code	Name of the subject	Code	Name of the subject
501301	Computational methods in		No equivalence : Same to be
	hydraulics		continued
501302	Water resources planning and		No equivalence : Same to be
	management		continued
501303	Fluid Mechanics	501041	Fluid Mechanics
Elective			
501304	Remote sensing and GIS	501045E	Remote sensing and GIS for water
			Resource Management
501304	Dam Engineering	601052	Dam Engineering
501304	Systems Techniques in water	601053	Optimization Techniques
	Resource engineering		
Elective	e II		1
501305	Closed conduit flow	601054B	Closed conduit flow
501305	Hydroinformatics and	501049D	Hydroinformatics
	Simulation		
501305	Hydropower	501044D	Hydropower
501308	Open Channel Hydraulics	501046	Open Channel Hydraulics
501309	Hydrology	501048	Hydrology
501310	Sediment Transport and River	501047	Sediment Transport and River
	Mechanics		Mechanics
Elective	e III	1	1
501311	Irrigation and Drainage	501042	Irrigation and Drainage
501311	Coastal Engineering	501049B	Coastal Engineering
501311	Water Management and	501049C	Water Management
•	conveyance		
501312	Elective IV (Open)		No equivalence : Same to be
	(P)		continued

M E Civil Environmental Engineering Subjects equivalence from 2008 course to 2013 course

Code	Subjects in 2008 Course	Code	Subjects in 2013 Course
2008		2013	
		ester I	
501501	Numerical methods and applied statistics		No equivalence : Same to be continued
501502	Air pollution and control	501067	Air pollution and control
501503	Physico-Chemical Process for Water and Waste Water Treatment	501063	Physico-Chemical Process for Water and Waste Water Treatment
501504	Elective I		
a	Air and water quality modeling		No equivalence : Same to be continued
b	Environmental legislation and management	501061	Environmental legislation and management system
С	Environmental impact assessment and management	601073	Environmental impact assessment
501505	Elective II		
a	Occupation, safety and health		No equivalence : Same to be
b	Principle and design of biological treatment system		continued
С	Environmental risk assessment and management		
	Seme	ster II	
501508	Industrial WasteWater Management	501066	Industrial WasteWater Management
501509	EnvironmentalChemistry & Micro-Biology	501062	Environmental Chemistry & Micro-Biology
501510	Solid waste andHazardous Waste Management	501068	Solid waste and Hazardous Waste Management
501511	Elective III		
a	Ground water contamination and pollution transport		No equivalence : Same to be continued
b	Agricultural pollution control and Environmental biotechnology		No equivalence : Same to be continued
c	Environmental sanitation	601072	Environmental sanitation
501512	Elective IV (Open)		
a	No names for open electives any one from above electives will be open elective		No equivalence : Same to be continued

(Dr R K Jain)

Coordinator BOS(Civil Engineering)

M E (Civil) Water Resource and Environmental Engineering Subjects equivalence from 2008 course to 2013 course

Code:2008	Subjects in 2008 Course	Code:2013	Subjects in 2013 Course
Semester I	-		-
501601	Environmental Chemistry & Microbiology	501082	Environmental Chemistry and Microbiology
501602	Environmental Management		No equivalence: Same to be continued
501603	Advance Fluid Mechanics	501083	Fluid Mechanics
501604	Elective I	201002	Traid Medianes
a	Ground water contamination and		No equivalence : Same to be continued
a	Transport		140 equivalence . Same to be continued
b	Hydrology and Groundwater	501087	Hydrology
c	Air Pollution Engineering		No equivalence : Same to be continued
d	Solid and Hazardous Waste Management		No equivalence : Same to be continued
501605	Elective II		
a	Unit Operation in Environmental Engineering		No equivalence : Same to be continued
b	Advance Water Treatment and Water Supply Engineering		No equivalence : Same to be continued
С	Remote Sensing and GIS System for Water Resources Management		No equivalence : Same to be continued
d	Planning and Management of Water Resources		Planning and Management of Water Resources
Semester I	[•	
501608	Optimization Technique	501008	No equivalence : Same to be continued
501609	Open Channel Hydraulics	501007	Open Channel Hydraulics
501610	Advance Waste Water Treatment	601092	Advanced Water and Waste Water Treatment
501611	Elective III		
a	Computational Method in Water Resources		No equivalence : Same to be continued
b	Noise Pollution and Control Technique		No equivalence : Same to be continued
c	Ground Water Modeling		No equivalence : Same to be continued
d	Industrial Waste Management		No equivalence : Same to be continued
501612	Elective IV (Open)		
a	Dam Engineering	601092	Dam Engineering
b	Energy and Environment		No equivalence : Same to be continued
c	Closed conduit Flow		No equivalence : Same to be continued
d	Research Methodology and Intellectual Property Right		No equivalence : Same to be continued

(Dr R K Jain)

Coordinator BOS(Civil Engineering)

Equivalence for M.E. Electrical [Power Systems] 2008 Course

M	I.E. Electrical	[Power Systems] 2008 Course	M.E. Electrical [Power Systems] 2013 Course		
		Sem I			
Sr.	Subject	Subject Name	Subject Code	Subject Name	Sem
No	Code				
1	503201	Computer Applications in Power systems	503201	Computer Applications in Power Systems	Sem I
2	503202	Power Sector Economics, Management and Restructuring	503202	Power Sector Economics and Management	Sem I
3	503203	Power System Modeling	503203	Power System Modeling	Sem I
4	503204	Digital Signal Processing and its	503210	Digital signal Processing	Sem II
	[Elective I]	Applications	[Elective II		
			Module I]*		
5	503204	Advanced Power Electronics	503205	Advanced Power Electronics	Sem I
	[Elective I]		[Elective I Module I]*		
6	503205	Artificial Intelligence and its	603203	ANN and Its application in	Sem III
	[Elective II]	Applications in Power Systems	[Elective III	power system	
			Module I]*		
7	503205	Renewable Energy Sources	603203	Renewable Energy	Sem III
	[Elective II]		[Elective III		
			Module I]*		
M	I.E. Electrical	[Power Systems] 2008 Course Sem II	M.E. Ele	ctrical [Power Systems] 2013 C	ourse
Sr.	Subject	Subject Name	Subject	Subject Name	Sem
No	Code	e e e e e e e e e e e e e e e e e e e	Code	J	
1	503208	Power System Dynamics	503207	Power System Dynamics	Sem II
2	503209	Power System Planning &		Power System Planning &	Sem II
_		Reliability	503208	Reliability	
3	503210	High Voltage Power Transmission		To be continued	
4	503211	Digital Power System Protection	(02201	Advanced Power System	Sem III
-	[Elective III]	,	603201	Protection	
5	503211	Power Electronics Applications in		To be continued	
	[Elective III]	Power Systems			
6	503212	Power Quality Assessment and	603202	Power Quality Assessment and	Sem III
	[Elective IV]	Mitigation	003202	Mitigation	
7	503212	Partial Discharges in Electrical	503205	Partial Discharges in Electrical	Sem I
	[Elective IV]	Power Apparatus	[Elective I	Equipments	
			Module I]*		

