

Structure, Syllabus, BOS Minutes & Regulations

GR-17

MECHANICAL ENGINEERING



Godavari institute of Engg & Technology

Approved By AICTE NAAC 'A+' Grade Recognized by UGC,U/Sec.2(f) & 12(B) Permanent affiliation by JNTUK

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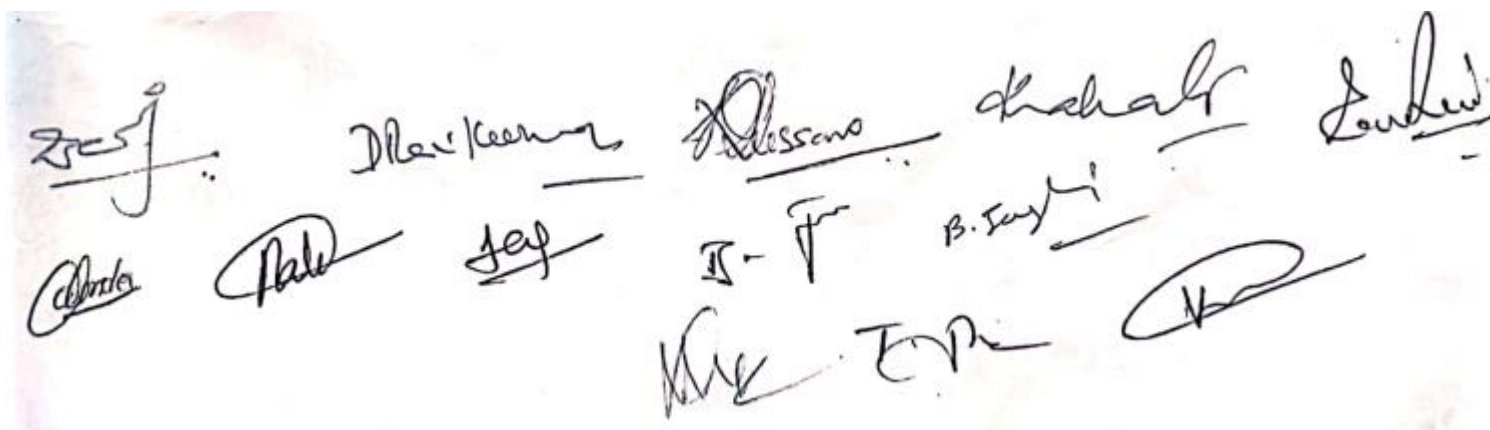


I YEAR

I SEMESTER

S. No.	Subject codes	Subject	Periods per week			C	Scheme of Examination Maximum Marks		
			L	T	P/D		Int.	Ext.	Total
1	17198101	English – I	3	1	-	3	40	60	100
2	17198102	Mathematics - I	3	1	-	3	40	60	100
3	17198103	Engineering Physics	3	1	-	3	40	60	100
4	17195104	Computer Programming	3	1	-	3	40	60	100
5	17193175	Engineering Drawing	-	-	4	3	40	60	100
6	17198106	Environmental Studies	3	1	-	3	40	60	100
7	17198111	English Communication Skills Lab. -1	-	-	3	2	50	50	100
8	17198112	Engineering Physics Lab.	-	-	3	2	50	50	100
9	17195113	Computer Programming Lab.	-	-	3	2	50	50	100
		Total	15	5	13	24	390	510	900

