

ANURAG Engineering College

(Autonomous)

Ananthagiri (V&M), Kodad, Suryapet (Dt). Pin 508 206



B.TECH.

CIVIL ENGINEERING

R15 REGULATION [CBCS]

COURSE STRUCTURE

Principal
Anurag Engineering College
Ananthagiri (V&M), Kodad,
Suryapet (Dt), Telangana-508206

I YEAR I SEMESTER

S. No.	Course Code	Course	CC	L	T / P / D	C	Internal Marks	External Marks	Total Marks
1	A51001	English-I	HS	2	0	2	25	75	100
2	A51002	Mathematics-I	BS	3	1	3	25	75	100
3	A51003	Engineering Physics-I	BS	2	1	2	25	75	100
4	A51004	Applied Chemistry-I	BS	2	1	2	25	75	100
5	A51005	Computer Programming- I	ES	3	1	3	25	75	100
6	A51006	Engineering Graphics-I	ES	0	4	2	25	75	100
7	A51007	Engineering Mechanics-I	ES	2	1	2	25	75	100
8	A51209	Computer Programming Lab-I	ES	0	3	2	25	75	100
9	A51210	English Language Communication Skills Lab-I	HS	0	3	2	25	75	100
10	A51211	Engineering Physics and Applied Chemistry Lab-I	BS	0	3	2	25	75	100
11	A51212	Engineering Workshop-I	ES	0	3	2	25	75	100
Total				14	21	24	275	825	1100

CC – Course Category L – Lectures T – Tutorial Credits P – Practical D – Drawing C-

I YEAR II SEMESTER

S. No.	Course Code	Course	CC	L	T / P / D	C	Internal Marks	External Marks	Total Marks
1	A52001	English-II	HS	2	0	2	25	75	100
2	A52002	Mathematics-II	BS	3	1	3	25	75	100
3	A52003	Engineering Physics-II	BS	2	1	2	25	75	100
4	A52004	Applied Chemistry-II	BS	2	1	2	25	75	100
5	A52005	Computer Programming- II	ES	3	1	3	25	75	100
6	A52006	Engineering Graphics-II	ES	0	4	2	25	75	100
7	A52007	Engineering Mechanics- II	ES	2	1	2	25	75	100
8	A52209	Computer Programming Lab-II	ES	0	3	2	25	75	100
9	A52210	English Language Communication Skills Lab-II	HS	0	3	2	25	75	100
10	A52211	Engineering Physics and Applied Chemistry Lab-II	BS	0	3	2	25	75	100
11	A52212	Engineering Workshop- II & IT Workshop	ES	0	3	2	25	75	100
Total				14	21	24	275	825	1100

CC – Course Category L – Lectures

T – Tutorial
C- Credits

P – Practical

D – Drawing

II YEAR I SEMESTER

S. No.	Course Code	Course	CC	L	T / P / D	C	Internal Marks	External Marks	Total Marks
1	A55001	Mathematics-III	BS	4	1	4	25	75	100
2	A55002	Building Materials, Construction and Planning	PC	3	0	3	25	75	100
3	A55003	Strength of Materials-I	ES	3	1	3	25	75	100
4	A55004	Fluid Mechanics	ES	3	1	3	25	75	100
5	A55005	Surveying	PC	4	1	4	25	75	100
6	A55006	Engineering Geology	PC	3	0	3	25	75	100
7	A55201	Surveying Lab	PC	0	3	2	25	75	100
8	A55202	Engineering Geology Lab	PC	0	3	2	25	75	100
9	A55203	Gender Sensitization	MC	2	0	0	25	75	100
Total				22	10	24	225	675	900

CC – Course Category L – Lectures

T – Tutorial
C- Credits

P – Practical

D – Drawing

II YEAR II SEMESTER

S. No.	Course Code	Course	CC	L	T / P / D	C	Internal Marks	External Marks	Total Marks
1	A56001	Probability and Statistics	BS	3	1	3	25	75	100
2	A56002	Elements of Electrical Engineering	ES	3	1	3	25	75	100
3	A56003	Strength of Materials-II	ES	4	1	4	25	75	100
4	A56004	Hydraulics & Hydraulic Machinery	PC	4	1	4	25	75	100
5	A56005	Concrete Technology	PC	3	0	3	25	75	100
6	A56006	Environmental Studies	HS	3	0	3	25	75	100
7	A56201	Strength of Materials Lab	PC	0	3	2	25	75	100
8	A56202	Fluid Mechanics & Hydraulic Machinery Lab	PC	0	3	2	25	75	100
9	A56203	Human Values & Professional Ethics	MC	0	2	0	25	75	100
Total				20	12	24	225	675	900

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III YEAR I SEMESTER

S. No.	Course Code	Course	CC	L	T / P / D	C	Internal Marks	External Marks	Total Marks
1	A55001	Structural Analysis	PC	4	1	4	25	75	100
2	A55002	Design of RC Structures	PC	4	1	4	25	75	100
3	A55003	Environmental Engineering	PC	3	0	3	25	75	100
4	A55004	Soil Mechanics	PC	3	1	3	25	75	100
5	A55005	Water Resource Engineering	PC	4	1	4	25	75	100
PROFESSIONAL ELECTIVE - I									
6	A55006	Elements of Earthquake Engineering	PE						
	A55007	Water shed Management	PE	3	0	3	25	75	100
	A55008	Disaster Management	PE						
7	A55201	Soil mechanics lab	PC	0	3	2	25	75	100
8	A55202	Computer Aided Drafting lab	PC	0	3	2	25	75	100
Total				21	10	25	200	600	800

CC – Course Category L – Lectures

T – Tutorial

P – Practical

D – Drawing

C- Credits

III YEAR II SEMESTER

S. No.	Course Code	Course	CC	L	T / P / D	C	Internal Marks	External Marks	Total Marks
1	A56001	Design of steel structures	PC	4	1	4	25	75	100
2	A56002	Foundation Engineering	PC	4	1	4	25	75	100
3	A56003	Transportation Engineering	PC	4	0	4	25	75	100
4	A56004	Irrigation Engineering	PC	3	1	3	25	75	100
PROFESSIONAL ELECTIVE - II									
5	A56005	Construction technology & Project management	PE	3	0	3	25	75	100
	A56006	Environmental impact Assessment	PE						
	A56007	Advanced Structural Analysis	PE						
6	OPEN ELECTIVE-I		OE	3	0	3	25	75	100
7	A56201	Concrete technology lab	PC	0	3	2	25	75	100
8	A56202	Advanced communication skills lab	PC	0	3	2	25	75	100
Total				21	9	25	200	600	800

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IV YEAR I SEMESTER

S. No.	Course Code	Course	CC	L	T/ P/ D	C	Internal Marks	External Marks	Total Marks
1	A57001	Estimating and Costing	PC	3	1	3	25	75	100
2	A57002	Pavement Design	PC	3	1	3	25	75	100
3	A57003	GIS & Remote sensing	PC	3	0	3	25	75	100
PROFESSIONAL ELECTIVE - III									
4	A57004	Railways and Airport Engineering	PE	3	0	3	25	75	100
	A57005	Earth Retaining Structures	PE						
	A57006	Advanced Structural Design	PE						
PROFESSIONAL ELECTIVE - IV									
5	A57007	Ground improvement techniques	PE	3	0	3	25	75	100
	A57008	Finite element methods	PE						
	A57009	Building Services	PE						
6	OPEN ELECTIVE-II		OE	3	0	3	25	75	100
7	A57201	Transportation Engineering lab	PC	0	3	1.5	25	75	100
8	A57202	Environmental Engineering lab	PC	0	3	1.5	25	75	100
9	A57203	Mini Project	PW	0	0	2	--	100	100
Total				20	8	23	200	700	900

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D – Drawing

IV YEAR II SEMESTER

S. No.	Course Code	Course	CC	L	T / P / D	C	Internal Marks	External Marks	Total Marks
PROFESSIONAL ELECTIVE - V									
1	A58001	Prestressed Concrete	PE						
	A58002	Hazards and solid waste management	PE	4	0	3	25	75	100
	A58003	Urban planning and development	PE						
PROFESSIONAL ELECTIVE - VI									
2	A58004	Rehabilitation and Retrofitting of structures	PE						
	A58005	Design and drawing of irrigation structures	PE	4	0	3	25	75	100
	A58006	Geo Environmental Engineering	PE						
3	OPEN ELECTIVE-III		OE	3	0	3	25	75	100
7	A58201	Project work	PW	0	0	10	50	150	200
8	A58202	Technical seminar	PW	0	0	2	100	-	100
9	A58203	Comprehensive viva	PW	0	0	2	100	-	100
Total				11	0	23	175	375	700

