



# SHREE VENKATESHWARA HI-TECH ENGINEERING COLLEGE

An ISO 9001:2015 Certified Institution

(Approved by AICTE, New Delhi and Affiliated to Anna University Chennai)

Sri Kalaivani Nagar, Erode-Gobi Main Road, Othakuthirai,

K.Mettupalayam Post, Gobichettipalayam – 638 455, Erode District, Tamilnadu

Web: <http://www.svhc.com>



## DEPARTMENT OF ELECTRONICS AND COMMUNICATION ENGINEERING

### List of COs for UG courses under Anna University Regulation 2017

<b>Semester</b>	:	I
<b>Course Code &amp; Name</b>	:	HS8151& Communicative English
<b>Year of Study</b>	:	2017 – 2018, 2018 – 2019, 2019-2020
<b>Cos No</b>	<b>Course Outcome</b>	
C101.1	<b>Read</b> articles of a general kind in magazines and newspapers.	
C101.2	Participate <b>effectively</b> in informal conversations; introduce themselves and their friends and express opinions in English.	
C101.3	Comprehend <b>conversations</b> and short talks delivered in English	
C101.4	<b>Write</b> short essays of a general kind and personal letters and emails in English.	
<b>Semester</b>	:	I
<b>Course Code &amp; Name</b>	:	MA8151 & Engineering Mathematics – I
<b>Year of Study</b>	:	2017 – 2018, 2018 – 2019, 2019-2020
<b>Cos No</b>	<b>Course Outcome</b>	
C102.1	<b>Use</b> both the limit definition and rules of <b>differentiation to differentiate</b> functions.	
C102.2	<b>Apply</b> differentiation to solve maxima and minima problems.	
C102.3	<b>Evaluate</b> integrals both by using riemann sums and by using the fundamental theorem of calculus.	
C102.4	<b>Apply</b> integration to compute multiple integrals, area, volume, integrals in polar coordinates, in addition to change of order and change of variables	
C102.5	<b>Evaluate</b> integrals using techniques of integration, such as substitution, partial fractions and integration by parts.	
C102.6	<b>Determine</b> convergence/divergence of improper integrals and evaluate convergent improper integrals.	
C102.7	<b>Apply</b> various techniques in solving differential equations	
<b>Semester</b>	:	I
<b>Course Code &amp; Name</b>	:	PH8151& Engineering Physics
<b>Year of Study</b>	:	2017 – 2018, 2018 – 2019, 2019-2020
<b>Cos No</b>	<b>Course Outcome</b>	
C103.1	The students will gain <b>knowledge</b> on the basics of properties of matter and its applications	
C103.2	The students will <b>acquire knowledge</b> on the concepts of waves and optical devices and their applications in fibre optics	
C103.3	The students will have adequate <b>knowledge</b> on the concepts of thermal properties of materials and their applications in expansion joints and heat exchangers	
C103.4	The students will get <b>knowledge</b> on advanced physics concepts of quantum theory and its applications in tunneling microscopes	
C103.5	The students will <b>understand</b> the basics of crystals, their structures and different crystal growth techniques.	
<b>Semester</b>	:	I
<b>Course Code &amp; Name</b>	:	CY8151& Engineering Chemistry



