

E.G.S. PILLAY ENGINEERING COLLEGE

(Autonomous)

Approved by AICTE, New Delhi | Affiliated to Anna University, Chennai
Accredited by NAAC with 'A' Grade | Accredited by NBA (CSE, EEE, MECH)

NAGAPATTINAM – 611 002



B.E. Electrical and Electronics Engineering

Full Time Curriculum and Syllabus

Second Year – Third Semester

Course Code	Course Name	L	T	P	C	Maximum Marks		
						CA	ES	Total
Theory Course								
1701MA301	Engineering Mathematics-III	3	2	0	4	40	60	100
1702EE301	Electron Devices and Circuits	3	0	0	3	40	60	100
1702EE302	Digital Electronics	3	0	0	3	40	60	100
1702EE303	Electromagnetic Theory	3	2	0	4	40	60	100
1702EE304	Power Plant Engineering	3	0	0	3	40	60	100
1702EE305	Electrical Machinery-I	3	0	0	3	40	60	100
Laboratory Course								
1702EE351	Electrical Machinery Laboratory-I	0	0	4	2	50	50	100
1702EE352	Electron Devices and Circuits Laboratory	0	0	2	1	50	50	100
1704EE353	Technical Seminar I	0	0	2	1	100	0	100
1704GE351	Life Skills: Soft Skills	0	0	2	0	100	0	100

L – Lecture | T – Tutorial | P – Practical | C – Credit | CA – Continuous Assessment | ES – End Semester

1701MA301	ENGINEERING MATHEMATICS III (Common to B.E - Civil, CSE, EEE, Mech B.Tech- IT Degree Programmes)	L	T	P	C
		3	2	0	4

PREREQUISITE :

1. Engineering Mathematics I
2. Engineering Mathematics II

COURSE OBJECTIVES:

1. To introduce Fourier series analysis and applications in Engineering, apart from its use in solving boundary value problems.
2. To acquaint the student with Fourier transform techniques used in wide variety of situations.
3. To introduce the effective mathematical tools for the solutions of partial differential equations that model several physical processes and to develop Z transform techniques for discrete time systems.

UNIT I FOURIER SERIES 12 Hours

Dirichlet's conditions – General Fourier series – Odd and even functions – Half range sine series – Half range cosine series – Parseval's identity – Harmonic analysis – Simple Applications

UNIT II FOURIER TRANSFORMS 12 Hours

Statement of Fourier integral theorem – Fourier transform pair – Fourier sine and cosine transforms – Properties – Transforms of simple functions – Convolution theorem – Parseval's identity

UNIT III PARTIAL DIFFERENTIAL EQUATIONS 12 Hours

Formation of partial differential equations – Singular integrals — Solutions of standard types of first order partial differential equations – Lagrange's linear equation — Linear partial differential equations of second order with constant coefficients of homogeneous type- Applications

UNIT IV APPLICATIONS OF PARTIAL DIFFERENTIAL EQUATIONS 12 Hours

Classification of PDE – Solutions of one dimensional wave equation – One dimensional equation of heat conduction – Steady state solution of two dimensional equation of heat conduction.

UNIT V Z – TRANSFORMS AND DIFFERENCE EQUATIONS 12 Hours

Z - transforms – Elementary properties – Inverse Z – transform (using partial fraction and residues) – Convolution theorem – Formation of difference equations – Solution of difference equations using Z – transform.

TOTAL: 60 HOURS

FURTHER READING / CONTENT BEYOND SYLLABUS / SEMINAR :

1. Linear Algebra
2. Numerical Solution of non-homogeneous partial differential equations

COURSE OUTCOMES:

On the successful completion of the course, students will be able to

- CO1 Use Fourier series analysis which is central to many applications in engineering
- CO2 Apply Fourier transform techniques used in wide variety of situations
- CO3 Compute the solution of partial differential equations
- CO4 Solve boundary value problem using partial differential equation
- CO5 Apply Z transform techniques for discrete time systems

REFERENCES:

