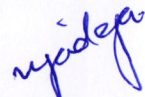


**1.1.2 Percentage of Programmes where the syllabus revision was carried out during the last five years**

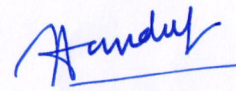
The percentage of program revision was calculated for an entire duration of the last five years (2017-18 to 2021-22).

Number of courses having 20% syllabus content revision in the last five years and number of new courses introduced during the same period were taken into taken in consideration for the calculation of program revision by the following formula;

$$\text{Overall \% change in the program} = \frac{(\text{Number of courses with change of the syllabus in the last five years} + \text{Number of new courses introduced in the last five years})}{\text{Total number of courses offered in the last five years}}$$

  
**Registrar**  
**Marwadi University**



  
**Provost**  
**Marwadi University**



Program Name	Program Code	Course name	Semester	Course code	Year of Introduction	Year of Revision	Percentage Change	No. of Revised & New Courses	% of Program Revision
B.Tech Mechanical Engineering	01ME	Basics of Environmental Studies	1	01EN1101	2016-17	2021-22	21%	13	97.10%
B.Tech Mechanical Engineering	01ME	Elements of Civil Engineering	1	01CI1101	2016-17	2021-22	20%		
B.Tech Mechanical Engineering	01ME	Elements of Mechanical Engineering	1	01ME1101	2016-17	2021-22	22%		
B.Tech Mechanical Engineering	01ME	Physics	1	01GS2101	2016-17	2021-22	30%		
B.Tech Mechanical Engineering	01ME	Engineering Graphics	2	01ME1102	2016-17	2021-22	20%		
B.Tech Mechanical Engineering	01ME	Mechanical Workshop	2	01ME1104	2016-17	2021-22	45%		
B.Tech Mechanical Engineering	01ME	Basic Electrical and Electronics Engineering	2	01EE1101	2016-17	2021-22	20%		
B.Tech Mechanical Engineering	01ME	Matrix Algebra and Vector Space	2	01MA1151	2016-17	2018-19	50%		
B.Tech Mechanical Engineering	01ME	Differential And Integral Calculus	2	01MA1101	2018-19	2021-22	50%		
B.Tech Mechanical Engineering	01ME	Fluid Mechanics	3	01ME1301	2017-18	2018-19	40%		
B.Tech Mechanical Engineering	01ME	Kinematics of Machines	3	01ME2302	2017-18	2021-22	20%		
B.Tech Mechanical Engineering	01ME	Material Science and Metallurgy	4	01ME1403	2017-18	2018-19	23%		
B.Tech Mechanical Engineering	01ME	Data Mining	7	01ME1722	2019-20	2020-21	100%		
B.Tech Mechanical Engineering	01ME	Computer Programming	1	01CE0101	2018-19	—	100%		
B.Tech Mechanical Engineering	01ME	Reading & Writing for Technology	1	01SL0102	2017-18	—	100%		
B.Tech Mechanical Engineering	01ME	Speaking & Presentation Skills	1	01SL0103	2017-18	—	100%		
B.Tech Mechanical Engineering	01ME	Value Education	1	01CR0102	2018-19	—	100%		
B.Tech Mechanical Engineering	01ME	NCC	1	01AU0101	2021-22	—	100%		
B.Tech Mechanical Engineering	01ME	Career Readiness Program	3	01CR0301	2017-18	—	100%		
B.Tech Mechanical Engineering	01ME	Applied differential equations	3	01MA0301	2018-19	—	100%		
B.Tech Mechanical Engineering	01ME	Mechanics of Solid	3	01CI0301	2017-18	—	100%		
B.Tech Mechanical Engineering	01ME	Fundamental of machine design		01ME0305	2019-20	—	100%		
B.Tech Mechanical Engineering	01ME	Manufacturing Process - I	3	01ME1303	2017-18	—	100%		
B.Tech Mechanical Engineering	01ME	Professional Ethics	3	01CR0302	2018-19	—	100%		
B.Tech Mechanical Engineering	01ME	Design Thinking and Problem Solving Skills	3	01ME0304	2018-19	—	100%		
B.Tech Mechanical Engineering	01ME	Numerical Analysis	4	01MA0271	2017-18	—	100%		
B.Tech Mechanical Engineering	01ME	Manufacturing Processes II	4	01ME1402	2017-18	—	100%		
B.Tech Mechanical Engineering	01ME	Machine Design & Industrial Drafting	4	01ME1401	2017-18	—	100%		
B.Tech Mechanical Engineering	01ME	Engineering Thermodynamics	4	01ME0404	2017-18	—	100%		
B.Tech Mechanical Engineering	01ME	Human Centric Design Approach	4	01ME0405	2018-19	—	100%		
B.Tech Mechanical Engineering	01ME	Dynamics of Machine-I	5	01ME0501	2018-19	—	100%		
B.Tech Mechanical Engineering	01ME	Fluid Power Engineering	5	01ME0502	2018-19	—	100%		
B.Tech Mechanical Engineering	01ME	Machine Design-1	5	01ME0503	2018-19	—	100%		
B.Tech Mechanical Engineering	01ME	Metrology	5	01ME0504	2018-19	—	100%		
B.Tech Mechanical Engineering	01ME	Business Benchmark	5	01CR0501	2018-19	—	100%		
B.Tech Mechanical Engineering	01ME	Reverse Engineering	5	01ME0508	2018-19	—	100%		
B.Tech Mechanical Engineering	01ME	Power Plant Engineering	5	01ME0505	2018-19	—	100%		
B.Tech Mechanical Engineering	01ME	Design for Manufacturing	5	01ME0507	2018-19	—	100%		
B.Tech Mechanical Engineering	01ME	Computer Graphics	5	01ME0506	2018-19	—	100%		
B.Tech Mechanical Engineering	01ME	Dynamics of Machine –II	6	01ME0601	2018-19	—	100%		
B.Tech Mechanical Engineering	01ME	Heat and Mass Transfer	6	01ME0602	2018-19	—	100%		
B.Tech Mechanical Engineering	01ME	Machine Design-II	6	01ME0603	2018-19	—	100%		
B.Tech Mechanical Engineering	01ME	Operation Research	6	01ME0604	2018-19	—	100%		
B.Tech Mechanical Engineering	01ME	Design Engineering & Project Management	6	01ME0610	2018-19	—	100%		
B.Tech Mechanical Engineering	01ME	IC Engines & Automobiles	6	01ME0605	2018-19	—	100%		
B.Tech Mechanical Engineering	01ME	Design of Material Handling Equipments	6	01ME0606	2018-19	—	100%		
B.Tech Mechanical Engineering	01ME	Advance Manufacturing processes	6	01ME0607	2018-19	—	100%		
B.Tech Mechanical Engineering	01ME	Finite Elements Method	7	01ME0701	2019-20	—	100%		
B.Tech Mechanical Engineering	01ME	Project-1	7	01ME0702	2019-20	—	100%		
B.Tech Mechanical Engineering	01ME	Rapid Casting :I	7	01ME0703	2019-20	—	100%		
B.Tech Mechanical Engineering	01ME	Advanced Machine Design	7	01ME0711	2019-20	—	100%		
B.Tech Mechanical Engineering	01ME	Computer Aided Process Management	7	01ME0721	2019-20	—	100%		
B.Tech Mechanical Engineering	01ME	Ref. & Air conditioning	7	01ME0731	2019-20	—	100%		
B.Tech Mechanical Engineering	01ME	Pneumatic and Hydraulic control	7	01ME0741	2019-20	—	100%		
B.Tech Mechanical Engineering	01ME	Renewable Energy Engineering	7	01ME0732	2019-20	—	100%		
B.Tech Mechanical Engineering	01ME	Sensorics	7	01ME0742	2019-20	—	100%		
B.Tech Mechanical Engineering	01ME	Production Technology	8	01ME0801	2019-20	—	100%		
B.Tech Mechanical Engineering	01ME	Project-II	8	01ME1802	2019-20	—	100%		
B.Tech Mechanical Engineering	01ME	Rapid Casting :II	8	01ME0803	2019-20	—	100%		
B.Tech Mechanical Engineering	01ME	Design of Pressure vessels	8	01ME0811	2019-20	—	100%		
B.Tech Mechanical Engineering	01ME	Machine Tool Design	8	01ME0812	2019-20	—	100%		
B.Tech Mechanical Engineering	01ME	Computer Integrated Mfg.	8	01ME0821	2019-20	—	100%		
B.Tech Mechanical Engineering	01ME	IOT for Manufacturing	8	01ME0822	2019-20	—	100%		
B.Tech Mechanical Engineering	01ME	Steam and Gas Turbine	8	01ME0831	2019-20	—	100%		
B.Tech Mechanical Engineering	01ME	Computational Fluid Dynamics	8	01ME0832	2019-20	—	100%		
B.Tech Mechanical Engineering	01ME	Robotics & FMS	8	01ME0841	2019-20	—	100%		
B.Tech Mechanical Engineering	01ME	Artificial Intelligence	8	01ME0842	2019-20	—	100%		







		Program Revision calculation- B.Tech Mech						
		No. of revised courses	13					
		No. of new courses	54					
		Total number of courses in the program	69					
		Overall % change in the program	97.10%					
B.Tech Civil Engineering	01CI	Reading and Writing Technology	1	01SL0101	2016-17	2017-18	50%	10
B.Tech Civil Engineering	01CI	Elements of Civil Engineering	1	01CI1101	2016-17	2021-22	22%	
B.Tech Civil Engineering	01CI	Engineering Physics	1	01GS2101	2016-17	2021-22	43%	
B.Tech Civil Engineering	01CI	Basics of Enviornmental Studies	1	01EN1101	2016-17	2021-22	20%	
B.Tech Civil Engineering	01CI	Matrix Algebra and Vector Space	2	01MA0103	2016-17	2021-22	25%	
B.Tech Civil Engineering	01CI	Engineering Graphics	2	01ME1102	2016-17	2021-22	20%	
B.Tech Civil Engineering	01CI	Basics of Electrical and Electronics Engineering	2	01EE1101	2016-17	2021-22	32%	
B.Tech Civil Engineering	01CI	Professional Ethics	4	01CR0401	2017-18	2018-19	60%	
B.Tech Civil Engineering	01CI	Advanced Surveying & Geomatics	4	01CI1404	2017-18	2018-19	30%	
B.Tech Civil Engineering	01CI	Basics of Geology & Geotechnical Engineering	4	01CI1403	2017-18	2019-20	25%	
B.Tech Civil Engineering	01CI	Speaking and Presentation Skills	1	01SL0103	2017-18	—	100%	52
B.Tech Civil Engineering	01CI	Value Education	1	01CR0103	2018-19	—	100%	
B.Tech Civil Engineering	01CI	Indian Constitution	1	01GS0103	2021-22	—	100%	
B.Tech Civil Engineering	01CI	Engineering Mathematics-III	3	01MA0201	2017-18	—	100%	
B.Tech Civil Engineering	01CI	Mechanics of Solids	3	01CI0301	2017-18	—	100%	
B.Tech Civil Engineering	01CI	Building Planning & Drawing	3	01CI0302	2017-18	—	100%	
B.Tech Civil Engineering	01CI	Surveying	3	01CI0303	2017-18	—	100%	
B.Tech Civil Engineering	01CI	Flui Mechanics	3	01CI0304	2017-18	—	100%	
B.Tech Civil Engineering	01CI	Software Application in Civil Engineering - I	3	01CI0305	2017-18	—	100%	
B.Tech Civil Engineering	01CI	Project Based Community Service-I	3	01CI0306	2018-19	—	100%	
B.Tech Civil Engineering	01CI	Structural Analysis-I	4	01CI0402	2017-18	—	100%	
B.Tech Civil Engineering	01CI	Software Applications in Civil Engineering-II	4	01CI0406	2017-18	—	100%	
B.Tech Civil Engineering	01CI	Project Based Community Service-II	4	01CI0407	2018-19	—	100%	
B.Tech Civil Engineering	01CI	Creativity, Problem Solving and Innovation	4	01CI0408	2021-22	—	100%	
B.Tech Civil Engineering	01CI	Hydrology and Water Resource Management	5	01CI0501	2018-19	—	100%	
B.Tech Civil Engineering	01CI	Structural Analysis-II	5	01CI0502	2018-19	—	100%	
B.Tech Civil Engineering	01CI	Highway Engineering	5	01CI0503	2018-19	—	100%	
B.Tech Civil Engineering	01CI	Enviornmental Engineering	5	01CI0504	2018-19	—	100%	
B.Tech Civil Engineering	01CI	Software Applications in Civil Engineering-III	5	01CI0505	2018-19	—	100%	
B.Tech Civil Engineering	01CI	Project Based Community Service-III	5	01CI0506	2018-19	—	100%	
B.Tech Civil Engineering	01CI	Enviornmental Pollution	5	01CI0507	2018-19	—	100%	
B.Tech Civil Engineering	01CI	Disaster Management	5	01CI0508	2018-19	—	100%	
B.Tech Civil Engineering	01CI	Traffic Engineering	5	01CI0509	2018-19	—	100%	
B.Tech Civil Engineering	01CI	Buisness Benchmark	5	01CR0501	2018-19	—	100%	
B.Tech Civil Engineering	01CI	Transportation Engineering	6	01CI0601	2018-19	—	100%	
B.Tech Civil Engineering	01CI	Elementary Design of Structures	6	01CI0602	2018-19	—	100%	
B.Tech Civil Engineering	01CI	Advanced Geotechnical Engineering	6	01CI0603	2018-19	—	100%	
B.Tech Civil Engineering	01CI	Professional Practice and Valuation	6	01CI0604	2018-19	—	100%	
B.Tech Civil Engineering	01CI	Construction Technology and Safety Engineering	6	01CI0605	2018-19	—	100%	
B.Tech Civil Engineering	01CI	Software Applications in Civil Engineering-IV	6	01CI0606	2018-19	—	100%	
B.Tech Civil Engineering	01CI	Project Based Community Service-IV	6	01CI0607	2018-19	—	100%	
B.Tech Civil Engineering	01CI	Energy Science & Engineering	6	01CI0608	2018-19	—	100%	
B.Tech Civil Engineering	01CI	Design of Concrete Structures	7	01CI0701	2019-20	—	100%	
B.Tech Civil Engineering	01CI	Irrigation Engineering	7	01CI0702	2019-20	—	100%	
B.Tech Civil Engineering	01CI	Construction Project Management	7	01CI0703	2019-20	—	100%	
B.Tech Civil Engineering	01CI	Project-I	7	01CI0704	2019-20	—	100%	
B.Tech Civil Engineering	01CI	Earthquake Engineering	7	01CI0705	2019-20	—	100%	
B.Tech Civil Engineering	01CI	Smart Citites	7	01CI0706	2019-20	—	100%	
B.Tech Civil Engineering	01CI	Modern Transportation System	7	01CI0707	2019-20	—	100%	
B.Tech Civil Engineering	01CI	Environmental Impact Assessment	7	01CI0708	2019-20	—	100%	
B.Tech Civil Engineering	01CI	Foundation Engineering	8	01CI0801	2019-20	—	100%	
B.Tech Civil Engineering	01CI	Design of Steel Structures	8	01CI0802	2019-20	—	100%	
B.Tech Civil Engineering	01CI	Project-II	8	01CI0803	2019-20	—	100%	
B.Tech Civil Engineering	01CI	Advanced Structural Analysis	8	01CI0804	2019-20	—	100%	
B.Tech Civil Engineering	01CI	Rehabilitation and Retrofitting of Structures	8	01CI0805	2019-20	—	100%	
B.Tech Civil Engineering	01CI	Bridge Engineering	8	01CI0806	2019-20	—	100%	
B.Tech Civil Engineering	01CI	Sold Waste Management	8	01CI0807	2019-20	—	100%	







B.Tech Civil Engineering	01CI	Sustainable Building Technology	8	01CI0808	2019-20	—	100%		
B.Tech Civil Engineering	01CI	Prestressed Concrete Technology	8	01CI0809	2019-20	—	100%		
B.Tech Civil Engineering	01CI	Infrastructure Engineering & Management	8	01CI0810	2019-20	—	100%		
B.Tech Civil Engineering	01CI	Design of Formwork	8	01CI0811	2019-20	—	100%		
B.Tech Civil Engineering	01CI	Masonry Structures	8	01CI0812	2019-20	—	100%		
		<b>Program Revision calculation- B.Tech Civil</b>							
		No. of revised courses	10						
		No. of new courses	52						
		Total number of courses in the program	72						
		Overall % change in the program	86.1%						
BBA (Honors)	04BB	Microeconomics	1	04LS1103	2016-17	2017-18	50%	16	100%
BBA (Honors)	04BB	Principles Of Management	1	04LS1102	2016-17	2017-18	25%		
BBA (Honors)	04BB	Fundamentals Of Accounting	1	04LS1105	2016-17	2017-18	60%		
BBA (Honors)	04BB	Computer Essentials & Office Applications	1	04BB0104	2016-17	2021-22	60%		
BBA (Honors)	04BB	Mathematics For Business	1	04BB0106	2016-17	2017-18	20%		
BBA (Honors)	04BB	Business organization & Structure	1	04LS1104	2016-17	2017-18	40%		
BBA (Honors)	04BB	Career Readiness Program	1	04CR1101	2016-17	2018-19	50%		
BBA (Honors)	04BB	Tally	1	04BH2101	2017-18	2021-22	20%		
BBA (Honors)	04BB	COST ACCOUNTING	2	04LS1202	2016-17	2017-18	100%		
BBA (Honors)	04BB	Macro Economics	2	04LS1203	2016-17	2017-18	60%		
BBA (Honors)	04BB	Organizational Behaviour	2	04LS1204	2016-17	2017-18	25%		
BBA (Honors)	04BB	Statistics in Business	2	04BB0203	2016-17	2021-22	10%		
BBA (Honors)	04BB	E-Commerce	2	04LS1206	2016-17	2017-18	40%		
BBA (Honors)	04BB	Human Resource Management	2	04BB0204	2017-18	2021-22	20%		
BBA (Honors)	04BB	Entrepreneurship	4	04BB2405	2017-18	2019-20	70%		
BBA (Honors)	04BB	Advanced Excel	2	04BH0202	2017-18	2021-22	25%		
BBA (Honors)	04BB	Re+B21:B80search Methodology	3	04BB0304	2017-18	—	100%	69	
BBA (Honors)	04BB	Reading and Writing for Business	1	04SL0102	2017-18	—	100%		
BBA (Honors)	04BB	Speaking and Presentation Skills	1	04SL0103	2017-18	—	100%		
BBA (Honors)	04BB	English for Workplace	2	04SL0152	2017-18	—	100%		
BBA (Honors)	04BB	English through Films	2	04SL0153	2017-18	—	100%		
BBA (Honors)	04BB	Application Of Spreadsheet	2	04LS0212	2017-18	—	100%		
BBA (Honors)	04BB	Marketing Management	3	04BB0301	2017-18	—	100%		
BBA (Honors)	04BB	Business Environment	3	04BB0303	2017-18	—	100%		
BBA (Honors)	04BB	Financial Management	3	04BB0305	2017-18	—	100%		
BBA (Honors)	04BB	Business Laws	3	04BB0306	2017-18	—	100%		
BBA (Honors)	04BB	Fundamentals of Digital Marketing	3	04BB0307	2017-18	—	100%		
BBA (Honors)	04BB	Production & Operations Management	4	04BB0401	2017-18	—	100%		
BBA (Honors)	04BB	Management Information System	4	04BB0402	2017-18	—	100%		
BBA (Honors)	04BB	Income Tax – Law and Practice	4	04BB0403	2017-18	—	100%		
BBA (Honors)	04BB	Indian Financial System	4	04BB0404	2017-18	—	100%		
BBA (Honors)	04BB	Management of Services	4	04BB0406	2017-18	—	100%		
BBA (Honors)	04BB	Basics of French Language	4	04BB0407	2017-18	—	100%		
BBA (Honors)	04BB	Logistics Management	4	04BH0401	2017-18	—	100%		
BBA (Honors)	04BB	Operations Research	5	04BB0501	2018-19	—	100%		
BBA (Honors)	04BB	Strategic Management	5	04BB0502	2018-19	—	100%		
BBA (Honors)	04BB	Project Management	5	04BB0503	2018-19	—	100%		
BBA (Honors)	04BB	Understanding Corporate Financial Statements	5	04BB0505	2021-22	—	100%		
BBA (Honors)	04BB	Internship	5	04BB0506	2018-19	—	100%		
BBA (Honors)	04BB	Career Readiness Program	5	04CR0501	2018-19	—	100%		
BBA (Honors)	04BB	Management of Financial Markets	5	04BB0507	2018-19	—	100%		
BBA (Honors)	04BB	Banking	5	04BB0508	2018-19	—	100%		
BBA (Honors)	04BB	Taxation	5	04BH0501	2018-19	—	100%		
BBA (Honors)	04BB	Consumer Behaviour	5	04BB0509	2018-19	—	100%		
BBA (Honors)	04BB	Retail Marketing	5	04BB0510	2018-19	—	100%		
BBA (Honors)	04BB	Sales & Marketing	5	04BH0502	2018-19	—	100%		
BBA (Honors)	04BB	Employee Welfare & Social Securities	5	04BB0511	2018-19	—	100%		
BBA (Honors)	04BB	Compensation Management	5	04BB0512	2018-19	—	100%		
BBA (Honors)	04BB	Recruitment & Selection	5	04BH0503	2018-19	—	100%		
BBA (Honors)	04BB	International Marketing	5	04BB0513	2019-20	—	100%		
BBA (Honors)	04BB	International Human Resource Management	5	04BB0514	2019-20	—	100%		
BBA (Honors)	04BB	Fundamentals of International Business	5	04BH0504	2019-20	—	100%		
BBA (Honors)	04BB	Modern Banking Theory & Practices	5	04BB0515	2019-20	—	100%		
BBA (Honors)	04BB	Financial Analysis & Risk Management in Banks	5	04BB0516	2019-20	—	100%		
BBA (Honors)	04BB	Fundamentals of Operational Banking	5	04BH0505	2019-20	—	100%		
BBA (Honors)	04BB	Inventory Management	5	04BB0518	2021-22	—	100%		





BBA (Honors)	04BB	Warehousing, Distribution & Transportation Management	5	04BB0519	2021-22	—	100%		
BBA (Honors)	04BB	Packaging Management	5	04BH0507	2021-22	—	100%		
BBA (Honors)	04BB	Essentials of Digital Marketing	5	04BB0520	2021-22	—	100%		
BBA (Honors)	04BB	Applications of SEO, SEM & Web Analytics	5	04BB0521	2021-22	—	100%		
BBA (Honors)	04BB	Website Development	5	04BH0508	2021-22	—	100%		
BBA (Honors)	04BB	Innovation & Start-Up Management	5	04BB0522	2021-22	—	100%		
BBA (Honors)	04BB	Social Entrepreneurship and Corporate Entrepreneurship	5	04BB0523	2021-22	—	100%		
BBA (Honors)	04BB	International Business Procedures	5	04BH0506	2021-22	—	100%		
BBA (Honors)	04BB	Business Ethics & Corporate Governance	6	04BB0601	2018-19	—	100%		
BBA (Honors)	04BB	Management Accounting	4	04BB0602	2017-18	—	100%		
BBA (Honors)	04BB	International Business	6	04BB0603	2018-19	—	100%		
BBA (Honors)	04BB	Project	6	04BB0604	2018-19	—	100%		
BBA (Honors)	04BB	Six Sigma	6	04BH0601	2018-19	—	100%		
BBA (Honors)	04BB	Advance Financial Management	6	04BB0605	2018-19	—	100%		
BBA (Honors)	04BB	Asset Management	6	04BH0602	2018-19	—	100%		
BBA (Honors)	04BB	Advertising Management	6	04BB0606	2018-19	—	100%		
BBA (Honors)	04BB	Social Media Marketing	6	04BH0603	2018-19	—	100%		
BBA (Honors)	04BB	Change Management	6	04BB0607	2018-19	—	100%		
BBA (Honors)	04BB	Payroll Management	6	04BH0604	2018-19	—	100%		
BBA (Honors)	04BB	International Supply Chain Management	5	04BB0608	2021-22	—	100%		
BBA (Honors)	04BB	International Trade Finance & Forex Risk Management	6	04BH0605	2021-22	—	100%		
BBA (Honors)	04BB	Rural Banking and Micro Finance	6	04BB1609	2019-20	—	100%		
BBA (Honors)	04BB	Investment Banking & Insurance	6	04BH0606	2019-20	—	100%		
BBA (Honors)	04BB	IT in Logistics Management	6	04BB0610	2021-22	—	100%		
BBA (Honors)	04BB	International Logistics	6	04BH0607	2021-22	—	100%		
BBA (Honors)	04BB	Contemporary Practices of Digital Marketing	6	04BB0611	2021-22	—	100%		
BBA (Honors)	04BB	Marketing Through Social Media Platforms	6	04BH0609	2021-22	—	100%		
BBA (Honors)	04BB	Legal Aspects of Startups and IPR	6	04BB0612	2021-22	—	100%		
BBA (Honors)	04BB	Funding for Start-Ups	6	04BH0608	2021-22	—	100%		
		<b>Program Revision calculation BBA (H)</b>							
		<b>No. of revised courses</b>	<b>16</b>						
		<b>No. of new courses</b>	<b>69</b>						
		<b>Total number of courses in the program</b>	<b>85</b>						
		<b>Overall % change in the program</b>	<b>100%</b>						
B. Tech Electrical Engineering	01EE	Basic Electrical Engineering	1	01EE1109	2020-21	2021-22	25%	3	100%
B. Tech Electrical Engineering	01EE	Basics MECHANICAL ENGINEERING	1	01ME1109	2020-21	2021-22	20%		
B. Tech Electrical Engineering	01EE	COMPUTER PROGRAMMING	2	01CE1101	2020-21	2021-22	22%		
B. Tech Electrical Engineering	01EE	Environmental Science	1	01EN1109	2020-21	—	100%	32	
B. Tech Electrical Engineering	01EE	Physics	1	01GS1109	2020-21	—	100%		
B. Tech Electrical Engineering	01EE	Basic Electronics	1	01MA1109	2020-21	—	100%		
B. Tech Electrical Engineering	01EE	Maths-II	1	01EE1110	2020-21	—	100%		
B. Tech Electrical Engineering	01EE	English	1	01GS0103	2021-22	—	100%		
B. Tech Electrical Engineering	01EE	Maths I	1	AU001	2021-22	—	100%		
B. Tech Electrical Engineering	01EE	Engineering Graphics And Design	1	01PY0101	2021-22	—	100%		
B. Tech Electrical Engineering	01EE	Workshop	2	01EC1109	2020-21	—	100%		
B. Tech Electrical Engineering	01EE	Value Education	2	01MA1110	2020-21	—	100%		
B. Tech Electrical Engineering	01EE	National Cadet Corps-2	2	01SL1109	2020-21	—	100%		
B. Tech Electrical Engineering	01EE	Indian Constitution	2	01ME1110	2020-21	—	100%		
B. Tech Electrical Engineering	01EE	National Cadet Corps-1	2	01CR1103	2021-22	—	100%		
B. Tech Electrical Engineering	01EE	Physical/Sports/Yoga	2	AU0002	2021-22	—	100%		
B. Tech Electrical Engineering	01EE	Design Thinking And Problem Solving	3	01EE0305	2021-22	—	100%		
B. Tech Electrical Engineering	01EE	Electrical Circuit Analysis	3	01EE0301	2021-22	—	100%		
B. Tech Electrical Engineering	01EE	Electrical Machines-I	3	01EE0303	2021-22	—	100%		
B. Tech Electrical Engineering	01EE	Applied Mathematics For Electrical Engineering	3	01MA0303	2021-22	—	100%		
B. Tech Electrical Engineering	01EE	Analog and Digital Electronics	3	01EE0302	2021-22	—	100%		
B. Tech Electrical Engineering	01EE	Measurement Lab	3	01EE0304	2021-22	—	100%		
B. Tech Electrical Engineering	01EE	Power System - I	4	01EE0401	2021-22	—	100%		
B. Tech Electrical Engineering	01EE	Power Electronics	4	01EE0402	2021-22	—	100%		
B. Tech Electrical Engineering	01EE	Control System Engineering	4	01EE0403	2021-22	—	100%		
B. Tech Electrical Engineering	01EE	Field Theory	4	01EE0404	2021-22	—	100%		
B. Tech Electrical Engineering	01EE	Field Theory - Lab	4	01EE0405	2021-22	—	100%		
B. Tech Electrical Engineering	01EE	Community Services	4	01EE0407	2021-22	—	100%		
B. Tech Electrical Engineering	01EE	Communication Skills For Engineers	4	01SL0401	2021-22	—	100%		
B. Tech Electrical Engineering	01EE	Creativity, Problem Solving and Innovation	4	01EE0408	2021-22	—	100%		
B. Tech Electrical Engineering	01EE	Power Plant Engineering	4	01ME0505	2021-22	—	100%		





B. Tech Electrical Engineering	01EE	Automobile Engineering	4	01AE0409	2021-22	—	100%		
B. Tech Electrical Engineering	01EE	Object Oriented Programming With Java	4	01CE0432	2021-22	—	100%		
B. Tech Electrical Engineering	01EE	Computer Networks	4	01CE0431	2021-22	—	100%		
B. Tech Electrical Engineering	01EE	Fundamentals of Robotics	4	01EC0431	2021-22	—	100%		
		<b>Program Revision calculation- B.Tech Electrical</b>							
		<b>No. of revised courses</b>	3						
		<b>No. of new courses</b>	32						
		<b>Total number of courses in the program</b>	35						
		<b>Overall % change in the program</b>	100%						
B. Tech ICT	33	Foundation Skills in Sensors Interfacing	1	OLD: 01CT0103 NEW: 01CT1103	2018-19	2020-21	50%	1	100%
B. Tech ICT	33	Engineering Mathematics - I	1	01MA0101	2017-18	—	100%	92	
B. Tech ICT	33	Electrical Circuits	1	01EE0104	2017-18	—	100%		
B. Tech ICT	33	Introduction to Computer Programming	1	01CT0101	2017-18	—	100%		
B. Tech ICT	33	Reading and Writing for Technology	1	01SL0102	2017-18	—	100%		
B. Tech ICT	33	Speaking and Presentation Skills	1	01SL0103	2017-18	—	100%		
B. Tech ICT	33	Computer Workshop	1	01CE0102	2017-18	—	100%		
B. Tech ICT	33	Bas ics of Electronics Engineering	1	01EC0101	2017-18	—	100%		
B. Tech ICT	33	ICT Workshop	1	01CT0104	2018-19	—	100%		
B. Tech ICT	33	Sports/Physical Education	1	01PY0101	2017-18	—	100%		
B. Tech ICT	33	Indian Constitution	1	01GS0103	2021-22	—	100%		
B. Tech ICT	33	NCC-1	1	AU001	2021-22	—	100%		
B. Tech ICT	33	Engineering Mathematics II	2	01MA0151	2017-18	—	100%		
B. Tech ICT	33	Engineering Drawing and Computer Aided Design	2	01ME0105	2017-18	—	100%		
B. Tech ICT	33	Basics of Environmental Studies	2	01EN0101	2017-18	—	100%		
B. Tech ICT	33	Digital Electronics	2	01EC0102	2017-18	—	100%		
B. Tech ICT	33	Data Structure and Algorithm	2	01CT0102	2017-18	—	100%		
B. Tech ICT	33	Electrical and Electronic Workshop	2	01EE0102	2017-18	—	100%		
B. Tech ICT	33	Career Readiness Program	2	01CR0101	2017-18	—	100%		
B. Tech ICT	33	NCC-2	2	AU002	2021-22	—	100%		
B. Tech ICT	33	Discrete Mathematics and Graph Theory	3	01MA0231	2018-19	—	100%		
B. Tech ICT	33	Computer Organization and Architecture	3	01CT0301	2018-19	—	100%		
B. Tech ICT	33	Signals and Systems	3	01CT0302	2018-19	—	100%		
B. Tech ICT	33	Professional Ethics	3	01CR0302	2018-19	—	100%		
B. Tech ICT	33	Introduction to Communication Engineering	3	01CT0303	2018-19	—	100%		
B. Tech ICT	33	Object Oriented Programming	3	01CT0304	2018-19	—	100%		
B. Tech ICT	33	Introduction to R and R Studio	3	01CT0305	2018-19	—	100%		
B. Tech ICT	33	Design Engineering	3	01CT0306	2018-19	—	100%		
B. Tech ICT	33	Programming with Python	3	01CT0309	2021-22	—	100%		
B. Tech ICT	33	Data Structure using C++	3	01CT0308	2021-22	—	100%		
B. Tech ICT	33	Probability and Statistics	4	01CT0401	2018-19	—	100%		
B. Tech ICT	33	Problem Solving Using Python	4	01CT0402	2018-19	—	100%		
B. Tech ICT	33	Microcontroller and Interfacing	4	01CT0403	2018-19	—	100%		
B. Tech ICT	33	Analog and Digital Communication	4	01CT0404	2018-19	—	100%		
B. Tech ICT	33	Engineering Electrodynamics	4	01CT0405	2018-19	—	100%		
B. Tech ICT	33	Operating System	4	01CE0401	2018-19	—	100%		
B. Tech ICT	33	Technical Writing	4	01CT0406	2018-19	—	100%		
B. Tech ICT	33	Optimization Techniques	5	01CT0501	2019-20	—	100%		
B. Tech ICT	33	Database Management System	5	01CT0502	2019-20	—	100%		
B. Tech ICT	33	Computer Networks	5	01CT0503	2019-20	—	100%		
B. Tech ICT	33	Internet and Web Technology	5	01CT0504	2019-20	—	100%		
B. Tech ICT	33	Introduction to Single Board Computer Programming	5	01CT0505	2019-20	—	100%		
B. Tech ICT	33	Human Centered Design	5	01CT0506	2019-20	—	100%		







