SUBJECT NO-ME60353, SUBJECT NAME- KNOWLEDGE BASED SYSTEMS IN ENGINEERING
LTP- 4-0-0,CRD- 4

SYLLABUS :-

Introduction to expert systems – Definition, Need for expert systems, Methods of developing expert system – offline training/learning & on-line training/learning

Tools for developing expert systems – Hard Computing vs. Soft Computing, Fuzzy Set Theory, Fuzzy Logic Controllers (FLC), Neural Network (NN) Controllers – back propagation network, SOM, radial basis function networks, recurrent neural networks etc., Learning/optimisation tools – traditional (direct search and gradient based) and non-traditional (genetic algorithms (GAs), simulated annealing etc.) techniques. Combined techniques of soft computing – GA-FLC, GA-NN, NN-FLC, GA-FLC-NN

Some Applications