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P – Practical

D – Drawing

LIST OF OPEN ELECTIVES

OPEN ELECTIVE- I			
S.No	Course code	Course	Offering Department
1	A56301	Construction Materials	Civil Engineering
2	A56302	Waste Management	
3	A56303	Solar Photovoltaic Systems	Electrical & Electronics Engineering
4	A56304	Maintenance of Electrical Systems	
5	A56305	Advanced Engineering Materials	Mechanical Engineering
6	A56306	Mechatronics	
7	A56307	Principles of Communication Systems	Electronics & Communication Engineering
8	A56308	Electronic Measuring Instruments	
9	A56309	Java Programming	Computer Science & Engineering
10	A56310	Computer Networks	

OPEN ELECTIVE- II			
S.No.	Course code	Subject	Offering Department
1	A57301	Disaster Management and Mitigation	Civil Engineering
2	A57003	Geological Information System & Remote Sensing	
3	A57302	Energy Storage Systems	Electrical & Electronics Engineering
4	A57303	Electrical Engineering Materials	
5	A57022	Power Plant Engineering	Mechanical Engineering
6	A57304	Industrial Robotics	
7	A57305	Computer Organization	Electronics & Communication Engineering
8	A57306	Principles of Signal Processing	
9	A57307	Database Management Systems	Computer Science & Engineering
10	A57308	Web Technologies	

OPEN ELECTIVE- III			
S.No	Course code	Subject	Offering Department
1	A58301	Construction Technology and Project Management	Civil Engineering
2	A58302	Safety Engineering	
3	A58303	Energy conservation and Audit	Electrical & Electronics Engineering
4	A58304	Artificial Neural Networks	
5	A58305	Renewable Energy Sources	Mechanical Engineering
6	A58306	Automobile Engineering	
7	A58307	Nanotechnology	Electronics & Communication Engineering
8	A58308	Biometric System	
9	A58309	Game Theory with Engineering Applications	Computer Science & Engineering
10	A58310	Software Engineering	

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ELECTRICAL AND ELECTRONICS ENGINEERING

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COURSE STRUCTURE

Principal
Anurag Engineering College
Ananthagiri(V&M), Kodad,
Suryapet (Dt.), Telangana-508206

I YEAR I SEMESTER

S. No.	Course Code	Course	CC	L	T / P / D	C	Internal Marks	External Marks	Total Marks
1	A51001	English-I	HS	2	0	2	25	75	100
2	A51002	Mathematics-I	BS	3	1	3	25	75	100
3	A51003	Engineering Physics-I	BS	2	1	2	25	75	100
4	A51005	Computer Programming-I	ES	3	1	3	25	75	100
5	A51008	Electrical Circuits	ES	3	1	3	25	75	100
6	A51009	Engineering Graphics	ES	0	6	3	25	75	100
7	A51201	English Language Communication Skills Lab-I	HS	0	3	2	25	75	100
8	A51202	Computer Programming Lab - I	ES	0	3	2	25	75	100
9	A51205	Engineering Physics Lab	BS	0	3	2	25	75	100
10	A51206	Engineering Workshop	ES	0	3	2	25	75	100
Total				13	22	24	250	750	1000

CC – Course Category L – Lectures T – Tutorial Credits P – Practical D – Drawing C-

I YEAR II SEMESTER

S. No.	Course Code	Course	CC	L	T / P / D	C	Internal Marks	External Marks	Total Marks
1	A52001	English-II	HS	2	0	2	25	75	100
2	A52002	Mathematics-II	BS	3	1	3	25	75	100
3	A52003	Engineering Physics-II	BS	2	1	2	25	75	100
4	A52006	Computer Programming-II	ES	3	1	3	25	75	100
5	A52008	Mathematics-III	BS	3	1	3	25	75	100
6	A52009	Engineering Chemistry	BS	3	1	3	25	75	100
7	A52201	English Language Communication Skills Lab-II	HS	0	3	2	25	75	100
8	A52202	Computer Programming Lab - II	ES	0	3	2	25	75	100
9	A52205	Engineering Chemistry Lab	BS	0	3	2	25	75	100
10	A52206	IT Workshop	ES	0	3	2	25	75	100
Total				16	17	24	250	750	1000

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IIYEAR I SEMESTER

S. No.	Course Code	Course	CC	L	T / P / D	C	Internal Marks	External Marks	Total Marks
1	A53007	Mathematics-IV	BS	4	1	4	25	75	100
2	A53008	Switching Theory & Logic Design	ES	3	1	3	25	75	100
3	A53009	Electronic Devices & Circuits	PC	3	1	3	25	75	100
4	A53010	Network Theory	PC	3	1	3	25	75	100
5	A53011	Electromagnetic Fields	PC	3	1	3	25	75	100
6	A53012	Electrical Machines-I	PC	4	1	4	25	75	100
7	A53204	Electrical Circuits Lab	ES	0	3	2	25	75	100
8	A53205	Electronic Devices & Circuits Lab	PC	0	3	2	25	75	100
9	A53206	Gender Sensitization	MC	0	3	0	25	75	100
Total				20	15	24	225	675	900

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IIYEAR II SEMESTER

S. No.	Course Code	Course	CC	L	T/ P/ D	C	Internal Marks	External Marks	Total Marks
1	A54007	Electronic Circuits	ES	3	1	3	25	75	100
2	A54008	Managerial Economics and Financial Analysis	HS	3	1	3	25	75	100
3	A54009	Power Systems-I	PC	3	1	3	25	75	100
4	A54010	Control Systems	PC	4	1	4	25	75	100
5	A54011	Electrical Machines-II	PC	4	1	4	25	75	100
6	A54006	Environmental Studies	HS	3	1	3	25	75	100
7	A54204	Electrical Machines-I Lab	PC	0	3	2	25	75	100
8	A54205	Control Systems Lab	PC	0	3	2	25	75	100
9	A54206	Human Values and Professional Ethics	MC	0	3	0	25	75	100
Total				20	15	24	225	675	900

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IIIYEAR I SEMESTER

S. No.	Course Code	Course	CC	L	T / P / D	C	Internal Marks	External Marks	Total Marks
1	A55009	Linear IC Applications	PC	3	1	3	25	75	100
2	A55010	Management Science	HS	3	0	3	25	75	100
3	A55011	Power Electronics	PC	4	1	4	25	75	100
4	A55012	Power Systems-II	PC	3	1	3	25	75	100
5	A55013	Electrical Machines-III	PC	4	1	4	25	75	100
PROFESSIONAL ELECTIVE - I									
6	A55014	Renewable Energy Sources	PE	3	0	3	25	75	100
	A55015	Computer Organization							
	A55016	Signals & Systems							
7	A55203	Power Electronics Lab	PC	0	3	2	25	75	100
8	A55204	Electrical Machines-II Lab	PC	0	3	2	25	75	100
Total				20	10	24	200	600	800

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D – Drawing

IIIYEAR II SEMESTER

S. No.	Course Code	Course	CC	L	T / P / D	C	Internal Marks	External Marks	Total Marks
1	A56008	Switchgear and Protection	PC	4	1	4	25	75	100
2	A56009	Computer Methods in Power Systems	PC	3	1	3	25	75	100
3	A56010	Electrical Measurements	PC	4	1	4	25	75	100
4	A56011	Power Semiconductor Drives	PC	3	1	3	25	75	100
PROFESSIONAL ELECTIVE - II									
5	A56012	Special Electrical Machines	PE	3	1	3	25	75	100
	A56013	Advanced Power Electronics							
	A56014	Electrical Distribution Systems							
6	OPEN ELECTIVE-I		OE	3	1	3	25	75	100
7	A56207	Digital Signal Processing Lab	PC	-	3	2	25	75	100
8	A56208	Microprocessors & Microcontrollers Lab	PC	-	3	2	25	75	100
Total				20	12	24	200	600	800