1. Veerarajan. T., "Transforms and Partial Differential Equations", Second reprint, Tata McGraw Hill Education Pvt. Ltd., New Delhi, 2012
2. Grewal. B.S., "Higher Engineering Mathematics", 42nd Edition, Khanna Publishers, Delhi, 2012.
3. Bali.N.P and Manish Goyal, "A Textbook of Engineering Mathematics", 7th Edition, Laxmi Publications Pvt Ltd , 2007
4. Ramana.B.V., "Higher Engineering Mathematics", Tata Mc-GrawHill Publishing Company Limited, New Delhi, 2008.
5. Narayanan.S., Manicavachagom Pillay.T.K and Ramanaiah.G "Advanced Mathematics for Engineering Students" Vol. II & III, S.Viswanathan Publishers Pvt Ltd. 1998.
6. www.nptelvideos.in/2012/11/mathematics-iii.html

1702EE301

ELECTRON DEVICES AND CIRCUITS

L	T	P	C
3	0	0	3

PREREQUISITE:

1. Semiconductor Physics and Devices
2. Electric Circuit Analysis

COURSE OBJECTIVES:

1. To understand the structure and operation of electronic devices
2. To explain the operation and characteristics of electronic circuits
3. To analyze the BJT and FET based amplifier circuits

UNIT I DIODES

9 Hours

PN Junction Diode – structure, operation and V-I characteristics; capacitance effect – diffusion capacitance and transition capacitance; diode model; operation of clippers & clampers.

Zener Diode – V-I Characteristics, breakdown mechanism; application – voltage regulator.

Special Function Devices – Structure and operation of LED, Laser diode, Tunnel diode, Schottky diode and Photodiode.

UNIT II BIPOLAR JUNCTION TRANSISTOR CIRCUITS

9 Hours

BJT – Structure, operation, V-I characteristics of common base, common emitter and common collector configurations; DC and AC load line analysis; determination of Q point; biasing circuits; small signal model – analysis of CB, CE and CC amplifiers; low and high frequency response of an amplifier; Darlington amplifier and thermal run away/ secondary breakdown.

UNIT III FIELD EFFECT TRANSISTOR CIRCUITS

9 Hours

JFET – Structure, operation – n channel and p channel, V-I characteristics and biasing circuits of JFET.

MOSFET – Structure and operation of D-MOSFET & E-MOSFET, V-I characteristics, biasing circuits, small signal mode – analysis of common source and common drain amplifier, high frequency equivalent circuit; Comparison of devices.

UNIT IV DIFFERENTIAL AND POWER AMPLIFIERS

9 Hours

Differential Amplifier – Common mode and difference mode analysis of BJT based differential amplifier.

Single Tuned Amplifiers – Gain and frequency response of single tuned BJT and FET amplifier; neutralization methods.

Power Amplifiers – Class A, class B, class C and class AB Amplifiers (Qualitative analysis).

UNIT V FEEDBACK AMPLIFIERS AND OSCILLATORS

9 Hours

Negative Feedback – Voltage series, current series, current shunt and voltage shunt amplifiers – Input impedance, output impedance, current gain, voltage gain, overall current gain and overall voltage gain.

Positive Feedback – Barkhausen criterion; RC oscillators – RC phase shift and Wien bridge oscillators; LC oscillators – Hartley, Colpitts and Clapp; Crystal oscillators – Miller and Pierce crystal oscillators.

TOTAL: 45 HOURS

FURTHER READING / CONTENT BEYOND SYLABUS / SEMINAR :

1. Multistage Amplifiers
2. Design of Multivibrators using BJT

COURSE OUTCOMES:

On the successful completion of the course, students will be able to

- CO1: Explain the structure, operation and V-I Characteristics of Diodes, BJT and FET devices.
- CO2: Describe the design and operation of circuits containing Diodes, BJT and FET.
- CO3: Perform analysis of amplifiers using small signal models.
- CO4: Calculate the frequency response of circuits containing BJT and FET.

