

Department of Mechanical Engineering
R.V.R. & J.C. College of Engineering (A) , Guntur – 522019.

The Following are the curriculum changes in R16 stream

S.No	SUBJECT NAME	SUBJECT CODE	Summary	% OF SYLLABUS CHANGE
1	Differential Equations and Statistics	ME101	IV UNIT COMPLETELY CHANGED	20
2	Engineering Physics	ME102	ONE TOPIC IN I UNIT ; IV UNIT COMPLETELY CHANGED	20
3	Applied Chemistry	ME103	UNIT III AND IV CHANGED	40
4	English For Communication	ME104	UNIT II, UNIT III , IV AND SOME PARTS OF UNIT 5	70
5	Problem Solving With C	ME105	NO CHANGE	0
6	Engineering Mechanics - I	ME106	NO CHANGE	0
7	Chemistry Laboratory	ME151	NO CHANGE	0
8	C- Programming Lab	ME152	EXPERIMENT Numbers 7,8,12 CHANGED	25
9	Graphics Laboratory	ME153	NEWLY INTRODUCED	100
10	Calculus and Numerical Methods	ME107	UNIT IV AND V ADDED	40
11	Physics of Materials	ME108	UNIT I , II AND III ADDED	60
12	Chemistry of Engineering Materials	ME109	UNIT II ADDED	20
13	Environmental Studies	ME110	NO CHANGE	0
14	Engineering Drawing	ME111	NO CHANGE	0
15	Engineering Mechanics II	ME112	UNIT V ADDED	20
16	Physics Laboratory	ME154	NO CHANGE	0
17	Communication Skills Lab	ME155	UNIT V ADDED	20
18	Workshop Practice	ME156	NO CHANGE	0
19	Complex Analysis and Numerical Solutions	ME201	UNIT III ADDED	20
20	Mechanics of Materials I	ME202	NO CHANGE	0
21	Electrical Technology	ME203	NO CHANGE	0
22	Basic Thermodynamics	ME204	NO CHANGE	0
23	Theory of Machines and Mechanisms	ME205	NO CHANGE	0
24	Fluid Mechanics & Hydraulic Machines	ME206	IV AND V ADDED	40
25	SM & FM LAB	ME251	NO CHANGE	0
26	Machine Drawing and Computer Aided Drafting Lab	ME252	NO CHANGE	0

27	Professional Communication Skills Lab	ME253	UNIT IV AND V ADDED	40
28	Transformation Techniques and Distributions	ME207	UNIT IV AND V ADDED	40
29	Mechanics of Materials II	ME208	NO CHANGE	0
30	Casting , Welding and Metal Working Process	ME209	NO CHANGE	0
31	Applied Thermodynamics	ME210	NO CHANGE	
32	Engineering Metallurgy	ME211	UNIT I CHANGED AND A CHAPTER IN UNIT III	25
33	Basic Electronics and Micro Controllers	ME212	NO CHANGE	0
34	Basic Manufacturing Process LAB	ME254	NO CHANGE	0
35	Computer Applications in Mechanical Engineering LAB	ME255	NO CHANGE	0
36	Basic Electrical and Electronics Lab	ME256	EXPERIMENTS ON MICRO CONTROLLERS ADDED	20
37	Professional Ethics and Human Values	ME301	NO CHANGE	0
38	Design of Machine Elements	ME302	NO CHANGE	0
39	Metal Cutting and Machine Tools	ME303	NO CHANGE	0
40	IC Engines and Gas Turbines	ME304	NO CHANGE	0
41	Operations Research	ME305	NO CHANGE	0
42	Dynamics of Machines and Vibrations	ME306	NO CHANGE	0
43	Machine Shop Practice	ME351	NO CHANGE	0
44	Fuels and I.C. Engines Lab	ME352	NO CHANGE	0
45	Modelling Lab	ME353	NO CHANGE	0
46	Manufacturing Engineering	ME307	NO CHANGE	0
47	Design of Transmission Elements	Me308	TWO CONCEPTS IN UNIT V ARE ADDED	2
48	Heat Transfer	ME309	CHAPTER IN UNIT III	10
49	Finite Element Analysis	ME310	ONE CHAPTER IN UNIT III	10
50	Nano Technology	ME311/A	SOME TOPICS IN UNIT III AND IV CHANGED	20
51	Tribology	ME311/B	MAJOR CHANGE IN UNIT I , UNIT III AND UNIT IV	50