CC – Course Category L – Lectures

T – Tutorial

P – Practical

D – Drawing

C- Credits

IVYEAR I SEMESTER

S. No.	Course Code	Course	CC	L	T/ P/ D	C	Internal Marks	External Marks	Total Marks
1	A57010	Micro Processors and Micro Controllers	PC	3	1	3	25	75	100
2	A57011	Power System Operation and Control	PC	4	1	4	25	75	100
3	A57012	Utilization Of Electrical Energy	PC	3	1	3	25	75	100
PROFESSIONAL ELECTIVE - III									
4	A57013	Instrumentation	PE	3	1	3	25	75	100
	A57014	High Voltage Engineering							
	A57015	Optimization Techniques							
PROFESSIONAL ELECTIVE - IV									
5	A57016	Advanced Control Systems	PE	3	1	3	25	75	100
	A57017	Neural Networks and Fuzzy Logic							
	A57018	Linear system Analysis							
6	OPEN ELECTIVE-II		OE	3	1	3	25	75	100
7	A57204	Electrical Simulation Lab	PC	0	3	2	25	75	100
8	A57205	Micro Processors and Micro Controllers Lab	PC	0	3	2	25	75	100
9	A57206	Mini Project	PW	-	-	2	-	100	100
Total				19	12	25	200	700	900

CC – Course Category L – Lectures

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D – Drawing

IVYEAR II SEMESTER

S. No.	Course Code	Course	CC	L	T / P / D	C	Internal Marks	External Marks	Total Marks
PROFESSIONAL ELECTIVE - V									
1	A58007	HVDC Transmission & FACTS	PE	3	1	3	25	75	100
	A58008	Smart Grid							
	A58009	Power Quality							
PROFESSIONAL ELECTIVE - VI									
2	A58010	EHV AC Transmission	PE	3	1	3	25	75	100
	A58011	Power System Reliability							
	A58012	Digital Signal Processing							
3	OPEN ELECTIVE-III		OE	3	1	3	25	75	100
7	A58204	Seminar	PW	—	6	2	100	—	100
8	A58205	Project Work	PW	—	15	10	50	150	200
9	A58206	Comprehensive Viva-Voce	PW	—	—	2	100	—	100
Total				9	24	23	325	375	700

CC – Course Category L – Lectures

T – Tutorial
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P – Practical

D – Drawing

OPEN ELECTIVE- I			
S.No	Course Code	Course	Offering Department
1	A56301	Construction Materials	Civil Engineering
2	A56302	Waste Management	
3	A56303	Solar Photovoltaic Systems	Electrical & Electronics Engineering
4	A56304	Maintenance of Electrical Systems	
5	A56305	Advanced Engineering Materials	Mechanical Engineering
6	A56306	Mechatronics	
7	A56307	Principles of Communication Systems	Electronics & Communication Engineering
8	A56308	Electronic Measuring Instruments	
9	A56309	Java Programming	Computer Science & Engineering
10	A56310	Computer Networks	

OPEN ELECTIVE- II			
S.No.	Course Code	Subject	Offering Department
1	A57301	Disaster Management and Mitigation	Civil Engineering
2	A57003	Geological Information System & Remote Sensing	
3	A57302	Energy Storage Systems	Electrical & Electronics Engineering
4	A57303	Electrical Engineering Materials	
5	A57022	Power Plant Engineering	Mechanical Engineering
6	A57304	Industrial Robotics	
7	A57305	Computer Organization	Electronics & Communication Engineering
8	A57306	Principles of Signal Processing	
9	A57307	Database Management Systems	Computer Science & Engineering
10	A57308	Web Technologies	

OPEN ELECTIVE- III			
S.No	Course Code	Subject	Offering Department
1	A58301	Construction Technology and Project Management	Civil Engineering
2	A58302	Safety Engineering	
3	A58303	Energy conservation and Audit	Electrical & Electronics Engineering
4	A58304	Artificial Neural Networks	
5	A58305	Renewable Energy Sources	Mechanical Engineering
6	A58306	Automobile Engineering	
7	A58307	Nanotechnology	Electronics & Communication Engineering
8	A58308	Biometric System	
9	A58309	Game Theory with Engineering Applications	Computer Science & Engineering
10	A58310	Software Engineering	

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MECHANICAL ENGINEERING

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COURSE STRUCTURE

Principal
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I YEAR I SEMESTER

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2	A51002	Mathematics-I	BS	3	1	3	25	75	100
3	A51003	Engineering Physics-I	BS	2	1	2	25	75	100
4	A51004	Applied Chemistry-I	BS	2	1	2	25	75	100
5	A51005	Computer Programming- I	ES	3	1	3	25	75	100
6	A51006	Engineering Graphics-I	ES	0	4	2	25	75	100
7	A51007	Engineering Mechanics-I	ES	2	1	2	25	75	100
8	A51209	Computer Programming Lab-I	ES	0	3	2	25	75	100
9	A51210	English Language Communication Skills Lab-I	HS	0	3	2	25	75	100
10	A51211	Engineering Physics and Applied Chemistry Lab-I	BS	0	3	2	25	75	100
11	A51212	Engineering Workshop-I	ES	0	3	2	25	75	100
Total				14	21	24	275	825	1100

CC – Course Category L – Lectures T – Tutorial Credits P – Practical D – Drawing C-

I YEAR II SEMESTER

S. No.	Course Code	Course	CC	L	T / P / D	C	Internal Marks	External Marks	Total Marks
1	A52001	English-II	HS	2	0	2	25	75	100
2	A52002	Mathematics-II	BS	3	1	3	25	75	100
3	A52003	Engineering Physics-II	BS	2	1	2	25	75	100
4	A52004	Applied Chemistry-II	BS	2	1	2	25	75	100
5	A52005	Computer Programming- II	ES	3	1	3	25	75	100
6	A52006	Engineering Graphics-II	ES	0	4	2	25	75	100
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8	A52209	Computer Programming Lab-II	ES	0	3	2	25	75	100
9	A52210	English Language Communication Skills Lab-II	HS	0	3	2	25	75	100
10	A52211	Engineering Physics and Applied Chemistry Lab-II	BS	0	3	2	25	75	100
11	A52212	Engineering Workshop- II & IT Workshop	ES	0	3	2	25	75	100
Total				14	21	24	275	825	1100

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II YEAR I SEMESTER

S. No.	Course Code	Course	CC	L	T/ P/ D	C	Internal Marks	External Marks	Total Marks
1	A53013	Mechanics of Solids	ES	4	1	4	25	75	100
2	A53014	Thermodynamics	PC	4	1	4	25	75	100
3	A53015	Metallurgy & Material Science	ES	3	1	3	25	75	100
4	A53016	Environmental Studies	ES	3	1	3	25	75	100
5	A53001	Mathematics-III	BS	3	1	3	25	75	100
6	A53017	Electrical and Electronics Engineering	ES	3	1	3	25	75	100
7	A53207	Electrical and Electronics Engineering Lab	ES	-	3	2	25	75	100
8	A53208	Metallurgy and Mechanics of Solids Lab	ES	-	3	2	25	75	100
9	A53209	Gender Sensitization	MC	-	3	-	25	75	100
Total				20	15	24	225	675	900

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D – Drawing

II YEAR II SEMESTER

S. No.	Course Code	Course	CC	L	T / P / D	C	Internal Marks	External Marks	Total Marks
1	A54012	Production Technology	PC	3	1	3	25	75	100
2	A54013	Kinematics of machinery	PC	4	1	4	25	75	100
3	A54014	Thermal Engineering-I	PC	4	1	4	25	75	100
4	A54015	Mechanics of Fluids and Hydraulic Machines	PC	3	1	3	25	75	100
5	A54016	Machine Drawing	PC	–	6	3	25	75	100
6	A54001	Probability & Statistics	BS	3	1	3	25	75	100
7	A54207	Production Technology Lab	PC	–	3	2	25	75	100
8	A54208	Mechanics of Fluids and Hydraulic Machines Lab	PC	–	3	2	25	75	100
9	A54209	Human Values and Professional Ethics	MC	3	-	-	25	75	100
Total				20	17	24	225	675	900

