

**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.

Chaitanya Knowledge City, Rajanagaram, Rajamahendravaram – 533294. E.G.Dt. - AP.



GR14

DEPARTMENT OF AUTOMOBILE ENGINEERING

4 YEARS B.Tech. COURSE STRUCTURE & SYLLABUS

With Effective from 2014-15 Batch

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.

B.Tech., Automobile Engineering**With effective from 2014-15 Batch****B.Tech. Automobile Engineering****COURSE STRUCTURE****I YEAR****4+0+0+0+0 (T+P+D+ACC+NCC)****I SEMESTER**

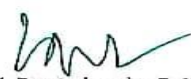
S. No.	Subject		Periods per week			C	Scheme of Examination Maximum Marks		
	Name	Code	T	P	D		Internal	External	Total
1	English – I	14198101	4	-	-	3	30	70	100
2	Mathematics - I	14198102	4	-	-	3	30	70	100
3	Mathematics – II (Mathematical Methods)	14198103	4	-	-	3	30	70	100
4	Engineering Physics	14198104	4	-	-	3	30	70	100
5	Computer Programming	14198105	4	-	-	3	30	70	100
6	Environmental Studies	14198106	4	-	-	3	30	70	100
7	English Communication Skills Lab-1	14198111	-	3	-	2	50	50	100
8	Engineering Physics Lab. (Engineering Physics Virtual lab assignments)	14198112	-	3	-	2	50	50	100
9	C- Programming Lab	14198113	-	3	-	2	50	50	100
	Total		24	9	-	24	-	-	900

I YEAR**4+0+0+0+0 (T+P+D+ACC+NCC)****II SEMESTER**

S. No.	Subject		Periods per week			C	Scheme of Examination Maximum Marks		
	Name	Code	T	P	D		Internal	External	Total
1	English – II	14198201	4	-	-	3	30	70	100
2	Mathematics – III	14198202	4	-	-	3	30	70	100
3	Engineering Chemistry	14198203	4	-	-	3	30	70	100
4	Engineering Mechanics	14198204	4	-	-	3	30	70	100
5	Engineering Drawing	14198275	1	-	3	3	30	70	100
6	Professional Ethics and Human Values*	14198296	4	-	-	-	-	-	-
7	English Communication Skills Lab – 2	14198211	-	3	-	2	50	50	100
8	Engineering Chemistry Lab	14198212	-	3	-	2	50	50	100
9	Engineering Workshop & IT Workshop	14198213	-	3	-	2	50	50	100
	Total		21	9	3	21	-	-	800

T : Theory P: Practical D: Drawing C: Credits ACC: Additional Credit Course NCC: Non Credit Course

*Professional Ethics & Human Values is an Audit Course / add on course with internal assessment only, Pass at 40% is compulsory,
No credit/Marks. Result shown as Satisfactory / Not Satisfactory.



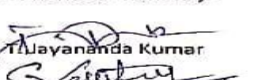
Dr. V. Ramachandra Raju



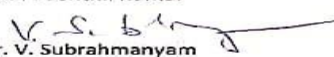
Dr. P. Senthil Kumar



Sri G. Satish Kumar



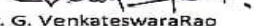
Dr. T. Jayananda Kumar



Mr. V. Subrahmanyam



Mr. P.N.E. Naveen



Mr. G. Venkateswara Rao



Sri P. VeeraRaju



Dr. M. Varaprasada Rao

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.