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<b>Year of Study</b>	:	2017 – 2018, 2018 – 2019, 2019-2020
<b>Cos No</b>	<b>Course Outcome</b>	
C104.1	The <b>knowledge</b> gained on engineering materials, fuels, energy sources and water treatment techniques will facilitate better understanding of engineering processes and applications for further learning.	
<b>Semester</b>	:	I
<b>Course Code &amp; Name</b>	:	GE8151 & Problem Solving And Python Programming
<b>Year of Study</b>	:	2017 – 2018, 2018 – 2019, 2019-2020
<b>Cos No</b>	<b>Course Outcome</b>	
C105.1	<b>Develop</b> algorithmic solutions to simple computational problems	
C105.2	<b>Read, write, execute</b> by hand simple python programs	
C105.3	Structure simple python programs for <b>solving problems</b>	
C105.4	<b>Decompose</b> a python program into functions	
C105.5	<b>Represent</b> compound data using python lists, tuples, dictionaries	
C105.6	<b>Read and write</b> data from/to files in python programs.	
<b>Semester</b>	:	I
<b>Course Code &amp; Name</b>	:	GE8152 & Engineering Graphics
<b>Year of Study</b>	:	2017 – 2018, 2018 – 2019, 2019-2020
<b>Cos No</b>	<b>Course Outcome</b>	
C106.1	Familiarize with the <b>fundamentals</b> and standards of engineering graphics	
C106.2	Perform freehand <b>sketching</b> of basic geometrical constructions and multiple views of objects.	
C106.3	<b>Project</b> orthographic projections of lines and plane surfaces	
C106.4	<b>Draw</b> projections and solids and development of surfaces	
C106.5	<b>Visualize</b> and to project isometric and perspective sections of simple solids.	
<b>Semester</b>	:	I
<b>Course Code &amp; Name</b>	:	GE8161&Problem Solving And Python Programming Laboratory
<b>Year of Study</b>	:	2017 – 2018, 2018 – 2019, 2019-2020
<b>Cos No</b>	<b>Course Outcome</b>	
C107.1	<b>Write</b> , test, and debug simple python programs	
C107.2	<b>Implement</b> python programs with conditionals and loops.	
C107.3	<b>Develop</b> python programs step-wise by defining functions and calling them.	
C107.4	<b>Use</b> python lists, tuples, dictionaries for representing compound data.	
C107.5	<b>Read and write</b> data from/to files in python	
<b>Semester</b>	:	I
<b>Course Code &amp; Name</b>	:	BS8161&physics and chemistry Laboratory
<b>Year of Study</b>	:	2017 – 2018, 2018 – 2019, 2019-2020
<b>Cos No</b>	<b>Course Outcome</b>	
C108.1	<b>Apply</b> principles of elasticity, optics and thermal properties for engineering applications	
C108.2	The students will be outfitted with hands-on knowledge in the quantitative chemical <b>analysis</b> of water quality related parameters	
<b>Semester</b>	:	II
<b>Course Code &amp; Name</b>	:	HS8251& Technical English



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<b>Year of Study</b>	:	2017 – 2018, 2018 – 2019, 2019-2020
<b>Cos No</b>	<b>Course Outcome</b>	
C109.1	Read technical texts and <b>write</b> area- specific texts effortlessly	
C109.2	<b>Listen</b> and comprehend lectures and talks in their area of specialisation successfully.	
C109.3	<b>Speak</b> appropriately and effectively in varied formal and informal contexts.	
C109.4	<b>Write</b> reports and winning job applications	
<b>Semester</b>	:	II
<b>Course Code &amp; Name</b>	:	MA8251& Engineering Mathematics - II
<b>Year of Study</b>	:	2017 – 2018, 2018 – 2019, 2019-2020
<b>Cos No</b>	<b>Course Outcome</b>	
C110.1	Eigenvalues and eigenvectors, diagonalization of a matrix, symmetric matrices, positive definite matrices and similar matrices.	
C110.2	Gradient, divergence and curl of a vector point function and related identities.	
C110.3	Evaluation of line, surface and volume integrals using gauss, stokes and green's theorems and their verification.	
C110.4	Analytic functions, conformal mapping and complex integration	
C110.5	Laplace transform and inverse transform of simple functions, properties, various related theorems and application to differential equations with constant coefficients.	
<b>Semester</b>	:	II
<b>Course Code &amp; Name</b>	:	PH8253& Physics For Electronics Engineering
<b>Year of Study</b>	:	2017 – 2018, 2018 – 2019, 2019-2020
<b>Cos No</b>	<b>Course Outcome</b>	
C111.1	<b>Gain knowledge</b> on classical and quantum electron theories, and energy band structures	
C111.2	<b>Acquire knowledge</b> on basics of semiconductor physics and its applications in various devices	
C111.3	Get <b>knowledge</b> on magnetic and dielectric properties of materials	
C111.4	Have the necessary <b>understanding</b> on the functioning of optical materials for optoelectronics	
C111.5	<b>Understand</b> the basics of quantum structures and their applications in spintronics and carbon electronics	
<b>Semester</b>	:	II
<b>Course Code &amp; Name</b>	:	BE8254& Basic Electrical and Instrumentation Engineering
<b>Year of Study</b>	:	2017 – 2018, 2018 – 2019, 2019-2020
<b>Cos No</b>	<b>Course Outcome</b>	
C112.1	<b>Understand</b> the concept of three phase power circuits and measurement	
C112.2	Comprehend the <b>concepts</b> in electrical generators, motors and transformers	
C112.3	<b>Choose appropriate</b> measuring instruments for given application	
<b>Semester</b>	:	II
<b>Course Code &amp; Name</b>	:	EC8251& Circuit Analysis
<b>Year of Study</b>	:	2017 – 2018, 2018 – 2019, 2019-2020
<b>Cos No</b>	<b>Course Outcome</b>	
C113.1	<b>Develop</b> the capacity to analyze electrical circuits, apply the circuit theorems in real time	
C113.2	<b>Design</b> and understand and evaluate the ac and dc circuits	
<b>Semester</b>	:	II



