

Haldia Institute of Technology

2nd Year: 3rd Semester

Theory

EC301	Electronic Devices	3L:0T:0P	3 credits
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Course Outcomes:

At the end of this course students will demonstrate the ability to

CO1. Study and analyze the behavior of semiconductor devices.

CO2. Analyze characteristics of Semi-conductor diodes and solve problems.

CO3. Analyze characteristics of Bi-polar Transistors and solve problems.

CO4. Analyze characteristics of MOS Transistors and solve problems.

CO5: Differentiate between different opto-electronic devices.

EC302	Digital System Design	3L:0T:0P	3 credits
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Course Outcomes:

At the end of this course students will demonstrate the ability to

CO1: Design and analyze combinational and sequential logic circuits

CO2: Optimize combinational and sequential logic circuits.

CO3: Analyze a memory cell and apply for organizing larger memories.

CO4: Understand the concept of ADC, DAC and logic family.

EC303	Signals and Systems	3L:1T:0P	3 credits
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Course Outcomes:

At the end of this course students will demonstrate the ability to

CO1: Classify the signals as Continuous time and Discrete time

CO2: Analyze the spectral characteristics of signals using Fourier analysis.

CO3: Classify systems based on their properties and determine the response of LTI system using convolution.

CO4: Identify system properties based on impulse response and Fourier analysis.

CO5: Apply transform techniques to analyze continuous-time and discrete-time signals and systems.

EC304	Network Theory	3L:0T:0P	3 credits
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Course Outcomes:

At the end of this course students will demonstrate the ability to

CO1: Understand basic electrical circuits with nodal and mesh analysis.

CO2: Implement network theorems to solve any circuit.

CO3: Analyze resonance of a circuit with practical aspects.

CO4: Apply Laplace Transform for steady state and transient analysis.

CO5: Investigate different circuits with two port network model and graph.

CO6: Appreciate the frequency domain techniques.

ES-CS301	Data Structure (ES)	3L:0T:0P	3 credits
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Course Outcomes:

CO1: Analyze the algorithms to determine the time and computation complexity; hence justify the correctness

CO2: Implement search problems using linear and binary search techniques..

CO3: Analyse time and computation complexity involving stacks, queues and linked lists.

CO4: Comprehend and compare selection sort, bubble sort, insertion sort, quick sort, merge sort and heap sort algorithms on basis of their performance in term of space and time complexity.

CO5: Implement graph search and traversal algorithms to determine the time and computation complexity.

BS-M301	Mathematics-III(BS)	2L:0T:0P	2 credits
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Course Outcomes:

The objective of this course is to familiarize the students with statistical techniques. It aims to equip the students with standard concepts and tools at an intermediate to advanced level that will serve them well towards tackling various problems in the discipline.

The students will be able to:

- ☐ Develop basic ideas of probability and random variables with various discrete and continuous probability distributions.
- ☐ Comprehend basic ideas of statistics including measures of central tendency, correlation and regression.
- ☐ Implement various statistical methods to study data samples.

Practical

EC391	Electronic Devices Lab.	0L-0T-2P	1 credits
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Course Outcomes:

- An ability to verify the working of different diodes, transistors, CRO probes and measuring instruments. Identifying the procedure of doing the experiment.
- Ability to understand the characteristics of BJT and FET and how to Determine different parameters for designing purpose..
- Ability to understand properties of photoelectric devices
- Ability to measure and record the experimental data, analyze the results, and prepare a formal laboratory report.

EC392	Digital System Design Lab.	0L-0T-2P	1
EC393	Electronic Devices Lab	0L-0T-2P	1
ES-CS391	Data Structure & Algorithm Lab (ES)	0L-0T-2P	1
HS-HU381	Soft Skill Development Lab	0L-0T-2P	1

Non Credit Course

MC381	Environmental Science	0L-0T-2P	0
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2nd Year: 4th Semester

Theory

EC401	AnalogCommunication	3L:0T:0P	3 credits
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Course Outcomes:

At the end of this course students will demonstrate the ability to

CO1: Understand the basic communication system

CO2: Compare the performance of AM, FM and PM schemes with reference to SNR

CO3: Understand noise as a random process and its effect on communication receivers

CO4: Evaluate the performance of TDM, FDM and OFDM in a communication system

EC402	Analog Electronic Circuits	3L:0T:0P	3 credits
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Course Outcomes:

At the end of this course students will demonstrate the ability to

CO1. Understand the characteristics of diodes and transistors

CO2. Design and analyze various rectifier and amplifier circuits

CO3. Design sinusoidal and non-sinusoidal oscillators

CO4. Understand the functioning of OP-AMP and design OP-AMP based circuits

EC403	Microprocessor & Microcontrollers	3L:0T:0P	3 credits
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Course Outcome :

At the end of this course students will demonstrate the ability to

CO1. Understand the architecture, instruction set, timing diagram of 8085, 8086 microprocessors.