REFERENCES:

1. Milman, Halkias and satyabrata Jit, “Electronic Devices and Circuits” 4th Edition, McGraw Hill Education (India) Private Ltd., 2015.
2. Robert L. Boylestad and Louis Nashelsky, “Electronic Devices and Circuit Theory”, 11th Edition, PHI Ltd., 2015.
3. David A. Bell, “Electronic Devices and Circuits”, 5th Edition, Oxford University Press, 2008.
4. Thomas L. Floyd, “Electronic Devices”, 10th Edition, An Imprint of Mc Millan publishing company, 2017.
5. Prof.A.N.Chandorkar, IIT Bombay online lecture series on Analog Electronics
<http://nptel.ac.in/courses/117101106/>
6. Prof.S.Karmalkar,IIT Madras, online lecture series on Solid State Devices
<http://nptel.ac.in/courses/117106091/>
7. https://onlinecourses.nptel.ac.in/noc18_ee32/preview

1702EE302

DIGITAL ELECTRONICS

L	T	P	C
3	0	0	3

PREREQUISITE :

1. Applied Physics for Engineers
2. Electric Circuit Analysis

COURSE OBJECTIVES:

3. To study the fundamentals of digital systems, programmable logic devices and logic families.
4. To design and analyze digital systems.
5. To apply the digital simulation techniques for application oriented digital circuits.

UNIT I NUMBER SYSTEM AND BOOLEAN ALGEBRA

9 Hours

Review of number system, Types and conversion codes , BCD, Gray code, Excess 3 code; Error detection and correction codes – Parity ,Hamming codes; Boolean algebra – De Morgan's theorem ,switching functions and simplification using K-maps.

UNIT II COMBINATIONAL CIRCUITS

9 Hours

Design using logic gates – Design of adders, subtractors, comparators; code converters – encoders, decoders; multiplexers and de-multiplexers– Function realization using multiplexers; Booth multiplier and Array Multiplier.

UNIT III SYNCHRONOUS SEQUENTIAL CIRCUITS

9 Hours

Flip flops – SR, JK, Master Slave JK and D flip flop, T flip flop; Analysis of synchronous sequential circuits – Design of synchronous sequential circuits, Counters; state diagram – state reduction – state assignment.

Unit IV ASYNCHRONOUS SEQUENTIAL CIRCUITS

9 Hours

Analysis of asynchronous sequential machines – State assignment, Asynchronous design problem.

UNIT V MEMORY DEVICES, PROGRAMMABLE LOGIC DEVICES AND LOGIC FAMILIES

9 Hours

Memories – ROM, PROM, EPROM ; Programmable Logic Devices – PLA, PAL, PLD ; Logic families: TTL, ECL, CMOS; Case study on four bit accumulator.

TOTAL: 45 HOURS

FURTHER READING / CONTENT BEYOND SYLLABUS / SEMINAR:

1. Introduction to VHDL programming
2. Hazards in Asynchronous sequential circuits

COURSE OUTCOMES:

On the successful completion of the course, students will be able to

- CO1 Simplify the switching functions and explain the architecture of logic circuits.
- CO2 Design of combinational logic circuits
- CO3 Design of synchronous sequential logic circuits
- CO4 Design of Asynchronous Digital Circuit
- CO5 Explain the architecture of different memories and programmable logic circuits.

REFERENCES:

1. M. Morris Mano, “Digital Logic and Computer Design”, Prentice Hall of India, 4th edition, 2013.
2. A.Anand kumar, “Fundamentals of digital circuits”, 3rd Edition, PHI Learnings Pvt. Ltd, 2014.
3. Malvino and Leach, Digital Principles and Applications, Tata McGraw Hill, New Delhi, 7th edition, 2011.
4. Floyd, Digital Fundamentals, Pearson Education, 10th edition, 2011.
5. John F.Wakerly, Digital Design Principles and Practice, Pearson Education, 4th edition, 2008.
6. <http://nptel.ac.in/courses/117106086/>

1702EE303

ELECTROMAGNETIC THEORY

L	T	P	C
3	2	0	4

PREREQUISITE :

1. Vector Calculus.
2. Electric Circuit Analysis.

COURSE OBJECTIVES:

1. Understand the concepts of vector calculus
2. Understand the principles of electric and magnetic fields
3. Comprehend the concepts of electromagnetic waves

UNIT I INTRODUCTION TO VECTOR CALCULUS

12 Hours

Introduction- scalar and vector fields; different coordinate systems-Cartesian, cylindrical, spherical coordinate system; divergence theorem; Stoke's theorem; Coulomb's law, Gauss law and its applications.

UNIT II STATIC ELECTRIC FIELDS

12 Hours

Electric field intensity-field due to different types of charges, electric flux density; electric potential due to uniformly charged infinite line, electric potential due to charged circular disc; potential gradient, dipole, field due to dipole; energy density in electrostatic field; electric boundary conditions (between two perfect dielectric and between free space and conductor), capacitance-concept of capacitance, capacitance of two dielectric media and three dielectric media.

