



GODAVARI INSTITUTE OF ENGINEERING & TECHNOLOGY (GIET-A)
(AUTONOMOUS)
Approved by AICTE, Accredited by NBA & NAAC 'A' Grade, Recognized under 2(f) and 12(b) of UGC, Permanently Affiliated to JNTUK, Kakinada.

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. EGDt - AP.



NBA ACCREDITED & NAAC 'A' GRADE

DEPARTMENT OF AUTOMOBILE ENGINEERING

4 YEARS B.Tech. COURSE STRUCTURE

(2014-15)

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

I YEAR

I SEMESTER

4+0+0+0+0 (T+P+D+ACC+NCC)

S.No.	Subject	T	P	D	C	Maximum Marks		
						Internal	External	Total
1	English-I	4	-	-	3	30	70	100
2	Mathematics - I	4	-	-	3	30	70	100
3	Mathematics - II	4	-	-	3	30	70	100
4	Engineering Physics	4	-	-	3	30	70	100
5	Computer Programming	4	-	-	3	30	70	100
6	Environmental Studies	4	-	-	3	30	70	100
7	English Communication Skills Lab-I-II	-	3	-	2	50	50	100
8	Engineering Physics Lab. (Engineering Physics Virtual lab assignments)	-	3	-	2	50	50	100
9	C-Programming Lab-I	-	3	-	2	50	50	100
	Total	24	9	-	24	-	-	900

I YEAR

II SEMESTER

4+0+0+0+0 (T+P+D+ACC+NCC)

S.No.	Subject	T	P	D	C	Maximum Marks		
						Internal	External	Total
1	English-II	4	-	-	3	30	70	100
2	Mathematics - III	4	-	-	3	30	70	100
3	Engineering Chemistry	4	-	-	3	30	70	100
4	Engineering Mechanics	4	-	-	3	30	70	100
5	Engineering Drawing	1	-	3	3	30	70	100
6	Professional Ethics and Human Values	4	-	-	-	-	-	-
7	English Communication Lab-II	-	3	-	2	50	50	100
8	Engineering Chemistry Lab	-	3	-	2	50	50	100
9	Engineering Workshop & IT Workshop	-	3	-	2	50	50	100
	Total	21	9	3	21	-	-	800

Dr. V. RamachandraRaju

Dr. P. Senthil Kumar

Sri G. Satish Kumar

Dr. T. Jayananda Kumar

Mr. V. Subrahmanyam

Mr. P.N.E. Naveen

M. G. Venkateswara Rao

Sri P. VeeraRaju

Dr. M. VaraPrasada Rao

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

S. No.	Subject	T	P	D	Credits	Maximum Marks		
						Internal	External	Total
1	Metallurgy & Materials Science	4	-	-	3	30	70	100
2	Mechanics of Solids	3+1	-	-	3	30	70	100
3	Thermodynamics	3+1	-	-	3	30	70	100
4	Basic Automobile Engineering	4	-	-	3	30	70	100
5	Fluid Mechanics & Hydraulic Machinery	4	-	-	3	30	70	100
6	Computer Aided Engineering Drawing Practice	1	-	3	2	30	70	100
7	Automobile Engineering Lab-I	-	3	-	2	50	50	100
8	Mechanics of Solids & FM lab	-	3	-	2	50	50	100
	Total	21	6	3	(22)	-	-	800

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

S. No.	Subject	T	P	D	Credits	Maximum Marks		
						Internal	External	Total
1	Kinematics of Machinery	3+1	-	-	3	30	70	100
2	Automotive Engines	3+1	-	-	3	30	70	100
3	Basic Electrical & Electronics Engineering	3+1	-	-	3	30	70	100
4	Industrial Engineering & Management	3+1	-	-	3	30	70	100
5	Manufacturing Processes	3+1	-	-	3	30	70	100
6	Soft Skills -I	1	3	-	-	-	-	-
7	Machine Drawing	-	-	3	3	50	50	100
8	Automobile Engineering Lab -II	-	3	-	2	50	50	100
9	Basic Electrical & Electronics Engineering Lab	-	3	-	2	50	50	100
	Total	21	9	3	22	-	-	800

Dr. V. Ramachandra Raju

Dr. P. Senthil Kumar

Sri G. Satish Kumar

Dr. J. Vanandha Kumar

Mr. V. Subrahmanyam

Mr. P. N.E. Naveen

Mr. G. Venkateswara Rao

Sri P. VeeraRaju

Dr. M. VaraPrasada Rao

III YEAR

I SEMESTER

4+0+0+0+0(T+D+P+ACC+NCC)

S. No.	Subject	T	P	D	Credits	Maximum Marks		
						Internal	External	Total
1	Dynamics of Machinery	3+1	-	-	3	30	70	100
2	Automotive Electrical & Auto tonics	3+1	-	-	3	30	70	100
3	Design of Machine Elements	3+1	-	-	3	30	70	100
4	Vehicle Transport Managements	3+1	-	-	3	30	70	100
5	Heat Transfer	3+1	-	-	3	30	70	100
6	Vehicle Performance & Testing	3+1	-	-	3	30	70	100
7	Heat Transfer Lab	-	3	-	2	50	50	100
8	Manufacturing processes Lab	-	3	-	2	50	50	100
9	Mini Project*	-	-	-	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