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<b>Course Code &amp; Name</b>	:	EC8252& Electronic Devices
<b>Year of Study</b>	:	2017 – 2018, 2018 – 2019, 2019 – 2020
<b>Cos No</b>		<b>Course Outcome</b>
C114.1		<b>Explain</b> the V-I characteristic of diode, UJT and SCR
C114.2		<b>Describe</b> the equivalence circuits of transistors
C114.3		<b>Operate</b> the basic electronic devices such as PN junction diode, bipolar and field effect transistors, power control devices, LED, LCD and other Opto-electronic devices
<b>Semester</b>	:	II
<b>Course Code &amp; Name</b>	:	EC8261&Circuits and Devices Laboratory
<b>Year of Study</b>	:	2017 – 2018, 2018 – 2019, 2019 – 2020
<b>Cos No</b>		<b>Course Outcome</b>
C115.1		<b>Analyze</b> the characteristics of basic electronic devices
C115.2		<b>Design</b> RL and RC circuits
C115.3		<b>Verify</b> Thevinin & Norton theorem KVL & KCL, and super position theorems
<b>Semester</b>	:	II
<b>Course Code &amp; Name</b>	:	GE8261&ENGINEERING PRACTICES LABORATORY
<b>Year of Study</b>	:	2017 – 2018, 2018 – 2019, 2019 – 2020
<b>Cos No</b>		<b>Course Outcome</b>
C116.1		<b>Fabricate</b> carpentry components and pipe connections including plumbing works
C116.2		<b>Use</b> welding equipments to join the structures
C116.3		<b>Carry out</b> the basic machining operations
C116.4		<b>Make</b> the models using sheet metal works
C116.5		<b>Illustrate</b> on centrifugal pump, air conditioner, operations of smithy, foundary and fittings
C116.6		<b>Carry out</b> basic home electrical works and appliances
C116.7		<b>Measure</b> the electrical quantities
C116.8		<b>Elaborate</b> on the components, gates, soldering practices
<b>Semester</b>	:	III
<b>Course Code &amp; Name</b>	:	MA8352& Linear Algebra and Partial Differential Equations
<b>Year of Study</b>	:	2017 – 2018, 2018 – 2019
<b>Cos No</b>		<b>Course Outcome</b>
C201.1		<b>Explain</b> the fundamental concepts of advanced algebra and their role in modern mathematics and applied contexts
C201.2		<b>Demonstrate</b> accurate and efficient use of advanced algebraic techniques
C201.3		<b>Demonstrate</b> their mastery by solving non - trivial problems related to the concepts and by proving simple theorems about the statements proven by the text
C201.4		<b>Apply</b> various types of partial differential equations and solve engineering problems using Fourier series
<b>Semester</b>	:	III
<b>Course Code &amp; Name</b>	:	EC8393 & Fundamentals of data Structures in C
<b>Year of Study</b>	:	2017 – 2018, 2018 – 2019
<b>Cos No</b>		<b>Course Outcome</b>
C202.1		<b>Construct</b> & implement linear and non-linear data structure operations using C



