



# **FMF3037 Literature course on Artificial Intelligence for CPS Operation Monitoring and Anomaly Detection 7.5 credits**

**Litteraturkurs i Artificiell Intelligens**

This is a translation of the Swedish, legally binding, course syllabus.

## **Establishment**

Course syllabus for FMF3037 valid from Autumn 2021

## **Grading scale**

P, F

## **Education cycle**

Third cycle

## **Specific prerequisites**

Admitted to PhD studies

## **Language of instruction**

The language of instruction is specified in the course offering information in the course catalogue.

## Intended learning outcomes

After completed course, students are expected to present a study of the area of AI based operation condition monitoring and anomaly detection for cyber-physical systems including the following learning goals and subjects:

- challenges and trends within the area of dependable intelligent systems
- current research questions and AI methods for effective inference and classification of dynamic processes.

The scientific area is to be studied both according to state of the art and from practical implementations.

## Course contents

The course includes a workshop series with topics spanning from scientific theories to algorithmic solutions, and a set of case studies for learning and analysis.

## Examination

- INL1 - Assignment, 7.5 credits, grading scale: P, F

Based on recommendation from KTH's coordinator for disabilities, the examiner will decide how to adapt an examination for students with documented disability.

The examiner may apply another examination format when re-examining individual students.

If the course is discontinued, students may request to be examined during the following two academic years.

## Ethical approach

- All members of a group are responsible for the group's work.
- In any assessment, every student shall honestly disclose any help received and sources used.
- In an oral assessment, every student shall be able to present and answer questions about the entire assignment and solution.