

# ARTIFICIAL INTELLIGENCE AND MACHINE LEARNING: Learn how to transform your business through advanced technology

FOR BANKING, INSURANCE, RETAIL, SHIPPING AND TELECOM SECTORS

30 June – 2 July, 2021

CYENS Centre of Excellence, Dimarchias Square 23, Nicosia

## OVERVIEW

The content of this course combines both technical and business leadership, built on robust and deep scientific technical understanding provided by the CYENS Centre of Excellence, and the in-depth knowledge of business needs provided by PwC.

This course draws on the cutting edge academic research and the latest advancements in AI/ ML to inform business decisions, improve the efficiency and analytic capabilities, and help corporations define new strategies and processes.

## KEY TAKEAWAYS

### FOR EXECUTIVES AND TEAM LEADERS – THIS WILL BE COVERED IN DAY 1

Learn how to build AI capabilities for your organization (banking, insurance, retail, shipping, telecom) and gain:

- A strategic understanding of the potential and enhanced capabilities of AI/ML
- The practical aspects of incorporating AI into business processes
- How to align your AI/ML strategy with your business strategy

### FOR DATA ANALYSTS AND SOFTWARE DEVELOPERS\* – THIS WILL BE COVERED IN DAYS 2 AND 3

- How to set up a ML project
- Work on a real-life project and gain hands-on experience

\*An understanding of engineering, science, mathematics or statistics will be required to understand the theory and the techniques used. This element of the course will have greatest benefit to data scientists, engineers, or analysts with some experience in programming.

## TUTORS



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## COURSE PROGRAMME

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### DAY 1

8:15am - 14:00pm

#### Participants:

Executives, Team Leaders

#### Introduction to Artificial Intelligence

- Philosophy and history
- Applications
- AI use cases

#### Introduction to ML (functional)

- Types of ML
- ML methods
- Applications

#### Business Value of AI

- Linking AI with your business strategy
- Success Stories from various industries

#### Operationalizing AI in an organisation

- From strategy to insight generation and automation
- Example Operating Models
  - Teams and skills needed
  - Investment needs
  - Organizational culture for ML

### DAY 2

8:15am - 15:45pm

#### Participants:

Data Analysts, Software Developers

#### Introduction to AI and ML

- Artificial Intelligence
- Machine Learning
- Setting up an ML project

#### Data preparation

- Data collection
- Data preprocessing
- Data transformation

#### Model development

- Regression
- Classification
- Neural networks
- Anomaly detection
- Clustering
- Model evaluation
- Improving performance
- Deep learning

### DAY 3

8:15am - 12:15pm

#### Participants:

Data Analysts, Software Developers

#### Hands-on Examples

- Data Preparation
- Model Development
- Model Deployment

#### Use Cases

#### Project Activity

- Participants will be asked to work on an industry specific project which involves the development of a ML solution/task using specific data (to be provided to the participants) and specific tools which they will need to use to arrive to a solution (Over a 4-week period).
- Problem Definition and Data Discovery Session and
  - Second level support (two 1-hour online meetings)
  - Presentation

## COURSE HIGHLIGHTS

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- Latest research translated into applicable methods
- Real world applications
- Use cases and real-life project example
- Interactive delivery

## COURSE FEES

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- **€450** (plus VAT) for companies that will join with two participants (1 Team leader attending day 1 and 1 Technical staff attending on days 2 & 3).
  - Additional person from the same company attending day 1 – **€150**
  - Additional person from the same company attending days 2 & 3 – **€250**
- **€400** (plus VAT) for individuals wishing to attend both parts of the course

**Course Contact:** 22 747575, [innovation@cyens.org.cy](mailto:innovation@cyens.org.cy)

## ORGANISED BY

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