^{*} Institute level assessment

Prof. Dr. Mrs. G. A. Vaidya Coordinator BOS Electrical Engineering Savitribai Phule Pune University

Equivalence for M.E. Electrical [Control Systems] 2008 Course

M.E. Electrical [Control Systems] 2008 Course Sem I			M.E. Electrical [Control Systems] 2013 Course		
Sr. No	Subject Code	Subject Name	Subject Code	Subject Name	Sem
1	503101	Advanced Mathematical Technique for control system	503101	Computational Technique for Control System	Ι
2	503102	Process Control Management	503102	Process Control Management	I
3	503103	Non linear Control system	503103	Non Linear Control System	
4	503104	Elective-I	503105	*Elective-I (Module- I)	
		Automation & Robotics		Automation and Robotics	I
		Modeling & Dynamic System		Modeling of Dynamic System	I
5	503105	Elective -II			
		Advanced Topics in Control Systems		To be Continued	•
		Computer Aided Control Systems Design	603102	Computer aided control system design	III
		SCADA System & Applications	603103	SCADA systems & Applications *Elective III (Module-I)	III

М.	M.E. Electrical [Control Systems] 2008 Course		M.E. Electrical [Control Systems] 2013 Course		Course
~		Sem II		~ ~ ~ ~ ~ ~ ~ ~ ~ ~ ~ ~ ~ ~ ~ ~ ~ ~ ~ ~	
Sr.	Subject	Subject Name	Subject	Subject Name	Sem
No	Code		Code		
1	503108	Multivariable & optimal Control	503107	Multivariable and Optimal Control	II
		System		System	
2	503109	System Identification & Adaptive	503108	System Identification and Adaptive	II
		Control		Control	
3	503110	Advanced Digital Control	503109	Advanced Digital Control	II
		Technique		Techniques	
4	503111	Elective –III			
		Robust Control Systems	503110	Robust Control Systems	II
				*Elective-II (Module-I)	
		Stochastic Dynamical Systems		> To be Continued	
		Large Scale System	503110	Large Scale Systems	II
				*Elective-II (Module-I)	
5	503112	Elective - IV			
		Intelligent Control	603103	Intelligent Control	III
				*Elective-III (Module-I)	
		Advanced Drives & Control	603101	Advanced Drives and Control	III

^{*} Institute level assessment

Prof. Dr. Mrs. G. A. Vaidya Coordinator BOS Electrical Engineering Savitribai Phule Pune University

Equivalence for M.E. Electrical [Power Electronics and Drives] 2008 Course

M	I.E. Electric	al [Power Electronics and Drives]	M.E. El	lectrical [Power Electronics and Drives] 2013		
		2008 Course Sem I		Course		
Sr. No	Subject Code	Subject Name	Subject Code	Subject Name	Sem	
1	503301	Modeling & Analysis of Electrical Machines	503301	Modeling & Analysis of Electrical Machines	I	
2	503302	Energy management and power quality in electrical drives	503302	Energy management and power quality in electrical drives	I	
3	503303	Power Electronic devices and circuits	503303	Power Converters	I	
	503304	i) DSP and its applications in Electrical drives	503305	i) DSP and its applications (*Elective - I , Module –I)	I	
4	Elective I	ii) Data Acquisition and Signal conditioning	503305	ii) Data Acquisition and Signal conditioning (*Elective – I, Module – I)	I	
		iii) Digital simulation of power electronic systems		To be continued		
5	503305	i) FACTS and HVDC		To be continued		
	Elective II	ii) Harmonics and their mitigation		>To be continued		
M		al [Power Electronics and Drives] 2008 Course Sem II	M.E. Electrical [Power Electronics and Drives] 2013 Course			
Sr. No	Subject Code	Subject Name	Subject Code	Subject Name	Sem	
1	503308	Controlled Electrical drives	503307	AC and DC Drives	II	
2	503309	Power electronic applications	603301	Power electronic applications	III	
3	503310	Design of Power electronic systems	503308	Design of Power electronic systems	II	
4	503311	i) Automation in Industrial drives	503310	i) Automation in Industrial drives (*Elective – II , Module – I)	II	
	Elective III	ii) Computer Aided Design of Electrical Machines	>	To be continued		
		iii) Microcontroller applications		To be continued		
5	503312	i) Artificial Intelligence in Electrical drives	603303	i) Artificial Intelligence in Electrical drives (*Elective – III, Module – I)	III	
	Elective IV	ii) Special topics in Power electronics and drives	>	To be continued		

^{*} Institute level assessment

Prof. Dr. Mrs. G. A. Vaidya Coordinator BOS Electrical Engineering Savitribai Phule Pune University

	M.E. Computer Eng	mineering Equivale	nce (Theory Subje	ects)
2008 Course		Equivalence in 20	13 Course	
		Term I	_	
Subject Code	Subject Title	Subject Code	Subject Title	
510101	Applied Algorithms	510101	Applied Algorithms	
510102	Emerging Trends in Computer Architecture	To Be Continued		
510103	Principles and Practices for IT Management	To Be Continued		
510104A	Elective-I Advance Software Engineering	To Be Continued		
510104B	Elective-I Intelligent Systems	510105A	Elective-I Intelligent Systems	
510104C	Elective-I Internet Routing Design	To Be Continued		
510104D	Elective-I Mobile Computing	To Be Continued		
510105A	Elective-II Information and Network Security	To Be Continued		
510105B	Elective-II Advanced Compilers	To Be Continued		
510105C	Elective-II Web Services and SOA	To Be Continued		
510105D	Elective-II Embedded System Design	To Be Continued		
		Term II		
510108	Distributed System	To Be Continued		
510109	High Performance Database Systems	To Be Continued		

