

# AIT503 Artificial Intelligence 101

**Level:** 5

**Credit Units:** 5 Credit Units

**Language:** ENGLISH

**Presentation Pattern:** EVERY JULY

## Synopsis:

AIoT is the combination of artificial intelligence (AI) and internet of things (IoT). IoT will generate large volume of raw data. However, this data without the analytics or inference by systems is of no value. In current day, machine learning algorithms dominate the field of AI. This course gives an overview of the fundamental machine learning algorithms and introduces students to the advanced topics such as artificial neural networks (ANN), convolutional neural network (CNN), recurrent neural networks (RNN) and reinforcement learning.

## Topics:

- Introduction to Artificial Intelligence
- Supervised Learning
- Unsupervised Learning
- Datasets
- Reinforcement Learning
- Deep Learning
- Artificial Neural Networks
- Convolutional Neural Networks
- Recurrent Neural Networks
- AI and Digital Twin
- Big Data Loop
- Deployment of models

## Learning Outcome:

- Assess the algorithms as supervised or unsupervised or hybrid types.
- Inspect the datasets and process them for training algorithms.
- Choose appropriate parameters for the algorithm to solve a given problem.
- Rate the performance of machine learning algorithms.
- Select the appropriate learning algorithm for the given problem.
- Set up machine learning algorithm and solve the given problem.

## Assessment Strategies - Regular Semester (Evening Class):

Components	Description	Weightage Allocation (%)
Overall Continuous Assessment	PARTICIPATION 1	10
	GROUP BASED ASSIGNMENT 1	40
Overall Examinable Components	ECA	50

<b>Total</b>	<b>100</b>
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\*The information listed is subject to review and change.