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C202.2	<b>Determine</b> appropriate Linear / Non-linear data structure for any given data set
C202.3	<b>Apply</b> hashing concepts for a given problem
C202.4	<b>Estimate</b> new data structure for an application
C202.5	<b>Organize</b> the sorting algorithm for an application
<b>Semester</b>	: III
<b>Course Code &amp; Name</b>	: EC8351 & Electronic Circuits- I
<b>Year of Study</b>	: 2017 – 2018, 2018 – 2019
<b>Cos No</b>	<b>Course Outcome</b>
C203.1	Show <b>knowledge</b> of working principles, characteristics and applications of BJT and FET
C203.2	Show <b>knowledge</b> of frequency response characteristics of BJT and FET amplifiers
C203.3	<b>Analyze</b> the performance of small signal BJT and FET amplifiers - single stage and multi stage amplifiers
C203.4	<b>Apply</b> the knowledge gained in the design of electronic circuits
<b>Semester</b>	: III
<b>Course Code &amp; Name</b>	: EC8352 & Signals and Systems
<b>Year of Study</b>	: 2017 – 2018, 2018 – 2019
<b>Cos No</b>	<b>Course Outcome</b>
C204.1	<b>Determine</b> if a given system is linear/causal/stable
C204.2	<b>Determining</b> the frequency components present in a deterministic signal
C204.3	Outline <b>characterizing</b> LTI systems in the time domain and frequency domain
C204.4	<b>Interpret</b> the output of an LTI system in the time and frequency domains
<b>Semester</b>	: III
<b>Course Code &amp; Name</b>	: EC8392 & Digital Electronics
<b>Year of Study</b>	: 2017 – 2018, 2018 – 2019
<b>Cos No</b>	<b>Course Outcome</b>
C205.1	<b>Use</b> digital electronics in the present contemporary world
C205.2	<b>Design</b> various combinational digital circuits using logic gates
C205.3	Do the <b>analysis</b> and design procedures for synchronous and asynchronous sequential circuits
C205.4	<b>Use</b> the semiconductor memories and related technology
C205.5	<b>Use</b> electronic circuits involved in the design of logic gates
<b>Semester</b>	: III
<b>Course Code &amp; Name</b>	: EC8391 & Control Systems Engineering
<b>Year of Study</b>	: 2017 – 2018, 2018 – 2019
<b>Cos No</b>	<b>Course Outcome</b>
C206.1	<b>Identify</b> the various control system components and their representations.
C206.2	<b>Analyze</b> the various time domain parameters.
C206.3	<b>Analysis</b> the various frequency response plots and its system.
C206.4	<b>Apply</b> the concepts of various system stability criterions.
C206.5	<b>Design</b> various transfer functions of digital control system using state variable models.
<b>Semester</b>	: III
<b>Course Code &amp; Name</b>	: EC8381 & Fundamentals of Data Structures in C Laboratory
<b>Year of Study</b>	: 2017 – 2018, 2018 – 2019