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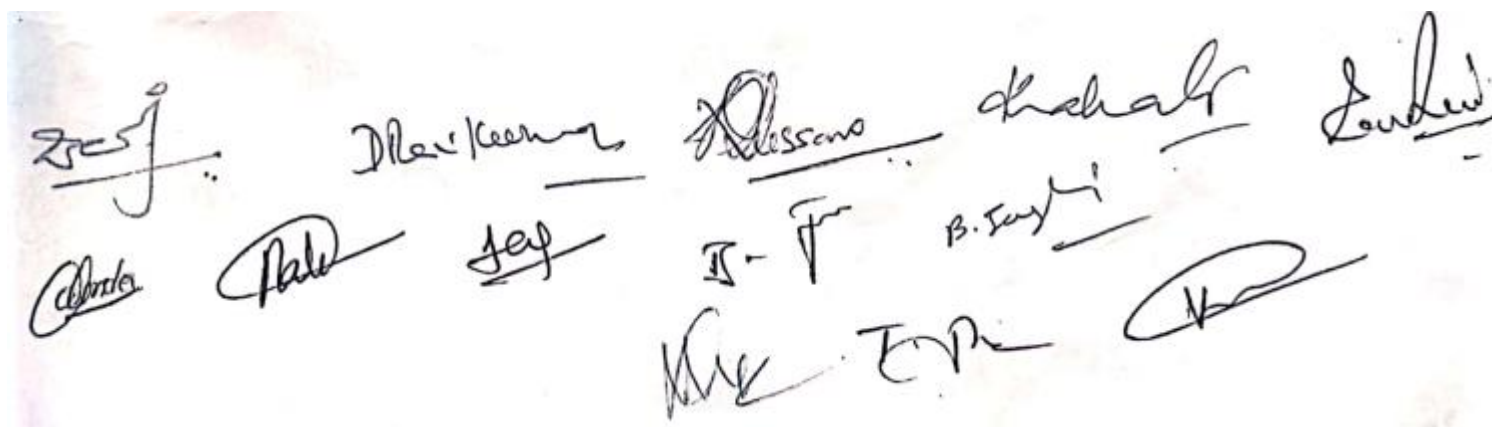


I YEAR

II SEMESTER

S. No.	Subject codes	Subject	Periods per week			C	Scheme of Examination Maximum Marks		
			L	T	P/D		Int.	Ext.	Total
1	17198201	English – II	3	1	-	3	40	60	100
2	17198202	Mathematics – II	3	1	-	3	40	60	100
3	17198203	Mathematics – III	3	1	-	3	40	60	100
4	17198204	Engineering Chemistry	3	1	-	3	40	60	100
5	17193205	Engineering Mechanics	3	1	-	3	40	60	100
6	17198206	Professional Ethics and Human Values*	2	1	-	1	40	60	100
7	17198211	English Communication Skills Lab. -2	-	-	3	2	50	50	100
8	17198212	Engineering Chemistry Lab	-	-	3	2	50	50	100
9	17198281	Engineering Workshop & IT Workshop	-	-	3	2	50	50	100
		Total	17	6	9	22	390	510	900

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II YEAR

I SEMESTER

S. No.	Subject codes	Subject	Periods per week			C	Internal	External	Total
			L	T	P/D				
1	17139301	Managerial Economics & Financial Analysis	3	1	-	3	40	60	100
2	17132302	Basic Electrical & Electronics Engineering	3	1	-	3	40	60	100
3	17130303	Metallurgy & Materials Science	3	1	-	3	40	60	100
4	17130304	Mechanics of Solids	3	1	-	3	40	60	100
5	17130305	Thermodynamics	3	1	-	3	40	60	100
6	17130376	Computer Aided Engineering Drawing Practice	-	-	4	3	40	60	100
7	17132311	Basic Electrical & Electronics Engineering Lab	-	-	3	2	50	50	100
8	17130312	Mechanics of Solids & Metallurgy lab	-	-	3	2	50	50	100
		Total	15	5	10	22	340	460	800