B.Tech ICT	33	Advanced Microprocessor	5	01CT0507	2019-20	—	100%
B.Tech ICT	33	Optical Communication	5	01CT0508	2019-20	—	100%
B.Tech ICT	33	Linux Administration	5	01CT0509	2019-20	—	100%
B.Tech ICT	33	Applied Linear algebra	5	01CT0510	2019-20	—	100%
B.Tech ICT	33	Theory of Computation	5	01CT0511	2019-20	—	100%
B.Tech ICT	33	Cognitive Aptitude 1	5	01GS0501	2019-20	—	100%
B.Tech ICT	33	Digital Signal Processing	6	01CT0601	2019-20	—	100%
B.Tech ICT	33	Wireless Communication and Mobile Computing	6	01CT0602	2019-20	—	100%
B.Tech ICT	33	Software Engineering	6	01IT0601	2019-20	—	100%
B.Tech ICT	33	Reverse Engineering	6	01CT0603	2019-20	—	100%
B.Tech ICT	33	Embedded System Design	6	01CT0604	2019-20	—	100%
B.Tech ICT	33	RF and Microwave Communication	6	01CT0605	2019-20	—	100%
B.Tech ICT	33	Advanced Computer Networks	6	01CT0606	2019-20	—	100%
B.Tech ICT	33	Machine learning	6	01CT0607	2019-20	—	100%
B.Tech ICT	33	Compiler Design	6	01CT0608	2019-20	—	100%
B.Tech ICT	33	VLSI Designs	6	01CT0609	2019-20	—	100%
B.Tech ICT	33	Satellite Communication	6	01CT0610	2019-20	—	100%
B.Tech ICT	33	Cloud Computing	6	01CT0611	2019-20	—	100%
B.Tech ICT	33	Data warehousing and Data Mining	6	01CT0612	2019-20	—	100%
B.Tech ICT	33	.Net Technology	6	01CT0613	2019-20	—	100%
B.Tech ICT	33	Cognitive Aptitude 2	6	01GS0601	2019-20	—	100%
B.Tech ICT	33	Cryptography and Network Security	7	01CT0701	2020-21	—	100%
B.Tech ICT	33	Information Theory and Coding	7	01CT0702	2020-21	—	100%
B.Tech ICT	33	Artificial Intelligence	7	01CT0703	2020-21	—	100%
B.Tech ICT	33	Management Information System	7	01CT0704	2020-21	—	100%
B.Tech ICT	33	Digital Design using Verilog	7	01CT0705	2020-21	—	100%
B.Tech ICT	33	Computer Vision	7	01CT0706	2020-21	—	100%
B.Tech ICT	33	Multimedia Computing	7	01CT0707	2020-21	—	100%
B.Tech ICT	33	Big Data Analytics	7	01CT0708	2020-21	—	100%
B.Tech ICT	33	Advance Java	7	01CT0709	2020-21	—	100%
B.Tech ICT	33	Embedded Operating System	7	01CT0710	2020-21	—	100%
B.Tech ICT	33	Wireless System Design	7	01CT0711	2020-21	—	100%
B.Tech ICT	33	Internet of Things	7	01CT0712	2020-21	—	100%
B.Tech ICT	33	Programming with Application Development	7	01CT0713	2020-21	—	100%
B.Tech ICT	33	Human Computer Interaction	7	01CT0714	2020-21	—	100%
B.Tech ICT	33	Project	8	01CT0801	2020-21	—	100%
B.Tech ICT	33	Cross Platform Mobile Development	8	01CT0802	2020-21	—	100%
B.Tech ICT	33	SEO and Digital Marketing	8	01CT0803	2020-21	—	100%
B.Tech ICT	33	VLSI Physical Design	8	01CT0804	2020-21	—	100%
B.Tech ICT	33	Data Visualization	8	01CT0805	2020-21	—	100%
B.Tech ICT	33	Advance Database	8	01CT0806	2020-21	—	100%
B.Tech ICT	33	Network Administration	8	01CT0807	2020-21	—	100%
B.Tech ICT	33	FPGA Based System Design	8	01CT0808	2020-21	—	100%
B.Tech ICT	33	Advance C++ Programming	8	01CT0809	2020-21	—	100%
B.Tech ICT	33	Game Development	8	01CT0810	2020-21	—	100%
B.Tech ICT	33	Introduction to DevOps Tools	8	01CT0811	2020-21	—	100%
B.Tech ICT	33	Deep Learning for Computer Vision	8	01CT0812	2020-21	—	100%
B.Tech ICT	33	Embedded Linux	8	01CT0813	2020-21	—	100%
B.Tech ICT	33	Spread Spectrum communications	8	01CT0814	2020-21	—	100%
B.Tech ICT	33	Advance Web Technology	8	01CT0815	2020-21	—	100%

Program Revision calculation- B.Tech ICT	
No. of revised courses	1
No. of new courses	92
Total number of courses in the program	93
Overall % change in the program	100%

*upadepa*



B. Tech Mechanical Engineering  
Faculty of Technology  
Marwadi University

**1.1.2 Board of Studies meeting minutes**

(Program revision)



## Minutes of Meeting






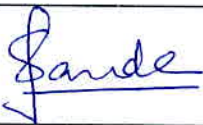


### B.O.S. for B.Tech. Mechanical Engineering

<b>Date:</b> 13/05/2016		<b>Meeting No:</b> 01	
<b>Start Time:</b> 11:00 AM		<b>End Time:</b> 01:00 PM	
		<b>Total Time:</b> 2 Hours	
<b>Presented by</b>		Dr. Pinank A Patel	
<b>Agenda – 1</b>			
<b>Review of Vision and Mission, PSO, PEO</b>			
<b>Resolution</b>	<ul style="list-style-type: none"> <li>Based on the feedback received from the different stakeholders like industrial experts, subject experts from other institute and with reference to AICTE model curriculum and syllabus of renowned universities such as IIT madras, VIT Vellore, SRM-Chennai a draft is created and a few revisions are made to the statements of Vision and Mission in alignment with the university's Vision and Mission statements. (Annexure-1)</li> <li>Based on feedback received from different stakeholders a draft was created for PSO and PEO and the same was presented among the BOS committee. Based on minor corrections given by the BOS committee PSO and PEO were finalized. (Annexure-2)</li> <li></li> </ul>		
<b>Agenda - 2</b>			
<b>Review of Curriculum structure and Course outcome of Mechanical Engineering for UG program</b>			
<b>Resolution</b>	<ul style="list-style-type: none"> <li>Syllabus and CO for 1<sup>st</sup> year subjects are discussed with BOS committee and approval was taken from the committee (Annexure-3)</li> <li>The CBCS scheme for the entire program has been discussed and approved by the BOS committee.</li> <li>Contact hours for students should ideally be 25 to 30 hours per week.</li> <li>1<sup>st</sup> Year course should be common for all branches of engineering.</li> <li>Percentage of continuous evaluation and end semester evaluation should either be 60:40 or 50:50 for theory and practical subjects.</li> <li>Passing criterion for theory and laboratory should ideally be 3:2:1 hours should be allowed for End semester, mid semester and internal evaluation examination.</li> <li>Based on discussion with BOS committee and with reference to model curriculum of AICTE following courses are included in the 1st year curriculum</li> <li>General Basic science courses such as - Physics, Basic environmental studies, Differential integral and calculus.</li> <li>Engineering science course such as - Elements of Mechanical, civil engineering, computer programming, Engineering graphics, and Mechanical workshop.</li> <li>Humanities and Social Sciences &amp; Management Courses such as Value education, Reading Writing/Speaking Skills, professional ethics.</li> </ul>		
<b>Agenda - 3</b>			
<b>Proposed Attainment for Course Outcome</b>			
<b>Resolution</b>	<ul style="list-style-type: none"> <li>It was decided by BOS members that CO target attainment for this year's student is set to 55% .i.e. 50% of students will achieve more than 55% marks.</li> </ul>		



<b>Agenda – 4</b>	<b>Review of the teaching scheme</b>
<b>Resolution</b>	<ul style="list-style-type: none"> <li>Based on discussion with BOS committee ,with reference to model curriculum of AICTE and Reputed universities such as IIT-Madras, VIT-Vellore Engineering core courses such as Fluid mechanics, Kinematics of machine, Fundamental of machine design, Manufacturing process-1 &amp; 2, Material science and metallurgy, are proposed in the 3rd year curriculum</li> <li>Provide tutorials of 1 hours in the courses Mechanics of Solids, Maths-III, Kinematics of Machines, Thermal, Material Science, Fluid mechanics, of sem-III and sem-IV.</li> </ul>
<b>Agenda – 5</b>	<b>Inclusion of state of art topics and contents suitable to the current and futuristic learning and development paradigms for the graduates.</b>
<b>Resolution</b>	<ul style="list-style-type: none"> <li>Reduce theory contact hours and increase practical contact hours for computer programing and engineering graphics, provide tutorials for the Elements of Electrical &amp; Electronics, Elements of Civil engineering subjects.</li> <li>The Learning and Development department would be offering SPT and SIG programs designed for the overall development of the student.</li> </ul>
<b>Agenda – 6</b>	<b>Suggestion on making the curriculum inclined towards industrial integration.</b>
<b>Resolution</b>	<ul style="list-style-type: none"> <li>Workshop is essential in all branches, (Workshop-I and Workshop-II) or increase hours of contact in case there is a single course on Workshop</li> <li>Workshop should be performance based instead of demonstration.</li> <li>For every tutorial 1 contact hour, 1 credit weightage to be given.</li> <li>Allow to earn credits early and permit final year projects in industries.</li> </ul>
<b>Agenda – 7</b>	<b>Feedback from Members of Board of Studies</b>
<b>Resolution</b>	<ul style="list-style-type: none"> <li>Viva can be replaced by quiz, performance evaluation, and surprise test.</li> </ul>



<b>BOS Committee members:</b>		<b>Signature</b>
<b>Meeting attended by: External Experts</b>		
1.	Dr. D. P. Vakharia	
2.	Dr. Puneet Tandon	
3.	Dr. Leenus Martin	
4.	Dr. Bharat Ramani	
<b>Meeting Attended by: Marwadi University</b>		
1.	Dr. R. L. Jhala	
2.	Dr. Sarang Pande	
3.	Prof. Nikunj Rachchh	
4.	Prof. Pinank Patel	



<b>Annexure</b>	
<b>Annexure - 1</b>	<ul style="list-style-type: none"> <li>● <b>Department Vision:</b></li> <li>● To be recognized globally for quality education and enrich our society with dedicated and competent engineers</li> <li>● <b>Department Mission:</b></li> <li>● Delivering quality education to the graduates and enhancing their skills related to different subjects offered</li> <li>● To create awareness of the current technologies by conducting regular industrial visits, training on latest technology and encouraging technical events</li> <li>● To make the graduates understand the impact of their work on society and encourage ethical values</li> <li>● To promote innovative ideas and utilize modern equipment &amp; tools to encourage research.</li> <li>● To motivate and prepare the graduates for higher education and competitive exams by conducting seminars, tests and mock interviews</li> </ul>
<b>Annexure - 2</b>	<ul style="list-style-type: none"> <li>● <b>PSO1:</b> Students will have knowledge and skills in core mechanical and allied engineering subjects, to identify, analyze, design and develop mechanical systems, meeting needs of society</li> <li>● <b>PSO2:</b> Students will have competence to take challenges associated with future technological issues such as biofuel, alternate energy, 3D printing, Robotics, Drones etc.</li> <li>● <b>PEO:</b></li> <li>● Demonstrate sustained learning and adapt to the constantly changing technologies through higher studies, professional development and self-study.</li> <li>● Have technological skills, soft skills and social skills towards Industry readiness and for contribution to society.</li> <li>● Have professional ethics, good communication and leadership capabilities for continued success in life.</li> <li>● To promote next level education</li> <li>● <b>PO</b></li> <li>● <b>PO1: Engineering knowledge:</b> Apply the knowledge of mathematics, science, engineering fundamentals, and an engineering specialization to the solution of complex engineering problems.</li> <li>● <b>PO2: Problem analysis:</b> Identify, formulate, review research literature, and analyze complex engineering problems reaching substantiated conclusions using first principles of mathematics, natural sciences, and engineering sciences.</li> <li>● <b>PO3: Design/development of solutions:</b> Design solutions for complex engineering problems and design system components or processes that meet the specified needs with appropriate consideration for the public health and safety, and the cultural, societal, and environmental considerations.</li> </ul>



	<ul style="list-style-type: none"> <li>● <b>PO4: Conduct investigations of complex problems:</b> Use research-based knowledge and research methods including design of experiments, analysis and interpretation of data, and synthesis of the information to provide valid conclusions.</li> <li>● <b>PO5: Modern tool usage:</b> Create, select, and apply appropriate techniques, resources, and modern engineering and IT tools including prediction and modelling to complex engineering activities with an understanding of the limitations.</li> <li>● <b>PO6: The engineer and society:</b> Apply reasoning informed by the contextual knowledge to assess societal, health, safety, legal and cultural issues and the consequent responsibilities relevant to the professional engineering practice.</li> <li>● <b>PO7: Environment and sustainability:</b> Understand the impact of the professional engineering solutions in societal and environmental contexts, and demonstrate the knowledge of, and need for sustainable development.</li> <li>● <b>PO8: Ethics:</b> Apply ethical principles and commit to professional ethics and responsibilities and norms of the engineering practice.</li> <li>● <b>PO9: Individual and team work:</b> Function effectively as an individual, and as a member or leader in diverse teams, and in multidisciplinary settings.</li> <li>● <b>PO10: Communication:</b> Communicate effectively on complex engineering activities with the engineering community and with society at large, such as, being able to comprehend and write effective reports and design documentation, make effective presentations, and give and receive clear instructions.</li> <li>● <b>PO11: Project management and finance:</b> Demonstrate knowledge and understanding of the engineering and management principles and apply these to one's own work, as a member and leader in a team, to manage projects and in multidisciplinary environments.</li> <li>● <b>PO12: Life-long learning:</b> Recognize the need for, and have the preparation and ability to engage in independent and life-long learning in the broadest context of technological change.</li> </ul>																						
<p><b>Annexure - 3</b></p>	<p style="text-align: center;"><b>B.Tech - Year-1, Sem-1</b></p> <table border="0" style="width: 100%;"> <thead> <tr> <th style="text-align: left;">Subject Code</th> <th style="text-align: left;">Subject Name</th> </tr> </thead> <tbody> <tr> <td>01MA0101</td> <td>Engineering Mathematics I</td> </tr> <tr> <td>01CI0101</td> <td>Elements of Civil Engineering</td> </tr> <tr> <td>01ME0101</td> <td>Elements of Mechanical Engineering</td> </tr> <tr> <td>01SL0102 /</td> <td>Reading &amp; Writing for Technology /</td> </tr> <tr> <td>01SL0103</td> <td>Speaking &amp; Presentation Skills</td> </tr> <tr> <td>01GS0101 /</td> <td>Physics /</td> </tr> <tr> <td>01GS0102</td> <td>Chemistry</td> </tr> <tr> <td>01EN0101</td> <td>Basics of Environmental Studies</td> </tr> <tr> <td>01CR0101</td> <td>Career Readiness Programme</td> </tr> </tbody> </table> <p style="text-align: center;"><b>B.Tech - Year-1, Sem-2</b></p> <table border="0" style="width: 100%;"> <thead> <tr> <th style="text-align: left;">Subject Code</th> <th style="text-align: left;">Subject Name</th> </tr> </thead> <tbody> </tbody> </table>	Subject Code	Subject Name	01MA0101	Engineering Mathematics I	01CI0101	Elements of Civil Engineering	01ME0101	Elements of Mechanical Engineering	01SL0102 /	Reading & Writing for Technology /	01SL0103	Speaking & Presentation Skills	01GS0101 /	Physics /	01GS0102	Chemistry	01EN0101	Basics of Environmental Studies	01CR0101	Career Readiness Programme	Subject Code	Subject Name
Subject Code	Subject Name																						
01MA0101	Engineering Mathematics I																						
01CI0101	Elements of Civil Engineering																						
01ME0101	Elements of Mechanical Engineering																						
01SL0102 /	Reading & Writing for Technology /																						
01SL0103	Speaking & Presentation Skills																						
01GS0101 /	Physics /																						
01GS0102	Chemistry																						
01EN0101	Basics of Environmental Studies																						
01CR0101	Career Readiness Programme																						
Subject Code	Subject Name																						



	01MA0151	Engineering Mathematics :II
	01CE0101	Computer Programming
	01ME0102	Engineering Graphics
	01EE0103	Basic Electrical and Electronics Engineering
	01ME0104	Mechanical Workshop
	01PE0101	Physical Education/Sports/Yoga



## Minutes of Meeting










### B.O.S. for B.Tech. Mechanical Engineering

<b>Date:</b> 28/05/2017		<b>Meeting No:</b> 02	
<b>Start Time:</b> 10:00 AM		<b>End Time:</b> 12:30 PM	
		<b>Total Time:</b> 2:30 Hours	
<b>Presented by</b>		Prof. Ramesh Bhoraniya	
<b>Agenda – 1</b>			
<b>Review of Curriculum structure and Course outcome of Mechanical Engineering for UG program</b>			
<b>Resolution</b>		<ul style="list-style-type: none"> <li>● Syllabus and CO for 2nd year subjects are discussed with BOS committee and approval was taken from the committee ( Annexure-1)</li> <li>● Based on discussion with BOS committee and with reference to model curriculum of AICTE and reputed universities such as IIT Madras, VIT Vellore, SRM-Chennai following courses are included in the 2nd year curriculum</li> <li>● General Basic science course - Numerical analysis</li> <li>● Humanities and Social Sciences &amp; Management Courses - Professional ethics</li> <li>● Based on discussion with BOS committee and with reference to model curriculum of following courses are included in the 2nd year curriculum</li> <li>● Engineering core courses such as Fundamental of machine design, Kinematics of machine, MP-1, Engineering thermodynamics, MDID, MSM</li> <li>● Based on Teacher, Industrial and student feedback following courses are included in curriculum</li> <li>● Project based Design engineering courses (6 credits) such as Human centric design approach, Design thinking and problem solving skill must be added to the curriculum as it is going to be mandatory by UGC in the coming future.</li> <li>● Based on feedback received with various industries such as Bosch Rexroth, Jyoti CNC Automation Ltd. and with reference to report of FICCI (The Federation of Indian Chambers of Commerce &amp; Industry), CII (The Confederation of Indian Industry) <b>Professional Elective courses</b> such as Advance Manufacturing processes, Computer Aided Process Management, Design for Manufacturing, Computer Integrated Mfg., IOT for Manufacturing, Pneumatic and Hydraulic control are discussed and approved for 3rd and 4th year students.</li> <li>● The topics of hybrid electric vehicles may be blended with subject content of IC Engine &amp; Automobiles if possible in future to keep the subject in line with latest trends in industries.</li> <li>● Solid modelling: software should be introduced in the earlier semester (may be as a non-credit subject) before student studies CAD in semester 6.</li> </ul>	
<b>Agenda – 2</b>			
<b>Review and Revision of Teaching Scheme</b>			
<b>Resolution</b>		<ul style="list-style-type: none"> <li>● It is advised to swap ET &amp; FM in 3<sup>rd</sup> and 4<sup>th</sup> semester.</li> </ul>	



	<ul style="list-style-type: none"> <li>Based on industrial feedback New subject Professional ethics is added to understand the organizational behaviour in industry.</li> <li>Project based subject Human centric design approach is added to sem-4.</li> <li>Course of Value Education is introduced</li> </ul>
<b>Agenda - 3</b>	<b>Proposed Attainment for Course Outcome</b>
<b>Resolution</b>	<ul style="list-style-type: none"> <li>The CO attainment for the previous year was slightly less than the target set. Since university is in its nascent stage and students are not converse with the evaluation system, only few students were able to achieve more than 60% marks.</li> <li>CO attainment not completely achieved in subjects such as Fluid mathematics, Mechanics of solids and Engineering Mathematics-II. To improve the attainment percentages extra sessions and more tutorials are added in these subjects.</li> <li>It was decided by BOS member that the same target of 55% CO attainment is set for the 2017-18 academic year students.</li> </ul>
<b>Agenda – 4</b>	<b>Feedback from Students, Teachers and Employers – participation of students in various Technical event</b>
<b>Resolution</b>	<ul style="list-style-type: none"> <li>Students are encouraged to participate in various events such as SAE-BAJA, Go-cart, ASME- HPVC and Funding also provided for the same</li> </ul>
<b>Agenda – 5</b>	<b>Addition of Value added course in curriculum for skill development and increase the employability</b>
<b>Resolution</b>	<ul style="list-style-type: none"> <li>Based on Feedback received from students and industries to practice brainstorming, critical thinking, application of scientific principle in the early stage of Design of product, a Design integrated course by Avesha introduced for odd semester students.</li> </ul>
<b>Agenda – 6</b>	<b>Feedback from Members of Board of Studies</b>
<b>Resolution</b>	<ul style="list-style-type: none"> <li>Internship (45 days) should be made mandatory for students in final year. It may not be a continuous duration</li> </ul>



BOS Committee members:		Signature
<b>Meeting attended by: External Experts</b>		
1.	Dr. D. P. Vakhariya	
2.	Dr. Bharat Ramani	
3.	Dr. S. B. Jadeja	
4.	Mr. Anand Savaliya	
<b>Meeting Attended by: Marwadi University</b>		
1.	Dr. R. L. Jhala	
2.	Dr. Sarang Pande	
3.	Dr. Nikunj Rachchh	
4.	Dr. Amit Sata	
5.	Prof. Ramesh Bhoraniya	



<b>Annexure</b>	
<b>Annexure-1</b>	<b>B.Tech - Year-2, Sem-3</b>
	<b>Subject Code      Subject Name</b>
	01CI0301      Mechanics Of Solids
	01MA0201      Engineering Mathematics III
	01ME0301      Fluid Mechanics
	01ME0302      Kinematics of Machines
	01ME0303      Manufacturing Processes I
	01CR0302      Professional Ethics
	<b>B.Tech - Year-2, Sem-4</b>
	<b>Subject Code      Subject Name</b>
	01MA0271      Numerical Analysis
	01ME0401      Machine Design & Industrial Drafting
	01ME0402      Manufacturing Processes II
	01ME0403      Material Science and Metallurgy
01ME0404      Engineering Thermodynamics	



## Minutes of Meeting

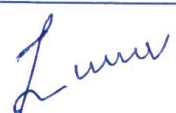



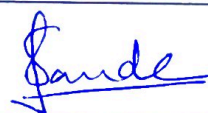



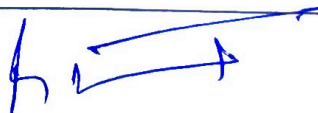

### B.O.S. for B.Tech. Mechanical Engineering

<b>Date:</b> 29/05/2018		<b>Meeting No:</b> 03	
<b>Start Time:</b> 10:00 AM		<b>End Time:</b> 01:00 PM	
		<b>Total Time:</b> 3:00 Hours	
<b>Presented by</b>		Prof. Ramesh Bhoraniya and Dr. Nikunj Rachchh	
<b>Agenda – 1</b>			
		<b>Review of Curriculum structure and Course outcome of Mechanical Engineering for UG program</b>	
<b>Resolution</b>		<ul style="list-style-type: none"> <li>● Syllabus and CO for 3<sup>rd</sup> year subjects are discussed with BOS committee and approval was taken from the committee (Annexure-1)</li> <li>● The BOS committee suggested changing a few topics in Fluid mechanics and Manufacturing process- I subject.</li> <li>● Based on discussion with BOS committee with reference to model curriculum of IIT-Madras, SRM-Chennai, following courses are included in the 3<sup>rd</sup> year curriculum</li> <li>● Engineering core courses such as Fluid power engineering, MD-I &amp; II, Heat and mass transfer, Dynamics of Machine-1</li> <li>● Project based course - Reverse engineering, Design engineering and project management,</li> <li>● Based on student feedback of students, an Operational research course is added to the curriculum.</li> <li>● From the feedback received from the industry cluster of Rajkot MSME Professional elective courses - Design of manufacturing, Computer graphics, Advance Manufacturing process, etc. are added in curriculum</li> <li>● BOS committee has suggested conducting expert talks, which helps the students to do interaction with industry persons and get the knowledge of the latest process and technology used in industry and know the standard practice followed in various industries.</li> </ul>	
<b>Agenda – 2</b>			
		<b>Review and Revision of Teaching scheme</b>	
<b>Resolution</b>		<ul style="list-style-type: none"> <li>● The syllabus of Semester 5 and Semester 6 was discussed and approved by BOS committee</li> <li>● <b>Fundamentals of machine design is added in 3<sup>rd</sup> sem</b> and Mechanics of solid subject is removed.</li> </ul>	
<b>Agenda - 3</b>			
		<b>Proposed Attainment for Course Outcome</b>	
<b>Resolution</b>		<ul style="list-style-type: none"> <li>● The target for CO attainment was set to 55% and same was achieved for B.tech Mechanical Engineering.</li> <li>● It was decided by BOS members that revised target of 57% for CO attainment is set for 2018-19 academic year students.</li> </ul>	

<b>Agenda – 4</b>	<b>Review of Vision and Mission, PSO, PEO for Mechanical Engineering PG program</b>
<b>Resolution</b>	<ul style="list-style-type: none"> <li>● Based on the feedback received from the different stakeholders, a draft is created and a few revisions are made to the statements of Vision and Mission in alignment with the university's Vision and Mission statements. (Annexure-2)</li> <li>● Based on feedback received from different stakeholders a draft was created for PO, PSO and PEO and the same was presented among the BOS committee. Based on minor corrections given by the BOS committee following PSO and PEO were finalized. (Annexure-3)</li> </ul>
<b>Agenda – 5</b>	<b>Review of Curriculum structure and Course outcome of Mechanical Engineering for PG program</b>
<b>Resolution</b>	<ul style="list-style-type: none"> <li>● Syllabus and CO for 1<sup>st</sup> year subjects are discussed with BOS committee and approval was taken from the committee (Annexure-3)</li> <li>● Contact hours for students should ideally be 25 to 30 hours per week.</li> <li>● Percentage of continuous evaluation and end semester evaluation should either be 60:40 or 50:50 for theory and practical subjects.</li> <li>● Passing criterion for theory and laboratory should ideally be 3:2:1 hours should be allowed for End semester, mid semester and internal evaluation examination.</li> <li>● Based on discussion with the BOS committee and with reference to the model curriculum of AICTE following courses are included in the 1st year curriculum.</li> <li>● Courses based on advanced core subjects -Advanced Machine Design, Computer Aided Design, Computer Aided Manufacturing, Computer Aided Production Management, Finite Element Analysis, Optimization Techniques</li> <li>● Courses based on Research Methodology</li> <li>● Courses based on Critical thinking - Computational Methods in Mechanical Engineering</li> <li>● Program elective- I- Advanced Material Processing Techniques, Design for Manufacturing and Assembly, Advanced Stress Analysis</li> <li>● Program Elective- II- Oil Hydraulics and Pneumatics; Noise and Vibration, Multibody dynamics</li> <li>● Based on discussion with the BOS committee and with reference to the model curriculum of reputed universities such as IIT-Madras, SRM-Chennai, VIT-vellore etc. Engineering core courses such Advanced Machine Design, Computer Aided Design, Finite Element Analysis, Computer Aided Manufacturing etc.</li> </ul>
<b>Agenda – 6</b>	<b>Addition of Value added course in curriculum for skill development and increase the employability</b>
<b>Resolution</b>	<ul style="list-style-type: none"> <li>● Based on feedback received from various MSME industries and with reference to report of industrial organization such as FICCI, CII to improve the industry oriented</li> </ul>



	<p>skill and employability of students, value added course such as CNC/VMC, CAD club, Automation are proposed and approved for 3rd and 4th year students.</p> <ul style="list-style-type: none"> <li>● Following Two value aided courses are recommended for PG students of CAD/CAM in 1<sup>st</sup> and 2<sup>nd</sup> semester</li> <li>● Numerical Methods using MATLAB &amp; Robotics and AI</li> </ul>
<b>Agenda – 7</b>	<b>Review of syllabus contents proposed.</b>
<b>Resolution</b>	<ul style="list-style-type: none"> <li>● Provide tutorials of 2 hours in the courses Research Methodology, Computational methods for PG program of Mechanical Engg. for 1<sup>st</sup> year</li> </ul>
<b>Agenda – 8</b>	<b>Inclusion of state of art topics and contents suitable to the current and futuristic learning and development paradigms for the postgraduates.</b>
<b>Resolution</b>	<ul style="list-style-type: none"> <li>● Program Elective will offer in each semester to give inclination towards their interest.</li> </ul>
<b>Agenda – 9</b>	<b>Suggestion on making the curriculum inclined towards industrial integration</b>
<b>Resolution</b>	<ul style="list-style-type: none"> <li>● For every tutorial 1 contact hour, 1 credit weightage to be given.</li> <li>● Allow to earn credits early and permit Dissertation work in industries.</li> </ul>
<b>Agenda – 10</b>	<b>Any special points/ advise by members of Board of Studies</b>
<b>Resolution</b>	<ul style="list-style-type: none"> <li>● The BOS committee suggested introducing a minor group.</li> <li>● It was suggested to have a minor in the field of Smart manufacturing, Mechanical Engineering Design, Automation and Thermal Engineering in B.Tech.</li> <li>● Viva to be replaced by quiz, performance evaluation, and surprise test</li> </ul>

BOS Committee members:		Signature
<b>Meeting attended by: External Experts</b>		
1.	Dr. D. P. Vakharia	
2.	Dr. Bharat Ramani	
3.	Dr. S. B. Jadeja	
4.	Anand Savaliya	
<b>Meeting Attended by: Marwadi University</b>		
1.	Dr. Sarang Pande	
2.	Dr. Nikunj Rachchh	
3.	Dr. Amit Sata	
4.	Prof. Ramesh Bhoraniya	
5.	Dr. R. L. Jhala	
6.	Dr. Pinank Patel	



<b>Annexure</b>	
<b>Annexure-1</b>	<p style="text-align: center;"><b>B.Tech - Year-3, Sem-5</b></p> <p><b>Subject Code    Subject Name</b></p> <p>01ME0501    Dynamics of Machine-I</p> <p>01ME0502    Fluid Power Engineering</p> <p>01ME0503    Machine Design-1</p> <p>01ME0504    Metrology</p> <p>01ME050*    Programme Elective I</p> <p>01CR0501    Business Benchmark</p> <p>01ME0508    REVERSE ENGINEERING</p> <p style="text-align: center;"><b>*Programme Elective 1</b></p> <p><b>Subject Code    Subject Name</b></p> <p>01ME0505    Power Plant Engineering</p> <p>01ME0507    Design for Manufacturing</p> <p>01ME0506    Computer Graphics</p> <p style="text-align: center;"><b>B.Tech - Year-3, Sem-6</b></p> <p><b>Subject Code    Subject Name</b></p> <p>01ME0601    Dynamics of Machine –II</p> <p>01ME0602    Heat and Mass Transfer</p> <p>01ME0603    Machine Design-II</p> <p>01ME0604    Operation Research</p> <p>01ME060*    Programme Elective II</p> <p>01ME0610    Design Engineering &amp; Project Management</p> <p style="text-align: center;"><b>*Programme Elective 2</b></p> <p><b>Subject Code    Subject Name</b></p> <p>01ME0605    IC Engines &amp; Automobiles</p> <p>01ME0606    Design of Material Handling Equipment</p> <p>01ME0607    Advance Manufacturing processes</p>
<b>Annexure - 2</b>	<ul style="list-style-type: none"> <li>● <b>Vision:</b></li> <li>● To be recognized globally for quality education and enrich our society with dedicated and competent engineers</li> <li>● <b>Mission:</b></li> <li>● Delivering quality education to the graduates and enhancing their skills related to different subjects offered</li> <li>● To create awareness of the current technologies by conducting regular industrial visits, training on latest technology and encouraging technical events</li> <li>● To make the graduates understand the impact of their work on society and encourage ethical values</li> </ul>

	<ul style="list-style-type: none"> <li>● To promote innovative ideas and utilize modern equipment &amp; tools to encourage research.</li> <li>● To motivate and prepare the graduates for higher education and competitive exams by conducting seminars, tests and mock interviews</li> <li>● Based on feedback received from different stakeholders a draft was created for PO, PSO and PEO and the same was presented among the BOS committee. Based on minor corrections given by the BOS committee following PO, PSO and PEO were finalized.</li> <li>● <b>PSO1:</b> Students will be able to apply principles of CAD and CAM in the field of engineering applications for research and development.</li> <li>● <b>PSO2:</b> Students will be able to develop software for design and development in the field of Mechanical Engineering.</li> <li>● <b>PEO:</b> Demonstrate sustained learning and adapt to the constantly changing technologies through higher studies, professional development and self-study.</li> <li>● Have technological skills, soft skills and social skills towards Industry readiness and for contribution to society.</li> <li>● Have professional ethics, good communication and leadership capabilities for continued success in life.</li> <li>● To promote next level education</li> </ul>																								
<b>Annexure - 3</b>	<p style="text-align: center;"><b>M.Tech - Year-1, Sem-1</b></p> <table border="0"> <thead> <tr> <th style="text-align: left;"><b>Subject Code</b></th> <th style="text-align: left;"><b>Subject Name</b></th> </tr> </thead> <tbody> <tr> <td>01RM0101</td> <td>Research Methodology</td> </tr> <tr> <td>01CA0101</td> <td>Computational Methods in Mechanical Engineering</td> </tr> <tr> <td>01CA0102</td> <td>Advanced Machine Design</td> </tr> <tr> <td>01CA0103</td> <td>Computer Aided Design</td> </tr> <tr> <td>01CA0104</td> <td>Advanced Material Processing Techniques</td> </tr> </tbody> </table> <p style="text-align: center;"><b>M.Tech - Year-1, Sem-2</b></p> <table border="0"> <thead> <tr> <th style="text-align: left;"><b>Subject Code</b></th> <th style="text-align: left;"><b>Subject Name</b></th> </tr> </thead> <tbody> <tr> <td>01CA0201</td> <td>Computer Aided Manufacturing</td> </tr> <tr> <td>01CA0202</td> <td>Computer Aided Production Management</td> </tr> <tr> <td>01CA0203</td> <td>Finite Element Analysis</td> </tr> <tr> <td>01CA0204</td> <td>Optimization Techniques</td> </tr> <tr> <td>01CA0205</td> <td>Oil Hydraulics and Pneumatics</td> </tr> </tbody> </table>	<b>Subject Code</b>	<b>Subject Name</b>	01RM0101	Research Methodology	01CA0101	Computational Methods in Mechanical Engineering	01CA0102	Advanced Machine Design	01CA0103	Computer Aided Design	01CA0104	Advanced Material Processing Techniques	<b>Subject Code</b>	<b>Subject Name</b>	01CA0201	Computer Aided Manufacturing	01CA0202	Computer Aided Production Management	01CA0203	Finite Element Analysis	01CA0204	Optimization Techniques	01CA0205	Oil Hydraulics and Pneumatics
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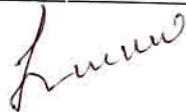



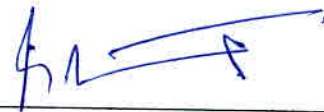







**Minutes of Meeting**  
**B.O.S. for B.Tech. Mechanical Engineering**

<b>Date:</b> 29/05/2019		<b>Meeting No:</b> 04	
<b>Start Time:</b> 10:01 AM		<b>End Time:</b> 01:00 AM	
		<b>Total Time:</b> 3:00 Hours	
<b>Presented by</b>		Dr. Sarang Pande and Dr. R. M. Bhoraniya	
<b>Agenda – 1</b>			
<b>To finalize curriculum structure of B.Tech Mechanical UG Program</b>			
<b>Resolution</b>	<ul style="list-style-type: none"> <li>Syllabus and CO for 4th year subjects are discussed with BOS committee and approval was taken from the committee (Annexure-1)</li> <li>Experts suggested including polarized ray diagrams and measurement of stresses to be covered as practical in the subject of fundamental machine design.</li> <li>Expert suggested to include the IS standard for design of mechanical components</li> <li>Based on discussion with BOS committee and with reference to model curriculum of AICTE and with model curriculum of IIT-Madras, SRM-Chennai, following courses are included in the 4th year curriculum</li> <li>Project based course - Project-I and II</li> <li>Engineering core courses such as Finite element method, Rapid casting-1 &amp; 2, Production technology</li> <li>Professional elective courses - Computer aided process management, Renewable energy engineering, Data mining and analysis, CFD, AI, Robotics, etc.</li> </ul>		
<b>Agenda – 2</b>			
<b>Review of Curriculum structure and Course outcome of Mechanical Engineering for PG program</b>			
<b>Resolution</b>	<ul style="list-style-type: none"> <li>Syllabus and CO for 2nd year subjects are discussed with BOS committee and approval was taken from the committee. (Annexure-2)</li> <li>Based on discussion with BOS committee and with reference to model curriculum of AICTE and with model curriculum of IIT-Madras, SRM-Chennai, following courses are included in the 2nd year curriculum</li> <li>Rapid prototyping and Tooling. IoT for Manufacturing,</li> <li>Seminar in each semester.</li> <li>Dissertation Phase-I and Dissertation Phase-II</li> <li>Based on feedback received with various industries such as Bosch Automation, Jyoti CNC, Macpower and with reference to report of FICCI (The Federation of Indian Chambers of Commerce &amp; Industry), CII (The Confederation of Indian Industry) Elective courses such as Robotics Engineering, Mechanics and Manufacturing of Composites, Rapid prototyping and Tooling, IoT for Manufacturing, Pressure Vessel and Piping Design, Micro and Nano Manufacturing.</li> </ul>		
<b>Agenda – 3</b>			
<b>Review and Revision of syllabus</b>			
<b>Resolution</b>	<ul style="list-style-type: none"> <li>Experts from various MSME sectors suggested the topic of recent manufacturing methods in subject of advanced manufacturing processes.</li> </ul>		