510110	Network Design, Modeling and Analysis	To Be Continued		
510111A	Elective-III Software Design and Architecture	510108	Software Design and Architecture	
510111B	Elective-III Pattern Recognition and Machine Vision	To Be Continued		
510111C	Elective-III Network Programming	To Be Continued		
510111D	Elective-III Advanced Internet Programming	To Be Continued		
510112A	Elective-IV Software Project Management	To Be Continued		
510112B	Elective-IV Infrastructure Management	To Be Continued		
510112C	Elective-IV Data Warehousing and Data Mining	To Be Continued		
510112D	Elective-IV Open Elective	To Be Continued		

M.E. Con	nputer Engmineering (Computer N	Networks) E	Equivalence (Theory	Subjects)		
2008 Course	2008 Course Equivalence in 2013 Course					
	Term I					
Subject Code	Subject Title	Subject Code	Subject Title			
510301	Applied Algorithms	To Be Co	ntinued			
510302	Emerging Trends in Computer Architecture	To Be Cor	ntinued			
510303	Principles and Practices for IT Management	To Be Co	ntinued			
510304A	Elective-I Internet Routing Design	610203A	Elective-III Internet Routing Design			
510304B	Elective-I Advanced TCP/IP	610201	Advanced TCP/IP			
510305A	Elective-II Wireless Technolgy	To Be Cor	ntinued			
510305B	Elective-II Information Security Audit and Management	510210C	Elective-II Information Security Audit and Management			
	Term	ı II				
510308	Operating System Design	To Be Cor	ntinued			
510309	High Performance Database Systems	To Be Cor	ntinued			
510310	Advanced Software Engineering	To Be Cor	ntinued			
510311A	Elective-III Network Programming	510210B	Elective-II Network Programming			
510311B	Elective-III Network Design, Modeling and Analysis	510207	Network Design, Modeling and Analysis			
510312A	Elective-IV Infrastructure Management	510205D	Elective-I Infrastructure Management			
510312B	Elective-IV Convergence Technology	510205B	Elective-I Convergence Technology			
510313C	Elective-IV Open Elective	To Be Continued				

ME(IT) Equivalence 2008 course and 2013 course

	2008 Course		2013 Course	
Subject Code	Subject Name	Subject Code	Subject Name	
		ester-l		
514421	Applied Algorithms	514402	Applied Algorithms	
F14402	Software Engineering	514410 B	Software Engineering	
514402	Methodologies	514410 B	Methodologies (Elective-II)	
514403	Advance Operating System	514403	Advance Operating System	
		514401	Mathematical Foundation of	
		314401	Information Technology	
		514404	Research Methodology	
514422	Elective-I	514405	Elective-I	
514422 A	a) Software Architecture	514405 A	a) Software Architecture	
514422 B	b) Real Time and Embedded	514405 B	b) Real Time and Embedded	
314422 B	Systems	314403 В	Systems	
514422 C	c) Bioinformatics		Continued	
514423	Elective-II			
514423 A	a) Information Assurance and	514413	Information Assurance and	
314423 A	Security	314413	Security (Semester-III)	
514423 B	h) Notwork Programming	514414	Network Programming	
314423 В	b) Network Programming	514414	(Semester-III)	
514423 C	c) Geographical Information	514405 C	Information Storage and	
314423 C	Systems	314403 C	Retrieval (Elective-I)	
514424	Laboratory Practice – I	514406	Laboratory Practice – I	
514425	Seminar - I	514412	Seminar-I	
	Seme	ster-II		
514426	Net centric Computing	514407	Wireless Communication	
311120		311107	Technologies	
514409	Advance Trends in Database	514408	Advanced Database Systems	
311103	Systems	311100	ravancea batabase systems	
514427	Management Trends in		Continued	
	Information Technology			
		514409	Advance Computer	
			Architecture	
514428	Elective-III	514410	Elective-II	
514428 A	a) Internet and Web	514410 A	a) Internet and Web	
	Technologies	2.1.	Technologies	
514428 B	b) Advanced Topics in		Continued	
	Operating Systems			
		514410 C	b) Natural Language	
			Processing	
		514410 D	c) Soft Computing	

514428 C	c) Mobile Computing and M	514415 C	Mobile Computing and M-
	Commerce	021120	Commerce (Open Elective)
514428 D	d) User Interface Design	514414 D	User Interface Design (Open Elective)
514439	Elective-IV		
514439 A	a) Internet Routing Design	514405 D	Internet Routing Design (Elective-I)
514439 B	b) Advance Network Programming		Continued
514439 C	c) High Performance Computer Networks		Continued
514439 D	d) Service Oriented Architecture	514415 A	Service Oriented Architecture (Open Elective)
514430	Laboratory Practice - II	514411	Laboratory Practice - II
514431	Seminar - II	514416	Seminar - II
	Seme	ester-III	
514432	Seminar – III	514418	Seminar - III
514433	Project Stage - I	514417	Project Stage - I
		514415	Open Elective
		514415 B	Business Intelligence
		514415 E	Grid and Cloud Computing
	Seme	ester-IV	
514433	Project Stage - II	514419	Project Stage - II

Subject Equivalence of 2008 course to 2013 course of ME (Production Engg.)-CAD CAM Engineering

