CHOUKSEY ENGINEERING COLLEGE
DEPARTEMENT OF ELECTRICAL & ELECTRONICS ENGINEERING
B.Tech Fifth Semester

Subject Name- Signal and system	**Subject Code- C025511(025)**

1. Students will understand the role of signals and systems in engineering design.
2. Students will have the understanding of the use of signals and basic system building blocks and their roles in large/complex system design.
3. Students will understand signal representation techniques and signal characteristics.
4. Students will understand the difference and the applications of analog versus discrete signals and the conversion between them.
5. Students will understand the process of sampling and the effects of under-sampling.
6. Students will understand the Fourier, Laplace and z-transforms

Subject Name- Control System	**Subject Code- C025512(025)**

1. Ability to acquire and apply fundamental principles of science and technology. Analyze continuous systems mathematically through the use of Laplace functions and state equations form.
2. Represent any physical system in both transfer functions and state equations form.
3. Apply classical design methods to improve the performance of continuous controlled system.

Subject Name- Electrical power System-I	**Subject Code- C025513(025)**

1. Student will be to calculate the resistance, inductance and capacitance of transmission line.
2. Student will be able to learn how to model the element in power system and able to carry out studies of load flow, transient stability, harmonics and other relevant studies.
3. Student will be able to calculate the voltage regulation of line and analyze the voltage profile of the transmission line.
4. Student will gain an understanding of VAR control using component to improve p.f, location of capacitor, operation of load tap changing can be examine.
5. Student will be able to calculate the sag, tension and mechanical stress of a transmission line.
6. Student will be able to learn different types of conductor and cable with its performance.
7. Student will able to understand the effect of surges in line.

Subject Name- Micro Processor And Micro Controller	**Subject Code- C025514(025)**

1. Understand the basic architecture of Microprocessor 8085 Microcontroller 8051.
2. Understand various instructions and their application in programming.
3. Understand memory organization and mapping.

Professional Elective-I

Subject Name- Linear Integrated Circuits	Subject Code- C025531(025)

1. The students will have a thorough understanding of operational amplifiers with linear integrated circuits.
2. The students will be able to design circuits using operational amplifiers for various applications.

Subject Name- Testing & Commissioning of Electrical Equipments	Subject Code- C025535(025)

1. After studying the subject students will be able to understand.
2. The common problems arising while commissioning of electric equipments.
3. Learn about the routine tests to be performed and maintenance measures for various equipments

Subject Name- Electrical Power System-I lab	Subject Code- C025511(025)

1. Compute the transmission line's capacitance, inductance, and resistance.
2. Study load flow, transient stability, harmonics, and other pertinent topics, and they should be able to model the element in a power system.
3. Compute the line's voltage regulation and examine the transmission line's voltage profile.
4. Learn about VAR control by utilizing components to increase p.f., locate capacitors, and check load tap changing action.
5. Determine a transmission line's sag, tension, and mechanical stress.
6. Learn about various conductor and cable types.
7. Comprehend the outcome of surges in line.

Subject Name- Control System lab	Subject Code- C025521(025)

1. Learn and use basic scientific and technological concepts.
2. Apply state equation form and Laplace functions to mathematically analyze continuous systems.
3. Use state equations and transfer functions to represent any physical system.
4. Use traditional design techniques to enhance the continuous controlled system's performance.

Subject Name- Micro Processor and Micro Controller Lab	Subject Code- C025523(025)

1. Develop a strong foundation in the architecture, programming, and functioning of microprocessors and microcontrollers.
2. Acquire proficiency in assembly language programming and debugging techniques for real-time problem-solving.
3. Design and integrate microprocessor and microcontroller-based systems for various real-world applications, such as automation, control systems, and IoT devices.
4. Analyze and optimize microcontroller-based systems for efficiency, cost-effectiveness, and scalability in industrial and academic projects.