UNIT III MAGNETOSTATICS

12 Hours

Biot-savart law- applications (infinite and finite long straight conductor, circular loop); Ampere circuital law-applications (infinite long straight conductor, coaxial cable); curl of magnetic field intensity; magnetic flux and magnetic flux density; scalar and vector magnetic potentials; magnetic boundary conditions (between two perfect dielectric and between free space and conductor).

UNIT IV FORCE, TORQUE AND INDUCTANCE

12 Hours

Lorentz force equation; force between differential current elements; force and torque on a closed circuit; the nature of magnetic materials; magnetization and permeability; self-inductance and mutual inductance-solenoid, toroid.

UNIT V MAXWELLS EQUATIONS AND TIME VARYING FIELDS

12 Hours

Maxwell's equations for steady fields in point form and integral form; Faraday's law; displacement current; Maxwell's equations in point form and integral form for time-varying field's; comparison of field theory and circuit theory; Poynting theorem, Poynting vector.

TOTAL: 60 HOURS

FURTHER READING / CONTENT BEYOND SYLLABUS / SEMINAR :

1. A Seminar on wave propagations in free space, in a conducting medium, dielectric mediums etc.
2. A report on EMI study in home appliances

COURSE OUTCOMES:

- On the successful completion of the course, students will be able to
- CO1 Remember the basics of electromagnetism, gauss, Coulomb's laws and theorems of divergence, Stoke's theorem.
 - CO2 Understand the concepts of static electric fields and magnetic fields
 - CO3 Analyze the curl, divergence, gradient using vector calculus
 - CO4 Analyze the charges in time varying fields.
 - CO5 Apply the Maxwell's in real time applications

REFERENCES:

1. William H.Hayt, 'Engineering Electromagnetics', Tata McGraw Hill, 2005.
2. Mathew N. O. SADIKU, 'Elements of Electromagnetics', Oxford University press Inc., seventh edition, 2018.
3. Joseph. A.Edminister, 'Theory and Problems of Electromagnetics', Second edition, Schaum Series, Tata McGraw Hill, 1995.
4. AshutoshPramanik, 'Electromagnetism – Theory and Applications', Prentice-Hall of India Private Limited, New Delhi, 2006.
5. Kraus and Fleish, 'Electromagnetic with Applications', McGraw Hill International Editions, Fifth Edition, 1999.
6. https://onlinecourses.nptel.ac.in/noc18_ee04/preview

1702EE304

POWER PLANT ENGINEERING

L	T	P	C
3	0	0	3

PREREQUISITE :

1. Basic Mechanical Engineering
2. Applied Chemistry

COURSE OBJECTIVES:

1. To have a detailed knowledge about energy sources available and their management.
2. To understand layout of various power plants and the function of various components of the power plant.
3. To become familiar with operation of various power plants.

UNIT I COAL BASED THERMAL POWER PLANTS

9 Hours

Layout of modern coal power plant; types of boiler; super critical boilers, FBC boilers; Turbines; condensers; steam and heat rate; subsystems of thermal power plants – fuel and ash handling, draught system, feed water treatment; Energy Scenario – National, international context.

UNIT II HYDRO POWER PLANTS

9 Hours

Introduction to hydro power plant – layout of dams; types, selection of water turbine, advantages and disadvantages; selection of site for hydro power plant; pumped storage hydro power plant.

UNIT III DIESEL AND GAS POWER PLANTS

9 Hours

Types, open and closed cycle gas turbine, work output & thermal efficiency; inter cooling – regeneration - advantages and disadvantages; Diesel engine power plant - component and layout.

UNIT IV NUCLEAR POWER PLANTS

9 Hours

Basics of nuclear energy - layout and subsystems of nuclear power plants, nuclear fission and fusion; types of reactor, working of nuclear reactors, boiling water reactor (BWR), pressurized water reactor(PWR), Canada deuterium- uranium reactor (CANDU), breeder, gas cooled reactors; safety measures for nuclear power plants.

UNIT V POWER FROM RENEWABLE ENERGY

9 Hours

Typical layout and associated components including turbines; Principle; Construction and working of wind, tidal, solar photo voltaic, solar thermal, geo thermal, biogas.

