# ANNA UNIVERSITY, CHENNAI

#### **AFFILIATED INSTITUTIONS**

R - 2008

#### I SEMESTER CURRICULA AND SYLLABI

(Common to all B.E. / B.Tech Programmes except B.E. Marine Engineering)

#### SEMESTER I

SL. No.	COURSE	COURSE TITLE	L	т	Р	С
THEO	RY					
1.	HS2111	Technical English - I	3	1	0	4
.2.	MA2111	Mathematics - I	3	1	0	4
3.	PH2111	Engineering Physics - I	3	0	0	3
4.	CY2111	Engineering Chemistry - I	3	0	0	3
5.	GE2111	Engineering Graphics	2	3	0	5
6.	GE2112	Fundamentals of Computing and Programming	3	0	0	3
PRAC	ΓΙCAL					
7.	GE2115	Computer Practice Laboratory -I	0	0	3	2
8.	GE2116	Engineering Practices Laboratory	0	0	3	2
9.		* Physics & Chemistry Laboratory I	0	0	3	-
			тот	AL : 2	6 CRE	DITS

<sup>\*</sup> Laboratory classes on alternate weeks for Physics and Chemistry. The lab examinations will be held only in the second semester (Including the first semester experiments also).

Principal,
Knowledge Institute of Technolog;
Kakapalayam (Po), Salem-637-504

# ANNA UNIVERSITY, CHENNAI

#### AFFILIATED INSTITUTIONS

R - 2008

# B.E. CIVIL ENGINEERING II - VIII SEMESTERS CURRICULA AND SYLLABI

#### **SEMESTER II**

(Common to all B.E. / B.Tech. Degree Programmes except B.E. – Marine Engineering)

SL. No.	COURSE	COURSE TITLE	L	Т	Р	С
THEOF	RY					
1.	HS2161	Technical English – II*	3	1	0	4
2.	MA2161	Mathematics – II*	3	1	0	4
3.	PH2161	Engineering Physics – II*	3	0	0	3
4.	CY2161	Engineering Chemistry – II*	3	0	0	3
5. a	ME2151	Engineering Mechanics (For non-circuit branches)	3	1	0	4
5. b	EE2151	Circuit Theory (For branches under Electrical Faculty)	3	1	0	4
5. c	EC2151	Electric Circuits and Electron Devices (For branches under I & C Faculty)	3	1	0	4
6. a	GE2151	Basic Electrical & Electronics Engineering (For non-circuit branches)	4	0	0	4
6. b	GE2152	Basic Civil & Mechanical Engineering (For circuit branches)	4	0	0	4
PRACT	ICAL					
7.	GE2155	Computer Practice Laboratory-II*	0	1	2	2
8.	GS2165	Physics & Chemistry Laboratory - II*	0	0	3	2
9. a	ME2155	Computer Aided Drafting and Modeling Laboratory (For non-circuits branches)	0	1	2	2
9. b	EE2155	Electrical Circuits Laboratory (For branches under Electrical Faculty)	0	0	3	2
9. c	EC2155	Circuits and Devices Laboratory (For branches under I & C Faculty)	0	0	3	2
			ТО	TAL: 2	28 CRE	DITS
10.	-	English Language Laboratory	0	0	2	-

<sup>\*</sup> Common to all B.E. / B.Tech. Programmes

+ Offering English Language Laboratory as an additional subject (with no marks) during 2 semester may be decided by the respective Colleges affiliated to Anna University Chennai.