52	Automobile Engineering	ME311/C	NO CHANGE	0
53	Industry Based Elective (Air Craft Systems and Design)	Me311/D	NEWLY INTRODUCED	100
54	Measurements and Control Systems	ME312/A	NO CHANGE	0
55	Mechanics of Composite Materials	ME312/B	NO CHANGE	0
56	Refrigeration and Air Conditioning	ME312/C	NO CHANGE	0
57	Industry Based Elective (PLM)	ME312/D	NEWLY INTRODUCED	100
58	Engineering Metrology	ME401	NO CHANGE	0
59	Advanced Machine Design	ME402	NO CHANGE	0
60	MOOCS	ME403	NEWLY INTRODUCED	100
61	Basic Surveying	CE404	NEWLY INTRODUCED	100
62	Building Materials and Estimation	CE404	NEWLY INTRODUCED	100
63	Energy Engineering	CHE404	NO CHANGE	0
64	Bio- Fuels	CHE404	UNIT III 80% CHANGE ; UNIT IV SEOND TOPIC 20% CHANGED AND 80 % IN UNIT V	22
65	JAVA Programming	CS404	NO CHANGE	0
66	Data Base Management Systems	CS404	NO CHANGE	0
67	Applied Electronics	EC404	80% UNIT IV AND UNIT V NEWLY ADDED	36
68	Basic Communication	EC404	UNIT V ADDED	20
69	Non-conventional Energy Sources	EE404	NEWLY INTRODUCED	100
70	Utilization of Electrical Energy	EE404	SEOND PART IN UNIT II ; UNIT III ARE ADDED	20
71	Software Engineering	IT404	UNIT IV AND V ADDED	40
72	WEB Technologies	IT404	UNIT V ADDED	20
73	Operations Management	ME405	NO CHANGE	0
74	Mechatronics	ME406/A	NO CHANGE	0
75	Design for Manufacturing and Assembly	ME406/B	UNIT V ADDED	20
76	Energy Resources and Utilization	ME406/C	NO CHANGE	0
77	Safety Management	ME406/D	NEWLY INTRODUCED	100
78	Term Paper	ME451	NO CHANGE	0
79	Simulation Lab	ME452	NEWLY INTRODUCED	100

80	Design and Metrology Lab	ME453	NO CHANGE	0
81	Industrial Engineering and Management	ME407	UNIT IV 2ND CHAPTER 50% CHANGE ; UNIT V - 30 % CHANGE	17
82	Automation & CAM	ME408	NO CHANGE	0
83	FMS & GT	ME409/A	NEWLY INTRODUCED	100
84	CAD	ME409/B	UNIT III - CHAPTER AND UNIT IV CHPATER	20
85	CFD	ME409/C	UNIT III AND IV	40
86	TQM	ME409/D	NEWLY INTRODUCED	100
87	Robotic Engineering	ME410/A	2 TOPICS IN UNIT IV	2
88	Advanced Concepts in Mechanical Engineering	ME410/B	UNIT I REVISED, COMPLETE II AND III CHANGE	50
89	Solar Radiation and Energy Conservation	ME410/C	NEWLY INTRODUCED	100
90	Industrial Administration	ME410/D	NEWLY INTRODUCED	100
91	CAM LAB	ME454	NO CHANGE	0
92	Project Work	ME455	NO CHANGE	0
Average				24.38462



[Dr. K. RAVINDRA]
Prof & HoD - ME
Dean - Academics

Dr. KOMMINENI RAVINDRA
Professor & HOD :: Dean - Academics
Department of Mechanical Engineering
R.V.R. & J. C. College of Engineering
(Autonomous)
Chowdavaram, GUNTUR-522019, A.P.

Department of Mechanical Engineering
R.V.R. & J.C. College of Engineering (A) , Guntur – 522019.

