INFORMATICS
ENGINEERING

MASTER OF SCIENCE

Department of Electrical and Computer Engineering (ECE)

School of Engineering

Hellenic Mediterranean University (HMU)

Course title & identity

- Title: **Computational Intelligence**
- Objectives
  - Introducing concepts, models, algorithms, and tools for development of intelligent systems:
    - Genetic Algorithms
    - Swarm intelligence
    - Neural networks
    - Fuzzy systems.
- Focus
  - Intelligent Computer Systems
- Members of stuff
  - Giorgoa Papadourakis (main)
  - Kostas Karambidis (secondary)

Computational Intelligence
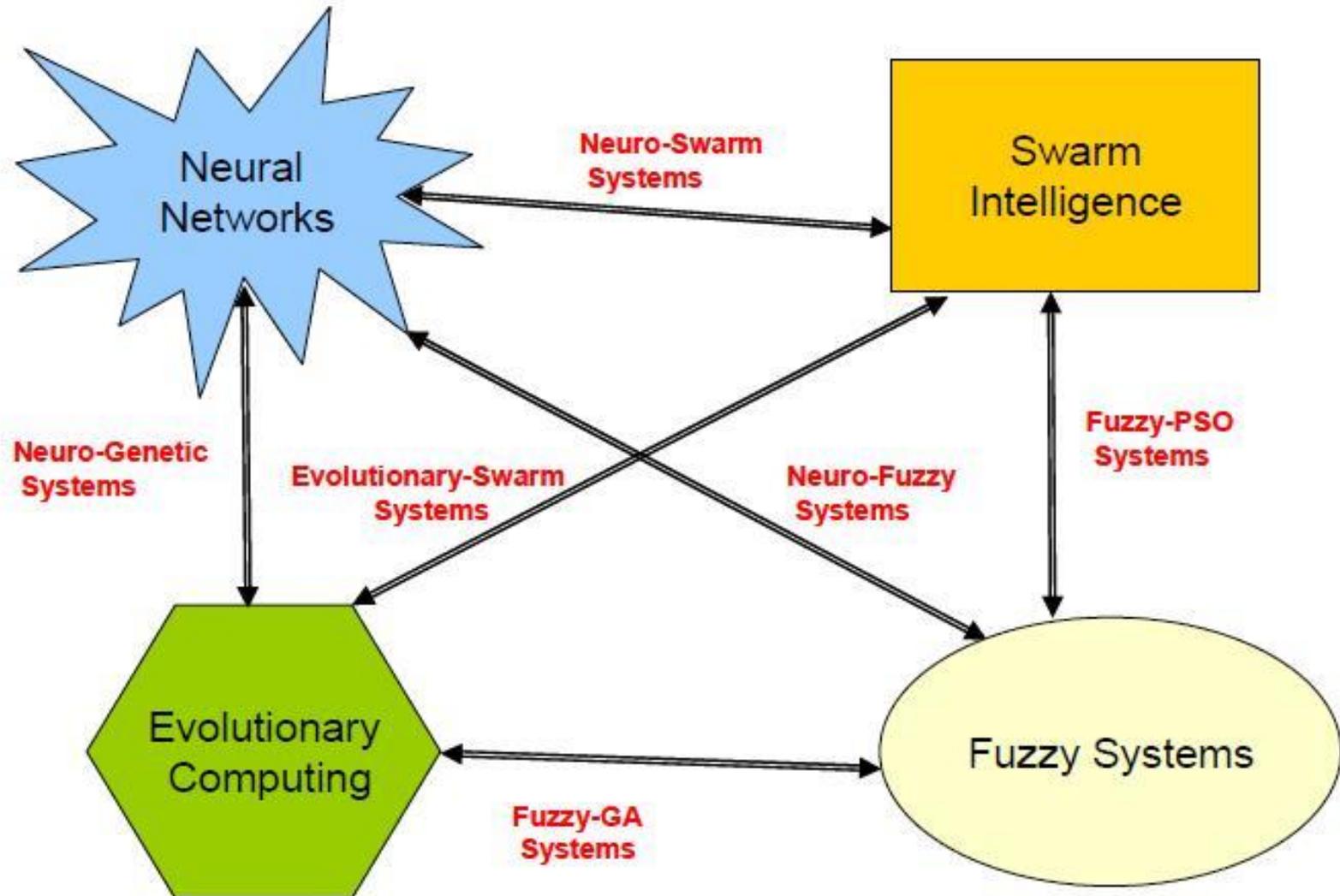
Approach

- Three (3) hours lectures: (YES)
- Laboratory classes: (NO)
- Assignments   15%
  - 3 (every 3 weeks)
- Project work: (YES)   60%
  - 3 (Gas, Neural, Fuzzy)
- Med-term assessment (NO)
- Final assessment (YES)   25%

Specific details

- Briefly introduce lecturing strategy
- Lectures, supported by transparencies using PowerPoint.
- Describe assignments / projects
  - Assignments will include programming (any language C, C++, Java, or MATLAB)
  - Project (2 people) 1 of 2 types
    - 1. Application Project (based on available freeware)
    - 2. Software Development
    - All projects will involve:
      - Classroom presentations of project proposals:
      - Classroom presentations of project results:
      - Project reports
- Detail any R&D project opportunities / relevance
  - Intelligent Systems Laboratory Projects

Applicant profile

- Pre-requisites (knowledge of programming language or MATLAB)
- Skills - Interest on Intelligent Computer Systems
- Expected weekly workload: 3-4 hours