CO2. Execute assembly language programming for microprocessors & microcontrollers.

CO3. Design interfacing of peripherals like I/O, A/D, D/A, timer etc.

CO4. Distinguish advanced microprocessors like 80286, 80386 etc.

CO5. Investigate systems using different microcontrollers like 8051, PIC microcontroller etc.

ES-CS401	Design & Analysis of Algorithm(ES)	3L-0T-0P	3 credits
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Course Outcome :

At the end of this course students will demonstrate the ability to

CO1. For a given algorithms analyze worst-case running times of algorithms based on asymptotic analysis and justify the correctness of algorithms .

CO2. Describe the greedy paradigm and explain when an algorithmic design situation calls for it. For a given problem develop the greedy algorithms.

CO3. Describe the divide-and-conquer paradigm and explain when an algorithmic design situation calls for it. Synthesize divide-and-conquer algorithms. Derive and solve recurrence relation.

CO4. Describe the dynamic-programming paradigm and explain when an algorithmic design situation calls for it. For a given problems of dynamic-programming and develop the dynamic programming algorithms, and analyze it to determine its computational complexity.

CO5. For a given model engineering problem model it using graph and write the corresponding algorithm to solve the problems.

CO6.Explain the ways to analyze randomized algorithms (expected running time, probability of error).

CO7.Explain what an approximation algorithm is. Compute the approximation factor of an approximation algorithm (PTAS and FPTAS).

BS-M401	Numerical Methods(BS)	2L-0T-0P	2 credits
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BS-PH401	Engineering Electromagnetics (BS)	2L-0T-0P	2 credits
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COURSE OUTCOMES

On completion of the course, student will be able to

CO1- Appraise need analysis for different coordinate systems in electromagnetics and their interrelations.

CO2-Apply vector calculus to solve field theory problems.

CO3-Calculate electric and magnetic fields in different coordinates for various charge and current configurations.

CO4- Understand boundary conditions associated with interfaces.

CO5- Appreciate Maxwell's equations for static and time varying fields.

CO6-Understand the concept of time varying fields and wave equations.

Practical

EC491	Analog Communication Lab	0L-0T-2P	1 credits
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EC492	Analog Electronic Circuits Lab.	0L-0T-2P	1 credits
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Course Outcome :

Students will be able to:

CO1: Design and test rectifiers, clipping circuits, clamping circuits and voltage regulators.

CO2: Compute the parameters from the characteristics of JFET and MOSFET devices.

CO3: Design, test and evaluate BJT amplifiers in CE configuration.

CO4: Design and test JFET/MOSFET amplifiers.

CO5: Design and test a power amplifier.

CO6: Design and test various types of oscillators.

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EC493	Microprocessor & Microcontrollers Lab	0L-0T-2P	1 credits
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BS-M491	Numerical Methods Lab (BS)	0L-0T-2P	1 credits
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3rd Year: 5th Semester

Theory

EC501	Electromagnetic Waves and Propagation	3L:0T:0P	3 credits
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Course Outcomes:

At the end of this course students will demonstrate the ability to

CO 1. Understand characteristics and wave propagation on high frequency transmission lines.

CO2. Carryout impedance transformation on TL.

CO3. Use sections of transmission line sections for realizing circuit elements.

CO 4. Characterize uniform plane wave.

CO5. Calculate reflection and transmission of waves at media interface .

CO6. Analyze wave propagation on metallic waveguides in modal form.

CO7. Understand principle of radiation and radiation characteristics of an antenna.

EC502	Digital Signal Processing	3L:0T:0P	3 credits
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Course Outcomes:

At the end of this course students will demonstrate the ability to

CO 1. Represent signals mathematically in continuous and discrete time and frequency domain.

CO2. Get the response of an LSI system to different signals .

CO3. Design of different types of digital filters for various applications.