	2008 course		2013 course	
Code	Subject	Code	Subject	
511201	Computer aided design	511201	Computer aided design	
511202	Computer aided Manufacturing	511202	Computer aided Manufacturing	
511203	Optimization Techniques	511210	Optimization Techniques (SEM 2)	
	Elective I			
	Advanced Stress Analysis	511313	Advanced Stress Analysis (SEM 3)	
	Tribology and Surface Engineering	511212	Tribology and Surface Engineering (Elective 3)	
511204	Industrial Robotics and Artificial Intelligence	511204	Industrial Robotics and Artificial Intelligence	
	Concurrent Product Design	511204	Concurrent Product Design	
	Elective II			
	Mechatronics.	511305	Advanced Mechatronics (Elective 1)	
	Rapid Prototyping	511310	Rapid Prototyping	
511205	Energy Management	511315	Energy resource management (Elective 3)	
	CAD/CAM/CAE software	511310	CAD/CAM/CAE software development	
	development		,	
511206	Lab Practice I	511306	Lab Practice I	
511207	Seminar I	511312	Seminar I (Sem 2)	
	SEM 2			
511208	Computer integrated	511307	Computer integrated manufacturing	
311208	manufacturing		Computer integrated mandracturing	
511209	Finite Element Analysis	511308	Finite Element Analysis	
511210	Advanced Mathematics.	511303	Advanced Mathematics & statistics (Sem 1)	
	Elective III			
	Manufacturing system design	511110	Manufacturing system design (Elective 2)	
	Advance material processing	511315	Advance material & processing	
511211	Book of life and a management	511211	Product Life Cycle Management (Elective	
	Product life cycle management	F1121F	2)	
	Quality & reliability engineering Elective IV (Open)	511315	Quality & reliability engineering	
	Technology Management.	511110	Manufacturing system design (Elective 2)	
	Design of Experiments &	511110	Design of Experiments & Research	
	Research Methodology.	311304	Methodology. (Sem 1)	
511212	Computational Fluid	511305	Methodology. (Jen 1)	
311212	Dynamics	311303	Computational Fluid Dynamics (Sem 1)	
	Computer aided Production	511314	Computer aided Production planning	
	planning.	011017	(Sem 3)	
511213	Lab Practice II	511311	Lab Practice 2 (Sem 2)	
711413	Lab I lactice II	311311	200 . ractice 2 (3cm 2)	

511214	Seminar II	511316 Seminar II (Sem3)	
SEM 3			
5112015	Seminar III	511318	Seminar III (Sem 4)
5112016	Project Stage I	511317	Project work Stage I (Sem3)
	SEM 3		
5112017	Project Stage II	511319	Project Stage II (Sem 4)

Subject Equivalence of 2008 course to 2013 course of ME (Production Engg.)-Manufacturing and Automation

	2008 course		2013 course
Code	Subject	Code	Subject
511101	Mathematics & Statistics	511101	Mathematics & Statistics (Sem 1)
511102	CAD/CAM/CIM	511107	Computer Integrated Manufacturing (Sem 2)
511103	Advance Manufacturing Processes	511103	Advance Manufacturing Processes (Sem1)
	Elective I		3 ()
	Advance Mechatronics	511105	Advanced Mechatronics (Elective 1)
	Reliability & Failure Analysis	511105	Reliability & Failure Analysis (Elective 1)
-44404	,	511111	Supply Chain Management (Elective 2)
511104	Supply Chain Management		
		511111	Advanced Machine Tool Design (Elective 2)
	Advance Machine Tool Design		
	Elective II		
	Advance Robotics	611101	Advance Robotics (Sem 3)
	Sheet Metal processing	511108	Tool and Die Design(Sem 2)
511105	Tool and Die Design	511108	Tool and Die Design (Sem 2)
	Engineering Economics &	611103	Engineering Economics & costing (Elective 3)
	Accounting		
511106	Lab Practice 1	511106	Lab Practice 1
511107	Seminar I	511112	Seminar I (Sem 2)
	SEM 2		
511108	Material Technology	511105	Materials Technology (Elective 1)
511109	Manufacturing Management	511105	Manufacturing Management (Elective 1)
511110	Industrial Automation	511102	Industrial Automation (Sem 1)
	Elective III		
	Plastics Processing	511110	Plastics Processing (Elective 2)
511111	Product Life Cycle Management	511110	Product Life Cycle Management (Elective 2)
311111	Welding & Joining,	511109	Advanced Joining processes (Sem 2)
	Surface Treatment processes	611102	Surface Engineering (Sem3)
	Elective IV (Open)		
		611103	Optimization Techniques (Elective 3)
	Optimization Techniques	544404	
F44440	Research Methodologies	511104	Research Methodologies (Sem 1)
511112	Intellectual Property Rights &	611103	Intellectual Property Rights (Elective 3)
	Product Design	644402	Energy Management (Elective 3)
	Energy management	611103	Litergy ividinagement (Elective 3)
511113	Lab Practice 2	511110	Lab Practice 2 (Sem 2)
511114	Seminar II	611104	Seminar II (Sem3)
VIIIIT	SEM 3	011107	Common in (Common)
611101	Seminar III	611106	Seminar III (Sem 4)
611102	Project Stage I	611105	Project work Stage I (Sem3)
017102	SEM 4	311100	· · · · · · · · · · · · · · · · · · ·
611103	Project Stage II	611107	Project Stage II (Sem 4)
317100		007	

ME Printing 2008 course Equivalence

2008 Sem I		2013 Sem I	
Subject code	Subject Name	Subject Code	Subject Name
508101	PSQT	508101	PSRA
508102	PTM	508102	PTM
508103	MTP	508103	MTP
Elect I		Elect I	
508104 A	Workflow Management in	508105 A	Workflow Management in
	Printing		Printing + module II
508104 B	P& PM	508105 B	P & PM + module II
508104 C	DOE & R M	508104	Research Methodology
Elect II (2008)		Elect II	
508105 A	Digital Printing	508106 A	Digital Ptg. + module II
508105 B	Entrepreneurship in Ptg. & allied fields	508106 B	Poly Sci. + module II
508105 C		508106 C	CQC SP + module II
508108	PMC	508107	Color Science
508109	Web handling on press	508108	Web handling on press
508110	Substrate & Ink	508109	Substrate & Ink
Elect III		Elect III (608103)	
508111 A	Multimedia sys. &	508111	Multimedia sys. &
	communication		communication + human rights
508111 B	Total Prod. Maintenance in Ptg.	No equivalence	
508111 C	Press Finger Printing		Press Finger Printing (module I) (Elect – I)+ (508105) + project management (module II)
FI		EL . 10./ (20.40)	
Elect IV (2008)		Elect IV (2013)	T
508112 A	Open Elective	No equivalence	
508112 B	Advances in converting & packaging	608102	Advances in converting & packaging
508112 C	Analysis of spot & process inks	608103	Elect III Ink technology