TOTAL: 45 HOURS

FURTHER READING / CONTENT BEYOND SYLLABUS / SEMINAR :

1. MHD/OTEC power plants
2. New and alternate energy sources

COURSE OUTCOMES:

On the successful completion of the course, students will be able to

- CO1 Understand the construction and operation of hydro power plants.
- CO2 Select the suitable turbine for hydro and thermal power plants.
- CO3 Select the turbine and site for diesel and gas power plant.
- CO4 Explain the reactor operation and selection of site in Nuclear power plant.
- CO5 Analyze the power generation from various natural resources.

REFERENCES:

1. P.K. Nag, “Power Plant Engineering”, Tata McGraw-Hill Publishing Company Ltd., Third Edition, 2014.
2. M.M. El-Wakil, “Power Plant Technology”, Tata McGraw-Hill Publishing Company Ltd., 2010.
3. Black & Veatch, “Power Plant Engineering” Springer, 1996.
4. Thomas C. Elliott, Kao Chen and Robert C. Swanekamp, “Standard Handbook of Power Plant Engineering” Third Edition, McGraw-Hill, 2004.
5. Godfrey Boyle, “Renewable energy” Oxford University Press in association with the Open University, 2004.

1702EE305

ELECTRICAL MACHINERY - 1

L	T	P	C
3	0	0	3

PREREQUISITE :

1. Electric Circuit Analysis
2. Basic Electrical Engineering

COURSE OBJECTIVES:

1. Understand the basic concepts behind the rotating and stationary machines.
2. Evaluate the performance characteristics of DC Generator and DC Motor
3. Explain the different types of Transformers, their working principle and performance

UNIT I INTRODUCTION TO MACHINERY CONCEPTS

9 Hours

Magnetic circuits; flux; Inductance; Dynamically and Statically induced EMF; Properties of Magnetic materials; Losses in magnetic materials, AC operation of magnetic materials; Principles of Electromechanical Energy conversion - Energy conversion through magnetic field and electric field.

UNIT II DC GENERATOR

9 Hours

Principle, Construction and Working of DC generator; EMF equation; Classification; Armature reaction; Commutation; Compensating winding; Generator characteristics.

UNIT III DC MOTOR

9 Hours

Principle of operation; Back EMF of DC motors; Classification; Torque equation; Speed-torque characteristics; Winding diagram; Motor starters; Braking methods; Introduction to permanent magnet DC motor.

UNIT IV TRANSFORMER

9 Hours

Transformer-Principle, construction, Ideal transformer, Equivalent circuit, Phasor diagram, Parallel operation of transformers; Three phase transformer connections-Tertiary winding; Voltage regulation; Inrush current; Per unit representation; Auto transformer.

UNIT V TESTING & APPLICATIONS OF ELECTRICAL MACHINES

9 Hours

Efficiency and Losses in Electrical machines; DC motor testing- Swinburne's test, Brake test, Hopkinson test-Transformer testing- Sumpner's test, Polarity test; Selection of DC Motors; Applications of DC motors; Applications of transformers.

TOTAL: 45 HOURS

FURTHER READING / CONTENT BEYOND SYLLABUS / SEMINAR :

1. DC motors in everyday life.
2. Applications of transformer in home and industries.

COURSE OUTCOMES:

On the successful completion of the course, students will be able to

- CO1 Explain the construction, working principle & performance characteristics of different types of rotating machines.
- CO2 Explain the construction, working principle & equivalent circuit parameters of transformers.
- CO3 Apply the speed control techniques and braking methods in DC motors
- CO4 Estimate the various losses taking place in DC machines and Transformers
- CO5 Apply the different testing methods to assess the performance of Electrical machines

REFERENCES:

1. D. P. Kothari and I. J. Nagrath, Electric Machines, Tata McGraw Hill Publishing Company Ltd, 2010.
2. Edward Hughes, Electrical and Electronic Technology, 12th edition, Pearson, 2016.
3. P. S. Bimbhra, Electrical Machinery, Khanna Publishers, 7th edition, 2011.
4. B. L. Theraja and A. K. Theraja, "Text Book of Electrical Technology: AC & DC Machines (Volume- 2)", S.Chand & Company Ltd., New Delhi, 2008.
5. M.N.Bandyopadhyay, Electrical Machines Theory and practice, PHI Learning Pvt. Ltd, New Delhi 2007.
6. Electrical Machines-I Nptel lecture video by Dr. D.Kastha, IIT Kharagpur