CC – Course Category L – Lectures

T – Tutorial
C- Credits

P – Practical

D – Drawing

IIIYEAR I SEMESTER

S. No.	Course Code	Course	CC	L	T / P / D	C	Internal Marks	External Marks	Total Marks
1	A55017	Machine Tools & Metrology	PC	3	1	3	25	75	100
2	A55018	Dynamics Of Machinery	PC	3	1	3	25	75	100
3	A55019	Design Of Machine Members-I	PC	4	1	4	25	75	100
4	A55020	Thermal Engineering-II	PC	4	1	4	25	75	100
5	A55021	Managerial Economics and Financial Analysis	HS	3	1	3	25	75	100
PROFESSIONAL ELECTIVE - I									
6	A55022	Automobile Engineering	PE	3	1	3	25	75	100
	A55023	Welding Technology							
	A55024	Turbo Machinery							
7	A55205	Metrology & Machine Tools Lab	PC	-	3	2	25	75	100
8	A55206	Thermal Engineering Lab	PC	-	3	2	25	75	100
Total				20	12	24	200	600	800

CC – Course Category L – Lectures

T – Tutorial
C- Credits

P – Practical

D – Drawing

III YEAR II SEMESTER

S. No.	Course Code	Course	CC	L	T / P / D	C	Internal Marks	External Marks	Total Marks
1	A56015	Design Of Machine Members-II	PC	3	1	3	25	75	100
2	A56016	Heat Transfer	PC	4	1	4	25	75	100
3	A56017	Refrigeration & Air Conditioning	PC	4	1	4	25	75	100
4	A56018	Operation Research	PC	3	1	3	25	75	100
PROFESSIONAL ELECTIVE - II									
5	A56019	Industrial Management	PE	3	1	3	25	75	100
	A56020	Nano Technology							
	A56021	Tribology							
6	OPEN ELECTIVE-I		OE	3	1	3	25	50	75
7	A56205	Heat Transfer Lab	PC	-	3	2	25	75	100
8	A56206	Advanced English Communication Skills Lab	PC	-	3	2	25	75	100
Total				20	12	24	200	600	800

CC – Course Category L – Lectures

T – Tutorial
C- Credits

P – Practical

D – Drawing

IV YEAR I SEMESTER

S. No.	Course Code	Course	CC	L	T / P / D	C	Internal Marks	External Marks	Total Marks
1	A57019	CAD/CAM	PC	4	1	4	25	75	100
2	A57020	Instrumentation & Control Systems	PC	3	1	3	25	75	100
3	A57021	Finite Element Analysis	PC	3	1	3	25	75	100
PROFESSIONAL ELECTIVE - III									
4	A57022	Power Plant Engineering	PE	3	1	3	25	75	100
	A57023	CNC Technologies							
	A57024	Unconventional Machining Process							
PROFESSIONAL ELECTIVE - IV									
5	A57025	Automation in Manufacturing Systems	PE	3	1	3	25	75	100
	A57026	Plant Layout & Material handling							
	A57027	Computational Fluid Dynamics							
6	OPEN ELECTIVE-II		OE	3	0	3	25	75	100
7	A57207	Computer Aided Design & Computer Aided manufacturing Lab	P.C	-	3	2	25	75	100
8	A57208	PDP & Instrumentation Lab	P.C	-	3	2	25	75	100
9	A57209	Mini Project	PW	-	-	2	-	100	100
Total				19	12	25	200	700	900

CC – Course Category L – Lectures

T – Tutorial
C- Credits

P – Practical

D – Drawing

IV YEAR II SEMESTER

S. No.	Course Code	Course	CC	L	T / P / D	C	Internal Marks	External Marks	Total Marks
PROFESSIONAL ELECTIVE - V									
1	A58013	Industrial Robotics	PE	3	1	3	25	75	100
	A58014	Mechatronics							
	A58015	Composite Materials							
PROFESSIONAL ELECTIVE - VI									
2	A58016	Production Planning and Control	PE	3	1	3	25	75	100
	A58017	Mechanical vibrations							
	A58018	Flexible Manufacturing Systems							
3	OPEN ELECTIVE-III		OE	3	0	3	25	75	100
7	A58207	Seminar	PW	-	6	2	100	-	100
8	A58208	Project work	PW	-	15	10	50	150	200
9	A58209	Comprehensive viva	PW	-	-	2	100	-	100
Total				09	24	23	325	375	700

CC – Course Category L – Lectures

T – Tutorial
C- Credits

P – Practical

D – Drawing

LIST OF OPEN ELECTIVES

OPEN ELECTIVE- I			
S.No	Course code	Course	Offering Department
1	A56301	Construction Materials	Civil Engineering
2	A56302	Waste Management	
3	A56303	Solar Photovoltaic Systems	Electrical & Electronics Engineering
4	A56304	Maintenance of Electrical Systems	
5	A56305	Advanced Engineering Materials	Mechanical Engineering
6	A56306	Mechatronics	
7	A56307	Principles of Communication Systems	Electronics & Communication Engineering
8	A56308	Electronic Measuring Instruments	
9	A56309	Java Programming	Computer Science & Engineering
10	A56310	Computer Networks	

OPEN ELECTIVE- II			
S.No.	Course code	Subject	Offering Department
1	A57301	Disaster Management and Mitigation	Civil Engineering
2	A57003	Geological Information System & Remote Sensing	
3	A57302	Energy Storage Systems	Electrical & Electronics Engineering
4	A57303	Electrical Engineering Materials	
5	A57022	Power Plant Engineering	Mechanical Engineering
6	A57304	Industrial Robotics	
7	A57305	Computer Organization	Electronics & Communication Engineering
8	A57306	Principles of Signal Processing	
9	A57307	Database Management Systems	Computer Science & Engineering
10	A57308	Web Technologies	

OPEN ELECTIVE- III			
S.No	Course code	Subject	Offering Department
1	A58301	Construction Technology and Project Management	Civil Engineering
2	A58302	Safety Engineering	
3	A58303	Energy conservation and Audit	Electrical & Electronics Engineering
4	A58304	Artificial Neural Networks	
5	A58305	Renewable Energy Sources	Mechanical Engineering
6	A58306	Automobile Engineering	
7	A58307	Nanotechnology	Electronics & Communication Engineering
8	A58308	Biometric System	
9	A58309	Game Theory with Engineering Applications	Computer Science & Engineering
10	A58310	Software Engineering	

ANURAG Engineering College

(Autonomous)

Ananthagiri (V&M), Kodad, Suryapet (Dt). Pin 508 206



B.TECH.

ELECTRONICS AND COMMUNICATION ENGINEERING

R15 REGULATION [CBCS]

COURSE STRUCTURE

Principal
Anurag Engineering College
Ananthagiri (V&M), Kodad,
Suryapet (Dt.), Telangana-508206

I YEAR I SEMESTER

S. No.	Course Code	Course	CC	L	T / P / D	C	Internal Marks	External Marks	Total Marks
1	A51001	English-I	HS	2	1	2	25	75	100
2	A51002	Mathematics - I	BS	3	1	3	25	75	100
3	A51003	Engineering Physics-I	BS	3	-	3	25	75	100
4	A51005	Computer Programming - I	ES	3	-	3	25	75	100
5	A51008	Electrical Circuits	ES	3	1	3	25	75	100
6	A51009	Engineering Graphics	ES	2	-	2	25	75	100
7	A51201	English Language Communication Skills Lab-I	HS	-	3	2	25	75	100
8	A51202	Computer Programming Lab - I	BS	-	3	2	25	75	100
9	A51205	Engineering Physic Lab	ES	-	3	2	25	75	100
10	A51206	Engineering Workshop	ES	-	3	2	25	75	100
Total				16	15	24	250	750	1000

CC – Course Category L – Lectures

T – Tutorial
C- Credits

P – Practical

D – Drawing

I YEAR II SEMESTER

S. No.	Course Code	Course	CC	L	T / P / D	C	Internal Marks	External Marks	Total Marks
1	A52001	English-II	HS	2	1	2	25	75	100
2	A52002	Mathematics – II	BS	3	1	3	25	75	100
3	A52003	Engineering Physics-II	BS	2	1	2	25	75	100
4	A52008	Mathematics – III	BS	3		3	25	75	100
5	A52009	Engineering Chemistry	BS	3	1	3	25	75	100
6	A52010	Electronic Devices and Circuits	PC	3		3	25	75	100
7	A52201	English Language Communication Skills Lab-II	HS	-	3	2	25	75	100
8	A52205	Engineering Chemistry Lab	BS	-	3	2	25	75	100
9	A52206	IT Work shop	ES	-	3	2	25	75	100
10	A52207	Electronic Devices and Circuits Lab	PC	-	3	2	25	75	100
Total				16	16	24	250	750	1000