Savitribai Phule Pune University ME Petroleum Equivalence of 2008 with 2013

Stı	ructure 2008	Structu	re 2013
Subject code	Subject name	Subject code	Subject name
512101	Numerical Methods	512101	Numerical
	and simulation in		Simulation in
	Petroleum		Petroleum
	Engineering		Engineering
512102	Petroleum	512107	Advanced
	Reservoir		Reservoir
	Management		Engineering
512103	Horizontal,	512103	Advanced
	Multilateral and		Drilling
	Intelligent wells		Engineering
512104	Elective I	512105	Elective I
512105	Elective II	512110	Elective II
512106	Lab Practice I	512106	Lab Practice I
512107	Seminar I	512112	Seminar I
512108	GIS and Computer		Examination to
	Applications in		continue
	Petroleum Industry		
512109	Environmental	512108	Environmental
	Management		Technology in
	Technology and		Petroleum
	Safety Measures		Engineering
512110	Advanced Natural	512109	Advanced
	Gas Engineering		Production
			Engineering
512111	Elective III	512118	Elective III
512112	Elective IV		Examination to
			continue
512113	Lab Practice II	512111	Lab Practice II
512114	Seminar II	512116	Seminar II
512115	Seminar III	512118	Seminar III
512116	Project Stage I	512117	Project Stage I
512116	Project Stage II	512117	Project Stage II

ME Polymer Equivalence of 2008 with 2013

Structure 2008		Stru	cture 2013
Subject code	Subject name	Subject code	Subject name
509115	Mathematical and	509121	Mathematical and
	Statistical Methods		Statistical Methods
509116	Principles of	509122	Principles of
	Management		Management
509117	Polymer Processing	509127	Polymer Processing
	and Testing		and Testing
509118	Elective I	509125	Elective I
509119	Elective II	509130	Elective II
509120	Lab Practice I	509126	Lab Practice I
509121	Seminar I	509132	Seminar I
509122	Polymer Physics and	509128	Polymer Physics and
	Characterization		Characterization
509123	Polymer Structure	509129	Polymer Structure
	and Properties		and Properties
509124	Processing and	509123	Examination to
	Mechanics of		continue
	Composites		
509125	Elective III	509135	Elective III
509126	Elective IV (Open)		Examination to
			continue
509127	Lab Practice II	509131	Lab Practice - II
509128	Seminar II	509136	Seminar II
609104	Seminar III	509138	Seminar -III
609105	Project Stage I	509137	Project Stage I
609106	Project Stage II	509139	Project Stage II

ME Chemical Equivalence of 2008 with 2013

St	ructure 2008	Structure 2013	
Subject code	Subject name	Subject code	Subject name
509101	Applied Statistics for	509101	Mathematical and
	Chemical Engineers		Statistical Methods
509102	Management of R&D	509104	Research Methodology
	in Chemical Industries		
509103	Advanced Separation	509103	Advanced Separation
	Processes		Processes
509104	Elective I	509105	Elective I
509105	Elective II	509110	Elective II
509106	Lab Practice I	509106	Lab Practice I
509107	Seminar I	509112	Seminar I
509108	Process Modeling and	509113	Process Modeling and
	Simulation		Simulation
509109	Advanced Transport	509107	Advanced Transport
	Phenomena		Phenomena
509110	Advanced Process	509108	Advanced Process
	Control		Control
509111	Elective III	509115	Elective - III
509112	Elective IV (Open)	509112	Examination to
			continue
509113	Lab Practice II	509111	Lab Practice - II
509114	Seminar II	509116	Seminar –II
609101	Seminar III	509118	Seminar -III
609102	Project Stage I	509117	Project Stage I
609103	Project Stage II	509119	Project Stage II

M. E. Instrumentation & Control (Process Instrumentation)

Equivalence

Semester- I

Sr.no	Subject	Subject (2008 Course)	Subject	Subject (2013 Course)
	Code		code	
1.	5061101	Transducer Design	506102	Transducer Design
2.	5061102	Mathematical Methods in	*506101	Mathematical Methods in
		Instrumentation		Instrumentation
3.	5061103	Communication Protocols for	*506209	Communication Protocols for
		Instrumentation		Instrumentation
4.	5061104	Analytical Instrumentation	*506203	Analytical Instrumentation
5.	5061105	Elective- I		
	A.	Industrial Automation		To be continued
	B.	Building Automation	606102	Building Automation
	C.	Geotechnical Instrumentation		To be Continued
6.	5061106	Lab Practice- I	506106	Lab Practice- I
7.	5061107	Seminar I		To be Continued

^{*}Common to Process Instrumentation & Bio- Medical Instrumentation.

(Dr. A. M. Panditrao)

M. E. Instrumentation & Control (Process Instrumentation)

Equivalence

Semester- II

Sr.no	Subject Code	Subject (2008 Course)	Subject	Subject (2013 Course)
			Code	
1.	5061108	Control System Design	506109	Advanced Control
				System
2.	5061109	Advanced Signal Processing	606101	Advanced Signal Processing
3.	*5061110	Organizational Behavior &		To Be continued
		Management		
4.	5061111	Elective II		
	A.	Modern Control Theory	506105 (A)	Modern Control Theory
	В.	Mechatronics		To Be Continued
	C.	Robotics		To Be Continued
5.	5061112	Elective III		
	A.	Advanced Process	506107	Advanced Process
		Instrumentation		Control
	B.	Automobile Instrumentation		To Be Continued
6.	5061113	Lab Practice- II	506111	Lab Practice- II
7.	5061114	Seminar- II		To Be Continued

^{*}Common to Process Instrumentation & Bio- Medical Instrumentation.

