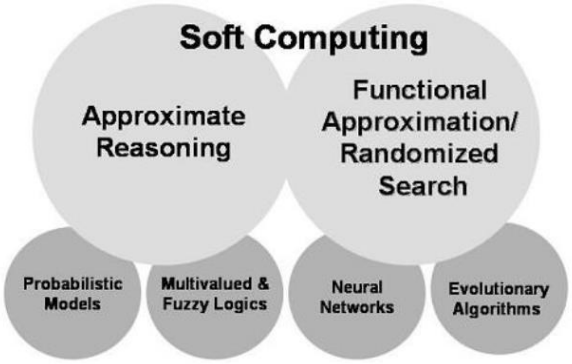
Soft Comuting (3 Credits)



Weeks	Sessions	Subjects
1	1st , 2nd	Introduction to Soft Computing
2	3rd , 4th	Search Strategies, Search Optimization
3	5th, 6th	Genetic Algorithm (GA)
4	7th, 8th	Artificial Neural Networks (ANN)
5	9th, 10th	Fuzzy Logic- An Introduction
6	11th, 12th	Fuzzy sets and fuzzy techniques
7	13th, 14th	Fuzzification and De-fuzzification methods
8	15th, 16th	Evolutionary Computing
9	17th, 18th	Applications of soft computing and statistical methods in water resources management
10	19th, 20th	Application of Artificial Neural Network in Environmental water quality assessment
11	21th, 22th	Soft computing tools in rainfall-runoff modeling
12	23th, 24th	Neuro-fuzzy modelling and forecasting in water resources
13	25th, 26th	Application of Soft Computing Methods in predicting evapotranspiration
14	27th, 28th	Student Project Presentation
15	29th, 30th	Student Project Presentation
16	31th, 32th	Student Project Presentation

References:

Soft computing in water resources engineering, artificial neural networks, fuzzy logic and genetic algorithms. G. Tayfur, wit press, 2012

Lecture notice. Introduction to soft computing, Dmitry Bystrov