	<ul style="list-style-type: none"> <li>Expert suggested to increase weightage of marks for project-1 and project-2 in semester-7 and semester-8</li> </ul>
<b>Agenda - 4</b>	<b>Proposed Attainment for Course Outcome</b>
<b>Resolution</b>	<ul style="list-style-type: none"> <li>The target for CO attainment was set to 57% and the same was achieved .</li> <li>It was decided by BOS members that a revised target of 59% for CO attainment is set for 2019-20 academic year students.</li> </ul>
<b>Agenda – 5</b>	<b>Introduction of course for skill development and employability</b>
<b>Resolution</b>	<ul style="list-style-type: none"> <li>Based on Industry survey, to promote on industry academic interaction and to improve employability a skill improvement program has been started with the industry tie up-under which Rapid casting-1 and Rapid casting-2 subjects are approved for 4th year students. In which student will learn following four different modules of manufacturing industries - (1) Rapid methodology in metal casting (2) Rapid Tooling in metal casting (3) Inspection and Quality control (4) Automation and Simulation</li> </ul>
<b>Agenda – 6</b>	<b>Addition of Seminar in curriculum to spread awareness about latest technologies/new research/Innovation</b>
<b>Resolution</b>	<ul style="list-style-type: none"> <li>Based on Feedback received from students, industries and Research organizations to start the dissertation phase, student should rigorously go through the literature for one semester and present the report in seminar in M.Tech program.</li> </ul>
<b>Agenda – 7</b>	<b>Feedback of Teacher, student and professional bodies</b>
<b>Resolution</b>	<ul style="list-style-type: none"> <li>Feedback received from students, teachers and various professional bodies such as ASME, SAE discussion was made to host the state/national/international level event to provide a platform where they can innovate, compete, interact with various professional organizations as well as industry.</li> </ul>
<b>Agenda – 8</b>	<b>Any special points/ advise by members of Board of Studies</b>
<b>Resolution</b>	<ul style="list-style-type: none"> <li>Experts suggested to encourage students to use the online open learning platform I such as swayam, where students can learn basic and advanced NPTEL courses.</li> <li>Expert suggested to include case study for the subject of FEA, Data mining and analysis, Artificial intelligence</li> <li>Dissertation phase- I and II should have equal weightages in both semesters of M.Tech program</li> </ul>



<b>BOS Committee members:</b>		<b>Signature</b>
<b>Meeting attended by: External Experts</b>		
1.	Dr. D. P. Vakhariya	
2.	Dr. B. M. Ramani	
3.	Dr. S. B. Jadeja	
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1.	Dr. R. L. Jhala	
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5.	Dr. Amit Sata	
6.	Dr. Pinank Patel	



<b>Annexure</b>	
<b>Annexure-1</b>	<p style="text-align: center;"><b>B.Tech - Year-4, Sem-7</b></p> <p><b>Subject Code    Subject Name</b></p> <p>01ME0701    Finite Elements Method</p> <p>01ME0702    Project-1</p> <p>01ME0703    Rapid Casting :I</p> <p>01ME07**    Prog.Elec.3</p> <p>01ME07**    Prog.Elec.4</p> <p style="text-align: center;"><b>*Programme Elective 3</b></p> <p><b>Subject Code    Subject Name</b></p> <p>01ME0711    Advanced Machine Design</p> <p>01ME0721    Computer Aided Process Management</p> <p>01ME0731    Ref. &amp; Air conditioning</p> <p>01ME0741    Pneumatic and Hydraulic control</p> <p style="text-align: center;"><b>*Programme Elective 4</b></p> <p><b>Subject Code    Subject Name</b></p> <p>01ME1722    Data Mining and Analysis</p> <p>01ME0732    Renewable Energy Engineering</p> <p>01ME0742    Ref. &amp; Air conditioning</p>
	<p style="text-align: center;"><b>B.Tech - Year-4, Sem-8</b></p> <p><b>Subject Code    Subject Name</b></p> <p>01ME0801    Production Technology</p> <p>01ME0802    Project-II</p> <p>01ME0803    Rapid Casting :II</p> <p>01ME08**    Prog.Elec.5</p> <p>01ME08**    Prog.Elec.6</p> <p style="text-align: center;"><b>*Programme Elective 3</b></p> <p><b>Subject Code    Subject Name</b></p> <p>01ME0811    Design of Pressure vessels</p> <p>01ME0821    Computer Integrated Mfg.</p> <p>01ME0831    Steam and Gas Turbine</p> <p>01ME0841    Robotics &amp; FMS</p> <p style="text-align: center;"><b>*Programme Elective 4</b></p> <p><b>Subject Code    Subject Name</b></p> <p>01ME0812    Machine Tool Design</p> <p>01ME0822    IOT for Manufacturing</p> <p>01ME0832    Computational Fluid Dynamics</p> <p>01ME0842    Artificial Intelligence</p>
<b>Annexure-2</b>	<p style="text-align: center;"><b>M.Tech - Year-1, Sem-3</b></p> <p><b>Subject Code                      Subject Name</b></p>





	01CA0301	Seminar
	01CA0302	Dissertation Phase-I
	01CA0305	Rapid prototyping and Tooling
	<b>M.Tech - Year-2, Sem-4</b>	
	<b>Subject Code</b>	<b>Subject Name</b>
	01CA0401	Seminar
	01CA0402	Dissertation Phase-II
	01CA0403	IoT for Manufacturing






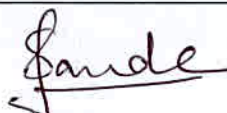




**Minutes of Meeting  
B.O.S. for B.Tech. Mechanical Engineering**

<b>Date:</b> May - 2020		<b>Meeting No:</b> 05 (online mode)	
<b>Start Time:</b> 02:00 PM	<b>End Time:</b> 04:00 PM	<b>Total Time:</b> 2:00 Hours	
<b>Presented by</b>	Dr. Nikunj Rachchh		
<b>Agenda – 1</b>	<b>Review of Curriculum structure and Course outcome of Mechanical Engineering for UG &amp; PG program</b>		
<b>Resolution</b>	<ul style="list-style-type: none"> <li>As per the expert's suggestion, changes are made in the syllabus of B.Tech and M.tech mechanical engineering as per guideline of AICTE.</li> <li>Based on the feedback received from the different stakeholders, a draft is created and a few revisions are made to the to the M.tech curriculum.</li> </ul>		
<b>Agenda – 2</b>	<b>Review and Revision of syllabus of UG</b>		
<b>Resolution</b>	<ul style="list-style-type: none"> <li>Experts suggested to include basic concepts of Data mining and analysis</li> <li>The Experts suggested to remove civil engineering drawing detail study in the subject of engineering drawing and engineering graphics.</li> <li>Review of contents of metacentric height analysis, elementary theory of notch and vertex flow analysis in Fluid mechanics subject</li> </ul>		
<b>Agenda – 3</b>	<b>Review and Revision of syllabus of PG</b>		
<b>Resolution</b>	<ul style="list-style-type: none"> <li>Courses based on advanced core subjects – Advanced Thermodynamics and Heat transfer, Advanced Fluid Mechanics, Experimental Techniques and Instrumentation In Thermal Engineering, Computational Fluid Dynamics, Solar Energy Engineering, Design and Optimization of the Thermal Systems are included in program.</li> <li>Courses based on Research Methodology and based on Critical thinking i.e. Computational Method for Mechanical Engineers are included in teaching scheme</li> <li>Based on discussion with BOS committee and with reference to model curriculum of reputed universities such as IIT-Madras, SRM-Chennai, VIT-Vellore etc. Engineering core courses such Advanced Thermodynamics and Heat transfer, Advanced Fluid Mechanics Energy Conservation &amp; Management, Combustion Engineering, Advanced Refrigeration Engineering etc. are also included</li> <li>Program Elective will offer in each semester (annexure-1)</li> <li>Provide tutorials of 2 hours in the courses Research Methodology, Computational methods for Mechanical Eng. for 1<sup>st</sup> year.</li> </ul>		
<b>Agenda - 4</b>	<b>Proposed Attainment for Course Outcome</b>		
<b>Resolution</b>	<ul style="list-style-type: none"> <li>The target for CO attainment was set to 59% and the same was achieved.</li> <li>It was decided by BOS members that a revised target of 60% for CO attainment is set for 2020-21 academic year students.</li> </ul>		



<b>Agenda – 5</b>	<b>Suggestion on making the curriculum inclined towards industrial integration.</b>
<b>Resolution</b>	<ul style="list-style-type: none"><li>• For every tutorial 1 contact hour, 1 credit weightage to be given.</li><li>• Allow to earn credits early and permit Dissertation work in industries.</li></ul>
<b>Agenda - 6</b>	<b>Proposed Value Aided Courses for M.Tech</b>
<b>Resolution</b>	<ul style="list-style-type: none"><li>• It was decided by BOS member that value aided courses will be offered for M.tech Students. Two courses proposed in meeting are Smart Manufacturing and Hands on Practice – Open foam.</li></ul>
<b>Agenda – 7</b>	<b>Implementation of MOOC course</b>
<b>Resolution</b>	<ul style="list-style-type: none"><li>• University has purchased bulk licenses of coursera courses, so under MILAP (Marwadi Integrated Learning &amp; Analysis Programme) scheme free coursera courses are offered to students for improvement of their skill and knowledge.</li></ul>
<b>Agenda – 8</b>	<b>Any special points/ advise by members of Board of Studies</b>
<b>Resolution</b>	<ul style="list-style-type: none"><li>• Ethical practices and Plagiarism norms recommended by UGC/AICTE for the dissertation should be follow properly in M.tech program.</li></ul>



<b>BOS Committee members:</b>		<b>Signature</b>
<b>Meeting attended by: External Experts</b>		
1.	Dr. D. V. Bhatt	
2.	Dr. B. M. Ramani	
3.	Dr. S. B. Jadeja	
4.	Mr. Anand Savaliya	
<b>Meeting Attended by: Marwadi University</b>		
1.	Dr. R. L. Jhala	
2.	Dr. Sarang Pande	
3.	Dr. Nikunj Rachchh	
4.	Dr. R. M. Bhoraniya	
5.	Dr. Amit Sata	
6.	Dr. Pinank Patel	



<b>Annexure</b>	
<b>Annexure-1</b>	<b>M.Tech - Year-1, Sem-1</b>
	<b>Subject Code    Subject Name</b>
	01RM0101    Research Methodology
	01CA0101    Computational Methods in Mechanical Engineering
	01CA01*/01TH01*    Program Elective-I
	01CA01*/01TH01*    Program Elective-II
	01CA01*/01TH01*    Program Elective-III
	<b>*Programme Elective-I</b>
	<b>Subject Code    Subject Name</b>
	01CA0102    Advanced Machine Design
	01TH0102    Advanced Thermodynamics and Heat Transfer
	<b>*Programme Elective-II</b>
	01CA0103    Computer Aided Design
	01TH0104    Advanced Fluid Mechanics
	<b>*Programme Elective-III</b>
	01CA0104    Advanced Material Processing Techniques
	01TH0106    Design of Heat Exchanger
	<b>M.Tech - Year-1, Sem-2</b>
	<b>Subject Code    Subject Name</b>
	01CA020*/ 01TH020*    Program Elective-I
	01CA020*/ 01TH020*    Program Elective-II
	01CA020*/ 01TH020*    Program Elective-III
	01CA020*/ 01TH020*    Program Elective-IV
	01CA020*/ 01TH020*    Program Elective-V
	<b>*Programme Elective-I</b>
	<b>Subject Code    Subject Name</b>
	01CA0201    Computer Aided Manufacturing
	01TH0201    Experimental Techniques and Instrumentation In Thermal Engineering
	<b>*Programme Elective-II</b>
	<b>Subject Code    Subject Name</b>
01CA0202    Computer Aided Production Management	
01TH0202    Computational Fluid Dynamics	
<b>*Programme Elective-III</b>	
<b>Subject Code    Subject Name</b>	
01CA0203    Finite Element Analysis	
01TH0203    Solar Energy Engineering	
<b>*Programme Elective-IV</b>	



<b>Subject Code</b>	<b>Subject Name</b>
01CA0204	Optimization Techniques
01TH0204	Design and Optimization of the Thermal Systems
<b>*Programme Elective-V</b>	
<b>Subject Code</b>	<b>Subject Name</b>
01CA0205	Oil Hydraulics and Pneumatics
01TH0205	Energy Conservation & Management
<b>M.Tech - Year-2, Sem-3</b>	
<b>Subject Code</b>	<b>Subject Name</b>
01CA0301/01TH0301	Seminar-I
01CA0302/01TH0302	Dissertation Phase-I
01CA030*/01TH030*	Program Elective-I
<b>*Programme Elective-I</b>	
<b>Subject Code</b>	<b>Subject Name</b>
01CA0305	Rapid prototyping and Tooling
01TH0304	Exergy Analysis of Thermal Systems
<b>M.Tech - Year-2, Sem-4</b>	
<b>Subject Code</b>	<b>Subject Name</b>
01CA0401/01TH0401	Seminar-II
01CA0402/01TH0402	Dissertation Phase-II
01CA040*/01TH040*	program Elective-I
<b>*Programme Elective-I</b>	
<b>Subject Code</b>	<b>Subject Name</b>
01CA0403	IoT for Manufacturing
01TH0404	Advanced Air conditioning Engineering



**Minutes of Meeting**  
**B.O.S. for B.Tech. Mechanical Engineering**

<b>Date:</b> 19/06/2021		<b>Meeting No:</b> 06 (online mode)	
<b>Start Time:</b> 11:00 AM	<b>End Time:</b> 12:00 PM	<b>Total Time:</b> 1 Hours	
<b>Presented by</b>		Dr. Pinank A Patel	
<b>Agenda – 1</b>	<b>Review of Mechanical Engineering Department for Academic Year 2020-21</b>		
<b>Resolution</b>	<ul style="list-style-type: none"> <li>The Theory classes and lab with demonstration of experiments online were conducted during the last one year because of the pandemic.</li> <li>The teaching &amp; learning process in online mode during the pandemic was appreciated.</li> </ul>		
<b>Agenda – 2</b>	<b>Teaching Scheme of Semester-I &amp; Semester-II as per new UGC/AICTE Guidelines</b>		
<b>Resolution</b>	<ul style="list-style-type: none"> <li>Course credits for engineering courses need to be revised to 160 credits as per the guidelines provided by UGC/AICTE. To comply with this following revisions are approved by the BOS committee.</li> <li>Semester - I and Semester - II teaching schemes are redesigned as per revised AICTE guidelines.</li> <li>Teaching hours for students can be kept around 27 hours per week.</li> <li>Subjects with end semester exams should not be more than 5 per semester.</li> <li>The contact hours for laboratory sessions can be increased to make students proficient for industry.</li> <li>Revision in syllabus of 01ME1101 - Elements of Mechanical Engineering, Resolution 01ME1102 Engineering Graphics and 01ME1104 - Mechanical Workshop is approved.</li> <li>NCC is introduced with a teaching scheme of 1 hour theory and 2 hours laboratory for 2 credit courses in Semester - I and Semester - II.</li> <li>The student who opts for NCC will be given exemption from below mentioned courses. <ul style="list-style-type: none"> <li>Value Education - Semester - I</li> <li>Indian Constitution - Semester - I</li> <li>Physical Education/Sports/Yoga - Semester - I</li> <li>Professional Ethics – Semester - II</li> </ul> </li> </ul>		
<b>Agenda - 3</b>	<b>Teaching Scheme of Semester-I &amp; Semester-II as per new UGC/AICTE Guidelines for M.Tech program</b>		
<b>Resolution</b>	<ul style="list-style-type: none"> <li>Course credits for engineering courses need to be revised to 66 credits as per the guidelines provided by UGC/AICTE.</li> <li>Semester - I and Semester - II teaching schemes are redesigned as per revised AICTE guidelines. (Annexure-1)</li> <li>Teaching hours for students can be kept around 20 to 22 hours per week.</li> <li>Subjects with end semester exams should not be more than 5 per semester.</li> </ul>		

	<ul style="list-style-type: none"> <li>Revision in various subject syllabus carried out.</li> </ul>
<b>Agenda – 4</b>	<b>Review of syllabus for PG program</b>
<b>Resolution</b>	<ul style="list-style-type: none"> <li>Research Methodology &amp; IPR is introduced in 2<sup>nd</sup> sem</li> <li>In line with the guidelines of UGC/AICTE Audit course is proposed in Semester - I and Semester – II</li> <li>Following courses are discussed and proposed for the semester 01AU9001- English for Technical writings; 01AU9002- Value Education; 01AU9003- Constitution of India, 01AU9004- Stress Management by Yoga, 01AU9005- Sanskrit for Technical Knowledge.</li> <li>As per new scheme 1 open elective offer in PG degree program</li> <li>Student have flexibility to take their subjects of interest for enhance the knowledge. Any one open elective during their entire PG course.</li> </ul>
<b>Agenda - 3</b>	<b>Proposed Attainment for Course Outcome</b>
<b>Resolution</b>	<ul style="list-style-type: none"> <li>The target for CO attainment was set to 60% and the same was achieved.</li> <li>It was decided by BOS members that a revised target of 60% for CO attainment is set for 2021-22 academic year students.</li> </ul>
<b>Agenda – 4</b>	<b>Introducing Creativity, Problem Solving and Innovation as a University Elective Subject</b>
<b>Resolution</b>	<ul style="list-style-type: none"> <li>Creativity, Problem Solving and Innovation subject is to be offered in 4th, 6th or 8th semester where interested students can choose as university elective course for 2 credits.</li> </ul>
<b>Agenda – 5</b>	<b>Introduction of Indian Constitution Subject</b>
<b>Resolution</b>	<ul style="list-style-type: none"> <li>Indian Constitution subject is introduced with a teaching scheme of 1 hour theory as mandatory course as per AICTE guidelines</li> </ul>
<b>Agenda – 6</b>	<b>Feedback from Members of Board of Studies</b>
<b>Resolution</b>	<ul style="list-style-type: none"> <li>Introducing NCC / NSS as a subject in the curriculum is appreciated.</li> <li>The students can have flexibility to earn more credits during the semester based on the subjects offered.</li> <li>Experts suggested to make it mandatory for all students to visit and prepare reports of 15 industries of various fields of Mechanical Engineering before completion of his/her graduation.</li> </ul>
Note: Meeting was scheduled virtually on Google Meet.	



BOS Committee members:		Signature
Meeting attended by: External Experts		
1.	Dr. D. V. Bhatt	
2.	Dr. B. M. Ramani	
3.	Mr. Anand Savaliya	
4.	Amit chotai	
Meeting Attended by: Marwadi University		
1.	Dr. R. L. Jhala	
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5.	Dr. Amit Sata	
6.	Dr. Pinank Patel	





<b>Annexure</b>	
<b>Annexure-1</b>	<b>M.Tech - Year-1, Sem-1</b>
	<b>Subject Code    Subject Name</b>
	01CA11*/01TH01*    Program Elective-I
	01CA11*/01TH01*    Program Elective-II
	01CA11*/01TH01*    Program Elective-III
	01CA01*/01TH11*    Program Elective-IV
	01CA11*/01TH11*    Program Elective-V
	01CA11*/01TH11*    Program Elective-V
	01OE900*    Open Elective
	01AU900*    Audit Course
	<b>*Programme Elective-I</b>
	<b>Subject Code    Subject Name</b>
	01CA1101    Program Core-I (CAD)
	01TH0102    Program Core-I (Advanced Heat Transfer)
	<b>*Programme Elective-II</b>
	01CA1102    Program Core-II (AMD)
	01TH0104    Program Core-II (Advanced Fluid Mechanics)
	<b>*Programme Elective-III</b>
	01CA1103    Lab I: Program Core (CAD Lab)
	01TH0106    Lab I: Program Core (Heat Exchanger Design)
	<b>*Programme Elective-IV</b>
	01CA0104    Lab-II: Program Core (AMD Lab)
	01TH1104    Lab-II: Program Core (Thermal Engg. Lab)
	<b>*Programme Elective-V</b>
	01CA1111    Computational Methods in Mechanical Engg.
	01TH1111    Computational Methods in Mechanical Engineering
	<b>*Programme Elective-VI</b>
	01CA1121    Advanced Material Processing Techniques
	01TH1121    Advanced Refrigeration Engineering
	<b>M.Tech - Year-1, Sem-2</b>
<b>Subject Code    Subject Name</b>	
01CA020*/ 01TH020*    Program Elective-I	
01CA020*/ 01TH020*    Program Elective-II	
01CA020*/ 01TH020*    Program Elective-III	
01CA020*/ 01TH020*    Program Elective-IV	
01CA020*/ 01TH020*    Program Elective-V	
01CA020*/ 01TH020*    Program Elective-VI	
01SL1210    Research Methodology & IPR	



	<p><b>*Programme Elective-I</b></p> <table><thead><tr><th>Subject Code</th><th>Subject Name</th></tr></thead><tbody><tr><td>01CA1201</td><td>Program Core-III (CAM)</td></tr><tr><td>01TH1201</td><td>Program Core-III (Design and Optimizations of Thermal Systems)</td></tr></tbody></table> <p><b>*Programme Elective-II</b></p> <table><thead><tr><th>Subject Code</th><th>Subject Name</th></tr></thead><tbody><tr><td>01CA1202</td><td>Program Core-IV (FEM)</td></tr><tr><td>01TH1202</td><td>Program Core-IV (Solar Energy Engg.)</td></tr></tbody></table> <p><b>*Programme Elective-III</b></p> <table><thead><tr><th>Subject Code</th><th>Subject Name</th></tr></thead><tbody><tr><td>01CA1203</td><td>Lab III: Program Core (CAM Lab)</td></tr><tr><td>01TH1203</td><td>Lab III: Program Core (HVAC Lab)</td></tr></tbody></table> <p><b>*Programme Elective-IV</b></p> <table><thead><tr><th>Subject Code</th><th>Subject Name</th></tr></thead><tbody><tr><td>01CA1204</td><td>Lab-IV: Program Core (FEM Lab)</td></tr><tr><td>01TH1204</td><td>Lab-IV: Program Core (Computational Fluid Flow &amp; Heat Transfer Lab)</td></tr></tbody></table> <p><b>*Programme Elective-V</b></p> <table><thead><tr><th>Subject Code</th><th>Subject Name</th></tr></thead><tbody><tr><td>01CA1211</td><td>Computer Aided Production Management</td></tr><tr><td>01TH1211</td><td>Energy Conservation &amp; Management</td></tr></tbody></table> <p><b>*Programme Elective-VI</b></p> <table><thead><tr><th>Subject Code</th><th>Subject Name</th></tr></thead><tbody><tr><td>01CA1221</td><td>Optimization Techniques</td></tr><tr><td>01TH1221</td><td>Computational Fluid Dynamics</td></tr></tbody></table>	Subject Code	Subject Name	01CA1201	Program Core-III (CAM)	01TH1201	Program Core-III (Design and Optimizations of Thermal Systems)	Subject Code	Subject Name	01CA1202	Program Core-IV (FEM)	01TH1202	Program Core-IV (Solar Energy Engg.)	Subject Code	Subject Name	01CA1203	Lab III: Program Core (CAM Lab)	01TH1203	Lab III: Program Core (HVAC Lab)	Subject Code	Subject Name	01CA1204	Lab-IV: Program Core (FEM Lab)	01TH1204	Lab-IV: Program Core (Computational Fluid Flow & Heat Transfer Lab)	Subject Code	Subject Name	01CA1211	Computer Aided Production Management	01TH1211	Energy Conservation & Management	Subject Code	Subject Name	01CA1221	Optimization Techniques	01TH1221	Computational Fluid Dynamics
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B. Tech Civil Engineering  
Faculty of Technology  
Marwadi University

**1.1.2 Board of Studies meeting minutes**

(Program revision)



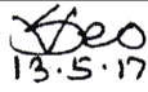






### Minutes of Meeting

<b>Date:</b> 13/05/2017		<b>Meeting No:</b> 02	
<b>Start Time:</b> 10.30 AM	<b>End Time:</b> 02:30 PM	<b>Total Time:</b> 3 Hours	
<b>Presented by</b>	Dr. Tarak Vora		
<b>Agenda – 1</b>	<b>Welcome of Board of Studies Member</b>		
<b>Resolutions</b>	<ul style="list-style-type: none"> <li>Dr. Tarak Vora, Professor &amp; Head, Civil Engineering Department welcomed all the distinguished BoS Members. BoS Member: Dr. B. J. Shah, Principal, Government Engineering College, Modasa; BoS Member: Dr. S. V. Deo, Associate Professor, NIT, Raipur; BoS Member-Industry Expert: Er. Manish Doshi, Structural Consultant, Rajkot, BoS</li> <li>Introduction of invited BoS Member was given by Dr. Tarak Vora to all BoS members. Internal BoS Member: Dr. Ankur Bhogayata, Associate Professor &amp; Head; Dr. Chirag Patel, Associate Professor.</li> <li>All the invited members were welcomed by all BoS Members.</li> <li>All the faculty members present in the BoS-02 were welcomed by Dr. Tarak Vora.</li> </ul>		
<b>Agenda – 2</b>	<b>Appointment of Member Secretary</b>		
<b>Resolutions</b>	Dr. Siddharth Shah was appointed as member secretary for the BoS.		
<b>Agenda – 3</b>	<b>Confirmation of Minutes of Meeting and action taken report on decisions/suggestions of the previous BoS.</b>		
<b>Resolutions</b>	The minutes of previous meeting no. 01 held on 06/06/2016 were already circulated to all members. Dr. B. J. Shah and Dr. S. V. Deo accept the minutes of meeting. Since there is no major comment from any member, the chairman requested to accept the minutes.		
<b>Agenda – 4</b>	<b>Review of Civil Engineering Department for Academic Year 2016-17</b>		
<b>Resolutions</b>	<ul style="list-style-type: none"> <li>Dr. Ankur Bhogayata gave a brief presentation on various activities related to academics, teaching learning methodology, student participation in technical and non-technical events, students and faculty achievements during A. Y. 2016-17.</li> <li>Since B. Tech Civil Engineering program had started in A.Y 2016-17 so students have pass out from first year only.</li> <li>In the first year, courses are common for all branches of engineering and curriculum was designed in such a way that in all subjects students can learn</li> </ul>		

	practical approach with number of experimentations in labs and also improve their various skills.																																	
<b>Agenda – 5</b>	<b>Teaching Scheme of B. Tech. in Civil Engineering and detailed syllabus of Sem-3 &amp; Sem-4.</b>																																	
<b>Resolutions</b>	<ul style="list-style-type: none"> <li>Semester – 3 and Semester – 4 teaching schemes and detailed syllabus are presented and approved in BoS meeting with gross agreement of all member present.</li> <li>Teaching and evaluation scheme for second year is courses are finalized and reported for the final approval.</li> <li>Course structure for third and fourth year of B. Tech Civil Engineering Program was finalized and present in BoS.</li> <li>The course structure in terms of credits and academic level should be mapped with learning level according Bloom’s Taxonomy for all semesters.</li> <li>Introduction of Software Application in Civil Engineering (I to IV) is recommended in semester 3 to 6 which will be improve software skills of students.</li> <li>Following subjects are introduced in semester 3 and 4.</li> </ul> <table border="1" style="margin-left: 40px;"> <thead> <tr> <th>Semester</th> <th>Subject Code</th> <th>Subject Title</th> </tr> </thead> <tbody> <tr> <td rowspan="7" style="text-align: center;">3</td> <td>01MA0201</td> <td>Engineering Maths-III</td> </tr> <tr> <td>01CI0301</td> <td>Mechanics of Solids</td> </tr> <tr> <td>01CI0302</td> <td>Building Planning &amp; Drawing</td> </tr> <tr> <td>01CI0303</td> <td>Surveying</td> </tr> <tr> <td>01CI0304</td> <td>Fluid Mechanics</td> </tr> <tr> <td>01CI0305</td> <td>Software Applications in Civil Engineering-I</td> </tr> <tr> <td>01CR0301</td> <td>Career Readiness Programme</td> </tr> <tr> <td rowspan="7" style="text-align: center;">4</td> <td>01VE400</td> <td>Entrepreneurship &amp; Engineering Ethics</td> </tr> <tr> <td>01CI0401</td> <td>Civil Engineering Materials &amp; Construction</td> </tr> <tr> <td>01CI0402</td> <td>Structural Analysis-1</td> </tr> <tr> <td>01CI0403</td> <td>Basics of Geology &amp; Geotechnical Engineering</td> </tr> <tr> <td>01CI0404</td> <td>Advanced Surveying</td> </tr> <tr> <td>01CI0405</td> <td>Concrete Technology</td> </tr> <tr> <td>01CI0406</td> <td>Software Applications in Civil Engineering-II</td> </tr> </tbody> </table>	Semester	Subject Code	Subject Title	3	01MA0201	Engineering Maths-III	01CI0301	Mechanics of Solids	01CI0302	Building Planning & Drawing	01CI0303	Surveying	01CI0304	Fluid Mechanics	01CI0305	Software Applications in Civil Engineering-I	01CR0301	Career Readiness Programme	4	01VE400	Entrepreneurship & Engineering Ethics	01CI0401	Civil Engineering Materials & Construction	01CI0402	Structural Analysis-1	01CI0403	Basics of Geology & Geotechnical Engineering	01CI0404	Advanced Surveying	01CI0405	Concrete Technology	01CI0406	Software Applications in Civil Engineering-II
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<b>Agenda – 6</b>	Discussion and approval of minor changes in syllabus.																																	
<b>Resolutions</b>	<ul style="list-style-type: none"> <li>Skill based elective courses 1) Reading and Writing for Technology and 2) Speaking and Presentation skills are introduced in place of communication skill course in 1<sup>st</sup> year courses.</li> </ul>																																	

	Subject Code	Subject Title
	01SL0102	Reading and Writing for Technology
	01SL0103	Speaking and Presentation Skills
<b>Agenda – 7</b>	Discussion and approval of skill-based/ humanity-based courses in the coming year.	
<b>Resolutions</b>	<ul style="list-style-type: none"> <li>In each semester humanity or skill based course are introduced viz. career readiness program, entrepreneurship engineering &amp; ethics, business benchmark.</li> </ul>	
<b>Agenda – 8</b>	Discussion on feedback received from students, faculties, parents, alumni and employers regarding teaching-learning process in order to review and design the syllabus.	
<b>Resolutions</b>	<ul style="list-style-type: none"> <li>Syllabus of A.Y 2016-17 have been discussed with the stakeholders of the department including student/faculty/employee/alumni/parents and necessary inputs are collected from them for academic provision in new semester courses.</li> </ul>	
<b>Agenda – 9</b>	Any other matter with the permission of the Chair.	
	<p>Couse outcomes for all the courses of 1<sup>st</sup> and 2<sup>nd</sup> year, Program outcomes and Program-specific outcome was discussed in detail.</p> <p>The following highlights were discussed/appreciated by the members.</p> <ul style="list-style-type: none"> <li>All course outcomes of each subject should map effectively with respective program outcomes and program-specific outcomes.</li> <li>First year Course attainment is less than 50% which is not achieved as per target attainment. Modification in teaching-learning process is suggested.</li> </ul>	
Note: Meeting was scheduled physically at MB062.		
<b>Meeting Attended By: External Experts</b> <ol style="list-style-type: none"> <li>Dr. B. J. Shah</li> <li>Dr. S. V. Deo</li> </ol>		<b>Meeting Attended By: Marwadi University</b> <ol style="list-style-type: none"> <li>Dr. Tarak Vora</li> <li>Dr. Ankur Bhogayata</li> <li>Dr. Siddharth Shah</li> <li>Dr. Chirag Patel</li> </ol>
<b>Meeting Attended By: Industry Expert</b> <ol style="list-style-type: none"> <li>Er. Manish Doshi</li> </ol>		



Sr. No.	Name	Designation	Sign
1	Dr. Shirish V. Deo	Member – BOS	 13.5.17
2	Dr. B. J. Shah	Member – BOS	
3	Mr. Manish V. Doshi	Member – BOS	
4	Dr. Ankur Bhogayata	Member – BOS	
5	Dr. Tarak Vora	Member – BOS	
6	Dr. Siddharth Shah	Member – BOS	
7	Dr. Chiragbhai Patel	Member – BOS	

### Minutes of Meeting

<b>Date:</b> 07/04/2018		<b>Meeting No:</b> 03	
<b>Start Time:</b> 10.30 AM	<b>End Time:</b> 01:30 PM	<b>Total Time:</b> 3 Hours	
<b>Presented by</b>	Dr. Tarak Vora		
<b>Agenda – 1</b>	<b>Welcome of Board of Studies Member</b>		
<b>Resolutions</b>	<ul style="list-style-type: none"> <li>Dr. Tarak Vora, Professor &amp; Head, Civil Engineering Department welcomed all the distinguished BoS Members. Introduction of invited BoS Member was given by Dr. Tarak Vora to all BoS members.</li> </ul> <p>BoS Member: Dr. B. J. Shah, Principal, Government Engineering College, Modasa; BoS Member: Dr. S. V. Deo, Associate Professor, NIT, Raipur; BoS Member-Industry Expert: Er. Manish Doshi, Structural Consultant, Rajkot, BoS</p> <p>Invited BoS Member: Dr. A.K. Varma, Professor &amp; Head, BVM Engineering College, V.V.Nagar; Dr. Yogesh Shah, Associate Professor, IITRAM, Ahmedabad</p> <p>Internal BoS Member: Dr. Ankur Bhogayata, Associate Professor &amp; Head; Dr. Siddharth Shah, Professor &amp; Head; Prof. Mazhar Dhankot, Assistant Professor</p> <ul style="list-style-type: none"> <li>All the invited members were welcomed by all BoS Members.</li> <li>All the faculty members present in the BoS-03 were welcomed by Dr. Tarak Vora.</li> </ul>		
<b>Agenda – 2</b>	<b>Confirmation of Minutes of Meeting and action taken report on decisions/suggestions of the previous BoS.</b>		
<b>Resolutions</b>	The minutes of previous meeting no. 02 held on 13/05/2017 were already circulated to all members. Dr. B. J. Shah and Dr. S. V. Deo accept the minutes of meeting. Since there is no major comment from any member, the chairman requested to accept the minutes.		
<b>Agenda – 3</b>	<b>Review of Civil Engineering Department for Academic Year 2017-18</b>		
<b>Resolutions</b>	<ul style="list-style-type: none"> <li>Dr. Ankur Bhogayata gave a brief presentation on various departmental activities related to academic performance of student, student and faculty achievements, participation in FDP/STTP/Workshop and other national level technical and non-technical events A. Y. 2017-18.</li> <li>MU-Fest event is organized in year 2017-18. Majority students have participated in various technical and non-technical events.</li> </ul>		

<b>Agenda – 4</b>	<b>Teaching Scheme of B. Tech. in Civil Engineering and detailed syllabus of Sem-5 &amp; Sem-6.</b>																																									
<b>Resolutions</b>	<ul style="list-style-type: none"> <li>• Semester – 5 and Semester – 6 teaching schemes and detailed syllabus are presented and approved in BoS meeting.</li> <li>• Teaching and examination scheme for the third year is courses are finalized and reported for the final approval.</li> <li>• Course structure for the fourth year of the B. Tech Civil Engineering Program was finalized and presented in BoS.</li> <li>• Introduction of mini project named Project-based community services (I to IV) is introduced in semester 3 to 6.</li> <li>• Department professional electives are offered in semester 5 as per different specializations.</li> <li>• Following subjects are introduced in semester 5 and 6.</li> </ul>																																									
	<table border="1" style="width: 100%; border-collapse: collapse;"> <thead> <tr> <th style="width: 15%;">Semester</th> <th style="width: 25%;">Subject Code</th> <th style="width: 60%;">Subject Title</th> </tr> </thead> <tbody> <tr> <td rowspan="10" style="text-align: center; vertical-align: middle;">5</td> <td>01CI0501</td> <td>Hydrology and Water Resource Management</td> </tr> <tr> <td>01CI0502</td> <td>Structural Analysis - II</td> </tr> <tr> <td>01CI0503</td> <td>Highway Engineering</td> </tr> <tr> <td>01CI0504</td> <td>Environmental Engineering</td> </tr> <tr> <td>01CI0505</td> <td>Software Applications in Civil Engineering - III</td> </tr> <tr> <td>01CI0506</td> <td>Project Based on Community Services - III</td> </tr> <tr> <td>01CR0501</td> <td>Business Benchmark</td> </tr> <tr> <td>01CI0507</td> <td>Environmental Pollution</td> </tr> <tr> <td>01CI0508</td> <td>Disaster Management</td> </tr> <tr> <td>01CI0509</td> <td>Traffic Engineering</td> </tr> <tr> <td rowspan="8" style="text-align: center; vertical-align: middle;">6</td> <td>01CI0601</td> <td>Transportation Engineering</td> </tr> <tr> <td>01CI0602</td> <td>Elementary Design of Structures</td> </tr> <tr> <td>01CI0603</td> <td>Advanced Geotechnical Engineering</td> </tr> <tr> <td>01CI0604</td> <td>Professional Practice &amp; Valuation</td> </tr> <tr> <td>01CI0605</td> <td>Construction Technology &amp; Safety Engineering</td> </tr> <tr> <td>01CI0606</td> <td>Software Applications in Civil Engineering - IV</td> </tr> <tr> <td>01CI0607</td> <td>Project Based on Community Services - IV</td> </tr> <tr> <td>01CI0608</td> <td>Energy Science &amp; Engineering</td> </tr> </tbody> </table>	Semester	Subject Code	Subject Title	5	01CI0501	Hydrology and Water Resource Management	01CI0502	Structural Analysis - II	01CI0503	Highway Engineering	01CI0504	Environmental Engineering	01CI0505	Software Applications in Civil Engineering - III	01CI0506	Project Based on Community Services - III	01CR0501	Business Benchmark	01CI0507	Environmental Pollution	01CI0508	Disaster Management	01CI0509	Traffic Engineering	6	01CI0601	Transportation Engineering	01CI0602	Elementary Design of Structures	01CI0603	Advanced Geotechnical Engineering	01CI0604	Professional Practice & Valuation	01CI0605	Construction Technology & Safety Engineering	01CI0606	Software Applications in Civil Engineering - IV	01CI0607	Project Based on Community Services - IV	01CI0608	Energy Science & Engineering
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<b>Agenda – 5</b>	Discussion and approval of M. Tech. in Civil Engineering teaching scheme and detailed syllabus of Sem-I & Sem-II.																																									
<b>Resolutions</b>	<ul style="list-style-type: none"> <li>• New Program M.Tech in Civil Engineering with Specialization in Structural Engineering, Transportation Engineering and Geotechnical Engineering is introduced in this Academic year.</li> </ul>																																									





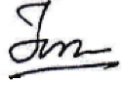




- Teaching schemes for M. tech Civil Engineering is proposed & detailed syllabus of 1<sup>st</sup> and 2<sup>nd</sup> semester are designed.
- Departmental electives are given in all semesters to provide flexibility in the curriculum.
- Following subjects are introduced in semester 1 and 2.