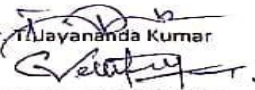
B.Tech., Automobile Engineering**With effective from 2014-15 Batch**

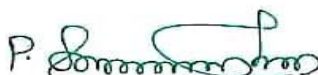
II YEAR		4+0+0+0+0 (T+P+D+ACC+NCC)				I SEMESTER			
S. No.	Subject		Periods per week			C	Scheme of Examination Maximum Marks		
	Name	Code	T	P	D		Internal	External	Total
1	Metallurgy & Materials Science	14170302	4	-	-	3	30	70	100
2	Mechanics of Solids	14170303	3+1	-	-	3	30	70	100
3	Thermodynamics	14170304	3+1	-	-	3	30	70	100
4	Basic Automobile Engineering	14170301	4	-	-	3	30	70	100
5	Fluid Mechanics & Hydraulic Machinery	14170305	4	-	-	3	30	70	100
6	Computer Aided Engineering Drawing Practice	14170376	1	-	3	2	30	70	100
7	Automobile Engineering Lab-1	14170311	-	3	-	2	50	50	100
8	Mechanics of Solids & Fluid Mechanics lab	14170312	-	3	-	2	50	50	100
Total			21	6	3	21	-	-	800

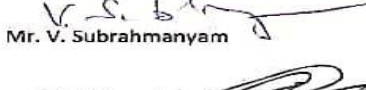
II YEAR		4+0+0+0+0 (T+D+P+ACC+NCC)				II SEMESTER			
S. No.	Subject		Periods per week			C	Scheme of Examination Maximum Marks		
	Name	Code	T	P	D		Internal	External	Total
1	Kinematics of Machinery	14170401	3+1	-	-	3	30	70	100
2	Automotive Engines	14170402	3+1	-	-	3	30	70	100
3	Basic Electrical & Electronics Engineering	14170403	3+1	-	-	3	30	70	100
4	Industrial Engineering & Management	14170404	3+1	-	-	3	30	70	100
5	Manufacturing Processes	14170405	3+1	-	-	3	30	70	100
6	Soft Skills -1	14179406	1	3	-	-	-	-	-
7	Machine Drawing	14170477	-	-	3	3	30	70	100
8	Automobile Engineering Lab -II	14170411	-	3	-	2	50	50	100
9	Basic Electrical & Electronics Engineering Lab	14172412	-	3	-	2	50	50	100
Total			21	9	3	22	-	-	800

T : Theory P: Practical D: Drawing C: Credits ACC: Additional Credit Course NCC: Non Credit Course

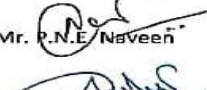

Dr. V. Ramachandra Raju


Dr. Jayananda Kumar
Mr. G. Venkateswara Rao


Dr. P. Senthil Kumar


Mr. V. Subrahmanyam
Sri P. VeeraRaju


Sri G. Satish Kumar


Mr. P.N.E. Naveen
Dr. M. VaraPrasada Rao

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.

B.Tech., Automobile Engineering**With effective from 2014-15 Batch**

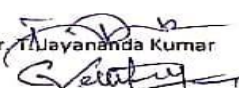
III YEAR			4+0+0+0+0 (T+D+P+ACC+NCC)				I SEMESTER		
S. No.	Subject		Periods per week			C	Scheme of Examination Maximum Marks		
	Name	Code	T	P	D		Internal	External	Total
1	Dynamics of Machinery	14170501	3+1	-	-	3	30	70	100
2	Automotive Electrical & Autotronics	14170502	3+1	-	-	3	30	70	100
3	Design of Machine Elements	14170503	3+1	-	-	3	30	70	100
4	Vehicle Transport Management	14170504	3+1	-	-	3	30	70	100
5	Heat Transfer	14170505	3+1	-	-	3	30	70	100
6	Vehicle Performance & Testing	14170506	3+1	-	-	3	30	70	100
7	Heat Transfer Lab	14170511	-	3	-	2	50	50	100
8	Manufacturing processes Lab	14170512	-	3	-	2	50	50	100
9	Mini Project*	14170521	-	-	-	2	100	-	100
	Total		24	6	-	24	-	-	900

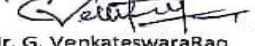
* Student should carry **Mini Project** during summer vacation after II B.Tech. II Sem. Course work and it will be evaluated during III B.Tech. I Sem.