CC – Course Category L – Lectures T – Tutorial P – Practical D – Drawing C- Credits

II YEAR I SEMESTER

S. No.	Course Code	Course	CC	L	T / P / D	C	Internal Marks	External Marks	Total Marks
1	A53016	Environmental Studies	HS	3	-	3	25	75	100
2	A53007	Mathematics –IV	BS	3	1	3	25	75	100
3	A53018	Computer Programming-II	ES	4	-	4	25	75	100
4	A53008	Switching Theory and Logic Design	PC	3	1	3	25	75	100
5	A53019	Electronic Circuits Analysis	PC	4	1	4	25	75	100
6	A53020	Probability Theory & Stochastic Processes	PC	3	1	3	25	75	100
7	A53210	Computer Programming-II Lab	ES	-	3	2	25	75	100
8	A53211	Electronic Circuits Analysis Lab	PC	-	3	2	25	75	100
9	A53212	Gender Sensitization	MC	-	3	-	25	75	100
Total				20	13	24	225	675	900

CC – Course Category L – Lectures

T – Tutorial
C- Credits

P – Practical

D – Drawing

II YEAR II SEMESTER

S. No.	Course Code	Course	CC	L	T / P / D	C	Internal Marks	External Marks	Total Marks
1	A54008	Managerial Economics & Financial Analysis	HS	3	0	3	25	75	100
2	A50017	Principles of Electrical Engineering	ES	3	1	3	25	75	100
3	A54018	Pulse and Digital Circuits	PC	3	1	3	25	75	100
4	A54019	Electromagnetic Theory and Transmission Lines	PC	4	0	4	25	75	100
5	A54020	Signals and Systems	PC	4	0	4	25	75	100
6	A54021	Digital Design Through Verilog HDL	PC	3	0	3	25	75	100
7	A54210	Electrical Engineering Lab	ES	-	3	2	25	75	100
8	A54211	Basic Simulation Lab	PC	-	3	2	25	75	100
9	A54212	Human values and Professional ethics	MC	-	2	-	25	75	100
Total				20	10	24	225	675	900

CC – Course Category L – Lectures

T – Tutorial
C- Credits

P – Practical

D – Drawing

III YEAR I SEMESTER

S. No.	Course Code	Course	CC	L	T / P / D	C	Internal Marks	External Marks	Total Marks
1	A55025	Computer Organization and Operating System	ES	3	0	3	25	75	100
2	A55026	Control Systems Engineering	PC	4	0	4	25	75	100
3	A55027	Antennas & Wave Propagation	PC	4	1	4	25	75	100
4	A55028	Analog Communications	PC	3	1	3	25	75	100
5	A55009	Linear IC Applications	PC	3	1	3	25	75	100
PROFESSIONAL ELECTIVE - I									
6	A55029	Electronic Measurements & Instrumentation	PE	3	0	3	25	75	100
	A55030	Artificial Neural Networks							
	A55031	EMI/EMC							
7	A55207	PC & IC Lab	PC	-	3	2	25	75	100
8	A55208	Analog Communications Lab	PC	-	3	2	25	75	100
Total				20	9	24	225	675	900

CC – Course Category L – Lectures

T – Tutorial

P – Practical

D – Drawing

C- Credits

III YEAR II SEMESTER

S. No.	Course Code	Course	CC	L	T / P / D	C	Internal Marks	External Marks	Total Marks
1	A56022	Management Science	HS	3	0	3	25	75	100
2	A56023	Microprocessors and Microcontrollers	PC	3	1	3	25	75	100
3	A56024	Digital Communications	PC	4	1	4	25	75	100
4	A56025	Digital Signal Processing	PC	4	1	4	25	75	100
PROFESSIONAL ELECTIVE - II									
5	A56026	Telecommunication switching Systems	PE	3	1	3	25	75	100
	A56027	Satellite Communications							
	A56020	Nanotechnology							
6	OPEN ELECTIVE-I		OE	3	0	3	25	75	100
7	A56207	Digital Signal Processing Lab	PC	-	3	2	25	75	100
8	A56208	Microprocessors and Microcontrollers Lab	PC	-	3	2	25	75	100
Total				20	10	24	200	600	800

CC – Course Category L – Lectures

T – Tutorial
C- Credits

P – Practical

D – Drawing

IV YEAR I SEMESTER

S. No.	Course Code	Course	CC	L	T / P / D	C	Internal Marks	External Marks	Total Marks
1	A57033	Computer Networks	PC	3	0	3	25	75	100
2	A57029	Microwave Engineering	PC	4	0	4	25	75	100
3	A57030	VLSI Design	PC	3	1	3	25	75	100
PROFESSIONAL ELECTIVE - III									
4	A57031	Embedded Systems Design	PE	3	0	3	25	75	100
	A57032	Biometric System							
	A57028	Optical Communications							
PROFESSIONAL ELECTIVE - IV									
5	A57034	Digital Signal Processors & Architectures	PE	3	0	3	25	75	100
	A57035	Digital Image Processing							
	A57036	Television Engineering							
6	OPEN ELECTIVE-II		OE	3	0	3	25	75	100
7	A57210	Advanced English Language Communication Skills Lab	HS	-	3	2	25	75	100
8	A57211	Microwave and Digital Communications Lab	PC	-	3	2	25	75	100
9	A57212	Mini Project	PW	-	3	2	-	100	100
Total				19	11	25	200	700	900

CC – Course Category L – Lectures

T – Tutorial
C- Credits

P – Practical

D – Drawing

IV YEAR II SEMESTER

S. No.	Course Code	Course	CC	L	T/ P/ D	C	Internal Marks	External Marks	Total Marks
PROFESSIONAL ELECTIVE - V									
1	A58019	Cellular & Mobile Communications	PE	3	1	3	25	75	100
	A58020	Radar Systems							
	A58021	Network Security							
PROFESSIONAL ELECTIVE - VI									
2	A58022	Wireless Communications & Networks	PE	3	1	3	25	75	100
	A58023	Internet of Things							
	A58024	Scripting Languages							
3	OPEN ELECTIVE-III		OE	3	0	3	25	75	100
7	A58210	Seminar	PW	-	3	2	100		100
8	A58211	Major Project	PW	-	15	10	50	150	200
9	A58212	Comprehensive Viva	PW	-	-	2		100	100
Total				9	21	23	225	475	700

CC – Course Category L – Lectures

T – Tutorial
C- Credits

P – Practical

D – Drawing

LIST OF OPEN ELECTIVES

OPEN ELECTIVE- I			
S. No	Course Code	Course	Offering Department
1	A56301	Construction Materials	Civil Engineering
2	A56302	Waste Management	
3	A56303	Solar Photovoltaic Systems	Electrical & Electronics Engineering
4	A56304	Maintenance of Electrical Systems	
5	A56305	Advanced Engineering Materials	Mechanical Engineering
6	A56306	Mechatronics	
7	A56307	Principles of Communication Systems	Electronics & Communication Engineering
8	A56308	Electronic Measuring Instruments	
9	A56309	Java Programming	Computer Science & Engineering
10	A56310	Computer Networks	

OPEN ELECTIVE- II			
S. No.	Course Code	Subject	Offering Department
1	A57301	Disaster Management and Mitigation	Civil Engineering
2	A57003	Geological Information System & Remote Sensing	
3	A57302	Energy Storage Systems	Electrical & Electronics Engineering
4	A57303	Electrical Engineering Materials	
5	A57022	Power Plant Engineering	Mechanical Engineering
6	A57304	Industrial Robotics	
7	A57305	Computer Organization	Electronics & Communication Engineering
8	A57306	Principles of Signal Processing	
9	A57307	Database Management Systems	Computer Science & Engineering
10	A57308	Web Technologies	

OPEN ELECTIVE- III			
S. No	Course Code	Subject	Offering Department
1	A58301	Construction Technology and Project Management	Civil Engineering
2	A58302	Safety Engineering	
3	A58303	Energy conservation and Audit	Electrical & Electronics Engineering
4	A58304	Artificial Neural Networks	
5	A58305	Renewable Energy Sources	Mechanical Engineering
6	A58306	Automobile Engineering	
7	A58307	Nanotechnology	Electronics & Communication Engineering
8	A58308	Biometric System	
9	A58309	Game Theory with Engineering Applications	Computer Science & Engineering
10	A58310	Software Engineering	

ANURAG Engineering College

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B.TECH.