Semester	Subject Code	Subject Title
1	01VE0101	Research and Communication skills
	01ST0101	Advanced Concrete Design
	01ST0102	Advanced Structural Analysis
	01ST0104	Analytical and Numerical Methods for Civil Engineering
	01ST0103	Material Testing & Evaluation
	01ST0105	Advanced Solid Mechanics
	01TR0101	Urban Transportation system planning
	01TR0102	Traffic Engineering
	01TR0103	Rail Transport Management system Planning & Design
	01TR0104	Transportation System Management
	01TR0105	Environmental Impact Assessment of Transportation project
	01GT0102	Advanced Soil Mechanics
	01GT0103	Advanced Foundation Engineering
	01GT0105	Pavement engineering
01GT0106	Rock mechanics	
2	01ST0201	Advanced Steel Design
	01ST0202	Earthquake Engineering & Structural Dynamics
	01ST0203	Design of Tall Structures
	01ST0206	Mini Project-1 (Structural Design)
	01ST0204	Repair and Retrofitting of the Structures
	01ST0205	Structural Optimization
	01TR0201	Pavement Design
	01TR0202	Road Safety Audit
	01TR0203	Traffic flow theory & Simulation
	01TR0204	Mini Project-1
	01TR0205	Advances in pavement materials and construction
	01GT0201	Ground Improvement Technique
	01GT0202	Soil Dynamics & Earthquake engineering
	01GT0203	FEM in Geotechnical Engineering
	01GT0204	Geosynthetic and its Applications
	01GT0205	Geospatial techniques
01GT0206	Earth & Rockfill dams	

<b>Agenda – 6</b>	Discussion and approval of minor changes in syllabus of various courses of UG
<b>Resolutions</b>	<ul style="list-style-type: none"> <li>In place of Engineering Mathematics-1 &amp; Engineering Mathematics-II, the course of Differential and Integral Calculus (DAIC) and Matrix Algebra and Vector Calculus (MAVC) are implemented</li> <li>In place of Career Readiness Program, Revised course of Value Education is introduced</li> <li>As per the feedback received by the students in the previous academic year, more practical subjects are introduced. The revised courses, Material Testing &amp; Evaluations (MTE), Advanced Surveying &amp; Geomatics (AS&amp;G), and Software Application in Civil Engineering-II (SACE-II).</li> <li>The subject name was suggested to be changed for Maths-3 with Applied Differential Equations (ADE).</li> <li>The course Entrepreneurship &amp; Engineering Ethics is revised as Profession Ethics in 4<sup>th</sup> semester.</li> </ul>
<b>Agenda – 7</b>	Discussion and approval of proposed open elective courses
<b>Resolutions</b>	<ul style="list-style-type: none"> <li>Open elective subject Energy Science and Engineering is proposed in semester 6.</li> </ul>
<b>Agenda –8</b>	Discussion and approval of proposed value-added courses
<b>Resolutions</b>	<ul style="list-style-type: none"> <li>Learning and Development department would be offering SPT and SIG programs designed for the overall development of the student.</li> <li>Onsite training on Field Testing in Geotechnical Engineering to be given to students.</li> </ul>
<b>Agenda – 9</b>	Discussion on feedback received from students, faculties, parents, alumni, and employers regarding the teaching-learning process in order to review and design the syllabus.
<b>Resolutions</b>	<ul style="list-style-type: none"> <li>Syllabus of A.Y 2017-18 have been discussed with the stakeholders of the department including student/faculty/employee/alumni/parents and necessary inputs are collected from them for academic provision in courses.</li> </ul>
<b>Agenda – 10</b>	Any other matter with the permission of the Chair.
<b>Resolutions</b>	<p>Couse outcomes for all the courses of 1<sup>st</sup> and 2<sup>nd</sup> year, Program outcomes and Program-specific outcome was discussed in detail.</p> <p>The following highlights were discussed/appreciated by the members.</p>

	<ul style="list-style-type: none"> <li>• Course attainment for A.Y 2017-18 is analyzed. As a result of the analysis, in all the semesters the course attainment is more than the target attainment.</li> <li>• More electives based on specialization should be offered in the final year curriculum.</li> <li>• Field training/ Internship/ Project should be included in the final year courses.</li> </ul>
Note: The meeting was scheduled physically at MB062.	
<b>Meeting Attended By: External Experts</b> <ol style="list-style-type: none"> <li>1. Dr. B. J. Shah</li> <li>2. Dr. S. V. Deo</li> </ol>	<b>Meeting Attended By: Marwadi University</b> <ol style="list-style-type: none"> <li>1. Dr. Tarak Vora</li> <li>2. Dr. Ankur Bhogayata</li> <li>3. Dr. Siddharth Shah</li> <li>4. Prof. Mazhar Dhankot</li> </ol>
<b>Meeting Attended By: Industry Expert</b> <ol style="list-style-type: none"> <li>1. Er. Manish Doshi</li> </ol>	

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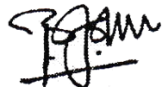


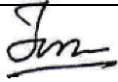

### Minutes of Meeting

<b>Date:</b> 24/05/2019		<b>Meeting No:</b> 04	
<b>Start Time:</b> 10.30 AM		<b>End Time:</b> 01:00 PM	
		<b>Total Time:</b> 2.5 Hours	
<b>Presented by</b>		Dr. Tarak Vora	
<b>Agenda – 1</b>			
<b>Welcome of Board of Studies Member</b>			
<b>Resolutions</b>		<ul style="list-style-type: none"> <li>• Dr. Tarak Vora, Professor &amp; Head, Civil Engineering Department welcomed all the distinguished BoS Members. BoS Member: Dr. B. J. Shah, Principal, Government Engineering College, Modasa; BoS Member: Dr. S. V. Deo, Associate Professor, NIT, Raipur; BoS Member-Industry Expert: Er. Jayant Lakhani, Veteran Structural Consultant, Rajkot, BoS Member-Alumni: Er. Harsh Sanghvi.</li> <li>• Introduction of invited BoS Member was given by Dr. Tarak Vora to all BoS members. Invited BoS Member: Dr. A.K. Varma, Professor &amp; Head, BVM Engineering College, V.V.Nagar; Dr. Yogesh Shah, Associate Professor, IITRAM, Ahmedabad</li> <li>• All the invited members were welcomed by all BoS Members.</li> <li>• All the faculty members present in the BoS-04 were welcomed by Dr. Tarak Vora.</li> </ul>	
<b>Agenda – 2</b>			
<b>Appointment of Member Secretary</b>			
<b>Resolutions</b>		Prof. Kunal P. Shukla was appointed as member secretary for the BoS.	
<b>Agenda – 3</b>			
<b>Confirmation of Minutes of Meeting and action taken report on decisions/suggestions of the previous BoS.</b>			
<b>Resolutions</b>		The minutes of previous meeting no. 03 held on 07/04/2018 were already circulated to all members. Since there was no comment from any member, the chairman requested to accept the minutes. Dr. B. J. Shah proposed the minutes to be accepted. Dr. S. V. Deo gave acceptance subsequently. The minutes were then accepted.	
<b>Agenda – 4</b>			
<b>Review of Civil Engineering Department for Academic Year 2018-19</b>			
<b>Resolutions</b>		<ul style="list-style-type: none"> <li>• Dr. Tarak Vora gave a brief presentation on various activities related to academics, student development, faculty development, research and consultancy done by the department during A. Y. 2018-19.</li> </ul>	
<b>Agenda – 5</b>			
<b>Teaching Scheme of B. Tech. in Civil Engineering and detailed syllabus of Sem-VII &amp; Sem-VIII.</b>			



<b>Resolutions</b>	<ul style="list-style-type: none"> <li>Semester – VII and Semester – VIII teaching schemes are designed and proposed.</li> </ul>																																										
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<b>Agenda – 6</b>	<b>Teaching Scheme of M. Tech. in Civil Engineering and detailed syllabus of Sem-III &amp; Sem-IV.</b>																																										
<b>Resolutions</b>	<ul style="list-style-type: none"> <li>M.Tech in Civil Engineering with Specialization in Structural Engineering, Geotechnical Engineering and Transportation Engineering, Semester – III and Semester – VI teaching schemes are designed and proposed.</li> <li>The number of Program Elective Courses are offered to give more liberty to students to gain knowledge as per their choice.</li> </ul>																																										
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		01GT0401	Soil Structure Interaction	
<b>Agenda – 7</b>				
<b>Discussion and approval of proposed value-added courses</b>				
<b>Resolutions</b>	<ul style="list-style-type: none"> <li>• Various STTP/ Workshop/ FDPs are planned for upcoming academic year.</li> <li>• SPT and SIG are planned for each semester by L&amp;D department.</li> <li>• Field Testing Training is proposed for UG and PG students.</li> <li>• Software hands on training is proposed to BOS member at various level of students based on the application of software.</li> <li>• Students will participate in different technical and non-technical national events.</li> </ul>			
<b>Agenda – 8</b>				
<b>Discussion on feedback received from the students, faculties, parents and industry experts regarding teaching learning process in order to review and design the syllabus.</b>				
<b>Resolutions</b>	<ul style="list-style-type: none"> <li>• Teaching scheme and detailed syllabus are proposed in A.Y. 2018-19 have been discussed with the stakeholders of the department including student/faculty/employee/alumni/parents and necessary inputs are collected from them for academic improvisation.</li> </ul>			
<b>Agenda – 9</b>				
<b>Any other matter with permission of the Chair.</b>				
<b>Resolutions</b>	<ul style="list-style-type: none"> <li>• Course outcomes of final year subjects are presented with its mapping with PO and PSO.</li> <li>• Course attainment for A.Y 2018-19 is analyzed. As a result of analysis, the average attainment of all the courses of 2018-19 year is not attained compared to target attainment. The Course outcome which are not attained for each subjects, for that changes in methodology in teaching-learning process is suggested.</li> <li>• As per the suggestion of the BOS members, The subject based site visit for majority subjects should be increase.</li> </ul>			
<b>Note: Meeting was scheduled at MB050-Departmental library.</b>				
<b>Meeting Attended By: External Experts</b>			<b>Meeting Attended By: Marwadi University</b>	
<ol style="list-style-type: none"> <li>1. Dr. B. J. Shah</li> <li>2. Dr. S. V. Deo</li> </ol>			<ol style="list-style-type: none"> <li>1. Dr. Tarak Vora</li> <li>2. Dr. Ankur Bhogayata</li> <li>3. Dr. Siddharth Shah</li> </ol>	
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6	Dr. Siddharth Shah	Member – BOS	

### Minutes of Meeting

<b>Date:</b> 04/05/2020		<b>Meeting No:</b> 05	
<b>Start Time:</b> 10.30 AM	<b>End Time:</b> 01:30 PM	<b>Total Time:</b> 3.0 Hours	
<b>Presented by</b>	Dr. Tarak Vora		
<b>Agenda – 1</b>	<b>Welcome of Board of Studies Member</b>		
<b>Resolutions</b>	<ul style="list-style-type: none"> <li>• Dr. Tarak Vora, Professor &amp; Head, Civil Engineering Department welcomed all the distinguished BoS Members. BoS Member: Dr. B. J. Shah, Principal, Government Engineering College, Modasa; BoS Member: Dr. S. V. Deo, Associate Professor, NIT, Raipur; BoS Member-Industry Expert: Er. Manish Doshi, Veteran Structural Consultant, Rajkot.</li> <li>• Introduction of invited BoS Member was given by Dr. Tarak Vora to all BoS members. Invited BoS Member: Dr. A.K. Varma, Professor &amp; Head, BVM Engineering College, V.V.Nagar, Dr. Yogesh Shah, Associate Professor, IITRAM, Ahmedabad</li> <li>• All the invited members were welcomed by all BoS Members.</li> <li>• All the faculty members present in the BoS-05 were welcomed by Dr. Tarak Vora.</li> </ul>		
<b>Agenda – 2</b>	<b>Appointment of Member Secretary</b>		
<b>Resolutions</b>	<ul style="list-style-type: none"> <li>• Prof. Amit Thoriya was appointed as member secretary for the BoS.</li> </ul>		
<b>Agenda – 3</b>	<b>Confirmation of Minutes of Meeting and action taken report on decisions/suggestions of the previous BoS.</b>		
<b>Resolutions</b>	<ul style="list-style-type: none"> <li>• The minutes of previous meeting no. 04 held on 24/05/2019 were already circulated to all members. Since there was no comment from any member, the chairman requested to accept the minutes. Dr. B. J. Shah proposed the minutes to be accepted. Dr. S. V. Deo and Dr. Yogesh Shah gave acceptance subsequently. The minutes were then accepted.</li> </ul>		
<b>Agenda – 4</b>	<b>Review of Civil Engineering Department for Academic Year 2019-20</b>		
<b>Resolutions</b>	<ul style="list-style-type: none"> <li>• Dr. Tarak Vora gave a brief presentation on various activities related to academics, student development, faculty development, research and consultancy done by the department during A. Y. 2019-20.</li> <li>• The teaching &amp; learning process adopted in online mode during the pandemic is appreciated by reviewing syllabus coverage and student feedback.</li> </ul>		



	<ul style="list-style-type: none"> <li>Demonstration of experimentation in online mode in various labs is appreciated specifically.</li> </ul>																		
<b>Agenda – 5</b>	<b>Discussion and approval of minor changes in syllabus of various courses of UG &amp; PG.</b>																		
<b>Resolutions</b>	<ul style="list-style-type: none"> <li>Following are the minor changes was proposed and approved by BoS Members M.Tech Civil Engineering (Structural Engineering)</li> </ul> <table border="1"> <thead> <tr> <th>Subject Code</th> <th>Subject Title</th> <th>Remarks</th> </tr> </thead> <tbody> <tr> <td>01ST1101</td> <td>Advanced Concrete Design</td> <td>Basics of Foundation Design, IS Code Provisions, Types &amp; Suitability of Different Types of Foundations, Design of Eccentric Isolated Column Footing, Design of Combined Footing, Design of Strap</td> </tr> <tr> <td>01GT1104</td> <td>Application of Numerical &amp; Statistical Methods in Civil Engineering.</td> <td>Solution of Linear systems and hypothesis testing has been added</td> </tr> <tr> <td>01ST1202</td> <td>Structural Dynamics</td> <td>Response of Single Degree of Freedom Systems, MDOF and recent advances.</td> </tr> <tr> <td>01ST1203</td> <td>Design of Tall Structures</td> <td>Composite Structures has been added</td> </tr> <tr> <td>01ST1204</td> <td>Structural Health Monitoring &amp; Retrofitting of Structures</td> <td>Methods of SHM has been intrtroduced</td> </tr> </tbody> </table>	Subject Code	Subject Title	Remarks	01ST1101	Advanced Concrete Design	Basics of Foundation Design, IS Code Provisions, Types & Suitability of Different Types of Foundations, Design of Eccentric Isolated Column Footing, Design of Combined Footing, Design of Strap	01GT1104	Application of Numerical & Statistical Methods in Civil Engineering.	Solution of Linear systems and hypothesis testing has been added	01ST1202	Structural Dynamics	Response of Single Degree of Freedom Systems, MDOF and recent advances.	01ST1203	Design of Tall Structures	Composite Structures has been added	01ST1204	Structural Health Monitoring & Retrofitting of Structures	Methods of SHM has been intrtroduced
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<b>Agenda – 6</b>	<b>Discussion and approval of proposed value-added courses</b>																		
<b>Resolutions</b>	<ul style="list-style-type: none"> <li>One value added course will be offered by MU-IIR center based on research activities.</li> <li>Various faculty development programs, Short term Training programs and workshops are planned for students and faculties.</li> </ul>																		
<b>Agenda – 7</b>	<b>Discussion and approval for inclusion of new MOOC courses proposed by the faculty.</b>																		

<b>Resolutions</b>	Two MOOC courses from COURSERA are proposed to the students of 4 <sup>th</sup> and 6 <sup>th</sup> semester. Syllabus of the course is mapped with the content of the MOOC course. Learning of the content shall be done through MOOC and evaluation will be done by the subject faculty.			
	Semester	Subject code-Name	MOOC Course Title	Content mapped (%)
	1	Reading and Writing for technology / Speaking and Presentation skill	Communication skills for Engineering scholars	30%
	4	Professional Ethics	Ethics, Technology and Engineering	25%
<b>Agenda – 8</b>	<b>Discussion on feedback received from students, faculties, parents, alumni and employers regarding teaching learning process in order to review and design the syllabus.</b>			
	Teaching scheme proposed in A.Y. 2016-17 have been discussed with the stakeholders of the department including student / faculty / employee / alumni / parents and necessary inputs are collected from them for academic improvisation.			
<b>Agenda – 9</b>	<b>Any other matter with permission of the Chair.</b>			
	<p><b>Average CO-PO attainment was achieved and</b></p> <p>Then, the forum was kept open for the discussion and suggestion. Following highlights were discussed/appreciated by the members.</p> <ul style="list-style-type: none"> <li>• The teaching scheme should allow multiple entry and exit, like after third year students may get Diploma by default.</li> <li>• Credit transfer/exchange facility should be given.</li> <li>• Additional options to earn extra credit in form of honors in degree can be offered to meritorious students.</li> <li>• Additional option to earn minor degrees can be given to meritorious students.</li> <li>• Practical assignment shall be given to the students so that the gap as per industry requirement can be filled.</li> <li>• Introduction of NCC/NSS as a course in curriculum is appreciated.</li> </ul>			
Note: Meeting was scheduled virtually on Google Meet.				

<p><b>Meeting Attended By: External Experts</b></p> <ol style="list-style-type: none"> <li>1. Dr. B. J. Shah</li> <li>2. Dr. S. V. Deo</li> <li>3. Dr. A. K. Verma</li> <li>4. Dr. Yogesh Shah</li> </ol> <p><b>Meeting Attended By: Industry Expert</b></p> <ol style="list-style-type: none"> <li>1. Er. Manish Doshi</li> </ol> <p><b>Meeting Attended By: Alumni Member</b></p> <ol style="list-style-type: none"> <li>1. Er. Harsh Sanghvi</li> </ol>	<p><b>Meeting Attended By: Marwadi University</b></p> <ol style="list-style-type: none"> <li>1. Dr. Tarak Vora</li> <li>2. Dr. Ankur Bhogayata</li> <li>3. Dr. Siddharth Shah</li> <li>4. Prof. Amit Thoriya</li> </ol>
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Sr. No	Name	Designation	Sign
1.	Dr. Tarak Vora	Chairman – BoS Committee HoD	Present - Online
2.	Dr. Ankur Bhogayata	Member – BoS Asso. Prof.	Present - Online
3.	Prof. Amit Thoriya	Member – BoS Assi. Prof.	Present - Online
4.	Dr. B. J. Shah	Member – BoS External Member	Present - Online
5.	Dr. Shirish V. Deo	Member – BoS External Member	Present - Online
6.	Er. Manish Doshi	Member – BoS Industrial Member	Present - Online
7.	Er. Harsh Sanghvi	Member – BoS Alumni Member	Present - Online
8.	Dr. Siddharth Shah	Invitee Professor	Present - Online
9.	Dr. A. K. Varma	Invitee External Member (Geotechnical Engineering)	Present - Online
10.	Dr. Yogesh Shah	Invitee External Member (Transportation Engineering)	Present - Online

### Minutes of Meeting

<b>Date:</b> 29/06/2021		<b>Meeting No:</b> 06	
<b>Start Time:</b> 11.00 AM	<b>End Time:</b> 02:30 PM	<b>Total Time:</b> 3.5 Hours	
<b>Presented by</b>	Dr. Tarak Vora		
<b>Agenda – 1</b>	<b>Welcome of Board of Studies Member</b>		
<b>Resolutions</b>	<ul style="list-style-type: none"> <li>• Dr. Tarak Vora, Professor &amp; Head, Civil Engineering Department welcomed all the distinguished BoS Members. BoS Member: Dr. B. J. Shah, Principal, Government Engineering College, Modasa; BoS Member: Dr. S. V. Deo, Associate Professor, NIT, Raipur; BoS Member-Industry Expert: Er. Jayant Lakhlani, Veteran Structural Consultant, Rajkot, BoS Member-Alumni: Er. Harsh Sanghvi.</li> <li>• Introduction of invited BoS Member was given by Dr. Tarak Vora to all BoS members. Invited BoS Member: Dr. A.K. Varma, Professor &amp; Head, BVM Engineering College, V.V.Nagar; Dr. Yogesh Shah, Associate Professor, IITRAM, Ahmedabad</li> <li>• All the invited members were welcomed by all BoS Members.</li> <li>• All the faculty members present in the BoS-06 were welcomed by Dr. Tarak Vora.</li> </ul>		
<b>Agenda – 2</b>	<b>Appointment of Member Secretary</b>		
<b>Resolutions</b>	Prof. Amit Thoriya was appointed as member secretary for the BoS.		
<b>Agenda – 3</b>	<b>Confirmation of Minutes of Meeting and action taken report on decisions/suggestions of the previous BoS.</b>		
<b>Resolutions</b>	The minutes of previous meeting no. 05 held on 04/05/2020 were already circulated to all members. Since there was no comment from any member, the chairman requested to accept the minutes. Dr. B. J. Shah proposed the minutes to be accepted. Dr. S. V. Deo gave acceptance subsequently. The minutes were then accepted.		
<b>Agenda – 4</b>	<b>Review of Civil Engineering Department for Academic Year 2020-21</b>		
<b>Resolutions</b>	<ul style="list-style-type: none"> <li>• Dr. Tarak Vora gave a brief presentation on various activities related to academics, student development, faculty development, research and consultancy done by the department during A. Y. 2020-21.</li> <li>• The teaching &amp; learning process adopted in online mode during the pandemic is appreciated by reviewing syllabus coverage and student feedback.</li> </ul>		



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<b>Agenda – 5</b>	<b>Teaching Scheme of B. Tech. in Civil Engineering and detailed syllabus of Sem-I &amp; Sem-II.</b>																																		
<b>Resolutions</b>	<ul style="list-style-type: none"> <li>Semester – I and Semester – II teaching schemes are redesigned as per revised AICTE guidelines. Total credit offered to the students is 160 in place of 183 as per previous teaching scheme.</li> <li>Number of Program Elective Courses and Open Elective Courses are increased to give more liberty to students to gain knowledge as per their choice.</li> <li>Either project or field/industry training is to be given in final semester.</li> <li>NCC is introduced with teaching scheme of 1 hour theory and 2 hours laboratory for 2 credit course in Semester – I and Semester – II.</li> <li>The student who opt for NCC will be given exemption from below mentioned courses. <ul style="list-style-type: none"> <li>Value Education – Semester – I</li> <li>Indian Constitution – Semester – I</li> <li>Physical Education/Sports/Yoga - Semester – I</li> <li>Professional Ethics – Semester – II</li> </ul> </li> </ul> <table border="1" data-bbox="496 1122 1286 1883"> <thead> <tr> <th>Subject Code</th> <th>Subject Title</th> </tr> </thead> <tbody> <tr><td>01MA2101</td><td>Differential and Integral Calculus</td></tr> <tr><td>01CI1101</td><td>Elements of Civil Engineering</td></tr> <tr><td>01ME1101</td><td>Elements of Mechanical Engineering</td></tr> <tr><td>01GS2101</td><td>Engineering Physics</td></tr> <tr><td>01SL0102/ 01SL0103</td><td>Reading writing for Technology/ Speaking &amp; Presentation Skills</td></tr> <tr><td>01EN1101</td><td>Basics of Environmental Studies</td></tr> <tr><td>01CR1103</td><td>Value Education</td></tr> <tr><td>01GS0103</td><td>Indian Constitution</td></tr> <tr><td>01AU0101</td><td>NCC-1</td></tr> <tr><td>01MA0103</td><td>Matrix Algebra and Vector Space</td></tr> <tr><td>01CE1101</td><td>Computer Programming</td></tr> <tr><td>01ME1102</td><td>Engineering Graphics</td></tr> <tr><td>01EE1101</td><td>Basics of Electrical &amp; Electronics Engineering</td></tr> <tr><td>01ME1104</td><td>Workshop</td></tr> <tr><td>01PY0101</td><td>Physical Education/Sports/Yoga</td></tr> <tr><td>01AU0102</td><td>NCC-2</td></tr> </tbody> </table>	Subject Code	Subject Title	01MA2101	Differential and Integral Calculus	01CI1101	Elements of Civil Engineering	01ME1101	Elements of Mechanical Engineering	01GS2101	Engineering Physics	01SL0102/ 01SL0103	Reading writing for Technology/ Speaking & Presentation Skills	01EN1101	Basics of Environmental Studies	01CR1103	Value Education	01GS0103	Indian Constitution	01AU0101	NCC-1	01MA0103	Matrix Algebra and Vector Space	01CE1101	Computer Programming	01ME1102	Engineering Graphics	01EE1101	Basics of Electrical & Electronics Engineering	01ME1104	Workshop	01PY0101	Physical Education/Sports/Yoga	01AU0102	NCC-2
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<b>Agenda – 6</b>	<b>Teaching Scheme of M. Tech. Civil Engineering (Structural Engineering) and detailed syllabus of Sem-I &amp; Sem-II.</b>																																														
<b>Resolutions</b>	<ul style="list-style-type: none"> <li>• Semester – I and Semester – II teaching schemes are redesigned as per revised AICTE guidelines.</li> <li>• Total course credits for Civil Engineering Course to be revised to 68 credits as per the guidelines provided by AICTE.</li> <li>• Number of Program Elective Courses and Open Elective Courses are increased to give more liberty to students to gain knowledge as per their choice.</li> </ul> <table border="1" data-bbox="443 667 1342 1722"> <thead> <tr> <th>Subject Code</th> <th>Subject Title</th> </tr> </thead> <tbody> <tr><td>01ST2101</td><td>Advanced Concrete Design</td></tr> <tr><td>01ST1102</td><td>Advanced Structural Analysis</td></tr> <tr><td>01ST1106</td><td>Computer Application in Structural Engineering-I</td></tr> <tr><td>01ST1107</td><td>Material Testing Lab</td></tr> <tr><td>01ST1108</td><td>Application of Numerical &amp; Statistical Methods in Structural Engineering</td></tr> <tr><td>01ST1109</td><td>Optimization Techniques</td></tr> <tr><td>01ST1110</td><td>Advanced Solid Mechanics</td></tr> <tr><td>01ST1111</td><td>Design of Prestressed Concrete Structures</td></tr> <tr><td>01ST1112</td><td>Design of Masonry Structures</td></tr> <tr><td>01ST1113</td><td>Design of Bridge</td></tr> <tr><td>01ST1201</td><td>Advanced Steel Design</td></tr> <tr><td>01ST2202</td><td>Structural Dynamics</td></tr> <tr><td>01ST1207</td><td>Computer Application in Structural Engineering-II</td></tr> <tr><td>01ST1208</td><td>Experimental Techniques in Structural Engineering</td></tr> <tr><td>01ST1209</td><td>Design of Tall Structures</td></tr> <tr><td>01ST1210</td><td>Blast Resistant Design of Structure</td></tr> <tr><td>01ST1211</td><td>Advanced Design of Foundation</td></tr> <tr><td>01ST1212</td><td>Structural Health Monitoring &amp; Retrofitting of Structures</td></tr> <tr><td>01ST1213</td><td>Design of Offshore Structures</td></tr> <tr><td>01ST1214</td><td>Design of Fiber Reinforced Composite Structures</td></tr> <tr><td>01ST1215</td><td>Design of Industrial Structures</td></tr> <tr><td>01SL1210</td><td>Research Methodology &amp; IPR</td></tr> </tbody> </table>	Subject Code	Subject Title	01ST2101	Advanced Concrete Design	01ST1102	Advanced Structural Analysis	01ST1106	Computer Application in Structural Engineering-I	01ST1107	Material Testing Lab	01ST1108	Application of Numerical & Statistical Methods in Structural Engineering	01ST1109	Optimization Techniques	01ST1110	Advanced Solid Mechanics	01ST1111	Design of Prestressed Concrete Structures	01ST1112	Design of Masonry Structures	01ST1113	Design of Bridge	01ST1201	Advanced Steel Design	01ST2202	Structural Dynamics	01ST1207	Computer Application in Structural Engineering-II	01ST1208	Experimental Techniques in Structural Engineering	01ST1209	Design of Tall Structures	01ST1210	Blast Resistant Design of Structure	01ST1211	Advanced Design of Foundation	01ST1212	Structural Health Monitoring & Retrofitting of Structures	01ST1213	Design of Offshore Structures	01ST1214	Design of Fiber Reinforced Composite Structures	01ST1215	Design of Industrial Structures	01SL1210	Research Methodology & IPR
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<b>Resolutions</b>	<ul style="list-style-type: none"> <li>Semester – I and Semester – II teaching schemes are redesigned as per revised AICTE guidelines.</li> <li>Total course credits for Civil Engineering Course to be revised to around 68 credits as per the guidelines provided by UGC/AICTE.</li> <li>Number of Program Elective Courses and Open Elective Courses are increased to give more liberty to students to gain knowledge as per their choice.</li> </ul>																																												

	Subject Code	Subject Title	
	01GT1102	Advanced Soil Mechanics	
	01GT1103	Advanced Foundation Engineering	
	01GT1107	Lab - I (Soil Mechanics)	
	01GT1108	Lab - II ( Highway Material Testing)	
	01GT2104	Application of Numerical & Statistical Methods in Geotechnical Engineering	
	01GT0109	Critical Soil Mechanics	
	01GT0110	Unsaturated Soil Mechanics	
	01GT1105	Pavement Engineering	
	01GT1106	Rock Mechanics	
	01GT0111	Offshore Geotechnical Engineering	
	01GT1201	Ground Improvement Technique	
	01GT1202	Soil Dynamics & Earthquake engineering	
	01GT0207	lab - III ( Sub Surface Investigation)	
	01GT0208	lab - IV (Computer Application in Geotechnical Engineering)	
	01SL1210	Research methodology and IPR	
	01GT1206	Earth & Rockfill dams	
	01GT0209	Earth Retaining Structures	
	01GT0210	Subsurface Investigation and Instrumentation	
	01GT1204	Geosynthetics and Its Application	
	01GT0211	Forensic Geotechnical Engineering	
Agenda – 9	Discussion and approval of minor changes in syllabus of various courses of UG & PG.		
	<ul style="list-style-type: none"> <li>Reframing of syllabus of Mathematics is done and it is proposed in four parts upto 4<sup>th</sup> semester.</li> <li>Revision in syllabus of 01CI0101–Elements of Civil Engineering is approved.</li> </ul>		
	Subject Code	Subject Title	Remarks
	01CI1101	Elements of Civil Engineering	Brief introduction of the development of smart cities and construction projects added in module - 1.
	01MA2101	Differential and Integral Calculus	Vector differential calculus and Vector Integral





		calculus are changed from semester 2 to semester 1.
01MA0103	Matrix Algebra and Vector Space	Vector calculus and the Application of linear algebra using MATLAB are added in course.
<b>M.Tech Civil Engineering (Structural Engineering)</b>		
Subject Code	Subject Title	Remarks
01ST1102	Advanced Structural Analysis	Numerical Integration and formation of stiffness matrix for local and global axis are added in content.
01ST1107	Material Testing Lab	List of experiments are added in course
01ST1108	Application of Numerical & Statistical Methods in Structural Engineering	Finite difference method , probability and distribution and solution of ordinary differential equation are added in course content
01ST1109	Optimization Techniques	Optimization technique Structural engineering application is added in the content.
01ST1110	Advanced Solid Mechanics	Few topics related to stress-strain analysis and theory of elasticity application are added.
01ST1201	Advanced Steel Design	Design of hollow steel section and pre-engineered building are added.
01ST1203	Design of Tall Structures	Use of commercially available software added.
01ST1212	Structural Health Monitoring & Retrofitting of Structures	Structural Assessment and Retrofitting are added.
01SL1210	Research Methodology & IPR	Research methodology and skills module is modified.