EC503	Digital Communication	3L:1T:0P	4 credits
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Course Outcomes:

At the end of this course students will demonstrate the ability to

CO1. understand the concept of Stochastic Process in Communication System.

CO2. represent various signals in different mathematical forms.

CO3. analyze baseband transmission mode of digital data.

CO4. analyze different carrier modulation techniques considering noise aspects.

EC504	Computer Architecture	3L:0T:0P	3 credits
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Course Outcomes:

At the end of this course students will demonstrate the ability to

CO1. learn how computers work.

CO2. know basic principles of computer's working.

CO3. analyze the performance of computers.

CO4. know how computers are designed and built.

CO5. Understand issues affecting modern processors (caches, pipelines etc.).

PE-EC505A	Nano Electronics	3L:0T:0P	3 credits
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Course Outcomes:

At the end of this course students will demonstrate the ability to

CO1. Understand various aspects of nano-technology and the processes involved in making nano components and material.

CO2. Leverage advantages of the nano-materials and appropriate use in solving practical problems.

CO 3. Understand various aspects of nano-technology and the processes involved in making nano components and material.

CO4. Leverage advantages of the nano-materials and appropriate use in solving practical problems.

PE-EC505B	Speech and Audio Processing	3L:0T:0P	3 credits
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Course Outcomes:

At the end of this course students will demonstrate the ability to

PE-EC505C	Power Electronics	3L:0T:0P	3 credits
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Course Outcomes:

At the end of this course students will demonstrate the ability to

CO1. Build and test circuits using power devices such as SCR.

CO2. Analyze and design controlled rectifier, DC to DC converters, DC to AC inverters.

CO3. Learn how to analyze these inverters and some basic applications.

CO4. Design SMPS.

PE-EC506A	Soft Skill and Interpersonal Communication	3L:0T:0P	3 credits
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Course Outcomes:

At the end of this course students will demonstrate the ability to

PE-EC506B	Cyber Law & Intellectual Property Rights	3L:0T:0P	3 credits
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Course Outcomes:

At the end of this course students will demonstrate the ability to

CO1. understand the role of intellectual property rights.

CO2. identify the main types of intellectual property rights.

CO3. understand the steps for successful registration and protection of intellectual property rights at national, regional and international levels .

CO4. search patent and trademark databases .

CO5. understand the legal aspects for intellectual property protection.

PE-EC506C	Human Resource Management	3L:0T:0P	3 credits
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Course Outcome :

At the end of the course the students will be able to :

CO1. know the professional and personal qualities of a HR manager. CO2. learn different methods of selecting human resources through recruitment, training and performance appraisal system.

CO3. know how to develop a favourable working environment in an organisation through participation in management and maintain a good industrial relation for benefit of the society.

CO4. know about consequence of industrial dispute and employee indiscipline of an organization.

Practical

EC591	Electromagnetic Wave Lab	0L:0T:2P	1 credits
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EC592	Digital Communication Lab.	0L:0T:2P	1 credits
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EC593	Digital Signal Processing Lab.	0L:0T:2P	1 credits
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MC581	Indian Constitution	2L:0T:0P	2 credits
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Course Outcome :

At the end of the course the students will be able to :

CO1.Enable the students to think and speak effectively on everyday topics, including topics

CO2. Build confidence in listening, speaking, reading and writing English professionally.

CO3. Equip students with the basics of Academic writing related to technical concepts

CO4.Prepare for competitive exams like TOEFL, IELTS

CO5. Developing industry-ready attitude towards professional communication.

3rd Year: 6th Semester

Theory

EC601	Control System& Instrumentation	3L:0T:0P	3 credits
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Course Outcome :

At the end of the course the students will be able to :

CO1. Characterize a system and find its steady state behavior.

CO2. Investigate stability of a system using different tests.

CO3. Design various controllers.

CO 4. Solve linear, non linear and optimal control problems.

CO5. Study with CRO, Wave analyzer, Spectrum analyzer knowing their functional details.

EC602	Computer Network	3L:0T:0P	3 credits
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Course Outcome :

At the end of the course the students will be able to :

PE-EC603 A	Introduction to MEMS	3L:0T:0P	3 credits
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Course Outcome :

At the end of the course the students will be able to :

CO1. Appreciate the underlying working principles of MEMS and NEMS devices.

CO2. Design and model MEM devices.