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<b>Cos No</b>	<b>Course Outcome</b>		
C207.1	<b>Write</b> basic and advanced programs in C		
C207.2	<b>Implement</b> functions and recursive functions in C		
C207.3	<b>Implement</b> data structures using C		
C207.4	<b>Choose</b> appropriate sorting algorithm for an application and implement it in a modularized way		
<b>Semester</b>	:	III	
<b>Course Code &amp; Name</b>	:	EC8381 & Fundamentals of Data Structures in C Laboratory	
<b>Year of Study</b>	:	2017 – 2018, 2018 – 2019	
<b>Cos No</b>	<b>Course Outcome</b>		
C208.1	<b>Design</b> and test rectifiers, filters and regulated power supplies.		
C208.2	<b>Design</b> and test BJT/JFET amplifiers.		
C208.3	<b>Differentiate</b> cascode and cascade amplifiers.		
C208.4	<b>Analyze</b> the limitation in bandwidth of single stage and multi stage amplifier		
C208.5	<b>Measure</b> CMRR in differential amplifier		
C208.6	<b>Simulate</b> and analyze amplifier circuits using pspice.		
C208.7	<b>Design</b> and test the digital logic circuits.		
<b>Semester</b>	:	III	
<b>Course Code &amp; Name</b>	:	HS8381 & Interpersonal skills/listening & speaking	
<b>Year of Study</b>	:	2017 – 2018, 2018 – 2019	
<b>Cos No</b>	<b>Course Outcome</b>		
C209.1	Listen and respond appropriately.		
C209.2	Participate in group discussions		
C209.3	Make effective presentations		
C209.4	Participate confidently and appropriately in conversations both formal and informal		
<b>Semester</b>	:	IV	
<b>Course Code &amp; Name</b>	:	MA8451 & Probability And Random Processes	
<b>Year of Study</b>	:	2017 – 2018, 2018 – 2019	
<b>Cos No</b>	<b>Course Outcome</b>		
C210.1	<b>Understand</b> the fundamental knowledge of the concepts of probability and have knowledge of standard distributions which can describe real life phenomenon.		
C210.2	<b>Understand</b> the basic concepts of one and two dimensional random variables and apply in engineering applications.		
C210.3	<b>Apply</b> the concept random processes in engineering disciplines.		
C210.4	<b>Understand</b> and apply the concept of correlation and spectral densities.		
C210.5	<b>Exposure</b> of various distribution functions and help in acquiring skills in handling situations involving more than one variable. Able to analyze the response of random inputs to linear time invariant systems.		
<b>Semester</b>	:	IV	
<b>Course Code &amp; Name</b>	:	EC8452&Electronic Circuits II	
<b>Year of Study</b>	:	2017 – 2018, 2018 – 2019	
C211.1	<b>Analyze</b> different types of amplifier, oscillator and multi vibrator circuits		
C211.2	<b>Design</b> BJT amplifier and oscillator circuits		



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C211.3	<b>Analyze</b> transistorized amplifier and oscillator circuits
C211.4	<b>Design</b> and analyze feedback amplifiers
C211.5	<b>Design</b> IC and RC oscillators, tuned amplifiers, wave shaping circuits, multi vibrators, power amplifier and dc convertors.
<b>Semester</b>	: IV
<b>Course Code &amp; Name</b>	: EC8491 & Communication Theory
<b>Year of Study</b>	: 2017 – 2018, 2018 – 2019
C212.1	<b>Design</b> AM communication systems
C212.2	<b>Design</b> angle modulated communication systems
C212.3	<b>Apply</b> the concepts of random process to the design of communication systems
C212.4	<b>Analyze</b> the noise performance of am and fm systems
C212.5	<b>Gain</b> knowledge in sampling and quantization
<b>Semester</b>	: IV
<b>Course Code &amp; Name</b>	: EC8451&Electromagnetic Fields
<b>Year of Study</b>	: 2017 – 2018, 2018 – 2019
C213.1	<b>Display</b> an understanding of fundamental electromagnetic laws and concepts
C213.2	<b>Write</b> maxwell's equations in integral, differential and phasor forms and explain their physical meaning
C213.3	<b>Explain</b> electromagnetic wave propagation in lossy and in lossless media
C213.4	<b>Solve</b> simple problems requiring estimation of electric and magnetic field quantities based on these concepts and laws
<b>Semester</b>	: IV
<b>Course Code &amp; Name</b>	: EC8453& Linear Integrated Circuits
<b>Year of Study</b>	: 2017 – 2018, 2018 – 2019
C214.1	<b>Design</b> linear and non linear applications of OP – AMPS
C214.2	<b>Design</b> applications using analog multiplier and PLL
C214.3	<b>Design</b> ADC and DAC using OP – AMPS
C214.4	<b>Generate</b> waveforms using OP – AMP circuits
C214.5	<b>Analyze</b> special function ICs
<b>Semester</b>	: IV
<b>Course Code &amp; Name</b>	: GE8291 & Environmental Science And Engineering
<b>Year of Study</b>	: 2017 – 2018, 2018 – 2019
C215.1	Environmental pollution or problems cannot be solved by mere laws. Public participation is an important aspect which serves the environmental protection. One will obtain knowledge on the following after completing the course.
C215.2	Public awareness of environmental is at infant stage.
C215.3	Ignorance and incomplete knowledge has lead to misconceptions
C215.4	Development and improvement in std. Of living has lead to serious environmental disasters
<b>Semester</b>	: IV
<b>Course Code &amp; Name</b>	: EC8461&Circuits Design and Simulation Laboratory
<b>Year of Study</b>	: 2017 – 2018, 2018 – 2019
C216.1	<b>Analyze</b> various types of feedback amplifiers
C216.2	<b>Design</b> oscillators, tuned amplifiers, wave-shaping circuits and multi vibrators



