

# Global Learning Semesters

## Course Syllabus

Course: CENG-420 Neural Networks

Department: Engineering

Host Institution: Intercollege, Nicosia, Cyprus



Course Summary		
Course Code	Course Title	Recommended Credit Hours
CENG-420	Neural Networks	3
Semester Offered	Contact Hours	Prerequisites
Spring	42	MATH-191 Calculus & Analytical Geometry II, COMP-255 C++ Language Programming. General knowledge of differential and integral calculus; knowledge of C++ language programming.
Department	Level of Course	Language of Instruction
Engineering	Upper Division	English

### Course Description

An introduction to the concepts behind the connectionist approach to problem solving. A broad variety of neural networks will be introduced together with their architectures, training algorithms and applications. Dealt with in particular are the problems associated with pattern mapping and pattern classification.

### Instructor

Mr. George Tsolaki

### Course Aims and Objectives

To introduce students the concepts and techniques of neural networks, applications and the basics of neural network usage.

### Teaching Methods

The course is delivered through a mixture of lectures, lab presentations, lab tutorials and practical exercises and assignments.

### Course Teaching Hours

The course is 42 hours (18 hours lectures/presentations + 24 hours laboratory work) long and is delivered in 14 weeks (3 hours/week).

### Evaluation and Grading

Homework: 20%  
Mid-Term Exam: 30%

Final Exam: 50%

## Readings and Resources

### Required Textbook

Dayhoff J., Neural Network Architectures, Van Nostrand Reinhold, 1990

### Recommended Readings

- I. Aleksander and H. Morton, Introduction to Neural Computing, Chapman and Hall, 1990
- P. D. Wasserman, Neural Computing: Theory and Practice, Van Nostrand Reinhold, 1989