M.Tech Civil Engineering (Transportation Engineering)		
Subject Code	Subject Title	Remarks
01TR0109	Application of Numerical & Statistical Methods in Geotechnical Engineering	Finite difference method, probability and distribution are added in course content
01SL1210	Research Methodology & IPR	Research methodology and skills module is modified.
M.Tech Civil Engineering (Geotechnical Engineering)		
Subject Code	Subject Title	Remarks
01GT1103	Advanced Foundation Engineering	Design of Special foundations has been removed
01GT2104	Application of Numerical & Statistical Methods in Geotechnical Engineering	Registration and statistical data analysis has been introduced.
01GT1105	Rock Mechanics	Stress-strain relationship of the Rock has been introduced along with RMR rating.
01GT1202	Soil Dynamics & Earthquake engineering	Dynamic properties of soil and analysis of SDOF system was introduced.
01GT1206	Earth & Rockfill dams	Graphical method of earthfill dam was introduced
01GT1204	Geosynthetics and Its Application	Experimentations on Geosynthetics has been introduced.
01SL1210	Research Methodology & IPR	Research methodology and skills module is modified.
Agenda – 10	Discussion and approval of proposed open elective courses	
	<ul style="list-style-type: none"> <li>Each department will be offering one open elective subject as per need of industry/society which can be opted by the student of other department only.</li> </ul>	

	<ul style="list-style-type: none"> <li>For B.Tech Civil Engineering, As proposed in the teaching scheme, student have to opt any two such open elective subjects and have to complete within 3<sup>rd</sup> to 6<sup>th</sup> semester. Students are given choice to select any subject offered from any department from the university other than its own department.</li> <li>For M.Tech Civil Engineering, student have to choose 2 audit course and one open elective subjects within 1<sup>st</sup> to 4<sup>th</sup> semester.</li> </ul>												
Agenda – 11	Discussion and approval of proposed value-added courses												
	<ul style="list-style-type: none"> <li>Learning and Development department would be offering SPT and SIG programs designed for the overall development of the student.</li> <li>Software training on ETABS to be done with collaboration with CADD Center, Rajkot to the students.</li> <li>Software training on Civil 3D is done with collaboration with CADD Center, Rajkot to the students.</li> <li>Onsite training on Field Testing in Geotechnical Engineering to be given to students.</li> </ul>												
Agenda – 12	Discussion and approval for inclusion of new MOOC courses proposed by the faculty.												
	<p>Two MOOC courses from COURSERA are proposed to the students of 4<sup>th</sup> and 6<sup>th</sup> semester. Syllabus of the course is mapped with the content of the MOOC course. Learning of the content shall be done through MOOC and evaluation will be done by the subject faculty.</p> <table border="1"> <thead> <tr> <th>Semester</th> <th>Subject code-Name</th> <th>MOOC Course Title</th> <th>Content mapped (%)</th> </tr> </thead> <tbody> <tr> <td>4</td> <td>Creativity &amp; Problem Solving</td> <td>Innovation through design: Think, Make, break and repeat</td> <td>20%</td> </tr> <tr> <td>6</td> <td>Energy Science &amp; Engineering</td> <td>Renewable energy technology fundamentals</td> <td>20%</td> </tr> </tbody> </table>	Semester	Subject code-Name	MOOC Course Title	Content mapped (%)	4	Creativity & Problem Solving	Innovation through design: Think, Make, break and repeat	20%	6	Energy Science & Engineering	Renewable energy technology fundamentals	20%
Semester	Subject code-Name	MOOC Course Title	Content mapped (%)										
4	Creativity & Problem Solving	Innovation through design: Think, Make, break and repeat	20%										
6	Energy Science & Engineering	Renewable energy technology fundamentals	20%										

<b>Agenda – 13</b>	Discussion on feedback received from students, faculties, parents, alumni and employers regarding teaching learning process in order to review and design the syllabus.
<b>Resolutions</b>	Teaching scheme proposed in A.Y. 2016-17 and revised Teaching Scheme to be proposed in A.Y. 2021-22 have been discussed with the stakeholders of the department including student/faculty/employee/alumni/parents and necessary inputs are collected from them for academic improvisation.
<b>Agenda – 14</b>	Any other matter with permission of the Chair.
	<p><b>CO-PO attainment was discussed in detail with expert by the chair. As a result of discussion, it is proposed to float detailed rubrics for the evaluation covering students of all the levels.</b></p> <p>Then, the forum was kept open for the discussion and suggestion. Following highlights were discussed/appreciated by the members.</p> <ul style="list-style-type: none"> <li>• The teaching scheme should allow multiple entry and exit, like after third year students may get Diploma by default.</li> <li>• Credit transfer/exchange facility should be given.</li> <li>• Additional options to earn extra credit in form of honors in degree can be offered to meritorious students.</li> <li>• Additional option to earn minor degrees can be given to meritorious students.</li> <li>• Practical assignment shall be given to the students so that the gap as per industry requirement can be filled.</li> <li>• Introduction of NCC/NSS as a course in curriculum is appreciated.</li> </ul>
<p>Note: Meeting was scheduled virtually on Google Meet and physically at MB050-Departmental library.</p>	
<p><b>Meeting Attended By: External Experts</b></p> <ol style="list-style-type: none"> <li>1. Dr. B. J. Shah</li> <li>2. Dr. S. V. Deo</li> <li>3. Dr. A. K. Verma</li> <li>4. Dr. Yogesh Shah</li> </ol> <p><b>Meeting Attended By: Industry Expert</b></p> <ol style="list-style-type: none"> <li>1. Er. Jayant Lakhani</li> </ol> <p><b>Meeting Attended By: Alumni Member</b></p> <ol style="list-style-type: none"> <li>1. Er. Harsh Sanghvi</li> </ol>	<p><b>Meeting Attended By: Marwadi University</b></p> <ol style="list-style-type: none"> <li>1. Dr. Tarak Vora</li> <li>2. Dr. Ankur Bhogayata</li> <li>3. Dr. Siddharth Shah</li> </ol>



Sr. No	Name	Designation	Sign
1.	Dr. Tarak Vora	Chairman – BoS Committee HoD	
2.	Dr. Ankur Bhogayata	Member – BoS Asso. Prof.	
3.	Prof. Amit Thoriya	Member – BoS Assi. Prof.	Present - Online
4.	Dr. B. J. Shah	Member – BoS External Member	Present - Online
5.	Dr. Shirish V. Deo	Member – BoS External Member	Present - Online
6.	Er. Mandeep Shah	Member – BoS Industrial Member	Absent
7.	Er. Harsh Sanghvi	Member – BoS Alumni Member	Present - Online
8.	Dr. Siddharth Shah	Invitee Professor	Present - Online
9.	Dr. A. K. Varma	Invitee External Member (Geotechnical Engineering)	Present - Online
10.	Dr. Yogesh Shah	Invitee External Member (Transportation Engineering)	Present - Online
11.	Mr. Jayant Lakhalani	Invitee Industrial Member	Present - Online

B. Tech Automobile Engineering  
Faculty of Technology  
Marwadi University

**1.1.2 Board of Studies meeting minutes**

(Program revision)



**Faculty of Liberal Studies**

**Second Board of Studies Meeting in Bachelor of Business Administration  
(BOS- BBA)**

**Minutes**

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**Chaired by:** Dr. Sunil Kumar Jakhoria, Professor & Dean, Faculty of Liberal Studies  
**Date:** 10th August' 2017  
**Time:** 3:25 PM - 6:40 PM  
**Venue:** BOARD ROOM-3<sup>rd</sup> Floor

*The attendees:*

The following members attended the meeting:

Dr. Sunil Kumar Jakhoria,  
Professor & Dean, Faculty of Business Management and Faculty of Liberal Studies

Dr. Sanjay Bhayani,  
Professor, Department of Business Management, Saurashtra University, Rajkot.

Dr. Hitesh Shukla,  
Professor, Deptt. of Business Management, Saurashtra University, Rajkot.

Dr. Suneet Saxena,  
Professor, Faculty of Management Studies

Dr. M. Srinivas Rao,  
Professor, Faculty of Management Studies

Dr. Kapil Shrimal,  
Assistant Professor, FOLS and Program Coordinator B. Com & BBA(FM)

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Prof. Paras Rughani,  
Assistant Professor and Program Coordinator BBA(H)

Prof. Amar Vijay Gandhi,  
Assistant Professor and Program Coordinator BBA.

Dr. Monica Verma,  
Assistant Professor and Member Secretary BoS

**Agenda for discussion and approval:**

***Item No. BOS/02/01: To confirm the minutes of 1st meeting of BOS held on 13.08.2016.***

The minutes of 1st BOS meeting held on 13.08.2016 were reviewed and confirmed as there were no comments from members.

***Item No. BOS/02/02: To report the action taken, where necessary, on the various decisions taken by the BOS in its 1st meeting held on 13.08.2016***

The Board noted the action taken, where necessary, on the various decisions taken in its 1st meeting held on 13.08.2016. The Board also expressed its satisfaction on the action taken report on the various decisions taken in its 1st meeting held on 13.08.2016.

***Item No. BOS/02/03: a) To consider and approve Introduction of New Programme Bachelor of Business Administration in Financial Markets  
b) To consider and approve programme structure, teaching and evaluation scheme, and credit distribution.  
c) To consider and approve syllabus of 1<sup>st</sup> year i.e. semester -1 & 2***

Based on the feedback received from the students, industry and alumni the Programme Assessment Committee (PAC) approved and recommended the introduction of 3year **Bachelor of Business Administration in Financial Markets [BBA(FM)]**. The programme details were presented to the board members for their suggestions and approval.





**Conclusion:**

The board reviewed and discussed the programme structure, teaching and evaluation scheme, and the syllabi of semester 1 and 2. The members suggested developing a similar course for the post graduate level. The board approved the introduction of the new programme **Bachelor of Business Administration in Financial Markets**. It was resolved as under:

**“Resolved that the new program titled “Bachelor of Business Administration in Financial Markets”, with 3years duration, intake of 60 students and to be introduced from academic year 2017- 18 stands approved and is recommended for presentation to the Academic Council.**

Programme details are provided in- Annexure-1(a); Programme structure, teaching and evaluation scheme, and credit distribution- Annexure-1(b) and Syllabus of 1<sup>st</sup> year i.e., semester -1 & semester- II - Annexure-1(c)

**Item No. BOS/02/04: Bachelor of Business Administration (Honours) - Approval of syllabus for 2<sup>nd</sup> year i.e., semester III & IV for the batch of 2016-19 and 2017-20**

BBA(H) programme was introduced in the academic year 2016-2017. The Curricula, Syllabi and Scheme of examination for the introduction of the courses offered in Semesters III and IV for the candidates admitted in the BBA(H) Programme during the academic year 2016-2017 was presented to the board members for deliberation and approval.

**Conclusion:**

The syllabi of semester III and IV were discussed and **approved**. The same to be implemented for academic year 2017- 18. It was resolved as under:

**“Resolved that all the syllabi for each course stands approved and are recommended for presentation to the Academic Council. Annexure -2**

**Item No. BOS/02/05: Bachelor of Business Administration - Approval of syllabus for 2<sup>nd</sup> year i.e., semester III & IV for the batch of 2016-19 and 2017-20**

BBA programme was introduced in the academic year 2016-2017. The Curricula, Syllabi and Scheme of examination for the introduction of the courses offered in Semesters III and IV for the candidates

admitted in the BBA Programme during the academic year 2016-2017 was presented to the board members for deliberation and approval.

**Conclusion:**

The syllabi of semester III and IV were discussed and **approved**. The same to be implemented for academic year 2017- 18 . It was resolved as under:

**“Resolved that all the syllabi for each course stands approved and are recommended for presentation to the Academic Council. Annexure -3**

**Item No. BOS/02/06: : Bachelor of Business Administration (Honors) (2017-20)**

**a) Approval of revision in course structure of 1<sup>st</sup> Year i.e., Semester I & II.**

**b) Approval of 1<sup>st</sup> Year syllabus after changes i.e., semester I & II**

The revision in 1<sup>st</sup> year curricula, Syllabi and Scheme of examinations for the candidates admitted in the BBA(H) Programme during the academic year 2017-2018 presented to the members for discussion and approval. The details of the same are as follows:

**Revision in Programme structure of 1<sup>st</sup> Year i.e. Semester I & II**

for the candidates admitted in the BBA(H) Programme during the academic year 2017-2018

**Comparative**

Old/Existing			New/ Revised		
Subject Code	Subject Name	Credits	Subject Code	Subject Name	Credits
<b>Semester I</b>					
04LS0101	Communication Skills-I*	4	04LS1102	Principles of Management	4
04LS0102	Principles of Management	4	04LS1103	Micro Economics	4
04LS0103	Micro Economics	4	04LS1104	Business Organizations & Structures	4
04LS0104	Business Organizations & Structures	4	04LS1105	Fundamentals of Accounting	4
04LS0105	Fundamentals of Accounting	4	04CR0101	Career Readiness Programme**	2
<b>Electives</b>		4	04BH0101	Tally ERP 9.0**	4



04LS0106	Business Mathematics	4	04BB0106	Mathematics for Business	4
04LS0107	Computer Essentials	4	04LS1107	Computer Essentials	4
			04SL0102	Reading and Writing for Business***	2
			04SL0103	Speaking and Presentation Skills***	2
<b>Semester II</b>					
04LS0201	Communication Skills-II*	4	04LS1202	Cost Accounting	4
04LS0202	Cost Accounting	4	04LS1203	Macro Economics	4
04LS0203	Macro Economics	4	04LS1204	Organizational Behaviour	4
04LS0204	Organizational Behaviour	4	04LS0205	Statistics in Business	4
04LS0205	Statistics in Business	4	04LS1206	E-Commerce	4
04LS0206	E-Commerce	4	04LS0212	Applications of Spreadsheet***	2
04LS0210	Career Readiness Programme **	2	04BH0201	Corporate Communication & Etiquette***	2
04LS0211	Tally ERP 9**	4	04SL0152	English for Workplace***	2
			04SL0153	English through Films***	2

Note:

1. \* Courses discontinued
2. \*\* shifted to semester I
3. \*\*\* courses introduced

### Introduction of New Courses

Reason for Introduction of New Courses — Batch: 2017-2019

Course Name	Feedback from stakeholders	Rational	Action to be taken
Reading and Writing for Business (RWB)	Recommendation from the Communication Department of the University.	To make learning of English easy and interesting. Give scholars coming from varied background to learn English the way it suits them and focus on what they lack. For eg., a student already has good written English but is not good in	RWB & SPS to be offered as elective course in semester-I
Speaking and Presentation Skills (SPS)			EW & ETF to be offered as elective course in semester-II
English for Workplace (EW)			
English through Films (ETF)			

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		presentation then such a student can opt for course of SPS rather than RWB.	
Applications of Spreadsheet	Suggestion from Programme coordinator	Most of the job openings require spreadsheet and word-processing software skills. Knowledge of excel will help Organize data in an easy-to-navigate way, Do basic and complex mathematical functions, Analyze data and make forecasting predictions and many more things	To be offered as core course in semester-II
Corporate Communication & Etiquette	Suggestion from Programme coordinator	Corporate Communication & etiquette training is useful for teaching graduates to act in ways that will create a positive public image and help build a company's brand. It gives confidence too.	To be offered as Value added course in semester-II

Details of the new courses introduced:

Name of the Programme	Name of the Course	Semester	Batch	Year of Introduction
BBA(Hons)	Reading and Writing for Business	I	2017-20	2017-18
	Speaking and Presentation Skills	I	2017-20	2017-18

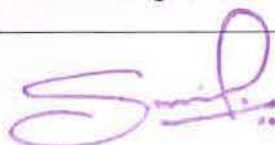


	English for Workplace	II	2017-20	2017-18
	English through Films	II	2017-20	2017-18
	Applications of Spreadsheet	II	2017-20	2017-18
	Corporate Communication & Etiquette	II	2017-20	2017-18

### Revision in the syllabus of the course

Reason for Revision

Course Name	Feedback from stakeholders	Rational	Action to be taken
Principles of Management	The subject faculty was of opinion that the existing course is covering topics already read by the student in 12 <sup>th</sup> std. and there are no advance level topics.	Will help student to learn over and above the knowledge he/she already has.	Principles of Management course revised
Micro Economics	Faculty felt the need to add few topics that were not there	Essential to be known at the UG level.	Micro Economics course revised
Business Organizations & Structures	Faculty feedback. The course was too basic and need was felt to add topics giving students knowledge of contemporary business organizations	Important to understand the changed and new for of business organizations.	Business Organizations & Structures course revised
Fundamentals of Accounting	Faculty feedback to make the course content relevant to the BBA programme	Student of business administration need to acquire different set of knowledge when compared to commerce graduate.	Fundamentals of Accounting course revised



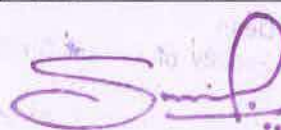


Computer Essentials	Faculty feedback to remove theoretical component and add more of MS office.	Impart greater skills that help in employability	Computer Essentials course revised
Cost Accounting	Faculty feedback to make the course content relevant to the BBA programme. And the course was too lengthy to be completed in allotted time.	Student of business administration need to acquire different set of knowledge when compared to commerce graduate.	Cost Accounting course revised
Macro Economics	Faculty felt the need to add few topics that were not there.	Essential to be known at the UG level.	Macro Economics course revised
Organizational Behaviour	Faculty feedback to incorporate topics relevant at UG level	differentiate it from the PG course	Organizational Behaviour course revised
E-Commerce	Faculty feedback to remove theoretical component.	Impart greater skills that help in employability	E-Commerce course revised

### Revision & shifting from one semester to other

Reason for Shifting & Revision

Course Name	Feedback from stakeholders	Rational	Action to be taken
Career Readiness Programme	Proposed by programme coordinator and reviewed in the PAC meeting	Shifting of the course is required for the program structure.	Career Readiness Programme course revised and shifted.
Tally ERP 9.0	Proposed by programme coordinator and reviewed in the PAC meeting	Shifting of the course is required so the students while learning basic accounting can apply it in	Tally ERP 9.0 shifted without any revision.



		computerized form.	
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#### Details of the courses shifted

Course Name	Semester		Batch	Year of Introduction
	From	To		
Career Readiness Programme	II	I	2017-20	2017-18
Tally ERP 9.0	II	I	2017-20	2017-18

#### Courses Discontinued

Course Name	Feedback from stakeholders	Rational	Action to be taken
Discontinue course on Communication Skills in semester 1 & 2	PAC	To incorporate courses- Reading and Writing for Business, Speaking and Presentation Skills, English for Workplace and English through Films in the programme structure.	Discontinue from batch of 2017-20.

#### Conclusion:

The board deliberated on the proposal. The introduction of courses designed to make learning of English effective -Reading and Writing for Business, Speaking and Presentation Skills, English for Workplace and English through Films. Similarly, the inclusion of courses like Tally ERP 9.0, Applications of Spreadsheet, Corporate Communication & Etiquette, Fundamentals of Digital Marketing etc., were applauded as the members felt that the programme catered to the current market needs and offer industry specific skills accordingly it was resolved as under:

**"Resolved that all the revision in course structure of 1<sup>st</sup> Year BBA(H) programme, courses, syllabi and teaching and evaluation scheme for each course stands approved and is recommended for presentation to the Academic Council."**

(Annexure 4- Approved syllabi of 1<sup>st</sup> Year i.e., semester I, &II)





Item No. BOS/02/07: Bachelor of Business Administration (2017-20)

- a) Approval of revision in course structure of 1<sup>st</sup> Year i.e., Semester I & II.  
 b) Approval of 1<sup>st</sup> Year syllabus after changes i.e., semester I & II

The revision in 1<sup>st</sup> year curricula, Syllabi and Scheme of examinations for the candidates admitted in the BBA Programme during the academic year 2017-2018 presented to the members for discussion and approval.

**Revision in course structure of 1<sup>st</sup> Year i.e., Semester I & II**

for the candidates admitted in the BBA Programme during the academic year 2017-2018

**Comparative**

Old/Existing			New/ Revised		
Subject Code	Subject Name	Credits	Subject Code	Subject Name	Credits
<b>Semester I</b>					
04LS0101	Communication Skills-I*	4	04LS1102	Principles of Management	4
04LS0102	Principles of Management	4	04LS1103	Micro Economics	4
04LS0103	Micro Economics	4	04LS1104	Business Organizations & Structures	4
04LS0104	Business Organizations & Structures	4	04LS1105	Fundamentals of Accounting	4
04LS0105	Fundamentals of Accounting	4	04CR0101	Career Readiness Programme**	2
<b>Electives</b>					
04LS0106	Business Mathematics	4	04BB0106	Mathematics for Business	4
04LS0107	Computer Essentials	4	04LS1107	Computer Essentials	4
			04SL0102	Reading and Writing for Business***	2
			04SL0103	Speaking and Presentation Skills***	2
<b>Semester II</b>					
04LS0201	Communication Skills-II*	4	04LS1202	Cost Accounting	4

04LS0202	Cost Accounting	4	04LS1203	Macro Economics	4
04LS0203	Macro Economics	4	04LS1204	Organizational Behaviour	4
04LS0204	Organizational Behaviour	4	04LS0205	Statistics in Business	4
04LS0205	Statistics in Business	4	04LS1206	E-Commerce	4
04LS0206	E-Commerce	4	04LS0212	Applications of Spreadsheet***	2
04LS0210	Career Readiness Programme **	2			
		4	04SL0152	English for Workplace***	2
			04SL0153	English through Films***	2

Note:

1. \* courses discontinued
2. \*\* shifted to semester I
3. \*\*\* courses introduced

### Introduction of New Courses

Reason for Introduction of New Courses — Batch: 2017-2019

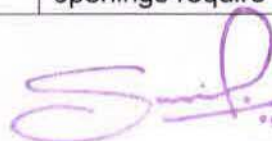
Course Name	Feedback from stakeholders	Rational	Action to be taken
Reading and Writing for Business (RWB)	Recommendation from the Communication Department of the university.	To make learning of English easy and interesting. Give scholars coming from varied background to learn English the way it suits them and focus on what they lack. For eg., a student already has good written English but is not good in presentation then such a student can opt for course of SPS rather than RWB.	RWB & SPS to be offered as elective course in semester-I
Speaking and Presentation Skills (SPS)			EW & ETF to be offered as elective course in semester-II
English for Workplace (EW)			
English through Films (ETF)			
Applications of Spreadsheet	Suggestion from	Most of the job openings require	To be offered as core course in

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	Programme coordinator	spreadsheet and word-processing software skills. Knowledge of excel will help Organize data in an easy-to-navigate way, Do basic <b>and</b> complex mathematical functions, Analyze data and make forecasting predictions and many more things	semester-II
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Details of the new courses introduced:

Name of the Programme	Name of the Course	Semester	Batch	Year of Introduction
BBA	Reading and Writing for Business	I	2017-20	2017-18
	Speaking and Presentation Skills	I	2017-20	2017-18
	English for Workplace	II	2017-20	2017-18
	English through Films	II	2017-20	2017-18
	Applications of Spreadsheet	II	2017-20	2017-18

### Revision in the syllabus of the course

Reason for Revision

Course Name	Feedback from stakeholders	Rational	Action to be taken

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Principles of Management	The faculty as it was opined that the existing course is covering topics already read by the student in 12 <sup>th</sup> . there are no advance level topics.	Will help student to learn over and above the knowledge he/she already has.	Principles of Management course revised
Micro Economics	Faculty felt the need to add few topics that were not there	Essential to be known at the UG level.	Micro Economics course revised
Business Organizations & Structures	Faculty feedback. The course was too basic and need was felt to add topics giving students knowledge of contemporary business organizations	Important to understand the changed and new for of business organizations.	Business Organizations & Structures course revised
Fundamentals of Accounting	Faculty feedback to make the course content relevant to the BBA programme	Student of business administration need to acquite different set of knowledge when compared to commerce graduate.	Fundamentals of Accounting course revised
Computer Essentials	Faculty feedback to remove theoretical component and add more of MS office.	Impart greater skills that help in employability	Computer Essentials course revised
Cost Accounting	Faculty feedback to make the course content relevant to the BBA programme. And the course was too lengthy to be completed in allotted time.	Student of business administration need to acquire different set of knowledge when compared to commerce graduate.	Cost Accounting course revised
Macro Economics	Faculty felt the need to add few topics that were not there.	Essential to be known at the UG level.	Macro Economics course revised
Organizational Behaviour	Faculty feedback to	differentiate it from	Organizational

	incorporate topics relevant at UG level	the PG course	Behaviour course revised
E-Commerce	Faculty feedback to remove theoretical component.	Impart greater skills that help in employability	E-Commerce course revised

### Revision & shifting from one semester to other

Reason for Shifting & Revision

Course Name	Feedback from stakeholders	Rational	Action to be taken
Career Readiness Programme	As reviewed in the Department meeting	Shifting of the course is required for the program structure.	Career Readiness Programme course revised and shifted.

Details of the courses shifted

Course Name	Semester		Batch	Year of Introduction
	From	To		
Career Readiness Programme	II	I	2017-20	2017-18

### Courses Discontinued

Course Name	Feedback from stakeholders	Rational	Action to be taken
Discontinue course on Communication Skills in semester 1 & 2	PAC	To incorporate courses- Reading and Writing for Business, Speaking and Presentation Skills, English for Workplace and English through Films in the programme structure.	Discontinue from batch of 2017-20.





**Conclusion:**

The board deliberated on the proposal.

The Members reviewed the periodical updation of the course syllabi that offer industry specific skills. The introduction of courses designed to make learning of English effective -Reading and Writing for Business, Speaking and Presentation Skills, English for Workplace and English through Films. Similarly, the inclusion of course Applications of Spreadsheet, Fundamentals of Digital Marketing, etc., were applauded as the members felt that the programme catered to the current market needs and accordingly it was resolved as under:

**“Resolved that all the revision in course structure of 1<sup>st</sup> Year BBA courses, syllabi and teaching and evaluation scheme for each course stands approved and is recommended for presentation to the Academic Council.”**

(Annexure 5- Approved syllabi of 1<sup>st</sup> Year i.e., semester I, &II)

**Item No. BOS/02/08: Non-Credit courses in addition to the courses included in the Programme Structure of BBA, BBA(Hons) and BBA(FM).**

The Board was informed that based on the feedback from the industry experts, the PAC proposed certification courses which a student has to complete in addition to the regular courses included in the programme structure of BBA, BBA(H) and BBA(FM). These courses are incorporated to enhance the skills and abilities of the scholars. These courses are applicable from the batch of 2016 -19 for BBA and BBA(H) Following courses were proposed:

- |                             |              |
|-----------------------------|--------------|
| a) Corporate Etiquettes     | Semester III |
| b) Corporate Correspondence | Semester IV  |
| c) Personal Finance         | Semester V   |
| d) SPSS                     | Semester VI  |

The board reviewed the proposed courses and after due deliberation approved the same and resolved:

**“Resolved that all the four course titles and the syllabi stand approved and is recommended for presentation to the Academic Council.”**

Annexure 6

**Item No. BOS/02/09: To consider and approve PEO, PO and PSO of Bachelor of Business Administration (BBA), Bachelor of Business Administration**



**(Honours) (BBA(H)) and Bachelor of Business Administration  
(Financial Markets) (BBA(FM)).**

The Proposed Programme Educational Objectives, Programme Outcomes and Programme Specific outcomes were presented before the board. The members were informed that the feedback from the industry, faculty and students was taken before finalizing the PEOs, POs and PSOs for BBA, BBA(H) and BBA(FM). The same are presented as below:

**PROGRAM EDUCATIONAL OBJECTIVES (PEOs)**

PEO 1: To provide knowledge in the management discipline with an understanding of its applicability in business decision-making for positive social impact.

PEO 2: To comprehend the challenges and opportunities of leading and working in inclusive and diverse teams and environments.

PEO 3: To be able to identify, analyze and recommend appropriate actions given international influences, issues, and situations at the industry, business, and individual levels

PEO 4: To demonstrate an understanding and appreciation of ethical principles at both the personal and professional levels.

PEO 5: To engage in life-long learning through research adopting contemporary modes of learning.

**PROGRAM LEARNING OUTCOMES (PLOs)**

PLO 1: To define, analyze, and devise solutions for structured and unstructured business problems and issues using cohesive and logical reasoning methods.

PLO2: To demonstrate competence in domestic and global business through the study of major disciplines within the fields of business.

PLO3: To develop an ability to function effectively as an individual and as a member or leader in diverse teams and multidisciplinary settings.

PLO4: To demonstrate comprehensive knowledge and understanding of various areas of management

PLO5: To be able to demonstrate domain-specific skills to solve critical issues of the concerned domain.

PLO6: To recognize the need for, and have the ability to engage in independent and lifelong learning.

PLO7: To train the students as efficient managers equipped with innovation, rationality, and application-oriented decision-making in the context of the ever-changing business environment.

PLO8: To understand the impact of the professional solutions in societal and environmental contexts, and demonstrate the knowledge of, and need for sustainable development.

**PROGRAM SPECIFIC OUTCOMES (PSOs)**

PSO 1: To be able to gain an understanding, of the legal, financial, marketing, production & operational activities of the business.

PSO2: To be able to demonstrate the ability to develop models/frameworks to reflect critically on a specific business context.

PSO3: To be able to apply their theoretical learnings in the business setting and achieve maximum industry exposure through live projects, internships, and workshops.

2-BOS (10-August -2017)

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Minutes

Dean  
Faculty of Liberal Studies  
Marwadi University  
Rajkot - 360003, Gujarat



The Board reviewed the proposed PEOs, Pos and PSOs and approved the same for BBA, BBA(H) and BBA(FM). And resolved:

**"Resolve that Item No.BOS/02/09 is approved (to be applicable from batch of 2016-19 for BBA and BBA(H)) and is recommended to be presented to the Academic Council" Annexure 7**

**Item No. BOS/02/10: Discussion on Programme Outcome and Course Outcome attainment**

The Board was informed that an analysis of CO attainment revealed that the targets set for the academic year 2016-17 at 40%, have been achieved.

Since the CO attainment for BBA and BBA(H) is well above the target, a revised target of 42% for CO attainment was proposed by PAC.

The Board noted the attainment levels for year 2016-17 and after due deliberations approved that CO attainment targets for year 2017-18 be set at 42%.

**Resolved to approve and recommend the same to the Academic Council.**

**Item No. BOS/02/11: Stakeholders Feedback**

The Board was informed that the new programme BBA(FM) and the Programme Structure have been framed after take in account the feedback collected by PAC from industry, academia experts, faculty, students and the alumni. The revision in the courses has also been done taking into account the feedback of the stakeholders.

The Board noted with satisfaction the suggestions received and actions taken on them.

There being no other business, the meeting ended with a vote of thanks to all present.

**(Dr. Monica Verma)**  
Member Secretary BOS.

**(Dr. Sunil Kumar Jakhoria)**  
Chairman

Dean  
Faculty of Liberal Studies  
Marwadi University  
Rajkot - 360003, Gujarat





**Faculty of Liberal Studies**

**Third Board of Studies Meeting in Bachelor of Business Administration  
(BOS- BBA)**

**Minutes**

---

**Chaired by:** Dr. Sunil Kumar Jakhoria, Professor & Dean, Faculty of Liberal Studies  
**Date:** Saturday 26th May 2018  
**Time:** 4:00 PM - 5:00 PM  
**Venue:** BOA  
RD ROOM-3<sup>rd</sup> Floor

*The attendees:*

Dr. Sunil Kumar Jakhoria, Professor & Dean, Faculty of Liberal Studies and Faculty of Business Management	Chairperson
Dr. Sanjay Bhayani, Professor, Department of Business Management, Saurashtra University, Rajkot.	Member, External Academia
Mr. Murali Prashad, Managing Director, Head Hunt HR Consultants Pvt Ltd.	Special Invitee
Dr. M.Srinivasa Rao Professor.	Special Invitee
Prof. Paras Rughani, Assistant Professor and Program Coordinator BBA(H)	Special Invitee
Dr. Alpesh Gajera Assistant Professor and Program Coordinator BBA(FM)	Special Invitee
Dr. Monica Verma, Assistant Professor and Member Secretary BoS	Member Secretary





*The leave of absence was granted to:*

Dr. Karunesh Saxena,  
Director, Faculty of Management Studies, Mohanlal Sukhadia  
University, Udaipur.

Special Invitee

Dr. Hitesh Shukala,  
Professor, Deptt. of Business Management, Saurashtra  
University, Rajkot.

Member, External  
Academia

Prof. Sunil Kumar Jakhoria, Chairman BOS and Dean, Faculty of Liberal Studies Chaired the meeting and welcomed all the members to the third BOS meeting. The Chairman further expressed special thanks to Dr. Sanjay Bhayani and Mr. Murali Prashad for sparing the time from their busy schedule to attend the meeting.

After that the agenda items were taken up and the Board decided/ recommended as under: -

**Item No.BOS/03/01: To confirm the minutes of 2nd meeting of BOS held on 10.08.2017.**

The minutes of 2<sup>nd</sup> BOS meeting held on 10.08.2017 were reviewed and confirmed as there were no comments from members.

**Item No. BOS/03/02: To report the action taken, where necessary, on the various decisions taken by the BOS in its 2nd meeting held on 10.08.2017**

The Board noted the action taken, where necessary, on the various decisions taken in its 2nd meeting held on 10.08.2017. And expressed its satisfaction on the action taken report on the various decisions taken in its 2nd meeting held on 10.08.2017.

**Item No.BOS/03/03: To consider and approve the syllabi of 3rd year i.e., semester V & VI of Bachelor of Business Administration for batch of 2016-19 and 2017-20**

The Board went through the scheme and syllabus of 3<sup>rd</sup> year i.e., semester V & VI. Their suggestions are noted as given below:

- Add Credit at the top of each syllabus
- Use curriculum in place of Syllabus and Course in place of Subject as proposed by UGC.
- Insert details regarding Elective and Specialization courses i.e., CBCS to be incorporated in all the Programmes.
- Try and incorporate learning outcome in each unit
- Bifurcate the course content into Theory and Practical.
- Add specific case studies, List of speakers, Projects, skill imparted or to be imparted.



**“Resolved that the syllabus as noted above stands approved and is recommended for presentation to the Academic Council after incorporating the changes”, Annexure 1**

**Item No.BOS/03/04: To consider and approve the syllabi of 3rd year i.e., semester V & VI of Bachelor of Business Administration (Hons) for batch of 2016-19 and 2017-20**

The Board went through the scheme and syllabus of 3<sup>rd</sup> year i.e., semester V & VI. Their suggestions are noted as given below:

- a) Add Credit at the top of each syllabus
- b) Use curriculum in place of Syllabus and Course in place of Subject as proposed by UGC.
- c) Insert details regarding Elective and Specialization courses i.e., CBCS to be incorporated in all the Programmes.
- d) Try and incorporate learning outcome in each unit
- e) Bifurcate the course content into Theory and Practical.
- f) Add specific case studies, List of speakers, Projects, skill imparted or to be imparted.
- g) Change the names of the course's social media marketing to Digital Marketing as the course name does not justify the content. and Recruitment and selection to Talent Hunt

**“Resolved that the syllabus as noted above stands approved and is recommended for presentation to the Academic Council after incorporating the changes” Annexure 2**

**Item No.BOS/03/05: To consider and approve the syllabus for 2nd year i.e., semester III & IV of Bachelor of Business Administration (Financial Markets)- (2017-20)**

The Board went through the scheme and syllabus of 2nd year i.e., semester III & IV. Their suggestions are noted as given below:

- a) Add Credit at the top of each syllabus
- b) Use curriculum in place of Syllabus and Course in place of Subject as proposed by UGC.
- c) Insert details regarding Elective and Specialization courses i.e., CBCS to be incorporated in all the Programmes.
- d) Try and incorporate learning outcome in each unit
- e) Bifurcate the course content into Theory and Practical.
- f) Add specific case studies, List of speakers, Projects, skill imparted or to be imparted.
- g) Change the names of the course's social media marketing to Digital Marketing as the course name does not justify the content. and Recruitment and selection to Talent Hunt

**“Resolved that the syllabus as noted above stands approved and is recommended for presentation to the Academic Council after incorporating the changes”. Annexure 3**





**Item No. BOS/03/06: Discussion on Programme Outcome and Course Outcome attainment**

The Board was informed that an analysis of CO attainment revealed that the targets set for the academic year 2017-18 at 42%, have been achieved.

Since the CO attainment is well above the target, a revised target of 44% for CO attainment was proposed by PAC.

The Board noted the attainment levels for year 2017-18 and after due deliberations approved that CO attainment targets for year 2018-19 be set at 44%.

**Resolved that Item No. BOS/03/06 is approved and recommend the same to the Academic Council.**

**Item No. BOS/03/07: : Stakeholders Feedback**

The Board was informed that all the courses content has been designed base on the feedback collected by PAC from industry, academia experts, faculty, students and the alumni. The feedbacks received were incorporated in the curriculum.

The Board noted with satisfaction the feedback received and their incorporation in curriculum.

There being no other matter, the meeting was concluded with a vote of thanks to the chair and the members present.

