COURSE STRUCTURE

For

CIVIL ENGINEERING

(Applicable for batches admitted from 2016-2017)



JAWAHARLAL NEHRU TECHNOLOGICAL UNIVERSITY: KAKINADA KAKINADA - 533 003, Andhra Pradesh, India

I Year - I Semester

S. No.	Subjects	L	T	P	Credits
1-HS	English – I	4	-		3
2-BS	Mathematics - I	4			3
3-ES	Engineering Chemistry	4			3
4-BS	Engineering Mechanics	4	2		3
5-BS	Computer Programming	4	1		3
6-ES	Environmental Studies	4	-		3
7-HS	Engineering /Applied Chemistry Laboratory			3	2
8-BS	English - Communication Skills Lab - I			3	2
9-ES	C Programming Lab			3	2
	Total Credits	_	·		24

I Year - II Semester

S. No.	Subjects	L	T	P	Credits
1-HS	English – II	4	-		3
2-BS	Mathematics – II (Mathematical Methods)	4			3
3-BS	Mathematics – III	4			3
4-ES	Engineering Physics	4			3
5-HS	Elements of Mechanical Engineering	4	-		3
6-ES	Engineering Drawing	4			3
7-BS	English - Communication Skills Lab - II			3	2
8-HS	Engineering /Applied Physics Lab			3	2
9-ES	Engineering / Applied Physics – Virtual Labs - Assignments			2	
10	Engg. Workshop & IT Workshop			3	2
	Total Credits				24

II Year - I Semester

S. No.	Subjects	L	T	P	Credits
1	Probability & Statistics	4	-		3
2	Basic Electrical & Electronics Engineering	4	-		3
3	Strength of Materials-I	4			3
4	Building Materials & Construction	4			3
5	Surveying	4			3
6	Fluid Mechanics	4			3
7	Survey Field Work - I			3	2
8	Strength of Materials Lab			3	2
MC	Professional Ethics & Human Values		3		
	Total Credits				22

II Year - II Semester

S. No.	Subjects	L	T	P	Credits
1	Building Planning & Drawing	4	-		3
2	Strength of Materials - II	4			3
3	Hydraulics & Hydraulic Machinery	4			3
4	Concrete Technology	4			3
5	Structural Analysis - I	4	1		3
6	Transportation Engineering - I	4			3
7	FM & HM Lab			3	2
8	Survey Field Work - II	-	-	3	2
MC	Management Science	2			
	Total Credits				22

III Year - I Semester

S. No.	Subjects	L	T	P	Credits
1	Managerial Economics & Financial Analysis	4			3
2	Engineering Geology	4			3
3	Structural Analysis -II	4			3
4	Design & Drawing of Reinforced Concrete Structures	4	2		3
5	Transportation Engineering - II	4			3
6	Concrete Technology Lab			3	2
7	Geology Lab			3	2
8	Transportation Engineering Lab			3	2
	Total Credits				21

III Year - II Semester

S. No.	Subjects	L	T	P	Credits
1	Design & Drawing of Steel Structures	4	2		3
2	Geotechnical Engineering - I	4			3
3	Environmental Engineering -I	4			3
4	Water Resource Engineering -I	4			3
5	 OPEN ELECTIVE i. Electronic Instrumentation ii. Data Base Management Systems iii. Alternative Energy Sources iv. Waste water Management v. Fundamentals of Liquefied Natural Gas vi. Green Fuel Technologies 	4			3
6	Geotechnical Engineering Lab			3	2
7	Environmental Engineering Lab			3	2
8	Computer Aided Engineering Lab			3	2
	Total Credits				21

IV Year - I Semester

S. No.	Subjects	L	T	P	Credits
1	Environmental Engineering - II	4			3
2	Water Resource Engineering - II	4	1		3
3	Geotechnical Engineering - II	4			3
4	Remote Sensing & GIS Applications	4			3
5	i. Finite Element Methods ii. Ground Improvement Techniques iii. Air Pollution & Control iv. Urban Hydrology v. Traffic Engineering	4			3
6	i. Advanced Structural Engineering ii. Advanced Foundation Engineering iii. Environmental Impact Assessment & Management iv. Ground water development v. Pavement Analysis and Design	4	1		3
7	IPR & Patents		2		
8	GIS & CAD Lab			2	2
9	Irrigation Design & Drawing			2	2
	Total Credits				22

IV Year - II Semester

S. No.	Subjects	L	T	P	Credits
1	Estimation Specification & Contracts	4			3
2	Construction Technology & Management	4			3
3	Prestressed Concrete	4			3
4	 Elective III i. Bridge Engineering ii. Soil Dynamics and Foundations iii. Solid and Hazardous Waste	4			3
5	Seminar on Internship Project		3		2
6	Project				10
	Total Credits				24