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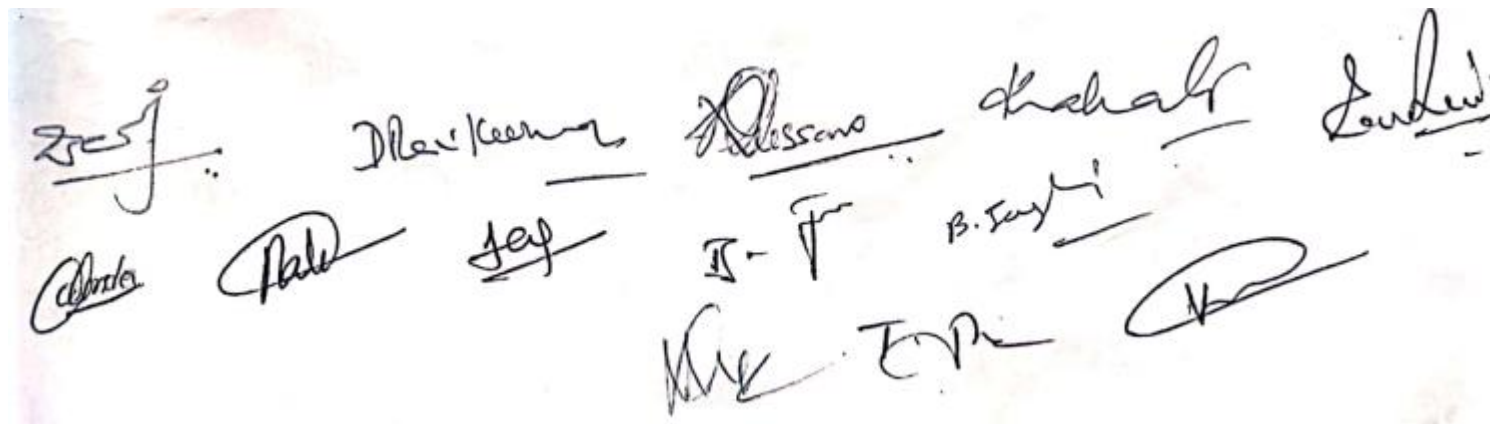
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II YEAR

II SEMESTER

S. No.	Subject codes	Subject	Periods per week			C	Internal	External	Total
			L	T	P/D				
1	17130401	Kinematics of Machinery	3	1		3	40	60	100
2	17130402	Thermal Engineering -I	3	1	-	3	40	60	100
3	17130403	Production Technology	3	1	-	3	40	60	100
4	17130404	Fluid Mechanics & Hydraulic Machinery	3	1	-	3	40	60	100
5	17130405	Industrial Engineering & Management	3	1	-	3	40	60	100
6	17130476	Machine Drawing	-	-	4	3	40	60	100
7	17139407	Soft Skills -1	1	-	2	1	40	60	100
8	17130411	Fluid Mechanics & Hydraulic Machinery Lab.	-		3	2	50	50	100
9	17130412	Production Technology Lab.	-		3	2	50	50	100
10	17130413	Thermal Engineering Lab.	-		3	2	50	50	100
		Total	16	5	15	25	430	570	1000

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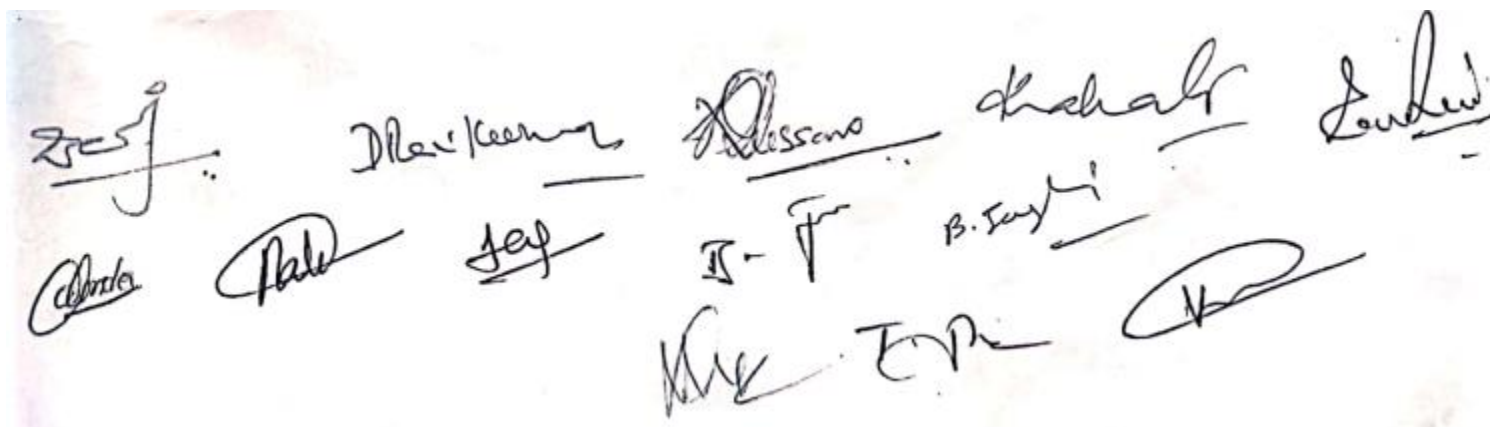
III YEAR

