

K.E. Society's  
**Rajarambapu Institute of Technology, Rajaramnagar**  
 (An Empowered Autonomous Institute, Affiliated to Shivaji University Kolhapur)  
**Program Articulation Matrix**

Course PO 2019-23															
Course Code	Course	P O1	P O2	P O3	P O4	P O5	P O6	P O7	P O8	P O9	PO 10	PO 11	PO 12	PS O1	PS O2
ME2012	Material Science & Metallurgy	3		1							1				
ME2032	Engineering Thermodynamics	3		1		1					1				
ME2052	Engineering Mechanics	3	3												
ME2072	Fluid Mechanics and Fluid Machines	3		1		1					1		1	1	3
ME2092	Manufacturing Processes and Machine Tools	1				3				1	1	1	1	1	
SH2172	Environmental Science	1		1				3							
ME2512	Engineering Mechanics Lab	3	1	3	1						1				
ME2532	Thermal Engineering Lab-I	1	3			3									
ME2552	Material Science & Metallurgy Lab	3						1						3	
ME2572	Workshop Practice -I	3				2		1							
ME2592	Comprehensive Exam-I	3		1		2		1						2	
SH2602	Environmental Project	3	3	3	3	3	2	3	2	3	3	3	2	2	
SH2592	Personal Effectiveness & Body Language							1	3	3			1		



**Program Articulation Matrix**

SH2612	Interpersonal Skills (Work life Balance)						2		1	3	3	3	1		
SH2632	Leadership & Public Speaking						2		1	3	3	3	1		
SH2692	Innovation Tools and Methods for Entrepreneurs	3	3	3	3		3	3	1	3	3	3	2		
SH2732	German Language – Basic Level								1	3	3				
SH2712	Japanese Language – Basic Level									1	3				
SH2062	Engineering Mathematics –III	3	3												
ME2022	Strength of Material	3				1						1			
ME2042	Applied Thermodynamics	3				1						1			
ME2062	Manufacturing Engineering	3		3		1									
ME2082	Kinematics of Machines	1	1	3	1	2					1		1	3	1
ME2102	Computer Programming C++	3	3							3		3			
ME2522	Machine Drawing Lab					3								3	
ME2542	Kinematics of Machines Lab	1	1	3	1	2					1		1	3	1
ME2562	Computer Programming C++ Lab	3	3					3		3		3			
ME2582	Workshop Practice – II	3		2	3	2									





### Program Articulation Matrix

ME2602	Comprehensive Exam-II	3		1										2	
SH2592	Personal Effectiveness & Body Language								1	1	3				
SH2612	Interpersonal Skills (Work life Balance)						2		1	2		3			
SH2632	Leadership & Public Speaking								1	3	3				
SH2692	Innovation Tools and Methods for Entrepreneurs	3	3	3	3		3	3	1	1	2	3	2		
SH2642	German Language – Advanced Level									1	3				
SH2622	Japanese Language – Advanced Level									1	3				
ME3012	Dynamics of Machines	3	3	3	1	1		1							
ME3032	Design of Machine Elements	1		3		3								3	
ME3052	Metrology & Control Engineering	3		3	3	3	1					1	1		
ME3072	Heat Transfer	3	3	1		1									
ME3312	Mechanics of Composite Material	3	3	3	1	1	2			1	2	1			
ME3332	Textile Technology	3	1	3				3	3	3	3			3	
ME3352	Energy Conversion and Management	3	3	2	1	2							1	3	1



**Program Articulation Matrix**

ME3392	World Class Manufacturing						3				3			3	
ME3412	Non Traditional Machining Processes	3			1						1				
ME3452	Industrial Organization and Management	3				3	3	3	3		1		3		1
ME3512	Workshop Practice – III	3			2			3							
ME3532	Dynamics of Machinery Lab	3	3	1											1
ME3552	Metrology & Measurement Lab	3	3			3					1	3			
ME3572	Thermal Engineering Lab-II	3			3					1					
ME3592	CAD-Modelling	1		3						3	3	1			
ME3612	Comprehensive Exam-III	3		1										2	
SH3032	Aptitude Training I	3	2		2	3	3				2	2			
ME3632	Summer Internship	3	3	3	3	3	2	2	2			2		2	
ME3022	Machine Design	3		3		3									
ME3042	Engines and Refrigeration	1		3	3	3	1							1	
ME3642	Biomechanics	3	3	3	1										
ME3662	Tribology	3	3	3											
ME3702	Finite Element Method	3	3	3	3	3				3		3			
ME3722	Alternative fuels	3	3	3		3									
ME3762	Gas turbines & Jet	3	3	1		3									





**Program Articulation Matrix**

	Propulsion														
ME3802	Additive Manufacturing	3		3		3			3		1	3			
ME3822	Computer Integrated Manufacturing System	3			3	1			3		3				
ME3842	Industrial Hydraulics and Pneumatics	3	3			3						3			3
OE3262	Aircraft Systems	3				3					3				
OE334	Research Methodology			3	3	3		3			2				
SH302	Biology for Engineers	3	3	3											
ME3522	Thermal Engineering Lab-III	3	3				1								
ME3542	Software Training-I	3	1	3	1	3						3	3	1	
ME3562	Comprehensive exam-IV	3		1										2	
ME3582	Capstone Project phase-I	3	3	3	3	3	2	2	3	3	3	2		2	2
SH3042	Aptitude training- II	3	3	3	3	3	3	2	3	3	3	2		2	2
ME4013	Industrial Engineering	3		1		3	1				3	3	1		
ME	Engineering Acoustics	3	3	1		3					1				
ME4132	Material Handling Systems	3	1			1									
ME4152	Machine Tool Design	3	2		3							1		1	
ME4192	Cryogenics	3				3					3				
ME4232	Industrial Automation and Robotics	3	3	2	1	2							1	3	1



**Program Articulation Matrix**

ME4312	Mechanical Vibrations	3	3	3	3	3							3		
ME4332	Experimental Mechanics	3	3	1	1	1	2			1	2	1			
ME4352	Automobile Engineering	3	3	2	1	2							1	3	1
ME4392	Mechatronics System Design	3	3	3		3									
ME4752	Condition Monitoring	3	1											3	
ME4772	Aircraft conceptual Design	3		3		3			1	3		3	3	3	3
ME4792	Mechanical System Design	3	3	3										3	
ME4832	Computational Fluid Dynamics	3				3					3				
ME4852	Air Conditioning system			3			1					3			
ME4892	Total Quality Management	3	3	1		3			1	3	3	1	1		1
ME4512	Industrial Engineering and Quality Control Lab	3	3	3		3									
ME4532	Advanced Machining Lab	3	3			1				3	1	3		3	3
ME4552	Software Training II	3	1	3	1	3						3	3		
ME4592	Mechanical Vibrations Lab	3	3	3	2										
ME4612	Experimental Mechanics Lab	3			1										
ME4632	Automobile	3	1	3	3	3	3	3	1		1	3	1	3	






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**Program Articulation Matrix**

	Engineering Lab															
ME4672	Mechatronics System Lab	3	3	3	3	3			1		1	3		1		
ME4712	Capstone Project Phase-II	3	2	3	3	3	3	2	3	3	3	2	2	3		
IP4022	Internship & Project	3	3	3	3	3	3	3	3		3	3		3		
OE438	Finance for Engineers (Online Course)	3				3				3						
OE436	Engineering Management & Economics (Online Course)	3	3		3	1			1			3				
RE4042	Research Project	3	3	3	3	3		3			3			3		

  
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