1702EE351	ELECTRICAL MACHINERY LABORATORY - 1	L	T	P	C
		0	0	4	2

PREREQUISITE :

1. Study of Electrical circuits
2. Basics of rotating and static machinery concepts

COURSE OBJECTIVES:

1. Complete the circuit to test a given electrical machine.
2. Analyze the performance characteristics of various electrical machines
3. Evaluate the performance of transformer

LIST OF EXPERIMENTS:

1. Study of DC Motor starters
2. Study of DC motor windings.
3. Study of three phase transformer connections
4. Swinburne's test and Load test on DC shunt motor.
5. Load test on DC series motor
6. Load test on DC compound motor
7. Speed control of DC shunt motor (Field control & armature control method)
8. Open circuit and load characteristics of DC shunt generator
9. Open circuit and short circuit test on single phase transformer
10. Open circuit and short circuit test on three phase transformer
11. Load test on single/three phase transformer
12. Separation of core losses on single phase transformer

TOTAL: 60 HOURS

ADDITIONAL EXPERIMENTS / INNOVATIVE EXPERIMENTS :

1. Cut view study of DC motor.
2. Sumpner's test on single phase transformer.

COURSE OUTCOMES:

On the successful completion of the course, students will be able to

- CO1 Draw the circuits for a given electrical machine
- CO2 Obtain the performance characteristics of DC Generators.
- CO3 Understand the operating behavior of DC motors under various loading condition.
- CO4 Obtain the equivalent circuit parameters of transformer
- CO5 Know the different starting and control measures involved in the operation of electrical machines.

REFERENCES:

1. B.A.Naveen Antony, "Electrical Machinery laboratory-1 Manual", 2018.
2. D.P. Kothari & B.S. Umre, Laboratory Manual for Electrical Machines, I.K. International publishing house Pvt. Ltd., 2013.
3. B. L. Theraja and A. K. Theraja, "Text Book of Electrical Technology: AC & DC Machines – Volume 2", S.Chand & Company Ltd., New Delhi, 2008.

1702EE352

ELECTRON DEVICES AND CIRCUITS LABORATORY

L	T	P	C
0	0	2	1

PREREQUISITE:

1. Semiconductor Physics and Devices
2. Electric Circuit Analysis

COURSE OBJECTIVES:

1. To analyze V-I Characteristics of different switches
2. To Design a transistor based amplifier circuits
3. To understand the operations of Digital Storage Oscilloscope.

LIST OF EXPERIMENTS:

1. Study on data sheets of electronic devices.
2. Study of digital storage oscilloscope.
3. Characteristics of PN junction diode and Zener diode.
4. Design a half wave and full wave rectifier with and without capacitive filter.
5. Design of Clipper and Clamper circuit.
6. Verify the V-I characteristic of photo diode and photo transistor.
7. Characteristics of CE and CB configurations.
8. Design and verify the frequency response of single stage transistor amplifier.
9. Characteristics of JFET / MOSFET.
10. Design and verify the frequency response of RC phase shift oscillator.

TOTAL: 30 HOURS

ADDITIONAL EXPERIMENTS / INNOVATIVE EXPERIMENTS :

1. Design of transistor based differential amplifier
2. Design of monostable multivibrators

COURSE OUTCOMES:

On the successful completion of the course, students will be able to

- CO1 Illustrate the turn on and turn off process of different switches.
- CO2 Design a circuit which is used to convert ac signal to dc signal.
- CO3 Determine voltage gain from CE and CB configurations.
- CO4 Determine the frequency and gain value of various types of oscillators and amplifiers
- CO5 Study and understand the operation of digital storage oscilloscope.

REFERENCES:

1. K. Krishnaram, "Electronic Devices and Circuits – Lab Manual" 2018.
2. Milman, Halkias and Satyabrata Jit, "Electronic Devices and Circuits" 4th Edition, Mc Graw Hill Education (India) Private Ltd, 2015.
3. Thomas L. Floyd, "Electronic Devices", 10th Edition, an Imprint of Mc Millan Publishing Company, 2017.