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C216.3	<b>Design</b> and simulate feedback amplifiers, oscillators, tuned amplifiers, wave-shaping circuits and multi vibrators using spice tool.
<b>Semester</b>	: IV
<b>Course Code &amp; Name</b>	: EC8462 & Linear Integrated Circuits Laboratory
<b>Year of Study</b>	: 2017 – 2018, 2018 – 2019
C217.1	<b>Design</b> amplifiers, oscillators, D-A converters using operational amplifiers.
C217.2	<b>Design</b> filters using OP-AMP and performs an experiment on frequency response.
C217.3	<b>Analyze</b> the working of PLL and describe its application as a frequency multiplier
C217.4	<b>Design</b> DC power supply using ICs.
C217.5	<b>Analyze</b> the performance of filters, multi vibrators, A/D converter and analog multiplier using spice.
<b>Semester</b>	: V
<b>Course Code &amp; Name</b>	: EC8501 & Digital Communication
<b>Year of Study</b>	: 2017 – 2018
C301.1	<b>Design</b> PCM Systems
C301.2	<b>Design</b> And Implement Base Band Transmission Schemes
C301.3	<b>Design</b> And Implement Band Pass Signaling Schemes
C301.4	<b>Analyze</b> The Spectral Characteristics Of Band Pass Signaling Schemes And Their Noise Performance
C301.5	<b>Design</b> Error Control Coding Schemes
<b>Semester</b>	: V
<b>Course Code &amp; Name</b>	: EC8553 & Discrete-Time Signal Processing
<b>Year of Study</b>	: 2017 – 2018
C302.1	<b>Apply</b> DFT For The Analysis Of Digital Signals And Systems
C302.2	<b>Design</b> IIR And Fir Filters
C302.3	<b>Characterize</b> the Effects Of Finite Precision Representation On Digital Filters
C302.4	<b>Design</b> Multirate Filters
C302.5	<b>Apply</b> Adaptive Filters Appropriately In Communication Systems
<b>Semester</b>	: V
<b>Course Code &amp; Name</b>	: EC8552 & Computer Architecture And Organization
<b>Year of Study</b>	: 2017 – 2018
C303.1	<b>Describe</b> Data Representation, Instruction Formats And The Operation Of A Digital Computer
C303.2	<b>Illustrate</b> the Fixed Point And Floating-Point Arithmetic For Alu Operation
C303.3	<b>Discuss</b> about Implementation Schemes Of Control Unit And Pipeline Performance
C303.4	<b>Explain</b> the Concept Of Various Memories, Interfacing And Organization Of Multiple Processors
C303.5	<b>Discuss</b> Parallel Processing Technique And Unconventional Architectures
<b>Semester</b>	: V
<b>Course Code &amp; Name</b>	: GE8077 & Total Quality Management
<b>Year of Study</b>	: 2017 – 2018
C304.1	The Student Would be Able to <b>Apply</b> the Tools and Techniques of Quality Management To Manufacturing And Services Processes.