PE-EC603 B	Bio-Medical Electronics	3L:0T:0P	3 credits
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Course Outcome :

At the end of the course the students will be able to :

CO1. Understand the application of the electronic systems in biological and medical applications.

CO2. Understand the practical limitations on the electronic components while handling bio-substances.

CO3. Understand and analyze the biological processes like other electronic processes.

PE-EC603 C	CMOS VLSI Design	3L:0T:0P	3 credits
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Course Outcome :

At the end of the course the students will be able to :

PE-EC603 D	Information Theory and Coding	3L:0T:0P	3 credits
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Course Outcome :

At the end of the course the students will be able to :

CO1. Understand the concept of information and entropy.

CO2. Understand Shannon's theorem for coding.

CO3. Calculation of channel capacity.

CO4. Apply coding techniques.

OE-EC604 A	Electronic Measurement & Measuring Instruments	3L:0T:0P	3 credits
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Course Outcome :

At the end of the course the students will be able to :

CO1. Describe the fundamental concepts and principles of instrumentation.

CO2. Explain the operation of various instruments required in measurements.

CO3. Apply the measurement techniques for different types of tests.

CO4. To select specific instruments for specific measurement function.

CO 5.Understand principle of operation and working of different electronic instruments Students will understand functioning, specification and application of signal analyzing instruments.

OE-EC604 B	Operating System	3L:0T:0P	3 credits
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Course Outcome :

At the end of the course the students will be able to :

CO1. understand the difference between different types of modern operating systems, virtual machines and their structure of implementation and applications.

CO2. understand the difference between process & thread, issues of scheduling of user-level processes / threads and their issues & use of locks, semaphores, monitors for synchronizing multiprogramming with multithreaded systems and implement them in multithreaded programs.

CO3. understand the concepts of deadlock in operating systems and how they can be managed / avoided and implement them in multiprogramming system.

CO4. understand the design and management concepts along with issues and challenges of main memory, virtual memory and file system.

CO5. understand the types of I/O management, disk scheduling, protection and security problems faced by operating systems and how to minimize these problems.

OE-EC604 C	Object Oriented Programming	3L:0T:0P	3 credits
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Course Outcome :

At the end of the course the students will be able to :

CO1. differentiate between structures oriented programming and object oriented programming.

CO2. use object oriented programming language like C++ and associated libraries to develop object oriented programs.

CO3. understand and apply various object oriented features like inheritance, data abstraction, encapsulation and polymorphism to solve various computing problems using C++ language.

CO4. apply concepts of operator-overloading, constructors and destructors.

CO5. apply exception handling and use built-in classes from STL

HS-HU601	Economics for Engineers	3L:0T:0P	3 credits
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Course Outcome :

At the end of the course the students will be able to :

MC-685	Effective Technical Communication	2L:0T:0P	2 credits
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Practical

EC691	Control System and Instrumentation Lab.	0L:0T:2P	1 credits
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EC692	Computer Network Lab.	0L:0T:2P	1 credits
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EC683	Electronic Design Workshop	0L:0T:2P	1 credits
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EC684	Programming based Mini Project	0L:0T:3P	1.5 credits
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Course Outcomes:

At the end of the course, students will demonstrate the ability to:

CO1. Conceive a problem statement either from rigorous literature survey or from the requirements raised from need analysis.

CO2. Design, implement and test the prototype/algorithm in order to solve the conceived problem.

CO3. Write comprehensive report on mini project work.

4th Year: 7th Semester

Theory

PE-EC701A	Antennas and Propagation	3L:0T:0P	3 credits
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Course Outcomes:

At the end of the course, students will demonstrate the ability to:

CO1. Understand the properties and various types of antennas.

CO2. Analyze the properties of different types of antennas and their design.

CO3. Operate antenna design software tools and come up with the design of the antenna of required specifications.

PE-EC701B	Bio-Medical Electronics	3L:0T:0P	3 credits
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PE-EC701C	Wireless Sensor Networks	3L:1T:0P	3 credits
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Course Outcomes:

At the end of this course students will demonstrate the ability to

CO1: Classify the signals as Continuous time and Discrete time

CO2: Analyze the spectral characteristics of signals using Fourier analysis.

CO3: Classify systems based on their properties and determine the response of LTI system using convolution.

CO4: Identify system properties based on impulse response and Fourier analysis.

CO5: Apply transform techniques to analyze continuous-time and discrete-time signals and systems.