(Dr. A. M. Panditrao)

M. E. Instrumentation & Control (Process Instrumentation)

Equivalence

Semester-III

Sr.no	Subject Code	Subject (2008 Course)	Subject	Subject (2013 Course)
			Code	
1.	6061101	Seminar- III		To be continued
2.	6061102	Project Stage- I	606105	Project Stage- I

Semester- IV

Sr.no	Subject Code	Subject (2008 Course)	Subject	Subject (2013 Course)
			Code	
1.	6061103	Project Stage- II	606107	Project Work Stage- II

(Dr. A. M. Panditrao)

M. E. Instrumentation & Control (Bio- Medical Instrumentation)

Equivalence

Semester- I

Sr.	Subject	Subject (2008 Course)	Subject	Subject (2013 Course)
No	Code		code	
1.	5061101	Transducer Design	506207	Transducer Design
2.	5061102	Mathematical Methods in	*506101	Mathematical Methods in
		Instrumentation		Instrumentation
3.	5061103	Communication Protocols for	*506209	Communication Protocols for
		Instrumentation		Instrumentation
4.	5061104	Analytical Instrumentation	*506203	Analytical Instrumentation
5.	5061201	Elective- I		
	A.	Fundamentals of Biomedical	506205	Fundamentals of Biomedical
		Instrumentation	(A).	Instrumentation
	B.	Introduction to Physiology and		To be Continued
		Anatomy		
6.	5061202	Lab Practice- I	506206	Lab Practice- I
7.	5061203	Seminar I		To be Continued

^{*}Common to Process Instrumentation & Bio- Medical Instrumentation.

(Dr. A. M. Panditrao)

M. E. Instrumentation & Control (Bio- Medical Instrumentation)

Equivalence

Semester- II

Sr.	Subject Code	Subject (2008 Course)	Subject	Subject (2013 Course)
No			Code	
1.	5061108	Control System Design	506210 (A).	Control System Design
2.	5061109	Advanced Signal Processing	606202	Advanced Digital Signal Processing
3.	*5061110	Organizational Behavior &		To Be continued
		Management		
4.	5061204	Elective II		
	A.	Bio- Signal Processing	506202	Bio- Signal Processing
	В.	Rehabilitation Engineering	506210 (B)	Rehabilitation
				Engineering
5.	5061205	Elective III		
	A.	Bio- Imaging Modality		To Be Continued
	В.	Biophotonics	506205 (D)	Biophotonics
6.	5061206	Lab Practice- II	506211	Lab Practice- II
7.	5061207	Seminar- II		To Be Continued

^{*}Common to Process Instrumentation & Bio- Medical Instrumentation.

(Dr. A. M. Panditrao)

M. E. Instrumentation & Control (Bio- Medical Instrumentation)

Equivalence

Semester-III

Sr. No	Subject Code	Subject (2008 Course)	Subject	Subject (2013 Course)
			Code	
1.	6061201	Seminar- III		To be continued
2.	6061202	Project Stage- I	606205	Project Stage- I

Semester-IV

Sr. No	Subject Code	Subject (2008 Course)	Subject	Subject (2013 Course)
			Code	
1.	6061203	Project Stage- II	606207	Project Work Stage- II

(Dr. A. M. Panditrao)

Savitribai Phule Pune University ME M.E. (Chemical - Environmental Engineering) Equivalence of 2008 with 2013

Structure 2008			Structure 2013		
Subject	Subject name	Subject	Subject name		
code		code			
509131	AppliedStatisticsforEnvironmentalEngineers	509131	AppliedStatisticsforEnvironmentalEngineers		
509132	EnvironmentalGeosciences	509132	EnvironmentalManagement		
509133	EnvironmentalChemistry	509133	EnvironmentalChemistry		
509134	ElectiveI	509134	Elective I		
509135	ElectiveII	509140	ElectiveII		
509136	LabPracticeI	509136	LabPracticeI		
509137	SeminarI	509142	SeminarI		
509138	WastewaterTreatment&Design	509137	WastewaterTreatment&Design		
509139	SolidWasteManagement	509138	SolidWasteManagement		
509140	IndustrialWasteTreatment	509139	IndustrialWasteTreatment		
509141	ElectiveIII	509145	ElectiveIII		
509142	ElectiveIV(Open)		Examination to continue		
509143	LabPracticeII	509141	LabPracticeII		
509144	SeminarII	509146	SeminarII		
609107	SeminarIII(BasedonProject)	509148	Seminar-III		
609108	ProjectStageI	509147	ProjectStageI		
609109	ProjectStageII	509149	ProjectWorkStage-II		

ME E&TC Communication Network 2008 Course Equivalent Subjects

			Semester I		
		2008 Course		2013 Course	
Sr. No.	Subject Code	Name of Subject	Equivalent Subject Code	Equivalent Name of Subject	Course
1	504601	Coding & Modulation Techniques	504505	Coding & Modulation Techniques (Elective I)	ME-CN
2	504182	Principles and Practices of IT Management		Continue as it is	
3	504602	Modeling and Simulation of Communication Networks	504501	Modeling and Simulation of Communication Networks	
4	504603	Microwave and Antenna Theory (Elective I)	504301	Electromagnetics and Antenna Theory	Microwave
5	504603	Signal Detection & Estimation (Elective I)	504504	Detection & Estimation Theory	ME-CN
6	504603	Ad-hoc Network (Elective I)		Continue as it is	
7	504604	RF MRMS (Elective II)		Continue as it is	
8	504604	Network Analysis, Architecture & Design (Elective II)		Continue as it is	
9	504604	Computational Electromagnetics (Elective II)	504307	Computational 504307 Electromagnetics	
10	504605	Communication Network Design Practice-I	504506		
11	504606	Seminar I	504512	Seminar I	CN

	Semester II							
	2008 Course			2013 Course				
Sr. No.	Subject Code	Name of Subject	Equivalent Subject Code	Equivalent Name of Subject	Course			
12	504607	Wired & Wireless Network		Continue as it is				
	504608	Network Traffic Analysis &		Traffic Analysis & QOS				
13		QOS	504507		ME-CN			
14	504609	Wireless System Design		Continue as it is				
	504610	Wireless Sensor Networks	504205	Wireless Sensor Networks				
15		(Elective III)		(Elective I)	ME-VLSI & ES			
16	504610	Network Security (Elective III)	504310	Network Security (Elective II)	CN			
17	504610	III)	604501	Mobile Computing	CN			
18	504611	Software Radio (Elective IV)	504210	Software Defined Radio	ME-VLSI & ES			
	504611	Nueral Networks in		Neural Networks in	CN			
19		Communication (Elective IV)	504505	Communication (Elective I)	CN			
	504611	Hardware Platforms for						
		Networking Applications		Continue as it is				
20		(Elective IV)						
	504612	Communication Network						
21		Design Practice-II	504511	Lab Practice II	CN			
22	504613	Seminar II	604504	Seminar II	CN			