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<b>Semester</b>		:	V
<b>Course Code &amp; Name</b>		:	OCE551 & Air Pollution And Control Engineering
<b>Year of Study</b>		:	2017 – 2018
C305.1	An <b>Understanding</b> of The Nature And Characteristics Of Air Pollutants, Noise Pollution And Basic Concepts Of Air Quality Management		
C305.2	<b>Ability to Identify</b> , Formulate And Solve Air And Noise Pollution Problems		
C305.3	<b>Ability to Design</b> Stacks And Particulate Air Pollution Control Devices To Meet Applicable Standards		
C305.4	<b>Ability</b> to Select Control Equipments		
C305.5	<b>Ability</b> to Ensure Quality, Control And Preventive Measures.		
<b>Semester</b>		:	V
<b>Course Code &amp; Name</b>		:	EC8551 & Communication Networks
<b>Year of Study</b>		:	2017 – 2018
C306.1	Identify the Components Required to Build Different Types Of Networks		
C306.2	<b>Choose</b> the Required Functionality at Each Layer For Given Application		
C306.3	<b>Identify</b> Solution for Each Functionality at Each Layer		
C306.4	<b>Trace</b> the Flow Of Information From One Node To Another Node in The Network		
<b>Semester</b>		:	V
<b>Course Code &amp; Name</b>		:	EC8562 & Digital Signal Processing Laboratory
<b>Year of Study</b>		:	2017 – 2018
C307.1	<b>Carryout</b> Basic Signal Processing Operations		
C307.2	<b>Demonstrate</b> their abilities Towards MATLAB Based Implementation of Various DSP Systems		
C307.3	<b>Analyze</b> the Architecture of A DSP Processor		
C307.4	<b>Design</b> and Implement The Fir And IIR Filters In DSP Processor For Performing Filtering Operation Over Real-Time Signals		
C307.5	<b>Design</b> a DSP System For Various Applications of DSP		
<b>Semester</b>		:	V
<b>Course Code &amp; Name</b>		:	EC8561 & Communication Systems Laboratory
<b>Year of Study</b>		:	2017 – 2018
C308.1	<b>Simulate &amp; Validate</b> the Various Functional Modules Of A Communication System		
C308.2	<b>Demonstrate</b> their Knowledge In Base Band Signaling Schemes through Implementation Of Digital Modulation Schemes		
C308.3	<b>Apply</b> Various Channel Coding Schemes & Demonstrate their Capabilities towards the Improvement of the Noise Performance of Communication System		
C308.4	<b>Simulate</b> End-To-End Communication Link		
<b>Semester</b>		:	V
<b>Course Code &amp; Name</b>		:	EC8563 & Communication systems Laboratory
<b>Year of Study</b>		:	2017 – 2018
C309.1	<b>Communicate</b> Between Two Desktop Computers		
C309.2	<b>Implement</b> the Different Protocols		
C309.3	Program Using Sockets.		



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C309.4	<b>Implement</b> And Compare The Various Routing Algorithms		
C309.5	Use the Simulation Tool.		
<b>Semester</b>		:	VI
<b>Course Code &amp; Name</b>	:	EC8691& Microprocessors and Microcontrollers	
<b>Year of Study</b>	:	2017 – 2018	
<b>Cos No</b>	<b>Course Outcome</b>		
C310.1	<b>Understand</b> and execute programs based on 8086 microprocessor.		
C310.2	<b>Design</b> memory interfacing circuits.		
C310.3	<b>Design</b> and interface i/o circuits.		
C310.4	<b>Design</b> and implement 8051 microcontroller based systems.		
<b>Semester</b>		:	VI
<b>Course Code &amp; Name</b>	:	EC8095 & VLSI DESIGN	
<b>Year of Study</b>	:	2017 – 2018	
<b>Cos No</b>	<b>Course Outcome</b>		
C311.1	<b>Realize</b> the concepts of digital building blocks using MOS transistor.		
C311.2	<b>Design</b> combinational MOS circuits and power strategies.		
C311.3	<b>Design</b> and construct sequential circuits and timing systems.		
C311.4	<b>Design</b> arithmetic building blocks and memory subsystems.		
C311.5	<b>Apply</b> and implement FPGA design flow and testing.		
<b>Semester</b>		:	VI
<b>Course Code &amp; Name</b>	:	EC8652 & Wireless Communication	
<b>Year of Study</b>	:	2017 – 2018	
<b>Cos No</b>	<b>Course Outcome</b>		
C312.1	<b>Characterize</b> a wireless channel and evolve the system design specifications		
C312.2	<b>Design</b> a cellular system based on resource availability and traffic demands		
C312.3	<b>Identify</b> suitable signaling and multipath mitigation techniques for the wireless channel and system under consideration.		
<b>Semester</b>		:	VI
<b>Course Code &amp; Name</b>	:	MG8591 & Principles of Management	
<b>Year of Study</b>	:	2017 – 2018	
<b>Cos No</b>	<b>Course Outcome</b>		
C313.1	Upon Completion Of The Course, Students Will Be Able To Have Clear Understanding		
C313.2	Managerial Functions Like Planning, Organizing, Staffing, Leading & Controlling And Have Same Basic Knowledge On International Aspect Of Management		
<b>Semester</b>		:	VI
<b>Course Code &amp; Name</b>	:	EC8651& Transmission Lines and RF Systems	
<b>Year of Study</b>	:	2017 – 2018	
<b>Cos No</b>	<b>Course Outcome</b>		
C314.1	Explain The Characteristics Of Transmission Lines And Its Losses		
C314.2	Write About The Standing Wave Ratio And Input Impedance In High Frequency Transmission Lines		
C314.3	Analyze Impedance Matching by Stubs Using Smith Charts		
C314.4	Analyze the Characteristics of TE and TM Waves		