PE-EC702A	Fibre Optic Communication	3L:0T:0P	3 credits
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Course Outcomes:

At the end of the course, students will demonstrate the ability to:

CO1. Understand the principles fiber-optic communication, the components and the bandwidth advantages.

CO2. Understand the properties of the optical fibers and optical components.

CO3. Understand operation of lasers, LEDs, and detectors

CO4. Analyze system performance of optical communication systems

CO5. Design optical networks and understand non-linear effects in optical fibers

PE-EC702B	Introduction to MEMS	3L:0T:0P	3 credits
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PE-EC702C	Adaptive Signal Processing	3L:0T:0P	3 credits
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Course Outcomes:

At the end of the course, students will demonstrate the ability to:

CO1. Understand the non-linear control and the need and significance of changing the control parameters w.r.t. real-time situation.

CO2. Mathematically represent the 'adaptability requirement'.

CO3. Understand the mathematical treatment for the modeling and design of the signal processing systems.

PE-EC703A	Satellite Communication	0L-0T-2P	3 credits
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Course Outcomes:

At the end of this course students will demonstrate the ability to

CO1. Visualize the architecture of satellite systems as a means of high speed, high range communication system.

CO2. State various aspects related to satellite systems such as orbital equations, sub-systems in a satellite, link budget, modulation and multiple access schemes.

CO3. Solve numerical problems related to orbital motion and design of link budget for the given parameters and conditions.

PE-EC703B	Nano Electronics	3L:0T:0P	3 credits
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PE-EC703C	Wavelet Transforms	3L:0T:0P	3 credits
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Course Outcome:

After successfully completion of this course, students should able to –

CO1. Classify various wavelet transform and explain importance of it.

CO2. Describe Continuous Wavelet Transform (CWT) and Discrete Wavelet Transform (DWT).

CO3. Explain the properties and application of wavelet transform.

CO4. Develop and realize computationally efficient wavelet based algorithms for signal and image processing.

CO5. Explain brief features and strength of transform beyond wavelet.

OE-EC704A	Millimeter Wave Technology	3L:0T:0P	3 credits
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OE-EC704B	Spread Spectrum Communication	3L-0T-0P	3 credits
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OE-EC704C	Entrepreneurship	2L-0T-0P	2 credits
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Course outcome :

At the end of the course the students will be able to :

CO1. know the contribution of an entrepreneur and role of SSI units in growth and development of socioeconomic condition of our country.

CO2. learn market survey, sales promotions and management of working capital through costing and book keeping.

CO3. know different decision making technique and benefit of personal management system as well as motivational methods of an enterprise.

CO4. learn how to prepare a project report and knowledge about different tax system of an enterprise.

HS-HU701 A/B/C	Principles of Management	2L-0T-0P	2 credits
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EC781	Industrial Training	0L-0T-2P	1 credits
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EC782	Project Stage – I	0L-0T-2P	1 credits
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4th Year: 8th Semester

Theory

PE-EC801A	Mobile Communication and Networks	3L-0T-0P	3 credits
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Course Outcomes:

At the end of the course, students will demonstrate the ability to:

CO 1. Understand the working principles of the mobile communication systems.

CO2. Understand the relation between the user features and underlying technology.

CO3. Analyze mobile communication systems for improved performance.

PE-EC801B	Digital Image and Video Processing	3L-0T-0P	3 credits
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Course Outcomes:

At the end of the course, students will demonstrate the ability to:

CO1. Mathematically represent the various types of images and analyze them.

CO2. Process these images for the enhancement of certain properties or for optimized use of the resources.

CO3. Develop algorithms for image compression and coding

PE-EC702B	Introduction to MEMS	3L:0T:0P	3 credits
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PE-EC702C	Adaptive Signal Processing	3L:0T:0P	3 credits
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Course Outcomes:

At the end of the course, students will demonstrate the ability to:

CO1. Understand the non-linear control and the need and significance of changing the control parameters w.r.t. real-time situation.

CO2. Mathematically represent the 'adaptability requirement'.

CO3. Understand the mathematical treatment for the modeling and design of the signal processing systems.

PE-EC703A	Satellite Communication	3L-0T-0P	3 credits
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Course Outcomes:

At the end of this course students will demonstrate the ability to

CO1. Visualize the architecture of satellite systems as a means of high speed, high range communication system.

