

**Maulana Abul Kalam Azad University of Technology, West Bengal**  
*(Formerly West Bengal University of Technology)*  
**Syllabus for B. Tech in CSE (Artificial Intelligence and Machine Learning)**  
(Applicable from the academic session 2020-2021)

**SEMESTER – VI**

**Application of machine learning in industries**

**Code: PCC- AIML601**

**Contacts: 2L**

Name of the Course:	Application of machine learning in industries	
Course Code: PCC- AIML601	Semester: VI	
Duration: 6 months	Maximum Marks:100	
<b>Teaching Scheme</b>	<b>Examination Scheme</b>	
Theory:2 hrs./week	Mid Semester exam: 15	
Tutorial: NIL	Assignment and Quiz: 10 marks	
	Attendance : 5 marks	
Practical: NIL	End Semester Exam :70 Marks	
Credit Points:	2	

- Introduction to linear regression (and multivariate linear regression)
- Logistic Regression and regularization
- Practical aspects of implementation
- Decision trees and pruning, implementation of decision trees
- Support vector machines and making them work in practice
- Boosting - implementing different boosting methods with decision trees.
- Using the algorithms for several tasks - how to set up the problem, debug, select features and develop the learning algorithm.
- Unsupervised learning - k-means, PCA, hierarchical clustering.
  - Implementing the clustering algorithms
  - Parallelizing the learning algorithms
  - Applications
  - Choosing from multiple algorithms - What will work?