	Semester III							
		2008 Course		2013 Course				
Sr. No.	Subject Code	Name of Subject	Equivalent Subject Code	Equivalent Name of Subject	Course			
23	604601	Seminar III	604506	Seminar III	CN			
24	604602	Project Stage - I	604505	Project Stage I	CN			

	Semester IV							
		2008 Course		2013 Course				
Sr. No.	Subject Code	Name of Subject	Equivalent Subject Code	Equivalent Name of Subject	Course			
25	604603	Project Stage - II	604507	Project Work Stage II	CN			

ME E&TC VLSI & Embedded System 2008 Course Equivalent Subjects

	Semester I							
	2008 Course			2013 Course				
Sr. No.	Subject Code	Name of Subject	Equivalent Subject Code	Equivalent Name of Subject	Equivalent branch			
1	504181	Analog and Digital CMOS IC Design		Continue as it is				
2	504182	Principles and Practices for IT Management		Continue as it is				
3	504183	Embedded System Design	Embedded System Design 504103		ME(VLSI & ES)			
4	504184	ASIC Design and Modeling (Elective I)	604202	ASIC Design	ME(VLSI & ES)			
5	504184	Nanotechnology (Elective I)						
6	504184	Machine Intelligence (Elective I)	504405	Artificial Intelligance (Elective I)	ME(SP)			
7	504185	Reconfigurable Computing (Elective II)	504203	Reconfigurable Computing	ME(VLSI & ES)			
8	504185	Memory Technologies (Elective II)		Continue as it is				
9	504185	VLSI EDA Tools (Elective II)		Continue as it is				
10	504186	VLSI Embedded Practice I	504206	Lab Practice I	ME(VLSI & ES)			
11	504187	Seminar I	504212	Seminar I	ME(VLSI & ES)			

	Semester II							
	2008 Course			2013 Course				
Sr. No.	Subject Code	Name of Subject	Equivalent Subject Code	Equivalent Name of Subject	Equivalent branch			
12	504188	Real Time Operating Systems		Continue as it is				

	504189	Embedded Signal Processing		Embedded Signal	
13			504209	504209 Processor	
14	504190	RF IC Design		Continue as it is	
	504191	Fault Tolerant System			ME(VLSI &
15		Design (Elective III)	604201	Fault Tolerant Systems	ES)
16	504191	Biomedical Signals and Systems (Elective III)		Continue as it is	
17	504191	Advanced Digital System Design (Elective III)		Continue as it is	
18	504192	Embedded Automotive Systems (Elective IV)		Continue as it is	
	504192	System-on-Chip (SoC)			ME(VLSI &
19		(Elective IV)	504208	System on Chip	ES)
	504192	Software Defined Radio			
20		(Elective IV)	504510	SDR and Cognitive Radio	CN
	504193	VLSI Embedded Practice II			ME(VLSI &
21			504211	Lab Practice II	ES)
	504194	Seminar II		Seminar II	ME(VLSI &
22			604204		ES)

	Semester III							
		2008 Course		2013 Course				
Sr. No.	Subject Code	Name of Subject	Equivalent Subject Code	Equivalent Name of Subject	Equivalent branch			
23	604601	Seminar III	604206	Seminar III	ME(VLSI & ES)			
	604602	Project Stage - I		Project Stage - I	ME(VLSI &			
24			604205		ES)			

	Semester IV							
		2008 Course		2013 Course				
Sr. No.	Subject Code	Name of Subject	Equivalent Subject Code	Equivalent Name of Subject	Equivalent branch			
25	604603	Project Stage - II	604207	Project Stage - II	ME(VLSI & ES)			

ME E&TC Digital System 2008 Course Equivalent Subjects

			S	Semester I	
2008 Course				2013 Course	
Sr. No.	Subject Code	Name of Subject	Equivalent Subject Code	Equivalent Name of Subject	Equivalent branch
1	504195	Microelectronics	504101	Microelectronics	ME (DS)
2	504182	Principles and Practices for IT Management		Continue as it is	
3	504196	Signal Processing Architectures	504102	Signal Processing Architectures	ME (DS)
4	504197	Fault Tolerant System Design (Elective I)	504110	Fault Tolerant System Design (Elective II)	ME (DS)
5	504197	Advanced Digital System Design (Elective I)		Continue as it is	
6	504197	Wireless and Mobile Technologies (Elective I)	604102	Wireless and Mobile Technologies	ME (DS)
7	504198	Machine Intelligence (Elective II)	504405	Artificial Intelligance (Elective I)	ME(SP)
8	504198	Advanced Computing Architectures (Elective II)		Continue as it is	
9	504198	Memory Technologies (Elective II)		Continue as it is	
10	504199	Digital System Design Practice I	504106	Lab Practice I	ME (DS)
11	504200	Seminar I	504112	Seminar I	ME (DS)

			S	emester II	
		2008 Course		2013 Course	
Sr. No.	Subject Code	Name of Subject	Equivalent Subject Code	Equivalent Name of Subject	Equivalent branch
12	504201	Embedded Systems	504103	Embedded Systems Design	ME (DS)
13	504202	Communication Network and Security	504305	Communication Network (Elective I)	ME(Microwave)
14	504203	Image Processing and Pattern Recognition	604101	Image Processing and Computer Vision	ME (DS)
15	504204	Digital Systems using PLDs (Elective III)		Continue as it is	
16	504204	Biomedical Signals and Systems (Elective III)		Continue as it is	
17	504204	Embedded Video processing (Elective III)		Continue as it is	
18	504205	Reconfigurable Computing (Elective IV)	504110	Reconfigurable Computing (Elective II)	ME (DS)
19	504205	Embedded Automotive Systems (Elective IV)		Continue as it is	
20	504205	Digital Signal Compression (Elective IV)		Continue as it is	
21	504206	Digital System Design Practice II	504111	Lab Practice II	ME (DS)
22	504207	Seminar II	604104	Seminar II	ME (DS)