1704EE353

TECHNICAL SEMINAR I

L	T	P	C
0	0	2	0

PREREQUISITE :

-

COURSE OBJECTIVES:

1. To develop self-learning skills of utilizing various technical resources to make a technical presentation.
2. To promote the technical presentation and communication skills.
3. To impart the knowledge on intonation, word and sentence stress for improving communicative competence, identifying and overcoming problem sounds.
4. To promote the ability for Interacting and sharing attitude.
5. To encourage the commitment-attitude to complete tasks.

The students are expected to make two presentations on advanced topics (recent trends) related to II year/ III semester subjects. A faculty guide is to be allotted and he / she will guide and monitor the progress of the student and maintain attendance also. Students are encouraged to use various teaching aids such as power point presentation and demonstrative models.

TOTAL: 30 HOURS

COURSE OUTCOMES:

On the successful completion of the course, students will be able to

- CO1 Identify and utilize various technical resources available from multiple field.
- CO2 Improve the technical presentation and communication skills.
- CO3 Improve communicative competence.
- CO4 Interact and share their technical knowledge.
- CO5 Understand and adhere to deadlines and commitment to complete the assignments.

EVALUATION SCHEME:

Continuous Assessment (100 Marks)

Distribution of Marks for Continuous Assessment	Marks
Presentation I	40
Report	10
Presentation II	40
Report	10
Total	100

1704GE351

LIFE SKILLS : SOFT SKILLS
(Common to all B.E / B.Tech Degree Programmes)

L	T	P	C
0	0	2	0

PREREQUISITE :

1. Technical English
2. Communicative English

COURSE OBJECTIVES:

1. To develop the students basic soft skills and enable them to get a job.
2. To develop the students' interpersonal skills and to enable them to respond effectively.
3. To develop the students selling skills and to enable them to apply in their interview process.
4. To develop the students' Corporate Etiquettes and enable them to respond effectively.
5. To develop the students' learning by practice of giving different situations.

UNIT I INTRODUCTION TO SOFT SKILLS

6 Hours

Soft Skills an Overview - Basics of Communication – Body Language – Positive attitude –Improving Perception and forming values – Communicating with others.

UNIT II TEAM Vs TRUST

6 Hours

Interpersonal skills – Understanding others – Art of Listening - Group Dynamics – Networking - Individual and group presentations - Group interactions – Improved work Relationship .

UNIT III SELLING ONESELF

6 Hours

How to brand oneself – social media – job hunting – Resume writing – Group Discussion – Mock G.D - .Interview skills – Mock Interview

UNIT IV CORPORATE ETIQUETTES

6 Hours

What is Etiquette – Key Factors – Greetings – Meeting etiquettes – Telephone etiquettes – email etiquettes – Dining etiquettes – Dressing etiquettes – Rest room etiquettes – Life etiquettes.

UNIT V LEARNING BY PRACTICE

6 Hours

1. My family. Myself. 2. Meeting people. Making Contacts. 3. A city. Getting about town. 4. Our flat. Home life.5. Travelling. Going abroad. 6. Going through Customs. 7. At a hotel. 8. Shopping. 9. Eating out. 10. Making a phone call. 11. A modern office.12 Discussing business.

TOTAL: 30 HOURS

ASSESSMENT PATTERN

1. Two assignments (2 x 25 marks = 50 marks)
2. Pragmatic assessment (50 marks)

COURSE OUTCOMES:

On the successful completion of the course, students will be able to

- CO1 Communicate effectively in their business environment.
- CO2 Improve their interpersonal skills which are mandatory in a corporate world.
- CO3 Brand themselves to acquire a job.
- CO4 Involve in corporate etiquettes.
- CO5 Survive in the different situations.

REFERENCES:

1. Dr.K.Alex, 'Soft Skills' Third Edition, S.Chand & Publishing Pvt Limited, 2009
2. Aruna Koneru, 'Professional Communication' Second Edition, Tata McGraw-Hill Education, 2008
3. D.K.Sarma, 'You & Your Career' First Edition, Wheeler Publishing & Co Ltd, 1999
4. Shiv Khera 'You Can Win' Third Edition, Mac Millan Publisher India Pvt Limited, 2005