COMPUTER SCIENCE AND ENGINEERING

R15 REGULATION [CBCS]

COURSE STRUCTURE

Principal
Anurag Engineering College
Ananthagiri (V&M), Kodad,
Suryapet (Dt.), Telangana-508206

I YEAR I SEMESTER

S. No.	Course Code	Course	CC	L	T / P / D	C	Internal Marks	External Marks	Total Marks
1	A51001	English- I	HS	2	0	2	25	75	100
2	A51002	Mathematics - I	BS	3	1	3	25	75	100
3	A51003	Engineering Physics- I	BS	2	1	2	25	75	100
4	A51005	Computer Programming -I	ES	3	1	3	25	75	100
5	A51010	Engineering Chemistry	BS	3	1	3	25	75	100
6	A51011	Basic Electrical Engineering	ES	3	1	3	25	75	100
7	A51201	English Language Communication Skills Lab - I	HS	0	3	2	25	75	100
8	A51202	Computer Programming Lab - I	ES	0	3	2	25	75	100
9	A51207	Engineering Chemistry Lab	BS	0	3	2	25	75	100
10	A51208	IT Work shop	ES	0	3	2	25	75	100
Total				16	17	24	250	750	1000

CC – Course Category L – Lectures T – Tutorial Credits P – Practical D – Drawing C-

I YEAR II SEMESTER

S. No.	Course Code	Course	CC	L	T / P / D	C	Internal Marks	External Marks	Total Marks
1	A52001	English- II	HS	2	0	2	25	75	100
2	A52002	Mathematics - II	BS	3	1	3	25	75	100
3	A52003	Engineering Physics- II	BS	2	1	2	25	75	100
4	A52006	Computer Programming - II	ES	3	1	3	25	75	100
5	A52008	Mathematics - III	BS	3	1	3	25	75	100
6	A52011	Engineering Graphics	ES	3	3	3	25	75	100
7	A52201	English Language Communication Skills Lab - II	HS	0	3	2	25	75	100
8	A52202	Computer Programming Lab - II	ES	0	3	2	25	75	100
9	A52208	Engineering Physics Lab	BS	0	3	2	25	75	100
10	A52209	Engineering Workshop	ES	0	3	2	25	75	100
Total				16	19	24	250	750	1000

CC – Course Category L – Lectures

T – Tutorial
C- Credits

P – Practical

D – Drawing

IIYEAR I SEMESTER

S. No.	Course Code	Course	CC	L	T / P / D	C	Internal Marks	External Marks	Total Marks
1	A53021	Probability & Statistics	BS	4	0	4	25	75	100
2	A53022	Discrete Mathematics	BS	4	0	4	25	75	100
3	A53023	Data Structures	PC	3	0	3	25	75	100
4	A53009	Electronic Devices & Circuits	ES	3	1	3	25	75	100
5	A53024	Digital Logic Design	ES	3	1	3	25	75	100
6	A53025	Object Oriented Programming	PC	3	0	3	25	75	100
7	A53213	Electronic Devices and Electrical Circuits Lab	ES	0	3	2	25	75	100
8	A53214	Data Structures Lab	PC	0	3	2	25	75	100
9	A53215	Gender Sensitization	MC	0	2	0	25	75	100
Total				20	10	24	225	675	900

CC – Course Category L – Lectures

T – Tutorial
C- Credits

P – Practical

D – Drawing

IIYEAR II SEMESTER

S. No.	Course Code	Course	CC	L	T / P / D	C	Internal Marks	External Marks	Total Marks
1	A54006	Environmental Studies	HS	3	1	3	25	75	100
2	A54022	Design and Analysis of Algorithms	PC	4	0	4	25	75	100
3	A54023	Computer Organization	PC	3	1	3	25	75	100
4	A54024	Database Management Systems	PC	4	0	4	25	75	100
5	A54025	Software Engineering	PC	3	0	3	25	75	100
6	A54026	Java Programming	PC	3	0	3	25	75	100
7	A54213	Java Programming Lab	PC	0	3	2	25	75	100
8	A54214	Database Management Systems Lab	PC	0	3	2	25	75	100
9	A54215	Human Values and Professional Ethics	MC	0	2	0	25	75	100
Total				20	10	24	225	675	900

CC – Course Category L – Lectures

T – Tutorial
C- Credits

P – Practical

D – Drawing

IIIYEAR I SEMESTER

S. No.	Course Code	Course	CC	L	T / P / D	C	Internal Marks	External Marks	Total Marks
1	A55032	Formal Languages and Automata Theory	PC	3	1	3	25	75	100
2	A55021	Managerial Economics and Financial Analysis	HS	3	1	3	25	75	100
3	A55033	Computer Networks	PC	4	0	4	25	75	100
4	A55034	Operating Systems	PC	4	0	4	25	75	100
5	A55035	Microprocessors and Microcontrollers	PC	3	0	3	25	75	100
PROFESSIONAL ELECTIVE - I									
6	A55036	Human Computer Interaction	PE	3	0	3	25	75	100
	A55037	Advanced Databases	PE						
	A55038	Mobile Computing	PE						
7	A55209	Advance English Communication Skills Lab	HS	0	3	2	25	75	100
8	A55210	Operating Systems and Computer Networks Lab	PC	0	3	2	25	75	100
Total				20	8	24	200	600	800

CC – Course Category L – Lectures

T – Tutorial
C- Credits

P – Practical

D – Drawing

IIIYEAR II SEMESTER

S. No.	Course Code	Course	CC	L	T / P / D	C	Internal Marks	External Marks	Total Marks
1	A56028	Compiler Design	PC	3	1	3	25	75	100
2	A56029	Data Warehousing and Data Mining	PC	4	0	4	25	75	100
3	A56030	Object Oriented Analysis and Designing	PC	4	0	4	25	75	100
4	A56031	Web Technologies	PC	3	0	3	25	75	100
PROFESSIONAL ELECTIVE - II									
5	A56032	Machine Learning	PE	3	0	3	25	75	100
	A56033	Internet of Things	PE						
	A56034	Cyber Forensics	PE						
6	OPEN ELECTIVE-I		OE	3	0	3	25	75	100
7	A56209	Data Warehousing and Data Mining Lab	PC	0	3	2	25	75	100
8	A56210	Web Technologies Lab	PC	0	3	2	25	75	100
Total				20	7	24	200	600	800

CC – Course Category L – Lectures

T – Tutorial
C- Credits

P – Practical

D – Drawing

IVYEAR I SEMESTER

S. No.	Course Code	Course	CC	L	T/ P/ D	C	Internal Marks	External Marks	Total Marks
1	A57037	Information Security	PC	3	1	3	25	75	100
2	A57038	Unix Programming	PC	4	0	4	25	75	100
3	A57039	Management Science	HS	3	0	3	25	75	100
PROFESSIONAL ELECTIVE - III									
4	A57040	Software Project Management	PE	3	0	3	25	75	100
	A57041	Cloud Computing	PE						
	A57042	Software Testing	PE						
PROFESSIONAL ELECTIVE - IV									
5	A57043	Predictive Analytics with R Programming	PE	3	1	3	25	75	100
	A57044	Scripting Languages	PE						
	A57045	Programming with Python	PE						
6	OPEN ELECTIVE-II		OE	3	0	3	25	75	100
7	A57213	Information Security Lab	PC	0	3	2	25	75	100
8	A57214	UNIX Programming Lab	PC	0	3	2	25	75	100
9	A57215	Mini Project	PW	0	3	2	--	100	100
Total				19	11	25	200	700	900