Semester III							
	2008 Course						
Sr. No.	Subject Code	Name of Subject	Equivalent Subject Code	Equivalent Name of Subject	Equivalent branch		
23	604601	Seminar III	604106	604106 Seminar III			
24	604602	Project Stage - I	604105	Project Stage I	ME (DS)		

Semester IV							
	2008 Course						
Sr. No.	Subject Code	Name of Subject	Equivalent Subject Code	Equivalent Name of Subject	Equivalent branch		
25	604603	Project Stage - II	604107	Project Stage II	ME (DS)		

ME E&TC Microwave 2008 Course Equivalent Subjects

	Semester I						
		2008 Course	201				
Sr. No.	Subject Code	Name of Subject	Equivalent Subject Code	Equivalent Name of Subject	Equivale nt branch		
1	504222	Electromagnetics and Antenna Theory	504301	Electromagnetics and Antenna Theory	ME(Micr owave)		
2	504182	Principles and Practices for IT Management		Continue as it is			
3	504223	RF Wave and Microwave Circuit Design	504302	RF Microwave Circuits	ME(Micr owave)		
4	504224	Applications of Microwaves to Radar and Satellite (Elective I)	604302	Radar and Satellite Communications	ME(Micr owave)		
5	504224	Digital Image Processing & Analysis (Elective I)	504402	Signal Processing Techniques	ME(SP)		
6	504224	Communication Networks (Elective I)	504305	Communication Networks (Elective I)	ME(Micr owave)		
7	504225	Smart Antennas (Elective II)	504310	Smart Antennas (Elective II)	ME(Micr owave)		
8	504225	Speech Processing And Application (Elective II)	504407	Speech Signal Processing	ME(SP)		
9	504225	Semiconductor Device Modelling and Technology (Elective II)	504105	Semiconductor Device Modelling (Elective I)	ME(DS)		
10	504226	Lab Practice I	504306	Lab Practice I	ME(Micr owave)		
11	504227	Seminar I	504312	Seminar I	ME(Micr owave)		

	Semester II							
Sr.	2008 Course		201	Equivale nt branch				
No.	Subject Code	Name of Subject	Equivalent Subject Code	Equivalent Name of Subject				
12	504228	Microwave Integrated Circuits		Continue as it is				
13	504229	Signal Processing for Wireless Communication	504305	Signal Processing for Wireless Communication (Elective I)	ME(Micr owave)			
14	504230	Mobile Communication – GSM and CDMA		Continue as it is				
15	504231	Fibre Optic Communication (Elective III)		Continue as it is				
16	504231	System Design (Elective III)		Continue as it is				
17	504231	EMI and EMC Techniques (Elective III)	604301	EMI and EMC Techniques	ME(Micr owave)			
		Any one subject of Elective IV from the following branches		Continue as it is				
18	504231	1. Electronics Engineering						
19		2. Computer Engineering						
20	504232	3. Information Technology						
21	504233	Lab Practice II	504311	Lab Practice II	ME(Micr owave)			
22	504234	Seminar II	604304	Seminar II	ME(Micr owave)			

	Semester III							
	2008 Course		2008 Course 2013 Course Equivale		t branch			
23	Subject Code	Name of Subject	Equivalent Subject Code	Equivalent Name of Subject				
23	604601	Seminar III	604306	Seminar III	ME(Micr owave)			
	604602	Project Stage - I		Project Stage - I	ME(Micr			
24			604305		owave)			

	Semester IV							
	2008 Course		2013 Course		Equivale nt branch			
Sr. No.	Subject Code	Name of Subject	Equivalent Subject Code	Equivalent Name of Subject				
25	604603	Project Stage - II	604307	Project Stage - II	ME(Micr owave)			

ME E&TC **Signal Processing 2008 Course Equivalent Subjects** Semester I 2008 Course 2013 Course Sr. Equivalent Course Subject No. Name of Subject Subject Equivalent Name of Subject Code Code Linear Algebra & 1 Continue as it is **Random Processes** Principles and Practices 2 Continue as it is for IT Management 3 **Signal Processing** Signal Processing ME-SP **Techniques Techniques** 504402 4 Digital Image Processing ME-SP (Elective I) 504401 Image Processing and Analysis 5 Automotive Electronics (Elective I) Continue as it is 6 Artificial Intelligence Artificial Intelligance (Elective (Elective I) 504405 ME-SP 7 Biomedical Signal Biomedical signal ME-SP Processing (Elective II) 504409 processing Wireless and Mobile 8 Communication (Elective Wireless and mobile 604102 technologies ME-DS 9 Smart Antennas (Elective ME-504310 Smart Antennas (Elective II) Microwave Signal Processing Lab-I 10 ME-SP 504406 Lab Practice I Seminar I 11 504412 Seminar I ME-SP

	Semester II							
		2008 Course		2013 Course				
Sr. No.	Subject Code	Name of Subject	Equivalent Subject Code	Equivalent Name of Subject	Course			
12		Statistical Signal Processing	604401	Statistical Signal Processing	ME-SP			
13		Advanced Digital Signal Processing		Continue as it is				
14		VLSI in Signal Processing		Continue as it is				
15		Acoustic & Speech Processing (Elective III)	504410	Acoustic Signal Processing (Elective II)	ME-SP			
16		Digital Signal Compression (Elective III)		Continue as it is				
17		Multimedia Techniques (Elective III)		Continue as it is				
18		Radar & Satellite Signal Processing (Elective IV)	604302	Radar and Satellite Communications	ME- Microwave			
19		Operating Systems & Open Source Systems (Elective IV)		Continue as it is				
20		Computer Vision (Elective IV)		Continue as it is				
21		Signal Processing Lab-II	504411	Lab Practice II	ME-SP			
22		Seminar-II	604404	Seminar II	ME-SP			

Semester III						
		2008 Course		2013 Course		
Sr. No.	Subject Code	Name of Subject	Equivalent Subject Code	Equivalent Name of Subject	Course	
23		Seminar III	604406	Seminar III	ME-SP	
24		Project-Phase I	604405	Project Stage I	ME-SP	
			Semester I	V		
		2008 Course				
Sr. No.	Subject Code	Name of Subject	Equivalent Subject Code	Equivalent Name of Subject	Course	
25		Project-Phase II	604407	Project Work Stage II	ME-SP	