**(Dr. Monica Verma)**  
Member Secretary BOS.

**(Dr. Sunil Kumar Jakhoria)**  
Chairman

Dear  
Faculty of Liter...  
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Rajkot-380003, Gujarat



Faculty of Liberal Studies

Fourth Board of Studies Meeting in Bachelor of Business Administration  
(BOS- BBA)

Minutes

**Chaired by:** Dr. Sunil Kumar Jakhoria, Professor & Dean, Faculty of Liberal Studies  
**Date:** Saturday 15<sup>th</sup> June 2019  
**Time:** 3:00 PM - 6:00 PM  
**Venue:** BOARD ROOM-3<sup>rd</sup> Floor

**Minutes of the Fourth Board of Studies in BBA, Faculty of Liberal Studies held on 15<sup>th</sup> June, 2019 at 03.00 p.m. in the Board Room-3<sup>rd</sup> Floor Marwadi Campus.**

*The attendees:*

The following members attended the meeting:

Dr. Sunil Kumar Jakhoria, Professor & Dean, Faculty of Liberal Studies and Faculty of Business Management.	Chairperson
Dr. Sanjay Bhayani, Professor, Department of Business Management, Saurashtra University, Rajkot.	Member, External Academia
Dr. Hitesh Shukla, Professor, Deptt. of Business Management, Saurashtra University, Rajkot.	Member, External Academia
Dr. M.Srinivasa Rao, Professor, Faculty of Management Studies	Member
Prof. Paras Rughani, Assistant Professor and Program Coordinator BBA(H) & BBA(FM)	Member
Dr. Monica Verma Assistant Professor and Member Secretary BoS	Member Secretary



Prof. Sunil Kumar Jakhoria, Dean, Faculty of Liberal Studies Chaired the meeting and welcomed the members for attending the 4<sup>th</sup> BOS meeting. The Chairman further expressed special thanks to Dr. Sanjay Bhayani and Dr. Hitesh Shukla for their valuable presence. He also briefed them about the progress of the faculty.

After that, the agenda items listed were taken up for discussion and the following resolutions were passed.

**Item No.BOS/04/01:** **To confirm the minutes of 3rd meeting of BOS held on 26<sup>th</sup> May'2018.**

The minutes of 3rd BOS meeting held on 26<sup>th</sup> May, 2018 were circulated among the BOS members. Since no comment were received, the BOS approved the minutes of the 3rd BOS meeting.

**Item No.BOS/04/02:** **To report the action taken, where necessary, on the various decisions taken by the BOS in its 3rd meeting held on 26.05.2018**

As part of the action taken on the resolutions of Third BOS meeting the members were informed that actions have been take on all the suggestions except bifurcate the course content into Theory and Practical and incorporating learning outcome in each unit; which is in process. The Board noted the action taken, where necessary, on the various decisions taken in its 3rd meeting held on 26.05.2018 and expressed their satisfaction.

**Item No.BOS/04/03:** **To consider and approve introduction of course titled "Career Readiness Program", its syllabus and scheme of evaluation in semester V of BBA (Financial Markets)**

The members were informed about the introduction of 2 credit course titled "**Career Readiness Program**" to prepare the students for industry. The course title and syllabus were presented to the members for their suggestions and approval. The details are as follows:

**Comparative**

Existing			Revised		
Course Code	Course Name	Credits	Course Code	Course Name	Credits
04BB0503	Project Management	4	04BB0503	Project Management	4
04BF0501	Business and Corporate	4	04BF0501	Business and Corporate	4

Laws			Laws		
04BF0502	Foundation of Financial Mathematics	4	04BF0502	Foundation of Financial Mathematics	4
04BF0503	Management Information Systems	4	04BF0503	Management Information Systems	4
04BF0504	Wealth Management	4	04BF0504	Wealth Management	4
04BF0505	Derivative Market Operations	4	04BF0505	Derivative Market Operations	4
04BF0506	Summer Internship Project	2	04BF0506	Summer Internship Project	2
			04CR0501	Career Readiness Program	2
	<b>Total semester Credits</b>	<b>26</b>		<b>Total semester Credits</b>	<b>28</b>

Reason for Introduction of New Courses — Batch: 2017-2019

Course Name	Feedback from stakeholders	Rational	Action to be taken
Career Readiness Programme	Proposed by programme coordinator and reviewed in the Programme Academic Committee meeting	As in the entire programme structure there was no such course in offering	To be offered as ability enhancement course in semester V

Details of the new courses introduced:

Name of the Programme	Name of the Course	Semester	Batch	Year of Introduction
BBA(FM)	Career Readiness Programme	V	2017-20	2019-20

The BOS discussed the item and expressed its satisfaction and finally resolved as under:

**“Resolved that the course title, syllabus, scheme of evaluation and subsequent changes in the credits of semester – V of BBA (Financial Markets) stand approved and is recommended for presentation to the Academic Council”. Annexure -1**

**Item No.BOS/04/04: To consider and approve syllabus of semester V & VI of BBA (Financial Markets)**

The BOS discussed the item and approved the syllabuses of semester V&VI and resolved as under:





“Resolved that the semester V & VI syllabus stands approved and is recommended for presentation to the Academic Council”. Annexure 2

Item No.BOS/04/05:

**To consider and approve introduction of two new specializations namely; Banking & Insurance, International Business in BBA(Hons); and the courses of reading in the same and their course content.**

The Members were briefed about the proposal to introduce two new specializations namely; Banking & Insurance, International Business to the students admitted in 2017-18 w.e.f. 2019 to BBA(Hons) students and the courses to be taught in each of the specialization.

#### Introduction of New Specialization & Courses of teaching in each

Reason for Introduction of New Specializations & courses for teaching — Batch: 2017-2019 w.e.f. 2019

Specialization Name	Feedback from stakeholders	Rational	Action to be taken
International Business	Industry, Students and Faculty; and deliberation at PAC	To provide students with the skills and experience needed to advance careers in foreign trade and impart knowledge to expand business overseas.	Introduced as specialization from the batch of 2017-20 w.e.f. 2019
Banking & Insurance	Industry, Students and Faculty; and deliberation at PAC	To provide students with the skills and experience needed to advance careers in the fast-growing finance industry.	Introduced as specialization from the batch of 2017-20 w.e.f. 2019

Details of the new courses introduced in each specialization:

Name of the Programme & Specialization	Name of the Course	Semester	Course Credit	Batch	Year of Introduction

BBA(Hons)& International Business	International Marketing	V	4	2017-20	2019-20
	International Human Resource Management	V	4	2017-20	2019-20
	Fundamentals of International Business	V	3	2017-20	2019-20
	International Supply Chain Management	VI	4	2017-20	2019-20
	International Trade Finance & Forex Risk Management	VI	3	2017-20	2019-20
BBA(Hons) & Banking & Insurance	Modern Banking Theory & Practices	V	4	2017-20	2019-20
	Financial Analysis & Risk Management in Banks	V	4	2017-20	2019-20
	Fundamentals of Operational Banking	V	3	2017-20	2019-20
	Rural Banking and Micro Finance	VI	4	2017-20	2019-20
	Investment Banking & Insurance	VI	3	2017-20	2019-20

The BOS reviewed the proposed specializations, courses of teaching and syllabi. Same was approved and resolved as under

**“Resolved that the new specializations and the course of teaching along with the syllabi stand approved and is recommended for presentation to the Academic Council”.**  
Annexure 3

**Item No.BOS/04/06:**

**To consider and approve revision in the course content of Tally ERP 9. (04BH0101) in semester-5 of BBA(Hons)**

The members were presented with details of revision in the syllabus of the course *Tally ERP 9*. The details are as follows:


Reason for Revision

Course Name	Feedback from	Rational	Action to be
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4-BOS (15-June-2019)

Dean  
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Minutes



	stakeholders		taken
Tally ERP 9. (04BH0101) in BBA(Hons)	The subject faculty recommended the revision as the existing course content was too elementary and there is need to expand the content. And to use updated and latest version of tally that adds up the latest updates of the accounts or taxation policy like removing VAT and introducing GST. The suggestion was deliberated by PAC and accepted for presentation to the BoS	Will help student to acquire more understanding of tally and have hands on latest version so as to be market ready	Tally ERP 9. course revised

Details of the courses revised

Course Name	Semester	Batch	Year of Revision
Tally ERP 9. (04BH0101)	I	2019-22	2019-20

The BOS reviewed the item and resolved as under:

***“Resolved that the suggested modification stand approved and is recommended for presentation to the Academic Council”.*** Annexure 4

***Item No.BOS/04/07: To consider and approve Converting Corporate Communication & Etiquette (04BH0201) from credit to non-credit course in BBA(Hons)***

The board was informed that the course titled *“Corporate Communication & Etiquette (04BH0201)”* was taught as a 2-credit course in semester 2 of BBA(H) but there is recommendation to convert it into a non-credit certification course for students admitted in 2019-20.

4-BOS (15-June-2019)

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Course Name	Feedback from stakeholders	Rational	Action to be taken
Corporate Communication & Etiquette (04BH0201) in BBA(Hons)	The Learning and Development department recommended converting it into a certificate course and it should be delivered in a form of workshop to make it effective rather as a regular course. The suggestion was deliberated by PAC and accepted for presentation to the BoS	It will be more effective and the expected outcomes can be attained.	Convert Corporate Communication & Etiquette (04BH0201) from credit to non- credit course.

The BOS reviewed and approved the recommendation of converting course title "Corporate Communication & Etiquette (04BH0201)" from credit to non-credit course w.e.f., 2019 and resolved as under

**Resolved that the suggested change stand approved and is recommended for presentation to the Academic Council". Annexure 5**

**Item No.BOS/04/08:**

**To consider and approve introduction of course titled "Understanding of Corporate Financial Statements" and its syllabus in BBA & BBA(Hons) semester V**

The members were informed that course titled "Understanding of Corporate Financial Statements" will replace the courses titled Brand India: From Local to Global (04BB0504) in semester V of BBA & BBA(Hons) for the students admitted in 2019-20.

Course Name	Feedback from stakeholders	Rational	Action to be taken
Understanding of Corporate Financial Statements in semester V of BBA and BBA(Hons). (For students admitted in	Programme coordinator as it was observed that in the entire programme of BBA and BBA(H) there was no course which acquainted the students to corporate	Will help students to understand and interpret the corporate financial statements.	"Understanding of Corporate Financial Statements" to replace "Brand India: From

4-BOS (15-June-2019)

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2019-20)	final statements and their analysis. The suggestion was deliberated by Programme Academic Committee (PAC) and accepted. PAC recommended for presentation to the BoS		Local to Global" from academic year 2021
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Details of the changes:

Programme Name	Change		Semester	Batch	Year of Introduction
	From	To			
BBA & BBA(H)	Brand India: From Local to Global	Understanding of Corporate Financial Statements	V	2019-22	2019

The BOS discussed the item and approved it to be applicable on students admitted in 2019-20 w.e.f. 2021 and resolved as under:

**"Resolved that the new course titled Understanding of Corporate Financial Statements and its syllabus stand approved and is recommended for presentation to the Academic Council". Annexure 6**

**Item No.BOS/04/09: To consider and approve Discontinuing the courses titled Brand India: From Local to Global (04BB0504) in semester V of BBA & BBA(Hons) for the students admitted in 2019-20**

The members were informed about the Reasons for discontinuation:

Course Name	Feedback from stakeholders	Rational	Action to be taken
Brand India: From Local to Global (04BB0504) in semester V of BBA and BBA(Hons).  (For students admitted in 2019-20)	Programme coordinator and course faculties observed that despite being a good course the delivery and assessment of the course was difficult. The UG students were unable to comprehend the essence of the	Will be more suitable to be delivered to Post graduate students as they will understand the relevance of the course.	"Brand India: From Local to Global" discontinued from 2021

	course. The suggestion was deliberated by PAC and accepted for presentation to the BoS		
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Details of changes:

Programme Name	Course Name	Semester	Batch	Year of Discontinuation
BBA & BBA(H)	Brand India: From Local to Global	V	2019-22	2021

The BOS reviewed and approved that the courses titled "Brand India: From Local to Global" (04BB0504) in semester V to be discontinued and resolved:

**"Resolved that Item No.BOS/04/09 stand approved and is recommended for presentation to the Academic Council". Annexure 7**

**Item No.BOS/04/10:**

**Any other item with permission of the chair.  
Modification in course titled Entrepreneurship (04BB0405) in semester-IV taught in BBA and BBA(Hons)**

The members were informed that the university has entered into MOU with Center for Entrepreneurship Development, Gandhinagar. And propose to modify the course content of course titled Entrepreneurship(04BB0405) in semester-IV taught in BBA and BBA(Hons) according to Introducing Entrepreneurship Development Program Module II offered by Center for Entrepreneurship Development

Under this agenda item the BOS discussed and approved the proposed revision and resolved as under

**"Resolved that the suggested modification stand approved and is recommended for presentation to the Academic Council". Annexure 8**

**Item No. BOS/04/11: Discussion on Programme Outcome and Course Outcome attainment**

The Board was informed that an analysis of CO attainment revealed that the targets set for the academic year 2018-19 at 44%, have been achieved.

Since the CO attainment is well above the target, a revised target of 46% for CO attainment was proposed by PAC.

The Board noted the attainment levels for year 2018-19 and after due deliberations approved that CO attainment targets for year 2019-20 be set at 46%.

4-BOS (15-June-2019)

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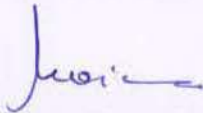
**Resolved that Item No. BOS/04/11 is approved and recommend the same to the Academic Council.**

**Item No. BOS/04/12 : Stakeholders Feedback**

The Board was informed that the PAC had collected feedback from students, industry and academic experts for curriculum development. The Board was further informed that the suggestions/feedback received were incorporated the same have been detailed in above agenda items.

The Board noted with satisfaction the suggestions received and actions taken on them.

The meeting concluded with a vote of thanks to the chair and the members present.



**(Dr. Monica Verma)**  
Member Secretary BOS.



**(Dr. Sunil Kumar Jakhoria)**  
Chairman

Dean  
Faculty of Liberal Studies  
Marwadi University  
Rajkot - 360003, Gujarat



Faculty of Liberal Studies

Fifth Board of Studies in Bachelor of Business Administration (BOS -BBA)

Minutes of the Fifth combined Board of Studies in BBA and Commerce, Faculty of Liberal Studies held on Saturday 5th September 2020|4:00 PM - 5:30 PM | Venue – Google Meet: [meet.google.com/wjs-pakz-oc](https://meet.google.com/wjs-pakz-oc)

Convener of Meeting Dean, Faculty of Liberal Studies

In the Chair : Dean, Faculty of Liberal Studies

The attendees:

Dr. Sunil Kumar Jakhoria, Professor & Dean, Faculty of Liberal Studies and Faculty of Business Management	In-Chair
Dr. Sanjay Bhayani, Professor, Department of Business Management, Saurashtra University, Rajkot.	Expert, External Academia
Dr. Hitesh Shukala, Professor, Deptt. of Business Management, Saurashtra University, Rajkot.	Expert, External Academia
Dr. Tarun Sharma, DGM- Strategy, Dalmia Cement Bharat Ltd., New Delhi	Expert, External Industry
Mr. Ketan Gandhi, CEO, KgGuruji.com, Pune.	Expert, External Industry
Dr. Dhiresk Kulshrestha, Associate Professor	Member, Internal
Dr. Prasanta Chatterjee Biswas, Associate Professor	Member, Internal
Dr. Monica Verma, Associate Professor	Member, Internal & BOS Coordinator
Dr. Kiran Kumar Agarwal, Associate Professor & Programme Coordinator BBA	Member, Internal
Mr. Paras Rughani Assistant Professor & Programme Coordinator, BBA(H) and BBA(FM)	Member, Internal
Mr. Raturaj Doshi, Assistant Professor & Academic Coordinator	Member, Internal

The leave of absence was granted to:

Dr. H.C. Sardar, Professor, Sheth Damodardas School of Commerce , Gujarat University.	Expert, External Academia
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At the outset, Prof. Sunil Kumar Jakhoria, Dean (Faculty of Business Management & Faculty of Liberal Studies ) and chairman to the Board Of Studies warmly welcomed all the members for attending the 5<sup>th</sup> combined meeting of the Board Of Studies in Bachelors Of Business Administration. The Chairman appreciated the interest and the presence of external members Dr. Sanjay Bhayani, Dr. Hitesh Shukla, who have been a constant support and a source of encouragement to the faculty over the past years. He also introduced the two new members, Dr. Tarun Sharma and Mr. Ketan Gandhi and thanked them for accepting to be on the board and sparing the time from their busy schedule to attend the meeting. The Chair made a brief presentation on the various programmes run under the Faculty of Liberal Studies, the syllabus updation process adopted by the Faculty and about the progress of the Faculty.

After that, the agenda items listed were taken up for discussion and the following resolutions were passed :

**Item No.BOS/05/01: To confirm the minutes of 4<sup>th</sup> meeting of BOS held on 15.06.2019.**

The Board Considered and confirmed the minutes of 4<sup>th</sup> BOS meeting held on 15.06.2019 as there were no comments from members.

**Item No.BOS/05/02: To report the action taken, where necessary, on the various decisions taken by the BOS in its 2<sup>nd</sup> meeting held on 15.06.2019.**

The Board noted the action taken, where necessary, on the various decisions taken in its 4<sup>th</sup> meeting held on **15.06.2019**. The Board also expressed its satisfaction on the action taken report on the various decisions taken in its 2<sup>nd</sup> meeting held on **15.06.2019**.

**Item No.BOS/05/03: All agenda items pertaining to BBA and BBA(H) programme**





*Item No.BOS/05/03i :* To consider and approve re -allocation of the sessions in course titled "Management of Services" ( 04BB0406) in semester-4 of BBA and BBA(H) programme.

The Board considered the suggested change and found it appropriate and positive.

**"Resolved that the changes as noted above stands approved and is recommended for presentation to the Academic Council after incorporating the changes (Annexure-IA and IB)**

*Item No.BOS/05/03ii :* To consider and approve an additional text book in course titled "Management of Services" ( 04BB0406) in semester-4 of BBA and BBA(H) programme.

The Board considered the suggested change and found that the book "Service Marketing" authored by Rajendra Nargundkar published by McGraw is good and should be added to the list of existing two text books as additional text.

**"Resolved that the addition book to be added to the list of text book as noted above stands approved and is recommended for presentation to the Academic Council after incorporating the changes (Annexure-IA and IB)**

*Item No.BOS/05/03iii :* To consider and approve change in evaluation scheme for course titled "Applications of Spreadsheet" course code 04LS0212 semester-2 BBA and BBA(H) .

The Board went through the scheme of evaluation and found that the changes in the form of online multiple choice question for mid-term and; practical and viva for Marwadi University final exam is a positive change.

**"Resolved that the changes in the evaluation as noted above stands approved and is recommended for presentation to the Academic Council after incorporating the changes (Annexure-IIA and IIB)**

***Item No.BOS/05/04:* All agenda items pertaining to BBA(FM) programme**

*Item No.BOS/05/04i:* To consider and approve the Removal of topic Value-Credit- Analysis in Unit -5 of the course titled "Financial





*statement Analysis" course code 04BF0205 semester-2 of BBA(FM)*

The Board considered the suggested change and found it appropriate.

**"Resolved that the change as noted above stands approved and is recommended for presentation to the Academic Council after incorporating the changes (Annexure-III A and III B)**

*Item No. BOS/05/04ii::*

*To consider and approve a typing error in unit 5 of the course titled Modern Banking Operations And Services" subject code 04BB0404 of BBA(FM) Global Packet Radio Services to General Packet Radio Services*

The Board approved the minor change of the correction in unit 5 of the course titled Modern Banking Operations And Services" subject code 04BB0404 taught in semester -4 of BBA(FM) Global Packet Radio Services to General Packet Radio Services

**"Resolved that the above change stands approved and is recommended for presentation to the Academic Council after incorporating the changes (Annexure-IV A and IV B)**

**Item No. BOS/04/05: Discussion on Programme Outcome and Course Outcome attainment**

The Board was informed that an analysis of CO attainment revealed that the targets set for the academic year 2019-20 at 46%, have been achieved.

Since the CO attainment is well above the target, a revised target of 48% for CO attainment was proposed by PAC.

The Board noted the attainment levels for year 2019-20 and after due deliberations approved that CO attainment targets for year 2020-21 be set at 48%.

**Resolved that Item No. BOS/04/05 is approved and recommend the same to the Academic Council.**

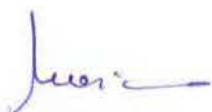
**Item No. BOS/04/06: : Stakeholders Feedback**

The Board was informed that the PAC had collected feedback from students, industry and academic experts for curriculum development. The Board was further informed that the suggestions/feedback received were incorporated as shown in above agenda items.



The Board noted with satisfaction the suggestions received and actions taken on them.

The meeting was concluded with a vote of thanks to the chair and all the members.



(Dr. Monica Verma)  
Member Secretary BOS.



(Dr. Sunil Kumar Jakhoria)  
Chairman

Dean  
Faculty of Liberal Studies  
Marwadi University  
Rajkot - 360003, Gujarat

**Faculty of Liberal Studies**

**Sixth Board of Studies meeting in Bachelor of Business Administration  
(BOS-BBA)**

**Minutes**

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**Chaired by:** Dr. Sunil Kumar Jakhoria, Professor & Dean, Faculty of Liberal Studies  
**Date:** 28-06-2021  
**Time:** 4:00pm -6:00pm  
**Venue:** Virtual mode via Google link: [meet.google.com/xzh-ebkx-dbh](https://meet.google.com/xzh-ebkx-dbh)

Minutes of the Sixth combined Board of Studies meeting of Bachelor of Business Administration, Faculty of Liberal Studies.

*The attendees:*

The following members attended the meeting:

Dr. Sunil Kumar Jakhoria, Professor & Dean, Faculty of Liberal Studies and Faculty of Business Management.	Chairperson
Dr. Sanjay Bhayani, Professor, Department of Business Management, Saurashtra University, Rajkot.	Expert External -Academia
Dr. Hitesh Shukla, Professor, Deptt. of Business Management, Saurashtra University, Rajkot.	Expert External -Academia
Dr. Tarun Sharma, DGM-Strategy, Dalmia Cement Bharat Ltd., New Delhi.	Expert External -Industry
Mr. Ketan Gandhi, CEO, KgGuruji.com, Pune.	Expert External –Industry
Dr. Dhiresk Kulshrestha, Associate Professor	Member, Internal
Dr. Prasanta Chatterjee Biswas, Associate Professor	Member, Internal
Dr. Monica Verma, Associate Professor	Member, Internal & BoS Secretary



Dr. Kiran Kumar Agarwal,  
Associate Professor and Program Coordinator BBA

Member, Internal

Mr. Paras Rughani,  
Assistant Professor and Program Coordinator BBA (Hons) &  
BBA(FM)

Member, Internal

On confirming the presence of members and the quorum being present, the chairman commenced the meeting.

Prior to commencement of agenda, Prof. Sunil Kumar Jakhoria, chairman to Board of Studies welcomed all the members to the 6<sup>th</sup> combined BOS meeting of Bachelors of Business Administration. The Chairman further expressed special thanks to Dr. Sanjay Bhayani and Dr. Hitesh Shukla, Dr. Tarun Sharma and Mr. Ketan Gandhi, for attending the meeting. The Chair informed the members that now onwards the board of studies meeting will be scheduled twice in a year. He briefed the members that the revision in the curriculum of all the UG programmes namely BBA, BBA(Hons) and BBA(FM), has been done with a view a) to rationalize and streamline the common courses b) to emphasize on application-based assessment c) to offer more choices and specialization d) revising the course outcomes in light of blooms taxonomy e) provide skill enhancement courses. He also briefed about the process adopted to draft the Curriculum and the syllabi.

#### **Agenda under Discussion:**

After that the agenda items listed were taken up for discussion and the following resolutions were passed.

**Item No.BOS/06/01: To confirm the minutes of the previous combined BOS meeting of BBA and Commerce.**

The minutes of the 5<sup>th</sup> combined BOS meeting of BBA and Commerce held on 5<sup>th</sup> September'20 was approved by chairman and mailed to the members on 11<sup>th</sup> September'20. Since no comments were received from any member, the minutes were confirmed.

**Item No.BOS/06/02: To report the action taken, where necessary, on the various decisions taken by the BOS in its 5<sup>th</sup> BOS meeting held on 5<sup>th</sup> September'20**

As part of the action taken on the resolutions of 5<sup>th</sup> BOS meeting the members were informed that the action has been taken on all the matters as below:

<b>Agenda item</b>	<b>Action Taken</b>
<b>Bachelor of Business Administration &amp; Bachelor of Business Administration (Honors)</b> i) Re allocation of the sessions in "Management of Services" in semester-4 ii) Recommendation of additional text book in "Management of Services" in semester-4 iii) Change in evaluation for course titled "Applications of	Completed



<i>Spreadsheet" semester-2 BBA and BBA(H)</i>	
<b>Bachelor of Business Administration (Financial Markets)</b> i) <i>Removal of topic Value-Credit- Analysis in Unit -5of the course titled financial statement Analysis semester-2</i> ii) <i>Correction of Global Packet Radio Services to General Packet Radio Services</i>	Completed

The Board noted the action taken, and expressed their satisfaction on the action taken report.

**Item No.BOS/06/03:**

***Items for Reporting/Information***

No agenda item for information.

**Item No.BOS/06/04(i):**

***To consider and approve revised Programme Structure for BBA Three Years program to be implemented from academic year 2021-22.***

The members were briefed regarding the need for revising the curriculum/ programme structure of BBA. Dr. Kiran Agarwal, Programme coordinator BBA presented to the members the revised programme structure and the changes made in comparison to the previous curriculum. The members were informed that the new curriculum offers greater number of course choice in the form of General electives and specializations. The members were informed that as in the earlier years the students will continue to take noncredit courses intended to enhance skills and abilities namely; Corporate Etiquettes in semester 3, Corporate Correspondence in semester 4, Personal Finance in semester 5 and SPSS in semester 6 along with the credit courses. The members were also informed that from the academic year 2021 students will be offered a two-credit university open elective in semester 1,2,3 and 4.

Courses Shifted

Following suggestion were received:

- 1) To offer course on a) Service marketing or service operations; b) innovation
- 2) To offer flexibility to the faculty in evaluation of the student.
- 3) To implement team work-based assessment.
- 4) If possible French language should be offered in more than one semester as one semester teaching is too less to learn a language.
- 5) If possible, for a 4-credit course there should be 3 theory classes and 1 practical/ field visit session so that the students have a greater practical exposure.

**Conclusion:**

The suggestions were discussed and the change 1) was **accepted and approved** and the programme coordinator was advised to deliberate on feasibility of including suggestion 2 to 5 and come up with suggestions in next BoS. It was resolved as under:

**“Resolved that the revised Programme structure stands approved and is recommended for presentation to the Academic Council. (Annexure-I)**

**Item No.BOS/06/04(ii):**

**To consider and approve syllabi of all six semesters as per Revised Curriculum for BBA Three Years program to be implemented from academic year 2021-22.**

The Board went through the syllabi and approved it to be applicable w.e.f batch of 2021-22 and resolved as under:

**“Resolved that the syllabi stand approved and is recommended for presentation to the Academic Council”. (Annexure-II)**

**Item No.BOS/06/05(i):**

**To consider and approve revised Programme Structure for BBA (Hons) Three Years program to be implemented from academic year 2021-22.**

Mr. Paras Rugani, Programme coordinator BBA(Hons) presented to the members the revised programme structure and the changes made in comparison to the previous curriculum. The members were informed that the new curriculum offers greater number of course choice in the form of General electives and specializations. The students will be offered eight credit certification courses during the three years programme and eight specializations to choose from. The members were informed that as in the earlier years the students will continue to take noncredit courses intended to enhance skills and abilities namely; Corporate Etiquettes in semester 3, Corporate Correspondence in semester 4, Personal Finance in semester 5 and SPSS in semester 6 along with the credit courses. The members were also informed that from the academic year 2021 students will be offered a two-credit university open elective in semester 1,2,3 and 4.

Following suggestion were received:

- 1) To offer course on Service marketing or service operations; b) innovation and C) Total Quality Management
- 2) To offer flexibility to the faculty in evaluation of the student.
- 3) To implement team work based assessment.
- 4) If possible French language should be offered in more than one semester as one semester teaching is too less to learn a language.
- 5) If possible for a 4 credit course there should be 3 theory classes and 1 practical/ field visit session so that the students have a greater practical exposure.

#### **Conclusion:**

The suggestions were discussed and the change 1) was **accepted and approved** and the programme coordinator was advised to deliberate on feasibility of including suggestion 2 to 5 and come up with suggestions in next BoS. It was resolved as under:

**“Resolved that the revised Programme structure stands approved and is recommended for presentation to the Academic Council”. (Annexure-III)**

Dean  
Faculty of Liberal Studies  
Marwadi University  
Rajkot - 360003, Gujarat





Item No.BOS/06/05(ii):

To Consider and approve syllabi of all six semesters as per Revised Curriculum for BBA(Hons) Three Years program to be implemented from academic year 2021-22.

The Board went through the syllabi and approved it to be applicable w.e.f batch of 2021-22 and resolved as under:

“Resolved that the syllabi stands approved and is recommended for presentation to the Academic Council”. (Annexure-IV)

Item No.BOS/06/05(iii):

To consider and approve a) offering additional specializations namely; Digital Marketing, Entrepreneurship and Logistics Management, b) the course of reading and c) the syllabi for BBA(Hons) batch of 2019-22 Three Years program.

The details are as follows:

Specialization Name	Course Name	Semester	Batch	Year of Introduction
Logistics	Inventory Management	V	2019-22	2021
	Warehousing, Distribution & Transportation Management	V	2019-22	2021
	Packaging Management	V	2019-22	2021
	IT in Logistics Management	VI	2019-22	2022
	International Logistics	VI	2019-22	2022
Digital Marketing	Essentials of Digital Marketing	V	2019-22	2021
	Applications of SEO, SEM & Web Analytics	V	2019-22	2021
	Website Development	V	2019-22	2021
	Contemporary Practices of Digital Marketing	VI	2019-22	2022
	Social Media Marketing	VI	2019-22	2022
Entrepreneurship	Innovation & Start-Up Management	V	2019-22	2021
	Social Entrepreneurship and Corporate Entrepreneurship	V	2019-22	2021
	Fundamentals of International Business	V	2019-22	2021
	Legal Aspects of Startups and IPR	VI	2019-22	2022
	Funding for Start-Ups	VI	2019-22	2022

The Board considered and approved the three new specializations namely, Digital Marketing, Entrepreneurship and Logistics Management, the five course of reading in each specialization and the syllabi for the same to be offered for the batch of 2019-22 i.e., w.e.f. 2021.

“Resolved that the proposed specializations along with courses of reading and the syllabi stands approved. It is recommended for presentation to the Academic Council”. (Annexure-V)

**Item No.BOS/06/06(i):**

**To consider and approve revised Programme Structure for BBA(FM) Three Years program to be implemented from academic year 2021-22.**

Mr. Paras Rugani, Programme coordinator BBA(FM) presented to the members the revised programme structure and the changes made in comparison to the previous curriculum. The students will be offered eight credit courses of NCFM during the three years programme. The members were informed that as in the earlier years the students will continue to take noncredit courses intended to enhance skills and abilities namely; Corporate Etiquettes in semester 3, Corporate Correspondence in semester 4, Personal Finance in semester 5 and SPSS in semester 6 along with the credit courses. The members were also informed that from the academic year 2021 students will be offered a two-credit university open elective in semester 1,2,3 and 4.

Following suggestion were received:

- 1) To offer course on Financial Behaviour.
- 2) If possible, for a 4-credit course there should be 3 theory classes and 1 practical/field visit session so that the students have a greater practical exposure.

**Conclusion:**

The suggestions were discussed and the programme coordinator was advised to deliberate on feasibility of including the same and come up with suggestions in next BoS. It was resolved as under:

**“Resolved that the revised programme structure stands approved and is recommended for presentation to the Academic Council. (Annexure-VI)**

**Item No.BOS/06/06(ii):**

**To consider and approve syllabi of all six semesters as per Revised Curriculum for BBA(FM) Three Years program to be implemented from academic year 2021-22.**

The Board went through the syllabi and approved it to be applicable w.e.f batch of 2021-22 and resolved as under:

**“Resolved that the syllabi stand approved and is recommended for presentation to the Academic Council”.** (Annexure-VII)

**Item No. BOS/06/07: Discussion on Programme Outcome and Course Outcome attainment**

The Board was informed that an analysis of CO attainment revealed that the targets set for the academic year 2020-21 at 48%, have been achieved.

Since the CO attainment is well above the target, a revised target of 50% for CO attainment



was proposed by PAC.

The Board noted the attainment levels for year 2021-22 and after due deliberations approved that CO attainment targets for year 2021-22 be set at 50%.

**Resolved that Item No. BOS/06/07 is approved and recommend the same to the Academic Council.**

**Item No. BOS/06/08: : Stakeholders Feedback**

The Board was informed that the PAC had collected feedback from students, industry and academic experts for curriculum development. The Board was further informed that the suggestions/feedback received were incorporated and accordingly the programme structure has been revised.

The Board noted with satisfaction the suggestions received and actions taken on them.

**Vote of Thanks**

There being no other business, the meeting ended at 6:10 pm with a vote of thanks to the chair.



**(Dr. Monica Verma)**  
Member Secretary BoS.



**(Dr. Sunil Kumar Jakhoria)**  
Chairperson

Dean  
Faculty of Liberal Studies  
Marwadi University  
Rajkot - 360003, Gujarat

**Faculty of Management Studies**

**Seventh Board of Studies meeting in Bachelor of Business Administration  
(BOS-BBA)**

**Minutes**

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**Chaired by:** Dr. Sunil Kumar Jakhoria, Professor & Dean, Faculty of Management Studies  
**Date:** 27-12-2021  
**Time:** 4:00pm -6:10pm  
**Venue:** Virtual mode via Google link: [meet.google.com/mzw-szya-orb](https://meet.google.com/mzw-szya-orb)

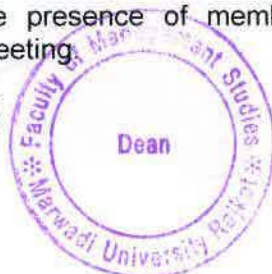
*The attendees:*

The following members attended the meeting:

Dr. Sanjay Bhayani, Professor, Department of Business Management, Saurashtra University, Rajkot.	Expert External -Academia
Dr. Hitesh Shukla, Professor, Deptt. of Business Management, Saurashtra University, Rajkot.	Expert External -Academia
Dr. Tarun Sharma, DGM-Strategy, Dalmia Cement Bharat Ltd., New Delhi.	Expert External -Industry
Mr. Ketan Gandhi, CEO, KgGuruji.com, Pune.	Expert External -Industry
Dr. Prasanta Chatterjee Biswas, Associate Professor	Member, Internal
Dr. Monica Verma, Associate Professor	Member, Internal & BoS Secretary
Dr. Kiran Kumar Agarwal, Associate Professor and Program Coordinator BBA	Member, Internal
Mr. Paras Rughani, Assistant Professor and Program Coordinator BBA(H) & BBA(FM)	Member, Internal

On confirming the presence of members and the quorum being present, the chairman commenced the meeting.

7-BOS (27-Dec-2021)



Page 1 of 6

Minutes

Prior to commencement of agenda, Prof. Sunil Kumar Jakhoria, chairman, Board of Studies welcomed all the members to the 7<sup>th</sup> BOS meeting of Bachelors of Business Administration and expressed special thanks to Dr. Sanjay Bhayani and Dr. Hitesh Shukla, Dr. Tarun Sharma and Mr. Ketan Gandhi, for attending the meeting.

After that, the agenda items listed were taken up for discussion and the following resolutions were passed.