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C314.5	Design a RF Transceiver System for Wireless Communication		
<b>Semester</b>		:	VI
<b>Course Code &amp; Name</b>	:	EC8004 & Wireless Networks	
<b>Year of Study</b>	:	2017 – 2018	
<b>Cos No</b>	<b>Course Outcome</b>		
C315.1	<b>Conversant</b> with the latest 3g/4g networks and its architecture		
C315.2	<b>Design</b> and implement wireless network environment for any application using latest wireless protocols and standards		
C315.3	<b>Ability</b> to select the suitable network depending on the availability and requirement		
C315.4	<b>Implement</b> different type of applications for smart phones and mobile devices with latest network strategies		
<b>Semester</b>		:	VI
<b>Course Code &amp; Name</b>	:	EC8681&Microprocessors and Microcontrollers Laboratory	
<b>Year of Study</b>	:	2017 – 2018	
<b>Cos No</b>	<b>Course Outcome</b>		
C316.1	<b>Write</b> ALP programmes for fixed and floating point and arithmetic operations		
C316.2	Interface <b>different</b> I/Os with processor		
C316.3	<b>Generate</b> waveforms using microprocessors		
C316.4	<b>Execute</b> programs in 8051		
C316.5	<b>Explain</b> the difference between simulator and emulator		
<b>Semester</b>		:	VI
<b>Course Code &amp; Name</b>	:	EC8661&VLSI DESIGN LABORATORY	
<b>Year of Study</b>	:	2017 – 2018	
<b>Cos No</b>	<b>Course Outcome</b>		
C317.1	<b>Write</b> HDL code for basic as well as advanced digital integrated circuit		
C317.2	<b>Import</b> the logic modules into FPGA boards		
C317.3	<b>Synthesize</b> place and route the digital IPS		
C317.4	<b>Design</b> , simulate and extract the layouts of digital & analog ic blocks using EDA tools		
<b>Semester</b>		:	VI
<b>Course Code &amp; Name</b>	:	EC8611&Technical Seminar	
<b>Year of Study</b>	:	2017 – 2018	
<b>Cos No</b>	<b>Course Outcome</b>		
C318.1	<b>Explain</b> the significance of learning recent advancement in electrical and electronics engineering discipline		
C318.2	<b>Review</b> and prepare the state-of-art technologies in the present technological developments.		
C318.3	<b>Organize</b> the presentation using the concepts of ordering and determining the central, main and supporting ideas.		
C318.4	<b>Present</b> any topic in any recent advancement with good communicative skill in front of peers and faculty members.		
C318.5	<b>Perform</b> well in placement recruitment drive with good technical skills and communication skills.		
<b>Semester</b>		:	VI



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<b>Course Code &amp; Name</b>	:	HS8581&Professional Communication
<b>Year of Study</b>	:	2017 – 2018
<b>Cos No</b>	<b>Course Outcome</b>	
C319.1	Make effective presentations	
C319.2	Participate confidently in group discussions.	
C319.3	Attend job interviews and be successful in them.	
C319.4	Develop adequate soft skills required for the workplace	
C319.5	Participate confidently in group discussions	