I SEMESTER

S. No.	Subject codes	Subject	Periods per week			C	Internal	External	Total
			L	T	P/D				
1	17130501	Dynamics of Machinery	3	1	-	3	40	60	100
2	17130502	Operations Research	3	1	-	3	40	60	100
3	17130503	Design of Machine Members-I	3	1	-	3	40	60	100
4	17130504	Instrumentation & Control Systems	3	1	-	3	40	60	100
5	17130505	Thermal Engineering -II	3	1	-	3	40	60	100
6	17130506	Metal Cutting & Machine Tools	3	1	-	3	40	60	100
7	17130511	Machine Tools Lab.	-	-	3	2	50	50	100
8	17130512	Theory of Machines Lab.	-	-	3	2	50	50	100
9	17130521	Mini Project-1	-	-	-	2	100	-	100
		Total	18	6	6	24	440	460	900

L-Lecture T-Tutorial P-Practical D-Drawing Int.-Internal Ext.-External

* Student should carry **Mini Project** during summer vacation after II B.Tech. II Sem. Course work and it will be evaluated during III B.Tech. I Sem.

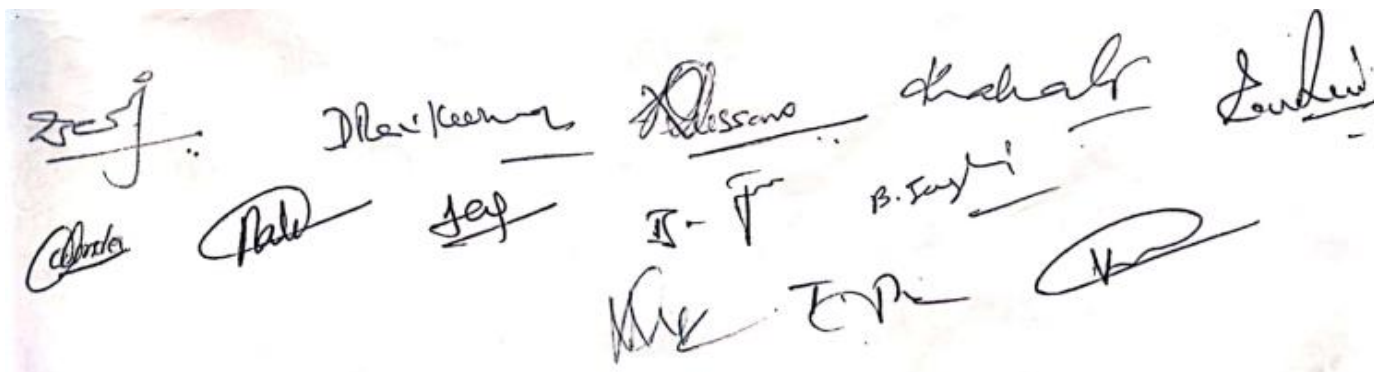


III YEAR

II SEMESTER

S. No.	Subject codes	Subject	Periods per week			C	Internal	External	Total
			L	T	P/D				
1	17130601	Finite Element Methods	3	1	-	3	40	60	100
2	17130602	CAD/CAM	3	1	-	3	40	60	100
3	17130603	Design of Machine Members– II	3	1	-	3	40	60	100
4	17130604	Open Elective: a. Building Technology b. Hybrid Vehicles c. Principles of Management d. Internet of Things e. Social Networking f. Environmental Pollution Control	3	1	-	3	40	60	100
5	17130605	Heat Transfer	3	1	-	3	40	60	100
6	17130606	Departmental Elective – I a. Automobile Engineering b. Experimental Stress Analysis c. Industrial Hydraulics & Pneumatics d. Methods Engineering and Work Design	3	1	-	3	40	60	100
7	17139607	Soft Skills - 2	1	-	2	1	40	60	100
8	17130611	Heat Transfer Lab.	-	-	3	2	50	50	100
9	17130612	Simulation Lab.	-	-	3	2	50	50	100
		Total	19	6	8	23	380	520	900