Principal,
Knowledge Institute of Technology
Kakapalayam (Po), Salem-637 504

#### A. CIRCUIT BRANCHES

#### I Faculty of Electrical Engineering

- 1. B.E. Electrical and Electronics Engineering
- 2. B.E. Electronics and Instrumentation Engineering
- 3. B.E. Instrumentation and Control Engineering

# II Faculty of Information and Communication Engineering

- 1. B.E. Computer Science and Engineering
- 2. B.E. Electronics and Communication Engineering
- 3. B.E. Bio Medical Engineering
- 4. B.Tech. Information Technology

#### B. NON - CIRCUIT BRANCHES

# I Faculty of Civil Engineering

1. B.E. Civil Engineering

### II Faculty of Mechanical Engineering

- 1. B.E. Aeronautical Engineering
- 2. B.E. Automobile Engineering
- 3. B.E. Marine Engineering
- 4. B.E. Mechanical Engineering
- 5. B.E. Production Engineering

#### III Faculty of Technology

- 1. B.Tech. Chemical Engineering
- 2. B.Tech. Biotechnology
- 3. B.Tech. Polymer Technology
- 4. B. Tech. Textile Technology
- 5. B.Tech. Textile Technology (Fashion Technology)
- 6. B.Tech. Petroleum Engineering
- 7. B. Tech. Plastics Technology

Principal,
Knowledge Institute of Technology
(akapalayam (Po), Salem-637 504

#### SEMESTER III

(Applicable to the students admitted from the Academic year 2008 – 2009 onwards)

COURSE CODE	COURSE TITLE	L	Т	Р	С
THEORY					
MA 2211	Transforms and Partial Differential Equations	3	1	0	4
GE 2021	Environmental Science and Engineering	3	0	0	3
AG 2211	Applied Geology	3	0	0	3
CE 2201	Mechanics of Solids	3	1	0	4
CE 2202	Mechanics of Fluids	3	1	0	4
CE 2203	Construction Techniques, Equipment and Practice	4	0	0	4
CE 2204	Surveying- I	3	0	0	3
PRACTICAL					
CE 2207	Survey Practical – I	0	0	4	2
CE 2208	Computer Aided Building Drawing	0	0	4	2
	TOTAL	22	3	8	29

#### SEMESTER IV

(Applicable to the students admitted from the Academic year 2008 – 2009 onwards)

COURSE CODE	COURSE TITLE		L	Т	Р	С
THEORY			-			
MA 2264	Numerical Methods		3	1	0	4
CE 2251	Soil Mechanics		3	0	0	3
CE 2252	Strength of Materials		3	1	0	4
CE 2253	Applied Hydraulic Engineering		3	1	0	4
CE 2254	Surveying – II		3	0	0	3
CE 2255	Highway Engineering		3	0	0	3
PRACTICAL						
CE 2257	Strength of Materials Lab		0	0	3	2
CE 2258	Hydraulic Engineering Laboratory		0	0	3	2
CE 2259	Survey Practical – II		0	0	4	2
	44.72	TOTAL	18	3	10	27

#### SEMESTER V

Code No.	Course Title	L	Т	Р	С
THEORY					
CE2301	Irrigation Engineering	3	0	0	3
CE2302	Structural Analysis I	3	1	0	4
CE2303	Railways, Airports and Harbour Engineering	4	0	0	4
CE2304	Environmental Engineering I	3	0	0	3
CE2305	Foundation Engineering	3	0	0	3
CE2306	Design of RC Elements	3	1	0	4
	PRACTICAL				
GE2321	Communication Skills Laboratory**	0	0	4	2
CE2307	Concrete and Highway Engineering Lab	0	0	3	2
CE2308	Soil Mechanics Laboratory	0	0	3	2
	TOTAL	19	2	10	27

3

Knowledge Institute of Technology Kakapalayam (Po), Salem-637 504

# SEMESTER VI

Code No.	Course Title	L	Т	Р	С
THEORY					
MG2351	Principles of Management	3	0	0	3
CE2351	Structural Analysis – II	3	1	0	4
CE2352	Design of Steel Structures	3	1	0	4
CE2353	Construction Planning & Scheduling	3	0	0	3
CE2354	Environmental Engineering II	3	0	0	3
E1***	Elective – I	3	0	0	3
PRACTICA	L				
CE2355	Environmental and Irrigation Engineering Drawing	0	0	4	2
CE2356	Environmental Engineering Laboratory	0	0	3	2
CE2357	Survey Camp	-	-	-	3
	TOTAL	18	2	7	27