CO2. State various aspects related to satellite systems such as orbital equations, sub-systems in a satellite, link budget, modulation and multiple access schemes.

CO3. Solve numerical problems related to orbital motion and design of link budget for the given parameters and conditions.

PE-EC703B	Nano Electronics	3L:0T:0P	3 credits
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PE-EC703C	Wavelet Transforms	3L:0T:0P	3 credits
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Course Outcome:

After successfully completion of this course, students should able to –

CO1.Classify various wavelet transform and explain importance of it.

CO2.Describe Continuous Wavelet Transform (CWT) and Discrete Wavelet Transform (DWT).

CO3.Explain the properties and application of wavelet transform.

CO4.Develop and realize computationally efficient wavelet based algorithms for signal and image processing.

CO5.Explain brief features and strength of transform beyond wavelet.

OE-EC704A	Millimeter Wave Technology	3L:0T:0P	3 credits
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OE-EC704B	Spread Spectrum Communication	3L-0T-0P	3 credits
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OE-EC704C	Entrepreneurship	2L-0T-0P	2 credits
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Course outcome :

At the end of the course the students will be able to :

CO1. know the contribution of an entrepreneur and role of SSI units in growth and development of socioeconomic condition of our country.

CO2. learn market survey, sales promotions and management of working capital through costing and book keeping.

CO3. know different decision making technique and benefit of personal management system as well as motivational methods of an enterprise.

CO4. learn how to prepare a project report and knowledge about different tax system of an enterprise.

HS-HU701 A/B/C	Principles of Management	2L-0T-0P	2 credits
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EC781	Industrial Training	0L-0T-2P	1 credits
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EC782	Project Stage – I	0L-0T-2P	1 credits
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4th Year: 8th Semester

PE-EC801A	Mobile Communication and Networks	0L-0T-2P	1 credits
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Course Outcomes:

At the end of the course, students will demonstrate the ability to:

1. Understand the working principles of the mobile communication systems.
2. Understand the relation between the user features and underlying technology.
3. Analyze mobile communication systems for improved performance.

PE-EC801B	Digital Image and Video Processing	0L-0T-2P	1 credits
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Course Outcomes:

At the end of the course, students will demonstrate the ability to:

1. Mathematically represent the various types of images and analyze them.
2. Process these images for the enhancement of certain properties or for optimized use of the resources.
3. Develop algorithms for image compression and coding

PE-EC801C	CMOS VLSI Design	0L-0T-2P	1 credits
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PE-EC802A	Embedded System	0L-0T-2P	1 credits
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PE-EC802B	High Speed Electronics	0L-0T-2P	1 credits
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PE-EC802C	Speech and Audio Processing	0L-0T-2P	1 credits
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OE-EC803A	Internet of Things(IoT)	0L-0T-2P	1 credits
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Course Outcome :

At the end of the course, the students will be able to :

1. understand the application areas of IOT.
2. realize the revolution of Internet in Mobile Devices, Cloud & Sensor Networks.
3. understand building blocks of Internet of Things and characteristics.

OE-EC803B	Photonics	0L-0T-2P	1 credits
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OE-EC803C	Cyber Security	0L-0T-2P	1 credits
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Course Outcome :

At the end of the course, the students will be able to :

CO 1. understand the concept of cyber security

OE-EC804A	Artificial Intelligence	0L-0T-2P	1 credits
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Course Outcome:

At the end of the course, the students will be able to:

CO1. understand the modern view of AI as the study of agents that receive percepts from the environment and perform actions.

CO2. demonstrate awareness of the major challenges facing AI and the complex of typical problems within the field.

CO3. exhibit strong familiarity with a number of important AI techniques, including in particular search, knowledge representation, planning and constraint management.

CO4. asses critically the techniques presented and to apply them to real world problems.

OE-EC804B	VLSI Signal Processing	0L-0T-2P	1 credits
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OE-EC804C	Organisational Behaviour	0L-0T-2P	1 credits
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Course Outcome :

At the end of the course the students will be able to:

CO1. know about organisational structure, organisational behaviour and personality development.

CO2. learn about motivational techniques and skill required to work in a group and the process of group decision making.

CO3. know various leadership styles and the role of leader in achievement of organisational objective.

CO4. learn about the reasons organizational change and its development.

EC881	Project Stage – II	0L-0T-2P	1 credits
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EC891	Grand Viva	0L-0T-2P	1 credits
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