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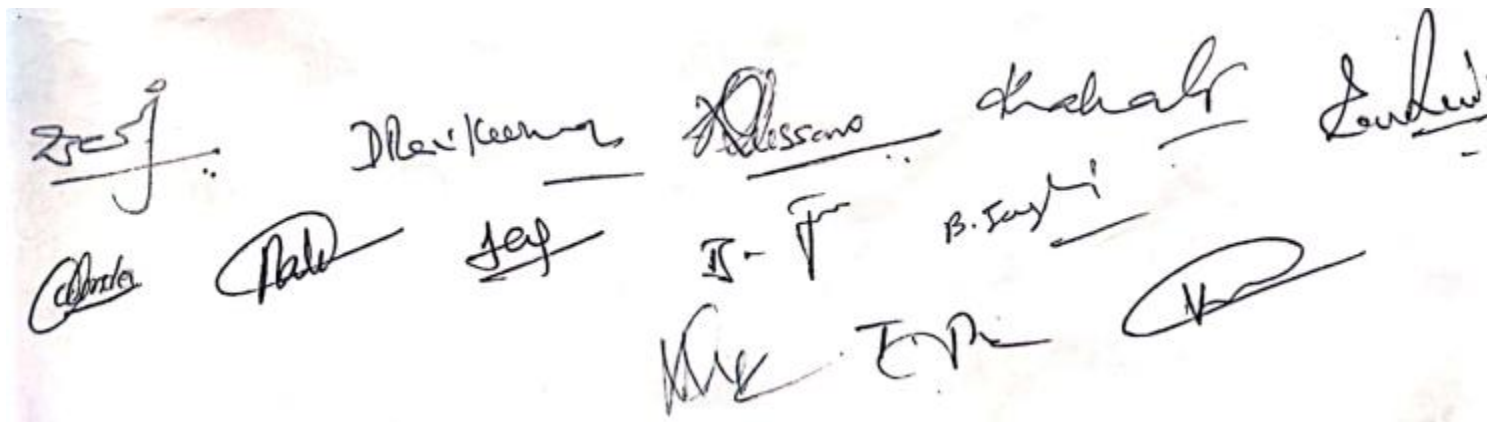
IV YEAR

I SEMESTER

S. No.	Subject codes	Subject	Periods per week			C	Internal	External	Total
			L	T	P/D				
1	17130701	Power Plant Engineering	3	1		3	40	60	100
2	17130702	Metrology	3	1	-	3	40	60	100
3	17130703	Refrigeration & Air-Conditioning	3	1	-	3	40	60	100
4	17130704	Unconventional Machining Processes	3	1	-	3	40	60	100
5	17130705	Robotics	3	1	-	3	40	60	100
6	17130766A 17130766B 17130766C 17130766D	Departmental Elective – II a. Metal Forming Theory and Practice b. Mechatronics c. Computational Fluid Dynamics d. Automation in Manufacturing	3	1	-	3	40	60	100
7	17139707	IPR & Patents	2	-	-	1	40	60	100
8	17130711	Metrology & Instrumentation Lab.	-	-	3	2	50	50	100
9	17130731	Fabrication Project/Term paper	-	-	3	2	50	50	100
10	17130722	Mini project-2	-	-	-	2	100	-	100
		Total	20	6	6	25	480	520	1000

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** Student should carry **Summer Internship** during summer vacation after III B.Tech. II Sem. Course work and it will be evaluated during IV B.Tech. I Sem.



IV YEAR

II SEMESTER

S. No.	Subject codes	Subject	Periods per week			C	Internal	External	Total
			L	T	P/D				
1	17130801	Departmental Elective – III a. Non Destructive Testing b. Condition Monitoring c. Gas Dynamics & Jet Propulsion d. Advanced Optimization Techniques e. Management Information Systems	3	1	-	3	40	60	100
2	17130802	Departmental Elective – IV a. Digital Manufacturing b. Design for Manufacture c. Pressure Vessels and Piping d. Product Life Cycle Management e. Renewable Energy Sources	3	1	-	3	40	60	100
3	17130841	Project Work	0	0	18	9	60	140	200
		Total	6	2	18	15	140	260	400

L-Lecture T-Tutorial P-Practical D-Drawing Int.-Internal Ext.-External