# SEMESTER VII

Code No.	Course Title	L	T	Р	С
THEORY					
CE2401	Design of Reinforced Concrete & Brick Masonry Structures	3	1	0	4
CE2402	Estimation and Quantity Surveying	3	0	0	3
CE2403	Basics of Dynamics and Aseismic Design	3	0	0	3
CE2404	Prestressed Concrete Structures	3	0	0	3
E2***	Elective – II	3	0	0	3
E3***	Elective – III	3	0	0	3
PRACTICAL					
CE2405	Computer Aided Design and Drafting Laboratory	0	0	4	2
CE2406	Design Project	0	0	4	2
	TOTAL	18	1	8	23

# SEMESTER VIII

Code No.	Course Title	L	T	Р	С
THEORY					
CE2451	Engineering Economics and Cost Analysis	3	0	0	3
E4***	Elective – IV	3	0	0	3
E5***	Elective – V	3	0	0	3
PRACTICAL					
CE2453	Project Work	0	0	12	6
	TOTAL	9	0	15	15

\*\* No Examination

# LIST OF ELECTIVES

#### SEMESTER - VI

# **ELECTIVE - I**

Code No.	Course Title	L	Т	Р	С
CE2021	Hydrology	3	0	0	3
CE2022	Cartography	3	0	0	3
CE2023	Electronic Surveying	3	0	0	3
CE2024	Remote Sensing Techniques and GIS	3	0	0	3
CE2025	Architecture	3	0	0	3
GE2022	Total Quality Management	3	0	0	3
GE2023	Fundamentals of Nanoscience	3	0	0	3
GE2025	Professional Ethics in Engineering	3	0	0	3
GE2071	Intellectual Property Rights (IPR)	3	0	0	3
GE2072	Indian Constitution and Society	3	0	0	3

#### SEMESTER - VII

# **ELECTIVE - II**

Code No.	Course Title	L	T	Р	С
CE2026	Traffic Engineering and Management	3	0	0	3
CE2027	Housing Planning and Management	3	0	0	3
CE2028	Ground Water Engineering	3	0	0	3
CE2029	Management of Irrigation Systems	3	0	0	3
CE2030	Coastal Zone Management	3	0	0	3
CE2031	Water Resources Engineering	3	0	0	3
CE2032	Pavement Engineering	3	0	0	3
CE2033	Ground Improvement Techniques	3	0	0	3
GE2073	Contract Laws and Regulations	3	0	0	3

# ELECTIVE - III

Code No.	Course Title	L	Т	Р	С
CE2034	Introduction to Soil Dynamics and Machine	2			2
	Foundations	3	0	U	3
CE2035	Rock Engineering	3	0	0	3
CE2036	Environmental Impact Assessment of Civil	2			_
	Engineering Projects	3	0	0	3
CE2037	Industrial Waste Management	3	0	0	3
CE2038	Air Pollution Management	3	0	0	3
CE2039	Municipal Solid Waste Management	3	0	0	3
CE2040	Ecological Engineering	3	0	0	3

Principal,
Knowledge Institute of Technolog)
Kakapalayam (Po), Salem-637 504

# SEMESTER - VIII

# **ELECTIVE - IV**

Code No.	Course Title	L	T	Р	С
CE2041	Bridge Structures	3	0	0	3
CE2042	Storage Structures	3	0	0	3
CE2043	Design of Plate and Shell Structures	3	0	0	3
CE2044	Tall Buildings	3	0	0	3
CE2045	Prefabricated structures	3	0	0	3
CE2046	Wind Engineering	3	0	0	3

# **ELECTIVE - V**

Code No.	Course Title	L	T	Р	С
CE2047	Computer Aided Design of Structures	3	0	0	3
CE2048	Industrial Structures	3	0	0	3
CE2049	Smart Structures and smart Materials	3	0	0	3
CE2050	Finite Element Techniques	3	0	0	3
CE2071	Repair and Rehabilitation of Structures	3	0	0	3

• The lab examinations will be held only in the second semester.

Principal, Knowledge Institute of Technology Kakapalayam (Po), Salem-637 504