SUBJECT NO-CH42012, SUBJECT NAME- SYSTEMS ENGINEERING

LTP- 3-0-0,CRD- 3

SYLLABUS :-

Prerequisite-Mathematics III and Mathematics IVPrinciples of system analysis; Creation and assessment of alternatives; Structure of systems; Interactions; Degrees of freedom; System information flow reversal; Digital encoding of system information flow; Selection of design variables and their structural effects; Decomposition of large scale systems through Block Diagram, Signal Flow Graph, and Matrix Algebra; Stability, sensitivity and determinancy of systems; Flow sheet simulation and recycle calculation; Optimization methods for single and multiple variables and techniques of systems optimization. Digital simulation in systems analysis and optimization.Text Book:1.Strategy of Process Engineering by D. F. Rudd and C. C. Watson2.Process analysis by Statistical Methods by D. M. Himmelblau3.Decomposition of large scale problems by D. M. Himmelblau.