CC – Course Category L – Lectures

T – Tutorial
C- Credits

P – Practical

D – Drawing

IVYEAR II SEMESTER

S. No.	Course Code	Course	CC	L	T / P / D	C	Internal Marks	External Marks	Total Marks
PROFESSIONAL ELECTIVE - V									
1	A58025	Big Data Analytics	PE						
	A58026	Distributed Systems	PE	3	0	3	25	75	100
	A58027	Operations Research	PE						
PROFESSIONAL ELECTIVE - VI									
2	A58028	Design Patterns	PE						
	A58029	Artificial Intelligence	PE	3	1	3	25	75	100
	A58030	Multimedia Computing	PE						
3	OPEN ELECTIVE-III		OE	3	0	3	25	75	100
7	A58213	Seminar	PW	0	6	2	100	---	100
8	A58214	Project work	PW	0	15	10	50	150	200
9	A58215	Comprehensive Viva Voce	PW	0	0	2	100	---	100
Total				9	22	23	325	375	700

CC – Course Category L – Lectures

T – Tutorial
C- Credits

P – Practical

D – Drawing

LIST OF OPEN ELECTIVES

OPEN ELECTIVE- I			
S.No	Course code	Course	Offering Department
1	A56301	Construction Materials	Civil Engineering
2	A56302	Waste Management	
3	A56303	Solar Photovoltaic Systems	Electrical & Electronics Engineering
4	A56304	Maintenance of Electrical Systems	
5	A56305	Advanced Engineering Materials	Mechanical Engineering
6	A56306	Mechatronics	
7	A56307	Principles of Communication Systems	Electronics & Communication Engineering
8	A56308	Electronic Measuring Instruments	
9	A56309	Java Programming	Computer Science & Engineering
10	A56310	Computer Networks	

OPEN ELECTIVE- II			
S.No.	Course code	Subject	Offering Department
1	A57301	Disaster Management and Mitigation	Civil Engineering
2	A57003	Geological Information System & Remote Sensing	
3	A57302	Energy Storage Systems	Electrical & Electronics Engineering
4	A57303	Electrical Engineering Materials	
5	A57022	Power Plant Engineering	Mechanical Engineering
6	A57304	Industrial Robotics	
7	A57305	Computer Organization	Electronics & Communication Engineering
8	A57306	Principles of Signal Processing	
9	A57307	Database Management Systems	Computer Science & Engineering
10	A57308	Web Technologies	

OPEN ELECTIVE- III			
S.No	Course code	Subject	Offering Department
1	A58301	Construction Technology and Project Management	Civil Engineering
2	A58302	Safety Engineering	
3	A58303	Energy conservation and Audit	Electrical & Electronics Engineering
4	A58304	Artificial Neural Networks	
5	A58305	Renewable Energy Sources	Mechanical Engineering
6	A58306	Automobile Engineering	
7	A58307	Nanotechnology	Electronics & Communication Engineering
8	A58308	Biometric System	
9	A58309	Game Theory with Engineering Applications	Computer Science & Engineering
10	A58310	Software Engineering	

Anurag Engineering College

(Autonomous)

Ananthagiri (V&M), Kodad, Suryapet (Dt). Pin 508 206



M.B.A.

[MASTER OF BUSINESS ADMINISTRATION]

R16 REGULATION [CBCS]

COURSE STRUCTURE

Principal
Anurag Engineering College
Ananthagiri (V&M), Kodad,
Suryapet (Dt.), Telangana-508206

Code	Subject	Approach	L	T/P	C	Marks	
						INT	EXT
A91001	Management and Organizational Behaviour	Overview and Cases	4	1	3	25	75
A91002	Business Environment	Overview and Cases	4	1	3	25	75
A91003	Financial Accounting & Analysis	Overview and Cases	4	1	3	25	75
A91004	Managerial Economics	Overview & Problem Solving	4	1	3	25	75
A91005	Statistics For Management	Overview and Cases	4	1	3	25	75
A91006	Business Communication	Overview and Cases	4	1	3	25	75
A91007	Computer Applications in Business	MS Office (Lab)	0	3	2	25	75
OPEN ELECTIVE-I							
A91008	Cross Cultural Management	Theory	4	0	3	25	75
A91009	WTO & IPR						
A91010	Total Quality Management						
A91011	Project Management						
TOTAL			28	9	23	200	600
TOTAL CREDITS AND MARKS			23			800	

L: Lecture T: Tutorial P: Practical, C: Credits

I YEAR II SEMESTER

Code	Subject	Approach	L	T/P	C	Marks	
						INT	EXT
A92001	Human Resource Management	Overview and Cases	4	1	3	25	75
A92002	Quantitative Analysis for Business Decision	Overview and Cases	4	1	3	25	75
A92003	Financial Management	Overview & Problem Solving	4	1	3	25	75
A92004	Marketing Management	Overview and Cases	4	1	3	25	75
A92005	Business Ethics and Corporate Governance	Overview and Cases	4	1	3	25	75
A92006	Management Information system	Overview and Cases	4	1	3	25	75
OPEN ELECTIVE-II							
A92007	Banking, Insurance & Risk Management	Theory	4	1	3	40	60
A92008	Foreign Trade						
A92009	Logistics & Supply Chain Management						
A92010	MSME Management						
A92201	Industry Analysis Report - Seminar	Using CMIE Prowess Database / Annual Reports of Companies, Industry SWOT, PEST and contribution to various areas like GDP etc. & MS-Excel and working in any organization during summer	0	3	2	50	--
TOTAL			28	10	23	225	525
TOTAL CREDITS AND MARKS			23			750	

L: Lecture T: Tutorial P: Practical, C: Credits

II YEAR I SEMESTER

Code	Subject	Approach	L	T/P	C	Marks	
						INT	EXT
A93001	Production and Operations Management	Overview and Cases	4	1	3	25	75
A93002	Strategic Management	Overview and Cases	4	1	3	25	75
A93003	Research Methodology	Overview and Applications	4	1	3	25	75
Core Elective	Elective-1	Overview and Cases	4	1	3	25	75
Core Elective	Elective-2	Overview and Cases	4	1	3	25	75
Core Elective	Elective-3	Overview and Cases	4	1	3	25	75
A93201	Business Best Practices – Seminar	Internet & Interaction with Executives	--	3	2	50	--
TOTAL			24	9	20	200	450
TOTAL CREDITS AND MARKS			20			650	

L: Lecture T: Tutorial P: Practical, C: Credits

II YEAR II SEMESTER

Code	Subject	Approach	L	T/P	C	Marks	
						INT	EXT
A94001	Entrepreneurship Concepts and Cases	Overview and Cases	4	1	3	25	75
Core Elective	Elective-4	Overview and Cases	4	1	3	25	75
Core Elective	Elective-5	Overview and Cases	4	1	3	25	75
Core Elective	Elective-6	Overview and Cases	4	1	3	25	75
A94201	Success Stories of Entrepreneurs- Seminar	Field Visit	--	3	2	50	--
Main Project Work							
A94202	Stage-I :Pre submission project seminar		--	--	2	50	--
A94203	Stage-II : Main project report & viva		--	--	4	40	60
A94204	Comprehensive Viva-Voce		--	--	2	--	100
Total			16	7	22	240	460
Total Credits and Marks			22			700	

L: Lecture T: Tutorial P: Practical, C: Credits

MARKETING ELECTIVES

Core Electives	Semester	Code
Consumer Behavior	II Year I Semester	A93004/M
Sales and Distribution	II Year I Semester	A93005/M
Integrated Marketing Communications	II Year I Semester	A93006/M
Retailing Management	II Year II Semester	A94002/M
Services Marketing	II Year II Semester	A94003/M
International Marketing	II Year II Semester	A94004/M

FINANCE ELECTIVES

Core Electives	Semester	Code
Strategic Management Accounting	II Year I Semester	A93004/F
Security Analysis and Portfolio Management	II Year I Semester	A93005/F
Financial Institutions, Markets & Services	II Year I Semester	A93006/F
Strategic Investment and Financing Decisions	II Year II Semester	A94002/F
International Financial Management	II Year II Semester	A94003/F
Financial Derivatives	II Year II Semester	A94004/F

HR ELECTIVES

Core Electives	Semester	Code
Performance Management	II Year I Semester	A93004/H
Training and Development	II Year I Semester	A93005/H
Management of Industrial Relations	II Year I Semester	A93006/H
Compensation & Reward Management	II Year II Semester	A94002/H
International Human Resource Management	II Year II Semester	A94003/H
Leadership and Change Management	II Year II Semester	A94004/H



hod civil <hod.civil@anurag.ac.in>

CE ELECTIVES LIST - Invitation to edit

1 message

AnuragEngineeringCollege (via Google Sheets) <drive-shares-noreply@google.com>

Wed, Jul 10, 2019 at 3:21 PM

Reply-To: AnuragEngineeringCollege <autonomy@anurag.ac.in>

To: hod.civil@anurag.ac.in

Cc: aletyshivakrishna@gmail.com, coe@anurag.ac.in, acoe1@anurag.ac.in

autonomy@anurag.ac.in has invited you to edit the following spreadsheet:

 **CE ELECTIVES LIST**

Dear Sir/Madam,

Kindly provide the details of the Electives opted by students of III and IV B.Tech I semester on or before 12.07.2019.

with regards,

Examination Branch.

