

SVKM's NMIMS
MUKESH PATEL SCHOOL OF TECHNOLOGY MANAGEMENT & ENGINEERING
Course Structure: 2017-18
Teaching Scheme: BTech (Mechatronics) (2nd Year) for the Academic Year (2017 - 18)

Name of the Programme: B.TECH. MECHATRONICS										Second Year					Year: 2017 - 18						
Semester - III																					
Sr. No.	SAP Module Code	Module / Subject Code	Name of the Module	No. of Students booked for module	Theory (Hours Per Week)	Practical (Hours Per Week)	Tutorial (Hours Per Week)	Total no. of hours for the subject	Credit/s	Term End Exam Duration (Hrs)+B22	Examination Scheme (Weightage)									Template Codes	
											*ICA			TEE			Total				
									Written/ Online	Only ICA	Test I	Test II	Term work	Total Marks	Scaled to (Marks)	Marks	Scaled to (Marks)	Marks	Weightage %		
1	BTAB03001	Engineering Mathematics - III			3	0	2	5	4	Written/3Hrs	-	15	15	20	50	30	70	70	100	100	7008
2	BTMA03002	Strength of Materials			3	0	2	5	4	Written/3Hrs	-	15	15	20	50	30	70	70	100	100	7008
3	BTMA03003	Fluid Mechanics and Machinery			3	2	0	5	4	Written/3Hrs	-	15	15	20	50	30	70	70	100	100	7008
4	BTMA03004	Digital Electronics			3	2	0	5	4	Written/3Hrs	-	15	15	20	50	30	70	70	100	100	7008
5	BTMA03005	Theory of Machines - I			3	0	2	5	4	Written/3Hrs	-	15	15	20	50	30	70	70	100	100	7008
6	BTMA03006	Electronic Devices and Circuits			3	2	0	5	4	Written/3Hrs	-	15	15	20	50	30	70	70	100	100	7008
Total					18	6	6	30	24	18	0	90	90	120	300	180	420	420	600	600	

Name of the Programme: B.TECH. MECHATRONICS										Second Year					Year: 2017 - 18						
Semester - IV																					
Sr. No.	SAP Module Code	Module / Subject Code	Name of the Module	No. of Students booked for module	Theory (Hours Per Week)	Practical (Hours Per Week)	Tutorial (Hours Per Week)	Total no. of hours for the subject	Credit/s	Term End Exam Duration (Hrs)+J44	Examination Scheme (Weightage)									Template Codes	
											*ICA			TEE			Total				
									Written/ Online	Only ICA	Test I	Test II	Term work	Total Marks	Scaled to (Marks)	Marks	Scaled to (Marks)	Marks	Weightage %		
1	BTAB04001	Engineering Mathematics - IV			3	0	2	5	4	Written/3Hrs	-	15	15	20	50	30	70	70	100	100	7008
2	BTMA04002	Signals and Systems			3	2	0	5	4	Written/3Hrs	-	15	15	20	50	30	70	70	100	100	7008
3	BTMA04003	Theory of Machines - II			3	0	2	5	4	Written/3Hrs	-	15	15	20	50	30	70	70	100	100	7008
4	BTMA04004	Thermodynamics and Heat Transfer			3	2	0	5	4	Written/3Hrs	-	15	15	20	50	30	70	70	100	100	7008
5	BTMA04005	Manufacturing Processes			3	0	0	3	3	Written/3Hrs	-	15	15	20	50	30	70	70	100	100	7008
6	BTMA04006	Microprocessors And Interfacing			3	2	0	5	4	Written/3Hrs	-	15	15	20	50	30	70	70	100	100	7008
7	BTMA04007	Electro-Mechanical Workshop			0	2	0	2	1	Only ICA	0	0	0	50	50	0			50	100	7003
Total					18	8	4	30	24	18	0	90	90	170	350	230	420	420	650	700	

Date :

10/7/17



Vinod Jain
Incharge Head Mechatronics Program

SVKM's NMIMS
MUKESH PATEL SCHOOL OF TECHNOLOGY MANAGEMENT & ENGINEERING
Course Structure: 2017-18
Teaching Scheme: B.Tech (Mechatronics) (3rd Year) for the Academic Year (2017 - 18)

Name of the Programme: B.TECH. MECHATRONICS										Third year					Year: 2017 - 18									
Semester - V																								
Sr. No.	SAP Module Code	Module / Subject Code	Name of the Module	No. of Students booked for modul	Theory (Hours Per Week)	Practical (Hours Per Week)	Tutorial (Hours Per Week)	Total no. of hours for the subject	Credit/s	Term End Exam Duration (Hrs)+J59	Examination Scheme (Weightage)								Template Codes					
											*ICA				TEE		Total							
											Written/ Online	Only ICA	Test I	Test II	Term work	Total Marks	Scaled to	Marks		Scaled to	Marks	Weightag		
1		BTMA05001	Design of Machine Elements		3	0	2	5	4	Written/3Hrs	-	15	15	20	50	30	70	70	100	100	7005			
2		BTMA05002	Linear Integrated Circuits and Applications		3	2	0	5	4	Written/3Hrs	-	15	15	20	50	30	70	70	100	100	7005			
3		BTMA05003	Modelling and Simulation		3	2	0	5	4	Written/3Hrs	-	15	15	20	50	30	70	70	100	100	7005			
4		BTMA05004	Instrumentation		3	2	0	5	4	Written/3Hrs	-	15	15	20	50	30	70	70	100	100	7005			
6		BTMA05005	Industrial Electronics		3	2	0	5	4	Written/3Hrs	-	15	15	20	50	30	70	70	100	100	7005			
7		BTMA05006	Basic Control Systems		3	2	0	5	4	Written/3Hrs	-	15	15	20	50	30	70	70	100	100	7005			
			Total		18	10	2	30	24	18	0	90	90	120	300	180	420	420	600	600				