**Agenda under Discussion:**

**Item No.BOS/07/01:** *To confirm the minutes of the previous combined BOS meeting of BBA and Commerce.*

The minutes of the 6<sup>th</sup> combined BoS meeting of BBA and Commerce held on 28<sup>th</sup> June'21 was approved by chairman and mailed to the members on 24<sup>th</sup> July'21. Confirmation for same was received from all the members by 27<sup>th</sup> July'21, the minutes were confirmed.

**Item No.BOS/07/02:** *To report the action taken, where necessary, on the various decisions taken by the BOS in its 6<sup>th</sup> BOS meeting held on 28th June'21*

As part of the action taken on the resolutions of 6<sup>th</sup> BOS meeting the members were informed that the action has been taken on all the matters as below:

Sr. No	Suggestions	Action Taken
1	To incorporate course on a) Service marketing or Service operations b) Total Quality Management c) Innovation	<b>Noted and completed</b> After deliberation following was decided: a) Course titled 'Management of services' to be offered as elective in semester 4 to BBA, BBA(H) and BBA(FM) b) Unit on innovation added to the course titled Start – up Management. After incorporating the change, the new title of the course is 'Innovations and Start-up Management.'
2	To offer course in French language in more than one semester.	Noted as valid suggestion and referred to Subject Review committee. At present it is being deliberated upon.
3	Faculty should have liberty to decide Evaluation Scheme.	<b>The members were informed that we already have provision for the same, which are as follows:</b> a) Faculty in all the courses offered in a programme have complete autonomy to decide the evaluation scheme for 50 %





	(internals) of the total marks and; b) in courses identified as departmental courses the faculty has complete autonomy to decide evaluation scheme for whole 100%
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The Board noted the action taken, and expressed their satisfaction on the action taken report.

**Item No.BOS/07/03:**

**Items for Reporting/Information**

- 1) Henceforth, Faculty of Business Management and Faculty of Liberal Studies are merged and will be known as Faculty of Management Studies (FMS).
- 2) In the 6th BoS the FMS decided on offering Open elective of 2 credits across 1st to 4th semester of all the Under Graduate courses ie., BBA, BBA(H) and BBA (FM),. The same was reflected in the programme structure of all the programmes and the same was presented in 6th BoS meeting. However, later at the university level it was decided that the Open Electives shall be of 3 credits and offered in 3rd and 4th semester. As a result, the subsequent changes in the Programme structure of BBA, BBA(H) and BBA (FM) are being informed to all the board members. **Annexure-I**

**Item No.BOS/07/04:**

**Changes in the course of teaching in semester V of Entrepreneurship specialization and course of teaching in semester VI of Digital Marketing specialization. And their respective syllabuses.**

The members were informed that in the 6<sup>th</sup> BoS it was approved that in BBA(Hons) programmed

- i) In semester 5 course titled "International Business Procedures" with course code 04BH0506 will be the common course to be offered in Entrepreneurship and International Business specialization.
- ii) Similarly, in semester -6 course titled "Social Media Marketing" with course code 04BH1603 will be the common course for teaching in Marketing and Digital Marketing specialization.

But the central examination department was of the opinion that same course cannot be offered in two specializations because there will be some administrative issues. This was deliberated by respective subject area committees and the Programme Academic committee; and finally decided that hence forth:

- a) In Semester- 5
  - i) Course titled "Fundamentals of International Business" with course code 04BH0504 will be taught in International Business specialization; and
  - ii) Course titled "International Business Procedures" with course code 04BH0506 will be taught in Entrepreneurship specialization
- b) In Semester- 6
  - i) Course titled "Social Media Marketing" with course code 04BH1603 will be taught in Marketing specialization



- ii) Course titled "Marketing Through Social Media Platforms" with course code 04BH0609 will be taught in Digital Marketing specialization

Details of the changes are as follows:

Programme Name	Specialization	Change		Semester	Batch
		From	To		
BBA(H)	International Business	Fundamentals of International Business (04BH0504)	Fundamentals of International Business (04BH0504)	V	2021-24
	Entrepreneurship	Fundamentals of International Business (04BH0504)	International Business Procedures (04BH0506)	V	2021-24
	Marketing	Social Media Marketing (04BH1603)	Social Media Marketing (04BH1603)	VI	2021-24
	Digital Marketing	Social Media Marketing (04BH1603)	Marketing Through Social Media Platforms (04BH0609)	VI	2021-24

The members reviewed and approved the proposed changes and the syllabuses of "International Business Procedures" and "Marketing Through Social Media Platforms". It was resolved:

**"Resolved that Item No.BOS/07/04 stands approved and are recommended for presentation to the Academic Council". Annexure-II**

**Item No.BOS/07/05:**

**To consider and approve syllabus and teaching scheme of University Open Elective to be offered by FMS**

Dr. Sunil Kumar Jakhoria informed and explained to the board members that university (keeping in line with one of the major proposals of NEP to offer greater flexibility in courses offered to the students) has decided to introduce University open electives, a concept approved by the Academic Council. The student on commencement of 3<sup>rd</sup> semester has to choose 2 electives during the entire duration of his/her programme and those electives will be deemed as university wide open elective. To begin with, these electives will be offered in under graduate programmes and later extended to Post Graduate programmes. A pool of such university electives will be





created where every department in the university will contribute. In addition, courses like music, NCC, sports, performing arts etc. are also to be included. These courses will be available to the students other than the department/ faculty offering it. As a common guideline these courses shall not be too technical in nature, there is no lab component and there is no pre-requisite to the course. The Faculty of Management Studies, to begin with will offer nine courses, four in management and five in commerce.

The courses and teaching and evaluation were presented before the members for discussion and approval:

Course Title	Course code	Credits	Contact Hours
Entrepreneurship	04OP0006	3	36 hr
Digital Marketing	04OP0007	3	36 hr
Data Analysis using Spreadsheet	04OP0008	3	36 hr
Basics of Supply Chain Management	04OP0009	3	36 hr

And the evaluation scheme for each course shall be:

	Component	Weightage
A	Continuous Evaluation Component (Assignments / Quizzes /Class Participation etc.)	20% (C.S.E)
B	Internal Assessment	30% (I.A.)
C	End-Semester Examination	50% (External assessment)

Following comments and suggestion were received:

- 1) Course titled "Entrepreneurship", "Tax Planning for Individuals" and "Basics of Supply Chain Management" were approved by the members.
- 2) In the Course titled "Digital Marketing" more teaching hour should be allocated to unit 3 as the topic to be dealt in the unit have great potential for skilling and employability.
- 3) In the Course titled "Data Analysis using Spreadsheet" solver and Pivot table should be mentioned in unit -1 for greater clarity during course delivery.

**Conclusion:**

The suggestions were discussed and the changes were accepted and approved. It was resolved as under:

**"Resolved that all the syllabi and teaching and evaluation scheme for each course stands approved and are recommended for presentation to the Academic Council".**  
Annexure-III

**Item No. BOS/07/06: Discussion on Programme Outcome and Course Outcome attainment**

The Board was informed that an analysis of CO attainment revealed that the targets set for the academic year 2021-22 at 50%, have been achieved.





PAC proposed the CO attainment target for academic year 2022-23 at 50%.

The Board noted the attainment levels for year 2021-22 and after due deliberations approved that CO attainment targets for year 2022-23 be set at 50%.

**Resolved that Item No. BOS/07/06 is approved and recommend the same to the Academic Council.**

**Item No. BOS/07/07: : Stakeholders Feedback**

The Board was informed that the PAC had collected feedback from students, industry and academic experts on the syllabi and curriculum. The Board was further informed that the suggestions/feedback received were incorporated.

The Board noted with satisfaction the suggestions received and actions taken on them.

**Vote of Thanks**

After discussion on the agenda Dr. Sunil Kumar Jakhoria informed the members about the progress made by the faculty and the university; and decision by the University for the academic development of faculty and over all research environment since the last BOS.

There being no other business, the meeting ended with a vote of thanks to all present.

**(Dr. Monica Verma)**  
Member Secretary BoS.

**(Dr. Sunil Kumar Jakhoria)**  
Chairperson



B. Tech Electrical Engineering  
Faculty of Technology  
Marwadi University

**1.1.2 Board of Studies meeting minutes**

(Program revision)

<b>Date:</b> 28/05/2019		<b>Meeting No:</b> 01	
<b>Start Time:</b> 11:00 AM	<b>End Time:</b> 1:00 PM	<b>Total Time:</b> 2 Hours	
<b>Chaired by</b>	Dr. Sarang Pande		
<b>Agenda – 1</b>	<b>Welcome of Board of Studies Member</b>		
<b>Resolution</b>	The Chairman BOS, Dr. Sarang Pande, welcomed all the members and experts of the BOS present in the meeting. Committee members put their innovative ideas, views, suggestions and fruitful discussion for the syllabus.		
<b>Agenda – 2</b>	<b>Discussion on Vision, Mission, Program Outcomes (PO), Programs Specific Outcomes (PSO) &amp; Course Outcomes (CO) for 1st Year PG and UG (starting from next academic year).</b>		
<b>Resolution</b>	<p>The department established Mission and Vision (Annexure – II).</p> <p>As per laid out procedure for syllabus design by Marwadi University, stakeholders like Industrial experts, subject experts from other institute were consulted. Also syllabus of AICTE model curriculum, GATE syllabus and syllabus of various renowned institute/university was considered &amp; a draft was presented in department meeting.</p> <p>Department had presented PSO &amp; PO as prescribed by NBA and course structure for 1st year subjects of PG.</p> <p>The PO presented are in line with OBE implementation and as suggested by various accreditation agencies/councils. PO and PSO were finalized as per the attachment (Annexure III).</p>		
<b>Agenda – 3</b>	<b>Discussions and Suggestions on starting new PG program in Electrical Engineering.</b>		
<b>Resolution</b>	<p>Discussion carried out on introducing the new PG program in electrical engineering. Head of department suggested the first specialization of Power Electronics and Electric Drives as per the current trends in the industry and industry expert also agrees with the suggestion. Reports from FAME-I, FAME-II, Global EV outlook report 2019 were discussed and so, specialization of Electric vehicle was proposed while keeping the future trends and development and possible employment opportunities which may be created locally and globally.</p>		



<b>Agenda – 4</b>	<b>To discuss and approve the overall teaching scheme of Post-Graduation Programme to be offered by Marwadi University in Electrical Engineering.</b>
<b>Resolution</b>	Teaching schemes of Master of Technology Electrical Engineering with specialization “Electric Vehicle” & “Power Electronics & Electric Drive” are discussed and finalized. Alterations of few titles and credit hours are suggested and updated among syllabus.
<b>Agenda – 5</b>	<b>Discussion on faculty feedback.</b>
<b>Resolution</b>	As per the faculty feedback received the faculties have proposed syllabus/ change in syllabus which discussed in BOS meeting and following resolution were made. After due discussion & incorporation of suggestions from BOS members.
<b>Agenda – 6</b>	<b>To discuss and approve the syllabus of Sem-1 and Sem-2 of Master of Technology (Electrical Engineering) Program.</b>
<b>Resolution</b>	Syllabus of all subjects are discussed and updated. Alterations of few topics, books and elective subjects are suggested and updated among syllabus as per the feedback/comments by the industry experts.
<b>Agenda – 7</b>	<b>Value Added Course, Co-Curricular, Extra Curricular activity and skill development course.</b>
<b>Resolution</b>	Discussion to regularly conduct Co-Curricular, Extra Curricular activity considering the skill course, few workshops/Seminar/Trainings should be provided to improve the soft skills, software used in industries & other programs helping students to improve the employability/Skill Development/ Entrepreneurship. Marwadi University has separate vertical in the form of Learning & Development centre so their program like Special Interest Group (SIG), SPT & soft skills related program should be offered similarly. Department can offer Hardware academy, courses on PLC SCADA automation, energy audit, Renewable energy source, Latex (For report writing), Software (i.e. MATLAB) related training & Electric Vehicle (EV) etc. looking to the current & future trends in industry.
<b>Agenda – 8</b>	<b>Implementation of Choice Based Credit System and non-credit courses.</b>
<b>Resolution</b>	The BOS member discussed the ‘implementation of Choice Based Credit System (CBCS) and adoption of Credit and Grading system’ from the session 2019-20 for PG Program’.

Note: Meeting was scheduled physically at MB350.

**Meeting Attended By: External Experts**

1. Dr. Vivek Pandya
2. Mr. Dinesh Kapadiya
3. Dr Ranjan Behera

**Meeting Attended By: Internal Experts**

1. Dr. Sarang Pande
2. Dr Rajesh Patel
3. Dr Jignesh Makwana
4. Mr. Amit Ved
5. Prof. Nishant Kothari

## Annexure – I

**From:**

Dr. Jignesh Makwana  
Associate Professor,  
Department of Electrical  
Marwadi University,  
Rajkot, Gujarat – 360 003

Date: 28<sup>th</sup> May, 2019

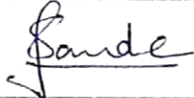
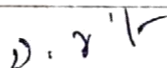

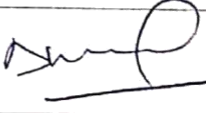

**To,**


The Registrar,  
Marwadi University,  
Rajkot, Gujarat – 360 003

**Sub:** Attendance sheet of 1<sup>st</sup> Board of Studies (BOS) meeting for Post graduate program, Electrical Engineering department, Faculty of PG Studies, Marwadi University

Dear Sir,

Please find herewith attendance sheet of Committee members:

Name of Committee Member	Designation & Affiliation	Signature
Prof.( Dr.) Sarang Pande <b>Chairman</b> (M) 757301280	Professor & Dean, PG Studies, Marwadi University	
Prof.(Dr.) Vivek Pandya <b>External Member</b> (M)9824225220	Professor, EE Department School of Technology Pandit Dindayal Petroleum University	—
Mr. Dinesh Kapadiya <b>External Member</b> (M)9712910816	Self Employed, Retd. General Manager, Hitachi Hirel Power Electronics Pvt. Ltd. Gandhinagar.	
Dr. Rajesh Patel <b>Internal Member</b> (M)9601260123	Professor, Head, Electrical Engineering. Department, FOE, MEFGI	—
Dr. Jignesh A. Makwana <b>Internal Member</b> (M) 8141879821	Associate Professor, EED, PG Studies, Marwadi University	
Mr. Amit Ved <b>Internal Member</b> (M) 9925148051	Associate Professor. & Head, Electrical Engineering. Department., FOT, MEFGI	
<del>Mr. Papankumar Trivedi</del> Nishant Kothari <b>Internal Member</b> (M)9879419806 999817421	Sr. Assistant Professor. & Head, <b>(EECPG)</b> Power electronic & Electrical drives, FOPG, MEFGI	

  
Dr. Jignesh Makwana  
Program Coordinator, EED, PG Studies  
Marwadi University, Rajkot.



## Annexure – II

### Department Vision: -

To contribute in improving living quality by developing responsible, technical skilled, creative and industry ready Electrical Engineers in the global context.

### Department Mission: -

1. To provide pleasant learning environment, platform to strengthen the skills and expand the interest of graduates
2. To develop individual research and thinking power to understand and solve society's and industry's problems related to electrical and electronics systems.
3. To encourage and provide support to be an entrepreneur by arranging idea sharing sessions with business mentors and motivating them to discover new opportunities including becoming Energy Auditor, Energy Manager and Consulting Engineer.
4. Inculcating attitudes, values, morals and vision that will prepare students for lifetime continued learning and leadership in their chosen careers.

## Annexure - III

The Program Outcomes (PO) & Program Specific Outcomes (PSO) are as follows -

PO1	Engineering knowledge: Apply the knowledge of mathematics, science, engineering fundamentals, and an engineering specialization to the solution of complex engineering problems.
PO2	Problem analysis: Identify, formulate, review research literature, and analyze complex engineering problems reaching substantiated conclusions using first principles of mathematics, natural sciences, and engineering sciences.
PO3	Design/development of solutions: Design solutions for complex engineering problems and design system components or processes that meet the specified needs with appropriate consideration for the public health and safety, and the cultural, societal, and environmental considerations.
PO4	Conduct investigations of complex problems: Use research-based knowledge and research methods including design of experiments, analysis and interpretation of data, and synthesis of the information to provide valid conclusions.
PO5	Modern tool usage: Create, select, and apply appropriate techniques, resources, and modern engineering and IT tools including prediction and modeling to complex engineering activities with an understanding of the limitations.
PO6	The engineer and society: Apply reasoning informed by the contextual knowledge to assess societal, health, safety, legal and cultural issues and the consequent responsibilities relevant to the professional engineering practice
PO7	Environment and sustainability: Understand the impact of the professional engineering solutions in societal and environmental contexts, and demonstrate the knowledge of, and need for sustainable development.
PO8	Ethics: Apply ethical principles and commit to professional ethics and responsibilities and norms of the engineering practice.
PO9	Individual and team work: Function effectively as an individual, and as a member or leader in diverse teams, and in multidisciplinary settings.
PO10	Communication: Communicate effectively on complex engineering activities with the engineering community and with society at large, such as, being able to comprehend and write effective reports and design documentation, make effective presentations, and give and receive clear instructions
PO11	Project management and finance: Demonstrate knowledge and understanding of the engineering and management principles and apply these to one's own work, as a member and leader in a team, to manage projects and in multidisciplinary environments.
PO12	Life-long learning: Recognize the need for, and have the preparation and ability to engage in independent and life-long learning in the broadest context of technological change.

The Program Specific Outcomes (PSO) for UG Program are as follows –

PSO1	Students shall have knowledge and skills in Electrical and Electronics fields so as to grasp engineering trade-offs, analyse, design, and synthesize data and technical concepts to form products and solutions for the real life problems.
PSO2	Students shall have competence to take challenges associated with future technological issues associated with green energy, energy harvesters, energy conservators, energy cells, ocean energy, smart grid, wire-less energy transmission etc.

The Program Specific Outcomes (PSO) for PG Program are as follows –

PSO1	Ability to design, develop and troubleshoot major components of electric vehicle
PSO2	Acquire skills for the design and control of power electronics-based solutions for energy efficiency in industrial and residential applications



<b>Date:</b> 31/10/2020		<b>Meeting No:</b> 02	
<b>Start Time:</b> 10:30 AM		<b>End Time:</b> 01:00 PM	
		<b>Total Time:</b> 02:30	
<b>Presented by</b>		Dr. Amit Ved	
<b>Agenda – 1</b>			
<b>Welcome of Board of Studies Member</b>			
<b>Resolution</b>	Dr. Amit Ved Head Electrical Engineering Department, welcomed all the members and experts of the BOS present in the meeting. Committee members put their innovative ideas, views, suggestions and fruitful discussion for the syllabus.		
<b>Agenda – 2</b>			
<b>MOM of last meeting.</b>			
<b>Resolution</b>	The MOM was read by Chairman (BOS), with consent from all members, the minutes of meeting was passed.		
<b>Agenda – 3</b>			
<b>B. Tech. - Electrical Engineering Draft teaching scheme for sem-1 to sem-8</b>			
<b>Resolution</b>	<p>All committee members agreed to scheme of B. Tech. Electrical Engineering sem-1 and sem-2 as it is and suggested no modification in the scheme. The scheme will be effective from 2020-21.</p> <p>Prof. Santoshkumar Vora suggested that the course of 01EE0403 - control system engineering should be introduced in sem-3 as it helps in study of Power Electronics and Power System at early stages. Prof. Amit Ved highlighted the importance of the course in sem-4 to which Prof. Santoshkumar Vora, Prof. Ranjan Behera and committee members agreed.</p> <p>Dr. Jignesh Makwana suggested that Electrical Machine-I has been introduced at the appropriate stage of learning. However, student should learn fundamental of Electromagnetics in details in the course Basic of Electrical Engineering (01EE0109).</p> <p>Prof. M. C. Chudasama clarified that topics of electrical machine require preliminary knowledge of electrical science to understand the principle and operation and hence no modification is required. The committee members agreed to suggestion of Prof. M. C. Chudasama.</p> <p>Prof. Ranjan Behera proposed that student should undergo industrial training – summer training after sem-6 for at least 4 weeks. The committee appreciated the feedback and will suggest such provision for students of electrical engineering.</p> <p>Mr. Vinod Patel suggested that the course of DSP based control of Power Electronics Systems (Laboratory) should be introduced in the scheme before sem-7 to which all committee members agreed.</p>		

	<p>Prof. Santoshkumar Vora suggested that (Program Elective-III) – Battery Chargers for Electric Vehicles should be combined with smart grid interface of EV (Program Elective- IV) course and proposed as a single course. A course on special machine for electric vehicles should be added in Program Elective – IV. Prof. Behera and Mr. Vinod Patel suggested that closed loop control of DC-DC converter should also be added in the course Battery Chargers for Electric Vehicles.</p> <p>Prof. Behera and Prof. Vora suggested that the course Microgrid (Program Elective – III) should be introduced in sem-8 whereas Power System Operation &amp; Control (Program Elective – IV) should be introduced in sem-7. The committee members agreed to suggestions.</p> <p>Mr. Vinod Patel suggested that simulation-based learning should be considered important tool for teaching and learning to impart skills as well as necessary understanding to learner at various levels. All committee members agreed to suggestion of Mr. Vinod Patel.</p> <p>It was unanimously decided that separate form should be shared with all committee members to comment on the course learning outcomes. It was shared and agreed upon by all committee members that design of course learning outcomes should not be too specific to any topic.</p> <p>Prof. M. C. Chudasama, Prof. Santoshkumar Vora and Prof. Ranjan Behera emphasized the importance of theory course on Electrical Measurement and Measuring Instruments. Based on the suggestions, the course of EMMI will be introduced in sem-6 in the revised scheme whereas the course on solid state drives will be taught as Program Elective in sem-VI under the group Power Electronics.</p>
<b>Agenda – 4</b>	<b>Draft Syllabus of B. Tech. sem-1 and sem-2</b>
<b>Resolution</b>	<p>The committee members suggested addition of two experiments in the course Basics of Electrical Engineering(01EE0109) and Elements of Electrical Engineering(01EE0101)</p> <ol style="list-style-type: none"> <li>1. Verification of two wattmeter method for three phase power measurement</li> <li>2. Study of energy measurement using energy meters</li> </ol>
<b>Agenda – 5</b>	<b>Draft Syllabus of B. Tech. sem-3 and sem-4</b>
<b>Resolution</b>	<p>Prof. Santoshkumar Vora, Prof. Ranjan Behera and Prof M C Chudasama suggested that there should be additional topic of Permanent Magnet DC machine and special purpose transformer in the course Electrical Machine-1.</p> <p>Prof. Vora suggested that specific topics such as</p> <ol style="list-style-type: none"> <li>1. Study of different error in measurement</li> </ol>

	<p>2. Study of current shunt and voltage divider Should be added in the course Measurement Lab.</p>
<b>Agenda – 6</b>	<b>Revised draft teaching scheme for M. Tech. – Electrical Engineering in specialization of Electric and Hybrid Vehicle and Power Electronics and Electrical Drives with effect from AY 2020-21</b>
<b>Resolution</b>	<p>Mr. Vinod Patel suggested that the course in DSP based control of Power Electronic Converters has little relevance in industrial application and should be replaced by relevant course. Prof. Santoshkumar Vora suggested that a course on Special Machines / Advanced Electrical Machines should replace the suggested course.</p> <p>In revised scheme, a course on Advanced Electrical Machines is introduced as mandatory course.</p> <p>All committee members agreed to remaining courses in the revised scheme.</p>
<b>Agenda – 7</b>	<b>Syllabus of M. Tech. – Electrical Engineering sem-3 and sem-4 for Academic Year 2020-21</b>
<b>Resolution</b>	Syllabus of M. Tech. – Electrical Engineering sem-3 and sem-4 for Academic Year 2020-21
<b>Agenda – 8</b>	<b>Revised syllabus of M. Tech. – Electrical Engineering – sem-1 and sem-2</b>
<b>Resolution</b>	<p>Mr. Vinod Patel, Dr. Jignesh Makwana and Prof. Ranjan Behera suggested a unit on state-space modelling and control of power electronic converter, switching function of power electronic converter in the course Power Electronic Converters (01PEED0101). The committee accepted the suggestions. The revised syllabus includes an additional unit on suggested topic.</p> <p>Mr. Vinod Patel suggested an additional unit on Resonant Converter in the course Switching Power Supplies (01PEED0103). The committee accepted the suggestion. The unit has been added in the revised syllabus.</p> <p>Prof. Ranjan Behera suggested that the course on Fundamental of Electric and Hybrid Vehicle (01EV1101) should include performance study of electric propulsion system with respect to application. The suggestion was applauded by committee and the same has been included in the revised syllabus.</p> <p>Prof Ranjan Behera suggested the inclusion of following contents in the course Battery Management Systems (01EV1201). The same has been accepted by committee members. The revised syllabus will include these contents.</p> <p>Design of battery BMS Design principles of battery BMS, Effect of distance, load, and force on battery life and BMS, energy balancing with multi-battery system</p>

	<p>The committee suggested following corrections in the course Advanced Electrical Drives (01PEED0201)</p> <ul style="list-style-type: none"> <li>• Flux Estimation algorithms in IM</li> <li>• Removal of Salient Pole synchronous machine and associated control</li> <li>• Removal of SRM and associated control. The content should be part of course on advanced / special machine for EVs.</li> </ul> <p>The committee suggested following correction in the course Digital Control of Power Electronic Systems (01PEED0205). The revised syllabus will include these suggestions.</p> <ul style="list-style-type: none"> <li>• Discretization of signal and conversion from continuous time domain to discrete time domain should be included in Unit-1.</li> <li>• Unit-3 should be promoted to Unit-2</li> <li>• Unit-2 which is advanced control technique, should be introduced after basics of control technique. The revised syllabus will include Unit-4 Digital Control Techniques.</li> </ul>
<b>Agenda – 9</b>	<b>Attainment level of course outcomes (CO's), Program Outcomes (PO's) is discussed.</b>
<b>Resolution</b>	It is observed that the few CO's were not attain in previous year, the committee has suggested to take proper action for CO attainment improvement. The process of PO attainment & the PO attainment of various courses of PG were discussed and agreed by all the members.
<b>Agenda – 10</b>	<b>Discussion on faculty feedback, parent's feedback and student's feedback.</b>
<b>Resolution</b>	As per the faculty feedback received the faculties have proposed syllabus/ change in syllabus which discussed in BOS meeting and following resolution were made. After due discussion & incorporation of suggestions from BOS members.
<b>Agenda – 11</b>	<b>Feedback from various stakeholders about curriculum.</b>
<b>Resolution</b>	For improvement in teaching – Learning process, the university collecting feedback from stakeholders like parents feedback – which will be collected at the time of PTM. Alumni feedback – from alumni, during alumni meet Student exit feedback – when student will be passing out from university Employer's feedback – from employers where our students will be placed. We have conducted PTM for 2019 batch in Sem.-I and Sem.-II for PG course.
<b>Agenda – 12</b>	<b>Introduction of skill related courses, courses related to improve Entrepreneurship and industrial ready course.</b>



<b>Resolution</b>	<p>It was discussed that the university emphasizes on the overall development of learner. In addition to Core courses, electives courses and humanity science courses, special attention will be paid to skills courses, entrepreneurship course and course that is required by industries.</p> <p>Such courses will be offered over a span as per the requirement of students in Electrical Engineering branch.</p> <p>The committee accepted the proposal and applauded the move by the department and university.</p> <p>The syllabi of these courses are designed by Learning and Development department and recommended by the committee.</p>
<p>Note: Meeting was scheduled virtually on Google Meet. <a href="https://meet.google.com/qdg-oejv-wuz">https://meet.google.com/qdg-oejv-wuz</a></p>	
<b>Meeting Attended By: External Experts</b>	<b>Meeting Attended By: Internal Experts</b>
<ol style="list-style-type: none"> <li>1. Dr. M C Chudasama</li> <li>2. Dr. Santoshkumar Vora</li> <li>3. Dr Ranjan Behera</li> <li>4. Mr. Vinod Patel</li> </ol>	<ol style="list-style-type: none"> <li>1. Dr Rajendrasinh Jadeja</li> <li>2. Dr. Jignesh Makwana</li> <li>3. Dr. Rajesh Patel</li> <li>4. Dr Amit D. Ved</li> <li>5. Dr. Tapankumar Trivedi</li> <li>6. Prof. Nishant Kothari</li> </ol>

Attendee:

Sr. No.	Name of BOS Member	Organization	Signature
1	Dr. Rajendrasinh B. Jadeja	Professor & Dean, Marwadi University, Rajkot	Online Mode
2	Dr. M. C. Chudasama	Head, Electrical Engineering, L. D. College of Engineering, Ahmedabad	Online Mode
3	Dr. Santoshkumar Vora	Professor and Head of Department, Electrical Engineering, Nirma University, Ahmedabad	Online Mode
4	Dr. Ranjan Bahera	Professor, Dept. of Electrical Engineering, IIT Patna, Patna, Bihar	Online Mode
5	Mr. Vinod Patel	AGM (R & D), Amtech Electronics India Ltd., Gandhinagar	Online Mode
6	Dr. Jignesh Makwana	Director, RhyMak Electronics, Bhavnagar,	Online Mode



Head of the Department  
Electrical Engineering  
Marwadi University

7	Dr. Rajesh Patel	Professor, Marwadi University, Rajkot	Online Mode
8	Dr. Amit D. Ved	Head, Electrical Engineering, Marwadi University, Rajkot	Online Mode
9	Dr. Tapan Trivedi	Head-PG (Power Elect. & Ele. Drives), Marwadi University, Rajkot	Online Mode
10	Mr. Nishant Kothari	Head-PG (Power System), Marwadi University	Online Mode



Head of the Department  
Electrical Engineering  
Marwadi University

### Minutes of Meeting


<b>Date:</b> 26/06/2021		<b>Meeting No:</b> 03	
<b>Start Time:</b> 2.30 PM		<b>End Time:</b> 4:30 PM	
		<b>Total Time:</b> 2 Hours	
<b>Presented by</b>		Dr. Amit Ved	
<b>Agenda – 1 Welcome of Board of Studies Member</b>			
<b>Resolution</b>	Dr. Amit Ved Head Electrical Engineering Department, welcomed all the members and experts of the BOS present in the meeting. Committee members put their innovative ideas, views, suggestions and fruitful discussion for the syllabus.		
<b>Agenda – 2 MOM of last meeting: 31/10/2020</b>			
<b>Resolution</b>	The MOM was read by Chairman (BOS), with consent from all members, the minutes of meeting was passed.		
<b>Agenda – 3 Draft Syllabus of B. Tech. sem-5 and sem-6</b>			
<b>Resolution</b>	<ul style="list-style-type: none"> <li>• Draft syllabus for B. Tech sem-5 and 6 was presented and following points were suggested:</li> <li>• Power System-II (01EE0501) - No of contact hours for Unit: Overvoltage and Transient should be increased to 12. A reference book: computer aided power system analysis by M. A. Pai to be included.</li> <li>• Electrical Machine-II (01EE0503) - No. of contact hours for Unit: Special Machines is less than expected to discuss all topics. It was suggested to increase no. of sessions for special machines. It was also suggested to change a keyword in Course Outcome 2. In addition to this, it was recommended to add induction generators and their fundamentals in the unit of Induction Machine.</li> <li>• High Voltage Engineering (01EE0507) - It was suggested that more measurement techniques should be added in the Non-Destructive Testing. Also, details of FEMM should be added in the Unit-1 Electrostatic fields, control and Analysis.</li> <li>• Solid State Drives (01EE0601) - A topic on traction drives should be added to the Unit-6 Application of Electric Drives.</li> <li>• Interconnected Power System (01EE0603) - The student version of power world simulator and related experiments should be added in the syllabus. This will enhance the understanding of learners.</li> <li>• Distributed Energy Resources and Energy Storage Systems (01EE0606) - The impact of EV integration on grid should be added as a topic in Unit-4 of proposed syllabus.</li> </ul>		

	<ul style="list-style-type: none"> <li>• Switch Mode Power Supplies (01EE0607) - A separate Unit on Synchronous Rectifiers should be added after the Unit-2 Resonant Converters.</li> <li>• Power System Practice and Design (01EE0608) - The title of Unit-6 be revised to Performance Improvement of Power System.</li> <li>• In addition to this, it was suggested that the title of the experiment be checked in all draft syllabus and they should be more specific. Any vague word should be immediately replaced with an appropriate action word.</li> <li>• All above suggestions are accepted and incorporated in the revised syllabus document.</li> <li>• The syllabus of B. Tech. sem-5 and sem-6 was passed with given suggestions.</li> </ul>
<b>Agenda – 3</b>	<b>Introducing Creativity, Problem Solving and Innovation as a University Elective Subject</b>
<b>Resolution</b>	<ul style="list-style-type: none"> <li>• Creativity, Problem Solving and Innovation subject is to be offered in 4<sup>th</sup>, 6<sup>th</sup> or 8<sup>th</sup> semester where interested students can choose as university elective course for 2 credits.</li> </ul>
<b>Agenda – 4</b>	<b>B. Tech. – Electrical Engineering Draft teaching scheme from sem-1 to sem-8 w.e.f 2021-22</b>
<b>Resolution</b>	<ul style="list-style-type: none"> <li>• The committee accepted the revised teaching scheme of B. Tech. - Electrical Engineering from sem-1 to sem-8 with effect from Academic year 2021-22 with following modifications:</li> <li>• In the Professional Elective IV- Power System Group, a course on Restructured Power System should be introduced.</li> <li>• In Professional Elective III - Power System Group, a separate course on Smart Grid should be introduced.</li> <li>• National Cadet Corps (NCC) is introduced with teaching scheme of 1 hour theory and 2 hours laboratory for 2 credit courses in Semester – I and Semester – II.</li> <li>• The student who opts for NCC will be given exemption from below mentioned courses. <ul style="list-style-type: none"> <li>○ Value Education – Semester – I</li> <li>○ Indian Constitution – Semester – I</li> <li>○ Physical Education/Sports/Yoga - Semester – I</li> <li>○ Professional Ethics – Semester – V</li> </ul> </li> </ul>
<b>Agenda – 5</b>	<b>Syllabus of Basics of Electrical and Electronics Engineering offered to first year engineering students of all branches</b>



<b>Resolution</b>	<ul style="list-style-type: none"> <li>The syllabus of Basics of Electrical and Electronics Engineering (Course code: 01EE1101) was passed with minor modification mentioned below:</li> <li>The contents related to Field Effect Transistors - JFET and MOSFET should be added. Hence, the name of Unit - 5 will be revised to Transistor instead of Bipolar Junction Transistor.</li> </ul>								
<b>Agenda – 6</b>	<b>University Electives to be offered by Electrical Engineering Department</b>								
<b>Resolution</b>	<ul style="list-style-type: none"> <li>The Department of Electrical Engineering will offer university electives in higher semesters as per the choice of students in respective semesters. The department will offer courses as per list mentioned below: <ul style="list-style-type: none"> <li>Renewable Energy (01EE1531)</li> <li>Industrial Electronics (01EE1532)</li> <li>Microcontrollers and Embedded Systems (01EE1533)</li> <li>Fundamentals of Electric and Hybrid Vehicles (01EE1534)</li> <li>Electrical Machines and Drives (01EE1631)</li> <li>Fundamentals of Electrical Power Utilization (01EE1632)</li> <li>Introduction to Battery Management Systems (01EE1633)</li> <li>Principles of Control Systems (01EE1634)</li> </ul> </li> <li>The teaching scheme of the course will be as follows: <table border="1" data-bbox="400 1099 1385 1189"> <thead> <tr> <th>L</th> <th>T</th> <th>P</th> <th>C</th> </tr> </thead> <tbody> <tr> <td>3</td> <td>0</td> <td>0</td> <td>3</td> </tr> </tbody> </table> </li> </ul> <p>Where L – Lecture, T – Tutorial, P – Practical, C-Credit</p>	L	T	P	C	3	0	0	3
L	T	P	C						
3	0	0	3						
<b>Agenda – 7</b>	<b>Draft teaching scheme and syllabus for M. Tech. – Electrical Engineering with specialization in Electric and Hybrid Vehicle and Power Electronics and Electrical Drives with effect from AY 2021-22</b>								
<b>Resolution</b>	<ul style="list-style-type: none"> <li>The draft teaching scheme and syllabus of M. Tech. - Electrical Engineering with specialization in Electric and Hybrid Vehicle and Power Electronics and Electrical Drives with effect from AY 2021-22 were accepted in their original form</li> </ul>								
<b>Agenda – 8</b>	<b>Attainment level of course outcomes (CO's), Program Outcomes (PO's) is discussed.</b>								
<b>Resolution</b>	It is observed that the few CO's were not attain in previous year, the committee has suggested to take proper action for CO attainment improvement. The process of PO attainment & the PO attainment of various courses of PG were discussed and agreed by all the members. Discussed about the subject in which CO is attained and suggestion has given to improve the CO attainment.								