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hod civil <hod.civil@anurag.ac.in>

Even Semester CE ELECTIVES LIST 2019-20 - Invitation to edit

1 message

AnuragEngineeringCollege (via Google Sheets) <drive-shares-noreply@google.com>

Sat, Nov 30, 2019 at 12:09 PM

Reply-To: AnuragEngineeringCollege <autonomy@anurag.ac.in>

To: hod.civil@anurag.ac.in

Cc: aletyshivakrishna@gmail.com, acoe1@anurag.ac.in

autonomy@anurag.ac.in has invited you to edit the following spreadsheet:

 **Even Semester CE ELECTIVES LIST 2019-20**

Dear Sir/Madam,

Kindly share details of the students studying III and IV B.Tech II Semester who opted electives (PE and OE).

with regards,

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hod eee <hod.eee@anurag.ac.in>

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AnuragEngineeringCollege (via Google Sheets) <drive-shares-noreply@google.com>

Wed, Jul 10, 2019 at 3:26 PM

Reply-To: AnuragEngineeringCollege <autonomy@anurag.ac.in>

To: hod.eee@anurag.ac.in

Cc: achireddyv@gmail.com, acoe1@anurag.ac.in, coe@anurag.ac.in, principal@anurag.ac.in

autonomy@anurag.ac.in has invited you to **edit** the following spreadsheet: **EEE ELECTIVES LIST**

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Kindly provide the details of the Electives opted by students of III and IV B.Tech I semester on or before 12.07.2019.

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hod eee <hod.eee@anurag.ac.in>

Even Semester EEE ELECTIVES LIST 2019-20 - Invitation to edit

1 message

AnuragEngineeringCollege (via Google Sheets) <drive-shares-noreply@google.com>
Reply-To: AnuragEngineeringCollege <autonomy@anurag.ac.in>
To: hod.eee@anurag.ac.in
Cc: achireddyv@gmail.com, acoe1@anurag.ac.in

Sat, Nov 30, 2019 at 12:11 PM

autonomy@anurag.ac.in has invited you to **edit** the following spreadsheet:

 **Even Semester EEE ELECTIVES LIST 2019-20**



Dear Sir/Madam,

Kindly share details of the students studying III and IV B.Tech II Semester who opted electives (PE and OE).

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hod mech <hod.mech@anurag.ac.in>

ME ELECTIVES LIST - Invitation to edit

1 message

AnuragEngineeringCollege (via Google Sheets) <drive-shares-noreply@google.com>

Wed, Jul 10, 2019 at 3:29 PM

Reply-To: AnuragEngineeringCollege <autonomy@anurag.ac.in>

To: hod.mech@anurag.ac.in

Cc: pchittibabu01@gmail.com, principal@anurag.ac.in, acoe1@anurag.ac.in, coe@anurag.ac.in

autonomy@anurag.ac.in has invited you to **edit** the following spreadsheet: **ME ELECTIVES LIST**

Dear Sir,

Kindly provide the details of electives on or before 12.07.2019.

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1 message

AnuragEngineeringCollege (via Google Sheets) <drive-shares-noreply@google.com>
Reply-To: AnuragEngineeringCollege <autonomy@anurag.ac.in>
To: hod.mech@anurag.ac.in
Cc: pchittibabu01@gmail.com

Sat, Nov 30, 2019 at 12:12 PM

autonomy@anurag.ac.in has invited you to **edit** the following spreadsheet:

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Dear Sir/Madam,
Kindly share details of the students studying III and IV B.Tech II Semester who opted
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hod ece <hod.ece@anurag.ac.in>

ECE ELECTIVES LIST - Invitation to edit

1 message

AnuragEngineeringCollege (via Google Sheets) <drive-shares-noreply@google.com>

10 July 2019 at 15:24

Reply-To: AnuragEngineeringCollege <autonomy@anurag.ac.in>

To: hod.ece@anurag.ac.in

Cc: rainhari@gmail.com, principal@anurag.ac.in, coe@anurag.ac.in, acoe1@anurag.ac.in

autonomy@anurag.ac.in has invited you to edit the following spreadsheet:

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1 message

AnuragEngineeringCollege (via Google Sheets) <drive-shares-noreply@google.com>

30 November 2019 at 12:11

Reply-To: AnuragEngineeringCollege <autonomy@anurag.ac.in>

To: hod.ece@anurag.ac.in

Cc: rainhari@gmail.com, acoe1@anurag.ac.in

autonomy@anurag.ac.in has invited you to edit the following spreadsheet:

 **Even Semester ECE ELECTIVES LIST 2019-20**

Dear Sir/Madam,

Kindly share details of the students studying III and IV B.Tech II Semester who opted
electives (PE and OE).

with regards,

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hod cse <hod.cse@anurag.ac.in>

CSE ELECTIVES LIST - Invitation to edit

1 message

AnuragEngineeringCollege (via Google Sheets) <drive-shares-noreply@google.com> Wed, Jul 10, 2019 at 3:22 PM

Reply-To: AnuragEngineeringCollege <autonomy@anurag.ac.in>

To: hod.cse@anurag.ac.in

Cc: shailajacse@anurag.ac.in, acoe1@anurag.ac.in, coe@anurag.ac.in, principal@anurag.ac.in

autonomy@anurag.ac.in has invited you to **edit** the following spreadsheet: **CSE ELECTIVES LIST**

Dear Sir/Madam,

Kindly provide the details of the Electives opted by students of III and IV B.Tech
I semester on or before 12.07.2019.with regards,
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hod cse <hod.cse@anurag.ac.in>

Even Semester CSE ELECTIVES LIST 2019-20 - Invitation to edit

1 message

AnuragEngineeringCollege (via Google Sheets) <drive-shares-noreply@google.com>
Reply-To: AnuragEngineeringCollege <autonomy@anurag.ac.in>
To: hod.cse@anurag.ac.in
Cc: shailajacse@anurag.ac.in, acoe1@anurag.ac.in

Sat, Nov 30, 2019 at 12:10 PM

autonomy@anurag.ac.in has invited you to **edit** the following spreadsheet:

 Even Semester CSE ELECTIVES LIST 2019-20



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Ananthagiri (V&M), Suryapet (Dt).

DEPARTMENT OF MASTER OF BUSINESS ADMINISTRATION

List of Electives Selected by the Students in the A.Y. 2019-20


Date: 21-06-2019

FINANCE ELECTIVES:

Electives for III Semester		
Core Electives	Semester	Code
Strategic Management Accounting	II Year I Semester	A93004/F
Security Analysis and Portfolio Management	II Year I Semester	A93005/F
Financial Institutions, Markets & Services	II Year I Semester	A93006/F

HR ELECTIVES:

Electives for III Semester		
Core Electives	Semester	Code
Performance Management	II Year I Semester	A93004/H
Training and Development	II Year I Semester	A93005/H
Management of Industrial Relations	II Year I Semester	A93006/H


PRINCIPAL
ANURAG ENGINEERING COLLEGE
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Head of the Department



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DEPARTMENT OF MASTER OF BUSINESS ADMINISTRATION

List of Electives Selected by the Students in the A.Y. 2019-20

Date: 05-012-2019

FINANCE ELECTIVES:

Electives for IV Semester		
Core Electives	Semester	Code
Strategic Investment and Financing Decisions	II Year II Semester	A94002/F
International Financial Management	II Year II Semester	A94003/F
Financial Derivatives	II Year II Semester	A94004/F

HR ELECTIVES:

Electives for IV Semester		
Core Electives	Semester	Code
Compensation & Reward Management	II Year II Semester	A94002/H
International Human Resource Management	II Year II Semester	A94003/H
Leadership and Change Management	II Year II Semester	A94004/H

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Head of the Department