

Syllabus for the course « Artificial Intelligence Engineering »

Requirements

We are looking for a teacher (or a team of teachers) that could teach some of the outlines listed below in “Possible outlines of the course”. Teachers will be able to define their teaching program as they wish provided they follow some of the required outlines. The course should focus on how machine learning can be deployed and maintained in a production environment. It would be relevant to introduce students to software tools like github, docker or kubernetes.

Course schedule

- Fall 2024
- 7 weeks from December 2024 until February 2025

Short description

- Lecture (2 hours per week) and lab (1h30 per week) in English
- About 30 students from Polytech Nice Sophia engineering school and EIT Digital Master in Data Science

Possible outlines of the course

- Introduction to MLOps, introduction to ETL and ELT, data lifecycle
- Data lake, data fabric, data mesh
- Data pipeline: Kubeflow, AutoML, stream processing
- Governance in data and ML: data catalog, MLflow, data security, model registry, feature store
- CI/CD (Continuous Integration/Continuous Delivery): automated CI/CD pipelines with Git, Kubernetes, Jenkins
- ML Monitoring: metrics, drift, outlier
- Global monitoring: lineage tracing, infrastructure

Contact

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