Name of the Programme: B.TECH. MECHATRONICS										Third Year					Year: 2017 - 18									
Semester - VI																								
Sr. No.	SAP Module Code	Module / Subject Code	Name of the Module	No. of Students booked for modul	Theory (Hours Per Week)	Practical (Hours Per Week)	Tutorial (Hours Per Week)	Total no. of hours for the subject	Credit/s	Term End Exam Duration (Hrs)+K73	Examination Scheme (Weightage)								Template Codes					
											*ICA				TEE		Total							
											Written/ Online	Only ICA	Test I	Test II	Term work	Total Marks	Scaled to (Marks)	Marks		Scaled to (Marks)	Marks	Weightag e %		
1		BTMA06001	Hydraulic and Pneumatic Systems		3	2	0	5	4	Written/3Hrs	-	15	15	20	50	30	70	70	100	100	7005			
2		BTMA06002	Presentation and Communication Techniques		2	0	2	4	3	Written/3Hrs		15	15	20	50	30	70	70	100	100	7005			
3		BTMA06003	PLC and Data Acquisition		3	2	0	5	4	Written/3Hrs	-	15	15	20	50	30	70	70	100	100	7005			
4		BTMA06004	Object Oriented Programming		3	2	0	5	4	Written/3Hrs	-	15	15	20	50	30	70	70	100	100	7005			
5		BTMA06005	Industrial Drives		3	2	0	5	4	Written/3Hrs	-	15	15	20	50	30	70	70	100	100	7005			
6		BTMA06006	CAD/CAM/CIM		3	2	0	5	4	Written/3Hrs	-	15	15	20	50	30	70	70	100	100	7005			
			Total		17	10	2	29	23	18	0	90	90	120	300	180	420	420	600	600				


 Date : 10/7/17
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SVKM's NMIMS
 MI KESHU PATEL SCHOOL OF TECHNOLOGY MANAGEMENT & ENGINEERING
 Course Structure: 2017-18
 Teaching Scheme: BTech (Mechatronics) (Final Year) for the Academic Year (2017 - 18)

Name of the Programme: B.TECH. MECHATRONICS										Final Year		Year: 2017 - 18									
Semester – VII																					
Sr. No.	SAP Module Code	Module / Subject Code	Name of the Module	No. of Students booked for module	Theory (Hours Per Week)	Practical (Hours Per Week)	Tutorial (Hours Per Week)	Total no. of hours for the subject	Credit/s	Term End Exam Duration (Hrs)		Examination Scheme (Weightage)								Template Codes	
										Written/ Online	Only ICA	*ICA				TEE		Total			
												Test I	Test II	Term work	Total Marks	Scaled to (Marks)	Marks	Scaled to (Marks)	Marks		Weightage %
1		BTMA07001	Mechatronics System Design		3	2	0	5	4	Written/3Hrs	-	15	15	20	50	40	60	60	100	100	7005
2		BTMA07002	Industrial Engineering		3	0	2	5	4	Written/3Hrs	-	15	15	20	50	40	60	60	100	100	7005
3		BTMA07003	Project Phase I		0	8	0	8	4	Written/3Hrs	Only ICA	0	0	100	100				100	100	7003
4			Elective I		3	0	2	5	4	Written/3Hrs	-	15	15	20	50	40	60	60	100	100	7005
5			Elective II		3	2	0	5	4	Written/3Hrs	-	15	15	20	50	40	60	60	100	100	7005
Total					12	12	4	28	20			15	0	60	60	180	300	260	240	500	500

Name of the Programme: B.TECH. MECHATRONICS										Final Year		Year: 2017 - 18									
Semester – VIII																					
Sr. No.	SAP Module Code	Module / Subject Code	Name of the Module	No. of Students booked for module	Theory (Hours Per Week)	Practical (Hours Per Week)	Tutorial (Hours Per Week)	Total no. of hours for the subject	Credit/s	Term End Exam Duration (Hrs)		Examination Scheme (Weightage)								Template Codes	
										Written/ Online	Only ICA	*ICA				TEE		Total			
												Test I	Test II	Term work	Total Marks	Scaled to (Marks)	Marks	Scaled to (Marks)	Marks		Weightage %
1		BTMA08001	Industrial Robotics		3	2	0	5	4	Written/3Hrs	-	15	15	20	50	40	60	60	100	100	7005
2		BTMA08002	Product Design and Development		3	0	2	5	4	Written/3Hrs	-	15	15	20	50	40	60	60	100	100	7005
3		BTMA08003	Project Phase - II		0	8	0	8	4	Written/3Hrs	Only ICA	0	0	100	100				100	100	7003
4			Elective III		3	0	2	5	4	Written/3Hrs	-	15	15	20	50	40	60	60	100	100	7005
5			Elective IV		3	2	0	5	4	Written/3Hrs	-	15	15	20	50	40	60	60	100	100	7005
Total					12	12	4	28	20			15	0	60	60	180	300	260	240	500	500

Elective I (Any one)	
Code	Subject
BTMA07004	Dynamic System Modeling and Analysis
BTMA07005	Flexible Manufacturing Systems
BTMA07006	Automobile Engineering

Elective II (Any one)	
Code	Subject
BTMA07007	Digital Signal Processing
BTMA07008	Microcontroller and Embedded Systems
BTMA07009	Microelectromechanical Systems

Elective III (Any one)	
Code	Subject
BTMA08004	Project Management
BTMA08005	Additive Manufacturing
BTMA08006	Reliability Engineering

Elective IV (Any one)	
Code	Subject
BTMA08007	Virtual Instrumentation
BTMA08008	Automotive Electronics
BTMA08009	Artificial Intelligence


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