III YEAR			4+0+0+0+0 (T+D+P+ACC+NCC)				II SEMESTER		
S. No.	Subject		Periods per week			C	Scheme of Examination Maximum Marks		
	Name	Code	T	P	D		Internal	External	Total
1	Machine Tools & Metrology	14170602	3+1	-	-	3	30	70	100
2	Instrumentation & Control Systems	14170603	3+1	-	-	3	30	70	100
3	Managerial Economics & Financial Analysis	14170601	3+1	-	-	3	30	70	100
4	Alternative Energy Sources for Automobiles	14170604	3+1	-	-	3	30	70	100
5	Departmental Elective - I	(See List)	3+1	-	-	3	30	70	100
6	Product Design and Assembly Automation	14170606	3+1	-	-	3	30	70	100
7	Soft Skills - 2	14178697	-	3	-		-	-	-
8	Machine Tools & Metrology Lab	14170611	-	3	-	2	50	50	100
9	Auto Scanning & Vehicle Testing Lab	14170612		3	-	2	50	50	100
	Total		24	9	-	22	-	-	800

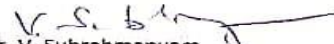
T : Theory P: Practical D: Drawing C: Credits ACC: Additional Credit Course NCC: Non Credit Course


Dr. V. Ramachandra Raju


Dr. T. Jayananda Kumar

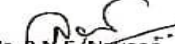

Mr. G. Venkateswara Rao


Dr. P. Senthil Kumar


Mr. V. Subrahmanyam


Sri P. VeeraRaju


Sri G. Satish Kumar


Mr. P.N.E. Naveen


Dr. M. VaraPrasada Rao

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.

B.Tech., Automobile Engineering**With effective from 2014-15 Batch**

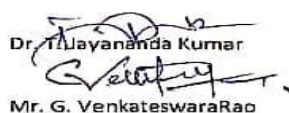
IV YEAR			4+0+0+0+0 (T+D+P+ACC+NCC)				I SEMESTER		
S. No.	Subject		Periods per week			C	Scheme of Examination Maximum Marks		
			T	P	D		Internal	External	Total
1	Departmental Elective – II	(See List)	3+1	-	-	3	30	70	100
2	Vehicle Dynamics	14170702	3+1	-	-	3	30	70	100
3	CAD / CAM	14170703	3+1	-	-	3	30	70	100
4	Finite Element Methods	14170704	3+1	-	-	3	30	70	100
5	Automotive Pollution & Control(Open Elective)	14170765a	3+1	-	-	3	30	70	100
6	Automotive Chassis & Suspension	14170706	3+1	-	-	3	30	70	100
7	Automobile Engineering LabIII & Instrumentation Lab	14170711	-	3	-	2	50	50	100
8	CAD / CAM LAB	14170712	-	3	-	2	50	50	100
9	Summer Internship	14170731	-	-	-	3	100	-	100
	Total		24	6	-	25	-	-	900

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

IV YEAR			4+0+0+0+0 (T+D+P+ACC+NCC)				II SEMESTER		
S. No.	Subject		Periods per week			C	Scheme of Examination Maximum Marks		
			T	P	D		Internal	External	Total
1	Automotive Control Systems	14170801	3+1	-	-	3	30	70	100
2	Vehicle maintenance	14170802	3+1	-	-	3	30	70	100
3	Departmental Elective – III	(See List)	3+1	-	-	3	30	70	100
4	Departmental Elective – IV	(See List)	3+1	-	-	3	30	70	100
5	Project Work	14170841	-	-	-	9	60	140	200
6	IPR& PATENTS	14179895	2	-	-	-	-	-	-
	Total		18	-	-	21	-	-	600

T : Theory P: Practical D: Drawing**C: Credits****ACC : Additional Credit Course****NCC: Non Credit Course**


Dr. V. Ramachandra Raju


Dr. T. Jayananda Kumar
Mr. G. Venkateswara Rao


Dr. P. Senthil Kumar


Mr. V. Subrahmanyam


Sri P. VeeraRaju


Sri G. Satish Kumar


Mr. P.N.E. Naveen


Dr. M. Varaprasada Rao