The Following are the curriculum changes in R18 stream:

S.No	SUBJECT NAME	SUBJECT CODE	Summary	% OF SYLLABUS CHANGE
1.	Mathematics-I	ME 111	UNIT –I,II,III,IV COMPLETELY CHANGED	100
2.	Engineering Chemistry	ME112	UNIT I completely changed, UNIT-II WITH minor changes, UNIT-III complete changed, UNIT-IV one part changed	60
3.	English for Communication Skills	ME113	UNIT I- NO CHANGE UNIT-II major changes UNIT-III-NO CHANGE UNIT-IV Minor changes	30
4.	Chemistry Lab	ME 151	PARTIAL CHANGES	30
5.	English Language Communication Skills Lab	ME152	MAJOR CHANGES	60
6.	Workshop Practice Lab	ME153	MAJOR CHANGES	60
7.	Environmental Science	MC 002	NO Change	0
8.	Mathematics-II	ME 121	MINOR CHANGES	25
9.	Engineering Physics	ME122	Completely change	100
10.	Programing for Problem Solving	ME123	MINOR CHANGES	40
11.	Basic Electrical Engineering	ME124	Completely change	100
12.	Physics Lab	ME161	MAJOR CHANGES	80
13.	Programing for Problem Solving Lab	ME162	MINOR CHANGES	30
14.	Engineering Graphics & Design Lab	ME163	NO CHANGE	0
15.	Basic Electrical Engineering Lab	ME164	Major changes	50
16.	Constitution of India	MC001	NEW COURSE	100
17.	Engineering Mechanics	ME211	Minor changes	20
18.	Life Sciences for Engineers	ME212	New course	100
19.	Manufacturing Processes	ME213	Major changes	50
20.	Basic Thermodynamics	ME214	minor	20
21.	Theory of Mechanisms & Machines	ME215	NO CHANGE	0
22.	Fluid Mechanics & Hydraulic Machines	ME216	Minor changes	20
23.	Machine Drawing Lab	ME251	NO CHANGE	0
24.	Communicative English Lab	ME252	New course	100
25.	Basic Electronics Lab	ME253	Major changes	50
26.	Essence of Indian Traditional Knowledge	MC 003	New course	100
27.	Mathematics - III (PDE, Probability & Statistics)	ME221	UNIT-I,II,III minor changes, UNIT-IV major changes	40
28.	Strength of Materials	ME222	NO CHANGE	0
29.	Manufacturing Technology	ME223	UNIT-II,III major changes	40
30.	Applied Thermodynamics	ME224	NO CHANGE	0
31.	Material Science and Metallurgy	ME225	UNIT-I,UNIT_IV minor changes	20

