



**SRI VASAVI INSTITUTE OF ENGINEERING AND TECHNOLOGY
DEPARTMENT OF ELECTRICAL & ELECTRONICS ENGINEERING**

... Empowering Mind

COUSE OUTCOMES SUMMARY III-I EEE A.Y:2020-21

CO#	CO STATEMENT	BTL
Power Systems-II(C311)		
C311.1	Calculate parameters of various types of transmission lines during different operating conditions.	Apply
C311.2	Analyze the performance of short and medium transmission lines.	Analyze
C311.3	Analyze the Performance of Long Transmission Lines	Analyze
C311.4	Evaluate reflection & Refraction Coefficients of travelling waves on transmission lines	Apply
C311.5	Analyze various factors related to charged transmission lines.	Analyze
C311.6	Determine sag/tension of transmission lines and performance of line Insulators. Calculate string efficiency	Apply
Renewable Energy Sources & Systems (C312)		
C312.1	Analyze solar radiation data, extraterritorial radiation, radiation on earth's surface	Analyze
C312.2	Design solar thermal collections	Design
C312.3	Design solar photo voltaic systems.	Design
C312.4	Develop maximum power point techniques in solar PV and wind	Design
C312.5	Determine Betz coefficient, tip speed ratio in wind energy conversion systems	Apply
C312.6	Evaluate the efficiency of hydro, tidal, biomass, fuel cell and geothermal systems	Apply
Signals and Systems(C313)		
C313.1	Define signals and systems, classify the signals, Systems and apply different operations on signal	Understand
C313.2	Determine Fourier series coefficient and Fourier transforms for different types of signals.	Apply
C313.3	Apply sampling theorem to convert continues time signals to discrete time signal and reconstruct back.	Apply
C313.4	Understand the Concepts of convolution, correlation, Energy and Power density spectrum and their relationships.	Understand
C313.5	Apply Laplace- Transform technique to analyze the continuous time systems represented by Linear Differential Equations & able to decide the stability of a system as well.	Apply
C313.6	Apply Z- Transform technique to analyze the 'Discrete Time' systems represented by 'Difference Equations'	Apply
Pulse & Digital Circuits(C314)		
C314.1	Design linear wave shaping circuits and derive the expressions for different input signals and apply as Integrator & Differentiator.	Create
C314.2	Design various clipping, clamping circuits and illustrate the clamping circuit theorem.	Create
C314.3	Illustrate how the transistor acts as a switch and understand the switching times of the transistor	Apply
C314.4	Design Multivibrators for various applications such as voltage to frequency converter, voltage to time converter etc	Create
C314.5	Illustrate the operation of Miller time base generator and bootstrap time base generator and UJT saw tooth generator.	Analyze
C314.6	Illustrate logic gates and sampling gates with the help of diodes and transistors	Apply
Power Electronics(C315)		
C315.1	Analyze the behavior of the various power semiconductor devices	Analyze
C315.2	Design AC-DC Single Phase Converters	Create
C315.3	Design AC-DC Three Phase Converters.	Create
C315.4	Design DC-DC Single Phase Converters	Create
C315.5	Design DC-AC Single & Three Phase Converters.	Create
C315.6	Design AC-AC Single & Three Phase Regulators.	Create

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