

10 HYBRID MODELS (STATISTICAL AND FUZZY) IN HYDRAULIC ENGINEERING

<u>Teachers:</u>	Spiliotis M.	Assoc. Professor
	Papadopoulos B.	Emeritus Professor
	Papadopoulos C.	PhD in Civil Engineering
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The course covers the following topics:

1. Fuzzy logic and sets
2. A-sections
3. Compound incision and complement
4. Unclear numbers and extension of the rule
5. Comparison of fuzzy logic and statistics-fuzzy estimators
6. Max-min composition, vague logic
7. Intelligent systems with fuzzy logic
8. Fuzzy optimization
9. Fuzzy Multicriterion Analysis
10. Applications in Hydrology
11. Applications in the EDP
12. Applications in the EDP
13. Applications in the EDP

After successful completion of the course the student is able to:

- He distinguishes classical logic from fuzzy logic
- Elementary mathematical documentation of fuzzy logic
- To distinguish in which cases the ambiguous approach contributes to the problem and in which cases the classical approach or a hybrid approach is preferred
- Be able to apply intelligent systems to hydrology
- Be able to apply unclear systems to EDP decision-making

Teaching Mode: 3 Hours Suggestion-Workshop / Week