32.	Fluid Mechanics & Strength of Materials Lab	ME261	NO CHANGE	0
33.	Manufacturing Lab - 1	ME262	NO CHANGE	0
34.	Modelling Lab	ME263	TWO MODULUS ADDED	20
35.	Design Thinking and Innovation	MC004	NEW COURSE	100
36.	Design of Machine Elements	ME311	NO CHANGE	0
37.	Advanced Strength of materials	ME312	NO CHANGE	0
38.	Machine Dynamics and Vibrations	ME313	NO CHANGE	0
39.	Operations Research	ME314	NO CHANGE	0
40.	Thermal Engineering Laboratory	ME351	NO CHANGE	0
41.	Professional Communication Skills Lab	ME352	NO CHANGE	0
42.	Design of Transmission Elements	ME321	NO CHANGE	0
43.	Finite Element Method	ME322	NO CHANGE	0
44.	Heat Transfer	ME 323	No change	0
45.	Heat transfer laboratory	ME361	No change	0
46.	Analysis & Simulation Lab	ME362	No change	0
47.	Automation in Manufacturing	ME411	Minor changes	30
48.	Fundamentals of Industrial Engineering	ME412	New course	100
49.	Metrology and Mechanical Measurements	ME413	No change	0
50.	Manufacturing Lab II (CAM)	ME451	No change	0
51.	Design and Metrology Lab	ME452	No change	0
52.	Internship	ME 453		0
53.	Mini Project	ME454		0
54.	Project	ME 461		0
55.	Computer Aided Design	MEEL01	No change	0
56.	Mechatronic System Design	MEEL02	Minor changes	30
57.	Fluidics and control systems	MEEL03	No change	0
58.	Industrial Robotics	MEEL04	No change	0
59.	I C Engines and Gas Turbines	MEEL05	New course	100
60.	Gas Dynamics and JET Propulsion	MEEL06	New course	100
61.	Refrigeration and Air Conditioning	MEEL07	No change	0
62.	Automobile Engineering	MEEL08	No change	0
63.	Power Plant Engineering	MEEL09	NEW COURSE	100
64.	Energy Conservation and Management	MEEL10	NEW COURSE	100
65.	Product Lifecycle Management	MEEL11	NEW COURSE	100
66.	Industrial Management	MEEL12	NEW COURSE	100
67.	Process Planning and Cost Estimation	MEEL13	NEW COURSE	100
68.	Total Quality Management	MEEL14	NEW COURSE	100
69.	Composite Materials	MEEL15		0
70.	Design Of Experiments	MEEL16	NEW COURSE	100
71.	Farm Machinery and Equipment	MEEL17	NEW COURSE	100
72.	Computational Fluid Dynamics	MEEL18		0
73.	Introduction to Aircraft Industry and Systems	MEEL19		0
74.	Production planning and control	MEEL20	NEW COURSE	100
75.	English Competency Development Programme	ME V01	NEW COURSE	101
76.	AI Tools , Techniques & Applications	ME V02	NEW COURSE	100
77.	Advanced Modeling lab (DELMIA)	ME V03	NEW COURSE	100
78.	Advanced Modeling lab (SIMULIA)	ME V03	NEW COURSE	100
79.	Automotive Engineering	MEOL01	Change in ivth unit	10

80.	Robotic Engineering	MEOL02	no change	0
81.	Introduction to Operations Research	MEOL03		
82.	Mechatronics	MEOL04	change in IV unit	20
83.	Applied Mechanics & Mechanical Engineering	MEOL05	NEW COURSE	100
84.	Building Materials and Construction	CEOL01	NEW COURSE	100
85.	Solid waste Management	CEOL02	NEW COURSE	100
86.	Remote Sensing and GIS	CEOL03	NO CHANGE	0
87.	Data Structures & Algorithms	ITOL01	NEW COURSE	100
88.	Operating Systems	ITOL02	NEW COURSE	100
89.	Big Data Analytics	ITOL03	NEW COURSE	100
90.	Web Technologies	ITOL04	NEW COURSE	100
91.	Applied Electronics	ECOL01	NO CHANGE	0
92.	Basic Electronics & Communication Engineering	ECOL02	NEW COURSE	100
93.	Microprocessors & Interfacing	ECOL04	NEW COURSE	100
94.	Digital Image Processing	ECOL05	NO CHANGE	0
95.	Renewable energy sources	EEOL01	NEW COURSE	100
96.	Utilization of Electrical Energy	EEOL02	NEW COURSE	100
97.	Power Converters	EEOL03	NEW COURSE	100
98.	Energy Conservation	EEOL04	NO CHANGE	100
99.	Introduction to Electric Vehicles and Storage Systems	EEOL05	NEW COURSE	100
100.	Programming with Java	CSOL01	NEW COURSE	100
101.	Relational Database Management Systems	CSOL02	NEW COURSE	100
102.	Programming with Python	CSOL03	NEW COURSE	100
103.	Internet of Things	CSOL04	NEW COURSE	100
104.	Energy Engineering	CHOL01	NEW COURSE	100
105.	Biofuels	CHOL02	NEW COURSE	100
106.	Pollution Control	CHOL03	NEW COURSE	100
107.	Nanoscience and Nanotechnology	CHOL04	NEW COURSE	100
108.	Industrial Management & Entrepreneurship	HSEL01	NEW COURSE	100
109.	Economics for Engineers	HSEL02	NEW COURSE	100
			Average	51.2593



[Dr. K. RAVINDRA]
Prof & HoD - ME
Dean - Academics

Dr. KOMMINENI RAVINDRA
Professor & HOD :: Dean - Academics
Department of Mechanical Engineering
R.V.R. & J. C. College of Engineering
(Autonomous)
Chowdavaram, GUNTUR-522019, A.P.