<b>Agenda – 9</b>	<b>Discussion on faculty feedback, parent’s feedback and student’s feedback.</b>	
<b>Resolution</b>	As per the faculty feedback received the faculties have proposed syllabus/ change in syllabus which discussed in BOS meeting and following resolution were made. After due discussion & incorporation of suggestions from BOS members. Based on the Feedback from different stack holders on action taken report has been prepared and BOS members are agree with the action taken reports.	
<b>Agenda – 8</b>	<b>Specific agenda with permission of chair</b>	
<b>Resolution</b>	<ul style="list-style-type: none"> <li>No specific agenda was proposed by any of the committee members. Hence, the meeting was called off after a thank speech from the Chairman - BoS.</li> </ul>	
<p>Note: Meeting was scheduled virtually on Google Meet.  <a href="https://meet.google.com/ynx-umzj-whb">meet.google.com/ynx-umzj-whb</a></p>		
<b>Meeting Attended By: External Experts</b>	<b>Meeting Attended By: Internal Experts</b>	
<ol style="list-style-type: none"> <li>Dr. M C Chudasama</li> <li>Dr. Santosh Vora</li> <li>Dr Ranjan Behera</li> </ol>	<ol style="list-style-type: none"> <li>Dr Amit Ved</li> <li>Dr Rajendrasinh Jadeja</li> <li>Dr. Rajesh Patel</li> <li>Dr. Tapankumar Trivedi</li> <li>Prof. Nishant Kothari</li> </ol>	

  
 Head of the Department  
 Electrical Engineering  
 Marwadi University

### Minutes of Meeting

<b>Date:</b> 26/02/2022		<b>Meeting No:</b> 04	
<b>Start Time:</b> 2.00 PM	<b>End Time:</b> 4:00 PM	<b>Total Time:</b> 2 Hours	
<b>Presented by</b>	Dr. Amit Ved		
<b>Agenda – 1</b>	<b>Approval of MOM of 2nd BOS held on 26th June 2021</b>		
<b>Resolution</b>	<ul style="list-style-type: none"> <li>The MOM was read by Chairman (BOS), with consent from all members, the minutes of meeting was passed</li> </ul>		
<b>Agenda – 2</b>	<b>Draft Syllabus of B.Tech. sem-7 and sem-8</b>		
<b>Resolution</b>	<ul style="list-style-type: none"> <li>The draft syllabus of B.Tech. sem-7 and sem-8 were discussed in the meeting. The committee suggested following changes in courses.</li> <li>Switchgear and Protection (01EE0703) - Increase the weightage of numerical protection as numerical relays have replaced conventional relays in majority applications</li> <li>Electrical Machine Design (01EE0704) - Reconsider hours of Computer Aided Design of Machines, it is not possible to cover all topics in allotted time</li> <li>Battery Chargers for Electric Vehicles (01EE0707) - Introduce standards of charger and protocols in syllabus e.g., OCCP – for communication</li> <li>Microgrid (01EE0710) - Reconsider the title or reduce the weightage of renewable sources, Control of frequency in islanded mode should be covered LVRT, Virtual Inertia concepts should be added PLL, and angle estimation should also be covered</li> <li>Testing and Commissioning of Electrical Equipment (01EE0802) - Non-Destructive Testing of electrical equipment should be covered as it is a core course</li> <li>FACTS and HVDC (01EE0806)- Reduce contents of FACTS – in depth analysis is expected in the course. It is not possible to cover all contents in the given time frame Similarly, reduce the contents of HVDC section</li> <li>Power System Operation and Control (01EE0807) - Reduce contents that requirement in depth analysis of operation and control – all contents cannot be covered in depth, Remove Chapter 5 and Chapter 6 from syllabus</li> <li>All above suggestions are accepted and incorporated in the revised syllabus document.</li> <li>The syllabus of B.Tech. sem-5 and sem-6 was passed with given suggestions.</li> </ul>		
<b>Agenda – 3</b>	<b>Draft Syllabus of B.Tech. sem-3 and sem-4 w.e.f. Academic Year (AY) 2022-23</b>		
<b>Resolution</b>	<ul style="list-style-type: none"> <li>The committee suggested following changes in the draft syllabus of course Electrical and Electronic Instruments (01EE1304):</li> </ul>		

	<ul style="list-style-type: none"> <li>Digital Storage Oscilloscope should be discussed in detail.</li> <li>All above suggestions are accepted and incorporated in the revised syllabus document.</li> <li>The syllabus of B.Tech. sem-3 and sem-4 was passed with given suggestions.</li> </ul>
<b>Agenda – 4</b>	<b>Introduction of Soft skill related courses from 1st to 6th semester with 1 hour and non-credit with effect from AY: 2022-23</b>
<b>Resolution</b>	<ul style="list-style-type: none"> <li>It was discussed that the university emphasizes on the overall development of learner. In addition to Core courses, electives courses and humanity science courses, special attention will be paid to soft skills courses.</li> <li>It was proposed in the meeting to introduce 1-hour mandatory non-credit courses in the curriculum of B.Tech. Electrical Engineering with effect from Academic Year 2022-23.</li> <li>Such courses will be offered over a span of 6 semesters as per the requirement of students in Electrical Engineering branch.</li> <li>The committee accepted the proposal and applauded the move by the department and university.</li> <li>The syllabi of these courses are designed by Learning and Development department and recommended by the committee.</li> </ul>
<b>Agenda – 5</b>	<b>University electives to be offered by the Electrical Engineering department</b>
<b>Resolution</b>	<ul style="list-style-type: none"> <li>The Department of Electrical Engineering will offer university electives/open electives for all students at the university.</li> <li>The syllabus of the university elective on Sustainable Energy is discussed. The committee accepted the syllabus document.</li> </ul>
<b>Agenda – 6</b>	<b>Revision in teaching scheme of B. Tech sem 1 &amp; 2 as per MU guidelines</b>
<b>Resolution</b>	<ul style="list-style-type: none"> <li>The revised teaching scheme of B.Tech. sem-1 and sem-2 Electrical Engineering was proposed by the Chairman-BoS.</li> <li>The committee accepted the proposed scheme and recommended it for the approval.</li> </ul>
<b>Agenda – 7</b>	<b>Draft Teaching scheme of B.Tech. Electrical Engineering with minor in Electric Vehicles with B.Tech. Electrical Engineering with minor in Electrical and Computer engineering</b>
<b>Resolution</b>	<ul style="list-style-type: none"> <li>The AICTE in the revised guidelines has specified specialization that can be offered to students pursuing B.Tech. Electrical Engineering. Such specialization is offered as minor degree to respective branches.</li> <li>The draft teaching scheme of B.Tech. Electrical Engineering with minor degree in Electric Vehicles and B.Tech. Electrical Engineering with minor</li> </ul>



	<p>Electrical and Computer Engineering. This teaching scheme is inline with the requirement of the AICTE.</p> <ul style="list-style-type: none"> <li>• It was proposed that students desirous of obtaining minor degree will obtain minimum 18 credits with electives of that specializations.</li> <li>• The list of electives for each minor degree was presented to the committee and accepted unanimously.</li> </ul>
<b>Agenda – 8</b>	<b>Swayam courses as part of full credit or partial credit (as part of internal assessment)</b>
<b>Resolution</b>	<ul style="list-style-type: none"> <li>• As per the gazette of India in No. 332 published on August 22, 2016, the guidelines for credit transfer through online learning courses SWAYAM were published.</li> <li>• It was discussed and agreed upon by all members to include SWAYAM courses towards full credit transfer in students' grade sheet.</li> <li>• Alternatively, such MOOC courses can be included for partial assessment (internal assessment) in any course with relevant contents.</li> </ul>
<b>Agenda – 9</b>	<b>Discussion on Stakeholder feedback</b>
<b>Resolution</b>	<ul style="list-style-type: none"> <li>• As per the faculty feedback received the faculties have proposed syllabus/ change in syllabus which discussed in BOS meeting and following resolution were made. After due discussion &amp; incorporation of suggestions from BOS members.</li> <li>• Parent's feedback of UG, PG and alumni feedback and exit feedback for PG courses, analysis and action taken report on same were presented. The BOS members were satisfied with the action taken report. There was a discussion on taking feedback from other stakeholders. HOD had informed that the university is conducting employer's feedback where students are placed and alumni feedback also. The form and process were presented. BOS members had resolved to continue with the process as decided by university.</li> </ul>
<b>Agenda – 10</b>	<b>Attainment level of course outcomes (CO's), Program Outcomes (PO's) is discussed.</b>
<b>Resolution</b>	It is observed that the few CO's were not attain in previous year, the committee has suggested to take proper action for CO attainment improvement. Care should be taken for mathematical subjects and subjects which has only theory component. The process of PO attainment & the PO attainment of various courses of PG were discussed.
<b>Agenda – 11</b>	<b>Specific agenda with permission of chair</b>
	<ul style="list-style-type: none"> <li>• No specific agenda was proposed by any of the committee members. Hence, the meeting was called off after a thank speech from the Chairman - BoS.</li> </ul>

Note: Meeting was scheduled virtually on Google Meet.

<https://meet.google.com/bxa-xndb-cfy?hs=224>

**Meeting Attended By: External Experts**

1. Dr. M C Chudasama
2. Dr. Santosh Vora
3. Dr Ranjan Behera

**Meeting Attended By: Internal Experts**

1. Dr Amit Ved
2. Dr Rajendrasinh Jadeja
3. Dr. Rajesh Patel
4. Dr. Tapankumar Trivedi
5. Prof. Nishant Kothari



Head of the Department  
Electrical Engineering  
Marwadi University

B. Tech Information and Communication  
Technology  
Faculty of Technology  
Marwadi University

**1.1.2 Board of Studies meeting minutes**

(Program revision)

### Minutes of Meeting – Board of Studies A. Y. 2017-18

Date: 5/6/2017		Meeting no: 01	
Start time: 11:00 AM	End time: 1:00 PM	Total time: 2 hours	
Chaired by	Prof. C. D. Parmar (HOD - ICT, Marwadi University)		
The formal welcome of members of the board of studies was done by Dr R. B. Jadeja.			
Agenda - 1	<b>Approval of Vision, Mission, PO, PSO and CO</b>		
<b>Discussion and Resolution</b>	<ul style="list-style-type: none"> <li>• Vision and Mission were discussed in alignment of University's Vision and Mission. It was approved by the committee members and University's concerned authorities.</li> <li>• Program outcomes (PO) were adopted as per the recommendation of UGC policy and Faculty of Technology policy of Marwadi University for outcome-based education.</li> <li>• Program Specific Outcomes (PSO) for ICT department were proposed and approved by the Board Members.</li> </ul>		
Agenda - 2	<b>Designing of syllabus framework for 1<sup>st</sup> year (Credits and teaching scheme)</b>		
<b>Discussion and Resolution</b>	<ul style="list-style-type: none"> <li>• Subjects covered are appropriate. There shall be one change in Engineering Graphics. The subject should be like Engineering Drawing and Computer Graphics.</li> <li>• Credit should be given according to hours i.e. 1 credit per hour for theory, 1 credit per 2 hours for laboratory/tutorial.</li> <li>• Total Contact hours for the students should not be more than 30 hours.</li> <li>• The suggestion regarding the conduction of the Viva Exam was brainstormed among the committee members and was decided that the subject faculty is going to conduct the Viva exam.</li> <li>• In tutorial there shall be no teaching in continuing to syllabus covered in class but there shall be doubt solutions and practice should be carried out. It should not be necessary to solve only examples. It may also cover connection of mathematics with engineering problems.</li> <li>• The suggestion from the expert was discussed regarding Evaluation scheme. Evaluation should be carried out for 100 marks instead of 150 marks. The bifurcation of 100 marks is 50 (End semester exam), 20 (Mid semester exam) and 30(continuous semester evaluation). The suggestion was not</li> </ul>		



	<p>feasible as per the uniformity in the evaluation scheme across the University.</p> <ul style="list-style-type: none"><li>• Targeted CO-PO and PSO attainment is 50% for the academic year 2017-18.</li><li>• The expert suggested that the Practical/Laboratory should be considered as a separate subject in mark sheet and its assessment should be done from 100 marks. Laboratory timing should be 3 hour slot. The suggestion was not feasible as per the uniformity in the evaluation scheme across the University.</li><li>• Instead of subject name as engineering mathematics there should be content base name to be considered. e.g. linear algebra, calculus. This suggestion is forwarded to the Mathematics department to brainstorm and the decision will be applicable from the next academic year.</li><li>• The name of subject “Data structure &amp; Algorithm Design” should be name as “Data structure &amp; Algorithm”. The suggestion is accepted and implemented.</li><li>• Subject “Career readiness program” should be name as “Professional skill development”. The suggestion is forwarded to L&amp;D Department as it is a common subject among all branches of Faculty of Technology.</li><li>• Advantages of Choice Based Credit System were discussed and proposed to the Dean of Faculty of Technology of Marwadi University.</li><li>• As per the guideline of UGC, Non-Credit Course named “Physical Education/Sports/Yoga has been presented and approved.</li><li>• Subjects of the first year were categorized into Basic Science, Engineering Science, Professional Core, Non-Credit Course, and HSMC. The committee has suggested to prepare syllabus structure of next 3 years with appropriate balance in the categorization.</li></ul> <p><b>Suggestion from Dr. S. L. Maskara for Marwadi University Engineering Program.</b></p> <ul style="list-style-type: none"><li>• Four years course plan should be ready and it should be presented in the next BoS meeting.</li><li>• Fix up frame work of Marwadi University followed by clusters which further followed by department.</li><li>• Course structure should be mapped with Washington accord guideline for basic science, humanity and social science, professional subject core, professional subject electives, open electives etc. (ICT department of Marwadi University has</li></ul>
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	<p>prepared it for first year)</p> <ul style="list-style-type: none"> <li>• There shall be limited main cluster of streams which have few common subjects. e.g. Electrical, EC, CSE, IT, ICT.</li> <li>• Brain storming is required to decide for choice based flexible credit system implementation.</li> <li>• There should be some audit subject included of less credit to increase the breadth of engineering knowledge.</li> </ul>
Agenda - 3	<b>Discussion on CO-PO, PSO mapping and attainment</b>
<b>Discussion and Resolution</b>	<ul style="list-style-type: none"> <li>• All the course outcomes for 1<sup>st</sup> year subjects were proposed and approved by the Board Members.</li> <li>• CO-PO and PSO mapping of 1<sup>st</sup> year subjects was brainstormed and finalized.</li> <li>• Proposed CO-PO and PSO target for AY 2017-18 was discussed and finalized to be 50% for majority of the subjects and subject which is in high demand in industry such as computer programming has given more weight age i.e. 52%.</li> </ul>
Agenda - 4	<b>Suggestion for preparing students for industry ready</b>
<b>Discussion and Resolution</b>	<ul style="list-style-type: none"> <li>• To bridge the gap between academia and industry, the committee felt the need to motivate and train the students to take summer internships from the 3<sup>rd</sup> year itself.</li> <li>• Faculty should be trained for conducting certain subjects with “Learning By Doing” approach.</li> <li>• Project/Problem Based Learning should be included in the assessment scheme of relevant subjects.</li> </ul>

Prof. C. D. Parmar offered vote of thanks to members of the board of studies for sparing their valuable time and giving constructive suggestions.

### Minutes of Meeting – Board of Studies A. Y. 2018-19

Date: 5/5/2018		Meeting no: 02	
Start time: 11:30 AM	End time: 5:30 PM	Total hours: 5 hours	
Chaired by		Prof. C. D. Parmar (HOD – ICT, Marwadi University)	
Formal welcome of members of the board of studies was done by Prof. C. D. Parmar.			
<b>Section - A</b>		<b>Action taken based on previous meeting</b>	
Agenda - 1		Approval of Vision, Mission, PO and PSO	
Action taken		No further modification required.	
Agenda - 2		Designing of syllabus framework for 1 <sup>st</sup> year (Credits and teaching scheme)	
Action taken		The elective domain was finalized. A roadmap of the teaching scheme for all 4 years had been laid out, and the inputs about the syllabus content, mode of examination, and name of the subjects were gained from the esteemed members of the BoS committee.	
Agenda - 3		Discussion on CO-PO, PSO mapping and attainment	
Action taken		No further modification required.	
Agenda - 4		Suggestion for preparing students for industry ready	
Action taken		Industrial internship approved.	

<b>Section: B</b>		<b>Agenda for discussion</b>	
Agenda - 1		<b>Designing of Syllabus framework for 2nd year (Credits and teaching scheme) B.Tech. ICT</b>	
<b>Discussion and Resolution</b>		<p>All experts have reviewed the teaching learning process and assessment process for the academic year 2017-18. The detailed syllabus and teaching scheme for semesters 3 and 4 were presented for discussion and suggestions from the experts. The draft teaching scheme for semesters 5, 6, 7 and 8 were presented as per the suggestions of the previous BoS meeting.</p> <ul style="list-style-type: none"> <li>• Subjects are as per the required flow of learning for ICT specialization.</li> <li>• Experts insist to promote project-based learning. One minor project can be assigned to the integration of various subjects.</li> <li>• Canvas or similar LMS portals would be used for continuous evaluation purposes.</li> <li>• They have also suggested some changes in flow for subjects offered in the first 3 semesters for a better learning curve.</li> <li>• Instead of Computer Workshop and Electrical and</li> </ul>	



	<p>Electronics workshop subjects, ICT workshop subject is more suitable for ICT graduates which cover learning outcomes for both subjects.</p> <ul style="list-style-type: none"> <li>• One subject focused on Project-based learning can be introduced in the 1<sup>st</sup> semester.</li> <li>• All mathematics subjects in the first three semesters should be given an appropriate name as per the content covered in the syllabus.</li> <li>• ICT graduates will be able to work with data analytics, so basic concepts of data analytics may be introduced in the 1<sup>st</sup> year. IRRS subject is introduced in semester 2 from the next academic year.</li> <li>• Instead of teaching Data Structure and Algorithm in semester 2, first preference must be given to Object-Oriented Programming subject. Swapping of DSA and OOP will be conducted from next academic year.</li> <li>• Some suggestions have been given by experts about the contents of subjects and it is implemented.</li> <li>• To inculcate a design thinking mindset and to promote entrepreneurship Design Engineering, Human Center Design and Reverse Engineering are suggested to execute in active learning mode.</li> <li>• All the teaching schemes and syllabus for 2<sup>nd</sup>,3<sup>rd</sup> and 4<sup>th</sup> have been proposed and courses and syllabi were designed keeping in mind that it should be relevant to the current demands and needs of the industry, and students must gain contemporary skills and must provide the platform for any entrepreneurship roles as well.</li> </ul>
<p>Agenda - 2</p>	<p><b>Choice-Based Credit System and finalization of the possible specializations in ICT</b></p>
<p><b>Discussion and Resolution</b></p>	<ul style="list-style-type: none"> <li>• Elective subject possibilities have been discussed, and five possible tracks have been identified. Elective subjects would be offered from Semester 5. In semester 5, students can take any one subject out of 5 subjects as an elective 1 and in semesters 6 and 7, students can choose any 2 subjects from the given 10 subjects as electives 2,3, and 4,5, respectively.</li> <li>• Teaching and examination scheme was prepared for batch 2017-21(semester 3 to 8) and 2018-22(semester 1 to 8) batch.</li> <li>• Choice Based Credit System were discussed and implemented for the students from AY 2018-19 onwards as per guideline of university.</li> <li>• All the teaching schemes and syllabus for 2<sup>nd</sup>,3<sup>rd</sup> and 4<sup>th</sup> have been proposed and courses and syllabi were designed keeping in mind that it should be relevant to the current</li> </ul>





	<p>demands and needs of the industry, and students must gain contemporary skills and must provide the platform for any entrepreneurship roles as well.</p> <ul style="list-style-type: none"><li>• CO-PO and PSO mapping for semester 1, 2, 3 and 4 for academic year 18-19 were discussed and finalized.</li></ul>
Agenda -3	<b>Analysis and finalization of CO-PO and PSO attainment</b>
<b>Discussion and Resolution</b>	<ul style="list-style-type: none"><li>• The targeted attainment for CO-PO and PSO is achieved for the semester 1 of academic year 2017-18 for all subjects except Basics of Electronics Engineering.</li><li>• Upon further analysis it is decided that target attainment for AY 2018-19 will be kept 50%.</li><li>• For meeting a demand of industry subjects namely FSSI and IRRS in 1<sup>st</sup> year and subjects like Computer Organization and Architecture, OOP and Design Engineering in 3<sup>rd</sup> semester will be given more weightage i.e. 52%.</li></ul>

Prof. C. D. Parmar offered vote of thanks to members of the board of studies for sparing their valuable time and giving constructive suggestions.



**Minutes of Meeting – Board of Studies A. Y. 2019-20**

Date: 24/5/2019		Meeting no: 03	
Start time: 10:30 AM	End time: 4:30 PM	Total hours: 5 hours	
Chaired by		Prof. C. D. Parmar (HOD – ICT, Marwadi University)	
Formal welcome of members of the board of studies was done by Prof. C. D. Parmar.			
<b>Section - A</b>		<b>Action taken based on the previous meeting</b>	
Agenda – 1		Designing of Syllabus framework for 2nd year (Credits and teaching scheme) B.Tech. ICT	
Action taken		All experts have appreciated the project-based learning implementation by the department. The challenges and its solutions to carry out the Industry Internship for summer break was discussed.	
Agenda – 2		Choice-Based Credit System and finalization of the possible specializations in ICT	
Action taken		Teaching scheme for all 8 semesters had been proposed and decided according to the UGC guidelines of credit structures. BoS committee members gave their valuable feedback on the teaching scheme and syllabus of MOOC-based credit courses for the final semester.	
Agenda – 3		Analysis and finalization of CO-PO and PSO attainment	
Action taken		No further modification is required.	

<b>Section: B</b>		<b>Agenda for discussion</b>	
Agenda - 1		<b>Designing of Syllabus framework for 3<sup>rd</sup> year, B.Tech. ICT</b>	
<b>Discussion and Resolution</b>		<p>All experts have reviewed the teaching scheme of all semesters and proposed a syllabus for 3<sup>rd</sup>-year subjects. The syllabus for compulsory and elective subjects has been brainstormed in the meeting.</p> <ul style="list-style-type: none"> <li>• In summer vacation students are encouraged to opt for a summer internship at industries or internships from home, and work on projects under the guidance of faculties or industry mentors.</li> <li>• Suggestions have been given by experts about the contents of subjects for semesters 5 and 6.</li> <li>• CO-PO and PSO mapping for semester 5 and 6 for academic year 19-20 were discussed and finalized.</li> </ul>	

Agenda - 2	<b>Planning for value-added courses for the academic year 2019-20.</b>
<b>Discussion and Resolution</b>	<ul style="list-style-type: none"> <li>• The committee discussed and felt that current industrial skills would be needed for the students in their engineering career apart from the regular academic courses and therefore value-added courses must be organized by the ICT department.</li> <li>• From the next academic year, according to the current industry demands, one must provide value-added courses to the students in scripting languages like Python and some background knowledge in JAVA framework like MEAN stack which would be very much helpful in their placement.</li> <li>• For the physical health of the students, a value-added course “Frolic” should happen every year.</li> </ul>
Agenda -3	<b>Analysis and finalization of CO-PO and PSO attainment</b>
<b>Discussion and Resolution</b>	<ul style="list-style-type: none"> <li>• The targeted attainment for CO-PO and PSO is achieved for the semester 2 and semester 3 for all subjects except Signals and Systems and OOP for 2017-18 batch. For 2018-19 batch targeted attainment is achieved for all subjects of semester 1 except Basics of Electronics Engineering.</li> <li>• Upon further analysis it is decided that target attainment for AY 2019-20 will be kept 50% for majority of the subjects and 52% for all elective and industry driven subjects for semester 5 and 6.</li> <li>• For semester 3 and 4 attainment target is kept same as AY: 2018-19 and for semester 1 and 2 all subjects target attainment is increased by 2% i.e 52% except ICP which is kept at 53%.</li> </ul>

Prof. C. D. Parmar offered vote of thanks to members of the board of studies for sparing their valuable time and giving constructive suggestions.



**Minutes of Meeting – Board of Studies A. Y. 2020-21**

Date: 12/6/2020		Meeting no: 04
Start time: 03:00 PM	End time: 06:00 PM	Total hours: 3 hours
Chaired by	Prof. C. D. Parmar (HOD – ICT, Marwadi University)	
Formal welcome of members of the board of studies was done by Prof. C. D. Parmar.		
<b>Section - A</b>	<b>Action taken based on the previous meeting</b>	
Agenda - 1	Designing of Syllabus framework for 3 <sup>rd</sup> year, B.Tech. ICT	
Action taken	The teaching learning and evaluation process for the subjects of AY 19-20 was discussed and evaluated. BoS committee members appreciated the project-based learning and Learning by Doing approach. The internship report discussed benefits and challenges faced by students. Core and elective subjects for semesters 5 and 6 were discussed.	
Agenda - 2	Planning for value-added courses for the academic year 2019-20.	
Action taken	Frolic value-added course was conducted during the previous academic year and should be repeated. Previously discussed value added courses such as MEAN STACK and Problem Solving Using Python are ongoing and will be completed within July 2020.	
Agenda - 3	Analysis and finalization of CO-PO and PSO attainment	
Action taken	No further modification is required.	

<b>Section: B</b>	<b>Agenda for discussion</b>
Agenda - 1	<b>Presentation of Project-Based Learning and Learning By Doing activities.</b>
<b>Discussion and Resolution</b>	<ul style="list-style-type: none"> <li>• Active learning assignments and project-based learning experiences for semesters 1 to 6 were presented.</li> <li>• Projects of the selected students were demonstrated as an outcome of project credit in various subjects.</li> </ul>
Agenda - 2	<b>Designing of Syllabus framework for 4<sup>th</sup> year, B.Tech. ICT</b>
<b>Discussion and Resolution</b>	<p>All experts have reviewed the teaching scheme of all semesters and proposed a syllabus for 4<sup>th</sup>-year subjects. The syllabus for compulsory and elective subjects has been brainstormed in the meeting.</p> <ul style="list-style-type: none"> <li>• Internship/project assessment guidelines were discussed and finalized.</li> <li>• Special courses in the defined minor elective tracks were suggested and also proposed course revision frequently through BoS to meet requirements of advancement in the field.</li> <li>• These elective courses will run on the MOOC basis as per the guidelines by AICTE to avail certain credits through MOOC.</li> </ul>





Agenda -3	<b>Proposed Teaching Scheme for the Batch 2020-2024</b>
<b>Discussion and Resolution</b>	<ul style="list-style-type: none"> <li>• Summer internship experiences were discussed and certain modifications in the subject sequences were taken into brainstorming for the prerequisite of internships.</li> <li>• Looking towards diversification of course, BoS members have promoted a choice-based flexible credit system for upcoming admitted students.</li> <li>• Final structure of elective subjects will be proposed in next Academic year BoS.</li> <li>• Teaching scheme and syllabus for semester 1 and 2 is discussed and proposed to continue as per the teaching scheme of the previous batch.</li> </ul>
Agenda - 4	<b>Planning for value-added courses for the academic year 2020-21</b>
<b>Discussion and Resolution</b>	<ul style="list-style-type: none"> <li>• Some additional value-added courses must be included which are meeting the current demands of industry like CISCO elementary networking course.</li> </ul>
Agenda -5	<b>Analysis and finalization of CO-PO and PSO attainment</b>
<b>Discussion and Resolution</b>	<ul style="list-style-type: none"> <li>• The targeted attainment of 17-21 batch for semester 4 and 5 were achieved for all the subjects whereas for 18-22 batch majority of the CO's were obtained for all the subjects of semester 2 and 3 except EDCAD.</li> <li>• Increment of 2 per cent in all the core subjects for semester 1 has been successfully achieved in the batch 2019-23.</li> <li>• On the further analysis, BoS committee members suggested that for the subjects which are not program core in the 1<sup>st</sup> year must be kept at 50 per cent and all the program electives and industry-driven subjects must have a minimum of 52% target.</li> <li>• For the batch 2017-21, as the subjects are being offered for the 1st time in the final year, all the program core and elective subjects will start with 52% target and the project being the most industry driven subject will start with 55%. For the batch 2018-22, as the subjects are being repeated, the target has been kept the same as previous academic years. For the batch 2019-23, based on the target achievement of the majority of the subjects of semester 3 and 4, it is decided to increase the target by 2%. For the batch 2020-24, a target has been decided for all the basic core courses which is 53% and for the engineering, basic sciences and HSMC courses are kept at 50%.</li> </ul>

Prof. C. D. Parmar offered vote of thanks to members of the board of studies for sparing their valuable time and giving constructive suggestions.

### Minutes of Meeting-Board of Studies AY 2021-22

Date: 09/7/2021		Meeting no: 05	
Start time: 02:00 PM		End time: 05:00 PM	
		Total hours: 3 hours	
Chaired by		Prof. C. D. Parmar (HOD – ICT, Marwadi University)	
Formal welcome of members of the board of studies was done by Prof. C. D. Parmar.			
<b>Section - A</b>		<b>Action taken based on the previous meeting</b>	
Agenda - 1		Presentation of Project-Based Learning and Learning By Doing activities.	
Action taken		No further modification is required.	
Agenda - 2		Designing of Syllabus framework for 4 <sup>th</sup> year, B.Tech. ICT	
Action taken		Specialization based MOOC courses have been identified and proposed to the students along with industrial internship.	
Agenda - 3		Proposed Teaching Scheme for the Batch 2020-2024	
Action taken		Semester 1 and 2 teaching and examination schemes have been approved and implemented for Batch 2020-24.	
Agenda - 4		Planning for value-added courses for the academic year 2020-21	
Action taken		Frolic value-added course was conducted during the previous academic year and should be repeated. Previously discussed value added course Get connected scope and sequence was conducted.	
Agenda - 5		Analysis and finalization of CO-PO and PSO attainment	
Action taken		No further modification is required.	

<b>Section: B</b>	<b>Agenda for discussion</b>
Agenda - 1	<b>Review of ICT Department for Academic Year 2020-21</b>
<b>Discussion and Resolution</b>	<ul style="list-style-type: none"> <li>• The software and hardware-based subjects are conducted with the help of IDE and simulator, respectively.</li> <li>• The teaching &amp; learning process in online mode during the pandemic was appreciated.</li> <li>• Summer internship carried out with help of industry expert's support in work-from-home execution.</li> <li>• The value-added course on Cyber Security is proposed with the help of CISCO academy, Marwadi University with certified faculty is proposed from the next academic year.</li> <li>• Placement of 1<sup>st</sup> batch is appreciated in terms of the highest and average package along with core and diversified profiles.</li> </ul>

Agenda -2	<b>Teaching and assessment scheme for the batch 2018-22 and 2019-23</b>
<b>Discussion and Resolution</b>	<ul style="list-style-type: none"> <li>• The final year teaching scheme for the batch 2018-22 have been kept the same as the final year syllabus of the batch 2017-21.</li> <li>• Similarly, 3rd year teaching scheme for the batch 2019-23 have been kept same as 3rd year syllabus of the batch 2018-22</li> </ul>
Agenda - 3	<b>Teaching Scheme of B.Tech. ICT Semester - I &amp; Semester - II as per new UGC/AICTE Guidelines for the batch 2021-25.</b>
<b>Discussion and Resolution</b>	<ul style="list-style-type: none"> <li>• Course credits for engineering courses need to be revised to 160 credits as per the guidelines provided by UGC/AICTE.</li> <li>• Semester – I and Semester – II teaching schemes are redesigned as per revised AICTE guidelines.</li> <li>• Teaching hours for students can be kept around 23-25 hours per week.</li> <li>• Subjects with end semester exams should not be more than 5 per semester.</li> <li>• The contact hours for laboratory sessions can be increased to make students proficient in the industry.</li> <li>• To meet the current industrial demand and to be skilled in contemporary courses like IoT, BoS committee members felt the Foundation of Skills in Sensor Interfacing (FSSI) course which was implemented in the AY 18-19 must be revised as well as the credit of the course must be increased. Therefore, the teaching scheme of FSSI changed from (0-0-2) to (0-0-4) and the additional modules of sensors, actuators and project implementation were added to the curriculum. It is also meeting the suggestion of students regarding in depth skill requirements to shape up the prototype in design thinking and hackathons.</li> <li>• NCC is introduced with a teaching scheme of 1-hour theory and 2 hours of laboratory for 2 credit courses in Semester – I and Semester – II.</li> <li>• In the academic year 21-22, for the 1<sup>st</sup>-semester students, the Indian Constitution and Basics of Environmental Studies courses should be added in the category of mandatory non-credit (MNC) courses.</li> </ul>

Agenda - 4	<b>Modification in teaching scheme of B.Tech. ICT sem III and IV has been proposed based on feedback taken from stakeholders</b>
<b>Discussion and Resolution</b>	<ul style="list-style-type: none"> <li>• Entire teaching schemes have been discussed and modifications in semesters III and IV have been proposed based on the feedback taken from student alumni, academicians and industrial experts.</li> <li>• Detailed feedback on the subject in the syllabus is carried out with the help of google form. The feedback form is filled up by the students, Pass out students, faculties, faculties from peer institute and industry experts. The suggestions were discussed in the meeting and some required actions taken are proposed and accepted as below. <ul style="list-style-type: none"> <li>• Subject named “01CT0308- Data Structure Using C++” with 4 credits(3-0-2) was introduced in semester 3 based on feedback received from pass out students.</li> <li>• Subject named “01CT0309 - Programming with Python” with 2 credits (0-0-4) is introduced in semester 3 based on the requirement and penetration of python programming in various domains of ICT</li> <li>• Subjects 01CT0407 - Database Management System and 01CT0408 - Internet and Web Technology have been shifted to semester 4 from semester 5 to fulfill the requirement of knowledge and skills for the internship module offered between semester 4 and 5.</li> <li>• Content of the subject 01CT0409 - Operating System has been modified.</li> <li>• Subject 01CT0306 - Design Engineering as per the old teaching scheme is proposed to offer in higher semester as students will be additionally compatible to justify the requirement of the skills needed to design the project.</li> <li>• Subject 01CT0405 - Engineering Electrodynamics as per the old teaching scheme is proposed to offer as an elective in semester 5.</li> </ul> </li> </ul>
Agenda - 5	<b>Feedback from Members of Board of Studies</b>
<b>Discussion and Resolution</b>	<ul style="list-style-type: none"> <li>• NCC / NSS as a subject in the curriculum is appreciated.</li> <li>• The students can have the flexibility to earn more credits during the semester based on the subjects offered.</li> <li>• It was suggested to manage subjects with a maximum of 4 credits taking the syllabus of the subjects into consideration.</li> </ul>



	<ul style="list-style-type: none"><li>• Internship with an industrial expert was appreciated.</li></ul>
Agenda - 6	<b>Analysis and finalization of CO-PO and PSO attainment</b>
<b>Discussion and Resolution</b>	<ul style="list-style-type: none"><li>• The targeted attainment for the academic year 20-21 has been achieved for most of the courses.</li><li>• The target attainment for the next academic year could be decided on the basis of course instructor's experience and number of times the course has been repeated which should be between 52 % to 60 %. as attached in annexure.</li></ul>

Prof. C. D. Parmar offered vote of thanks to members of the board of studies for sparing their valuable time and giving constructive suggestions.