II SEMESTER

4+0+0+0+0 (T+D+P+ACC+NCC)

S.No.	Subject	T	P	D	Credits	Maximum Marks		
						Internal	External	Total
1	Machine Tools & Metrology	3+1	-	-	3	30	70	100
2	Instrumentation & Control Systems	3+1	-	-	3	30	70	100
3	Managerial Economics & Financial Analysis	3+1	-	-	3	30	70	100
4	Alternative Energy Sources for Automobile	3+1	-	-	3	30	70	100
5	Departmental Elective - I	3+1	-	-	3	30	70	100
6	Product Design and Assembly Automation	3+1	-	-	3	30	70	100
7	Soft Skills - 2	-	3	-	-	-	-	-
8	Machine Tools & Metrology Lab	-	3	-	2	50	50	100
9	Auto Scanning & Vehicle Testing - Lab	-	3	-	2	50	50	100
Total		24	9	-	22	-	-	800

Dr. V. Ramachandra Raju

Dr. P. Senthil Kumar

Sri G. Satish Kumar

Dr. T. Jayarama Kumar

Mr. V. Subrahmanyam

Mr. P.N.E. Naveen

Mr. G. Venkateswara Rao

Sri P. VeeraRaju

Dr. M. VaraPrasada Rao

4+0+0+0+0 (T+D+P+ACC+NCC)

S. No.	Subject	T	P	D	Credits	Maximum Marks		
						Internal	External	Total
1	Departmental Elective – II	3+1	-	-	3	30	70	100
2	Vehicle Dynamics	3+1	-	-	3	30	70	100
3	CAD / CAM	3+1	-	-	3	30	70	100
4	Finite Element Methods	3+1	-	-	3	30	70	100
5	Automotive Pollution & Control(Open Elective)	3+1	-	-	3	30	70	100
6	Automotive Chassis & Suspension	3+1	-	-	3	30	70	100
7	Automobile Engineering Lab –III & instrumentation Lab	-	3	-	2	50	50	100
8	CAD / CAM LAB	-	3	-	2	50	50	100
9	Summer Internship	-	-	-	2	50	-	50
	Total	24	6	-	24	-	-	850

** 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.

4+0+0+0+0 (T+D+P+ACC+NCC)

S. No.	Subject	T	P	D	Credits	Maximum Marks		
						Internal	External	Total
1	Automotive Control Systems	3+1	-	-	3	30	70	100
2	Vehicle maintenance	3+1	-	-	3	30	70	100
3	Departmental Elective – III	3+1	-	-	3	30	70	100
4	Departmental Elective – IV	3+1	-	-	3	30	70	100
5	Project Work	-	-	-	9	60	140	200
6	IPR& PATENTS	2	-	-	-	-	-	-
	Total	18	-	-	21	-	-	600

T : Theory
D : Drawing
NCC : Non Credit Course

P : Practical
ACC : Additional Credit Course

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

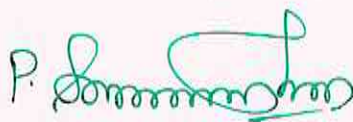
Dr. M. VaraPrasada Rao

ELECTIVES

<u>OPEN ELECTIVE</u> 1. Automotive Pollution and Control 2. Advanced Materials 3. Industrial Hydraulics and Pneumatics	<u>DEPARTMENTAL ELECTIVE- I</u> 1. Vehicle Body Engineering & Safety 2. Trouble Shooting, Servicing & Maintenance of Automobiles 3. Design for Safety & Comfort of Automobiles 4. Automotive Aerodynamics
<u>DEPARTMENTAL ELECTIVE- II</u> 1. Microprocessors & Micro controllers 2. Computational Fluid Dynamics 3. Electronic Engine & Vehicle Management System 4. Condition Monitoring of Vehicle Dynamics	<u>DEPARTMENTAL ELECTIVE- III</u> 1. Automotive Safety 2. Automotive Manufacturing 3. Auto Air Conditioning 4. Hybrid, Electric & Fuel cell vehicle
<u>DEPARTMENTAL ELECTIVE- IV</u> 1. Management Science 2. Principles of Entrepreneurship 3. Simulation of SI & CI Engines 4. Modern Vehicle Technology	



Dr. V. Ramachandra Raju



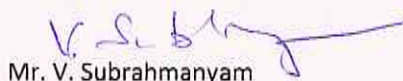
Dr. P. Senthil Kumar



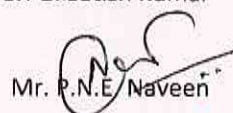
Sri G. Satish Kumar



Dr. T. Jayananda Kumar



Mr. V. Subrahmanyam



Mr. P.N.E. Naveen

Mr. G. Venkateswara Rao

Sri P. Veera Raju

Dr. M. Vara Prasad Rao