

GODAVARI INSTITUTE OF ENGINEERING & TECHNOLOGY
(AUTONOMOUS)

Approved by AICTE, Accredited by NBA & NAAC 'A+' Grade, Recognized under 2(f) and 12(b) of UGC, Permanently Affiliated to JNTUK, Kakinada.

DEPARTMENT OF MECHANICAL ENGINEERING
4 Years B.Tech. (Mechanical Engineering) Course Structure: (2017-18)

COURSE STRUCTURE
DETAILED SYLLABUS
ACADEMIC REGULATIONS
BOS MEETING MINUTES AND AGENDA

MECHANICAL ENGINEERING

FOR

B. TECH.FOUR YEAR DEGREE COURESE

(APPLICABLE FOR THE BATCHES ADMITTED FROM 2017-18)



An Autonomous Institution
NBA Accredited & NAAC A+

GODAVARI INSTITUTE OF ENGINEERING & TECHNOLOGY

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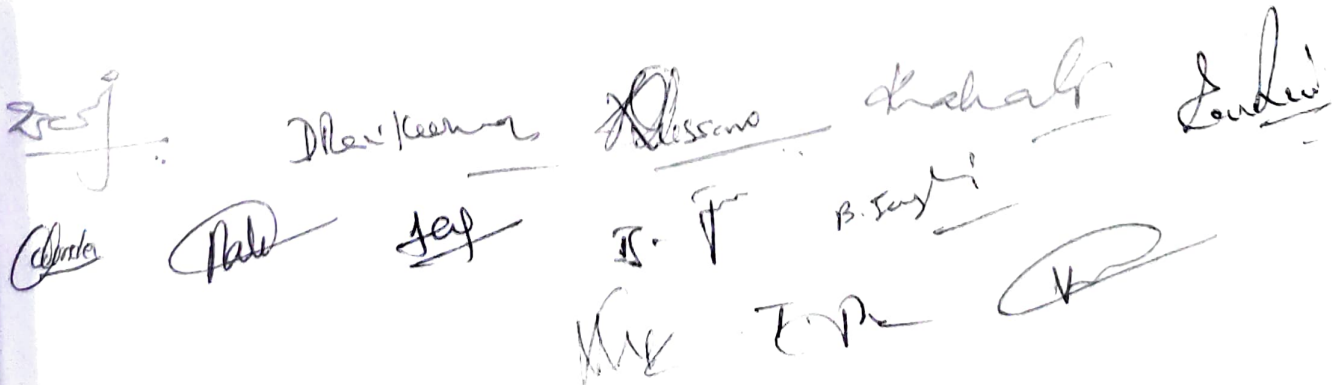
w.e.f. Academic Year : 2017-2018

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
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

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



DEPARTMENT OF MECHANICAL ENGINEERING
4 Years B.Tech. (Mechanical Engineering) Course Structure : (2017-2018)

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

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

Prof. Dheekema, , , ,
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II SEMESTER
II YEAR

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

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

Handwritten signatures: Marking, Hussain

Handwritten signatures: Chinty, Ravi, Jay

Handwritten initials: R. P.

Handwritten signature: B. Sanyal

Handwritten signature: T. Das

Handwritten signature: D. S.

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.

(Handwritten signatures and initials)
 [Signatures: Chaitanya, Pal, Jay, D. J., B. Sridhar, and others]

YEAR

II SEMESTER

Subject codes	Subject	Periods per week			C	Internal	External	Total
		L	T	P/D				
17130601	Finite Element Methods	3	1	-	3	40	60	100
17130602	CAD/CAM	3	1	-	3	40	60	100
17130603	Design of Machine Members- II	3	1	-	3	40	60	100
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
17130605	Heat Transfer	3	1	-	3	40	60	100
Departmental Elective - I								
17130665 A	Automobile Engineering							
17130665 B	Experimental Stress Analysis							
17130665 C	Industrial Hydraulics & Pneumatics	3	1	-	3	40	60	100
17130665 D	Methods Engineering and Work Design							
17139607	Soft Skills - 2	1	-	2	1	40	60	100
17130611	Heat Transfer Lab.	-	-	3	2	50	50	100
17130612	Simulation Lab.	-	-	3	2	50	50	100
Total		19	6	8	23	380	520	900

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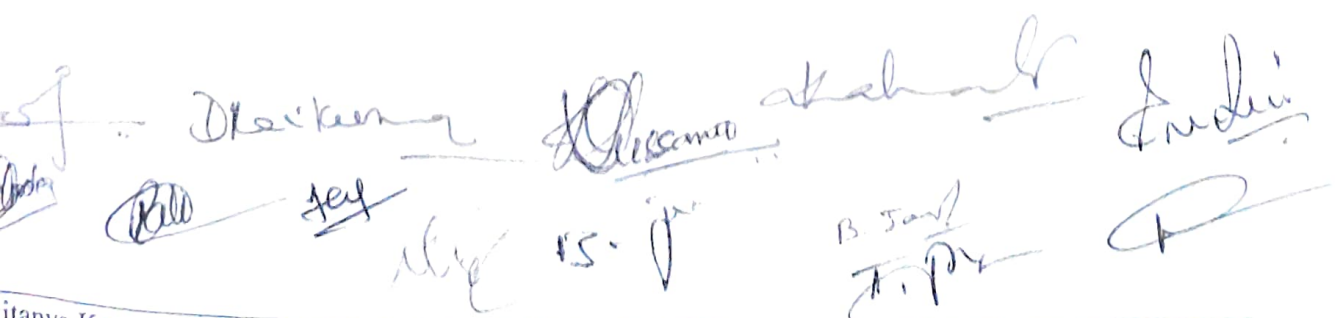
YEAR

I SEMESTER

Subject codes	Subject	Periods per week			C	Internal	External	Total
		L	T	P/D				
17130701	Power Plant Engineering	3	1		3	40	60	100
17130702	Metrology	3	1	-	3	40	60	100
17130703	Refrigeration & Air-Conditioning	3	1	-	3	40	60	100
17130704	Unconventional Machining Processes	3	1	-	3	40	60	100
17130705	Robotics	3	1	-	3	40	60	100
17130766A	Departmental Elective – II a. Metal Forming Theory and Practice	3	1	-	3	40	60	100
17130766B	b. Mechatronics							
17130766C	c. Computational Fluid Dynamics							
17130766D	d. Automation in Manufacturing							
17139707	IPR & Patents	2	-	-	1	40	60	100
17130711	Metrology & Instrumentation Lab.	-	-	3	2	50	50	100
17130731	Fabrication Project/Term paper	-	-	3	2	50	50	100
17130722	Mini project-2	-	-	-	2	100	-	100
	Total	20	6	6	25	480	520	1000

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

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



II SEMESTER

YEAR

Subject codes	Subject	Periods per week			C	Internal	External	Total
		L	T	P/D				
Departmental Elective – III								
17130861 A	Non Destructive Testing							
17130861 B	Condition Monitoring							
17130861 C	Gas Dynamics & Jet Propulsion	3	1	-	3	40	60	100
17130861 D	Advanced Optimization Techniques							
17130861 E	Management Information Systems							
Departmental Elective – IV								
17130862 A	Digital Manufacturing							
17130862 B	Design for Manufacture							
17130862 C	Pressure Vessels and Piping	3	1	-	3	40	60	100
17130862 D	Product Life Cycle Management							
17130862 E	Renewable Energy Sources							
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

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