

Machine Learning and Big Data

Time Allotted (hours)	Outline	Required Background
2	Introduction to Machine Learning <ul style="list-style-type: none"> • Types of learning • KNN • Curse of Dimensionality • Introduction to GCP 	Intermediate python programming skills and a strong statistical background are required for this course.
2	<ul style="list-style-type: none"> • Decision Trees • Random forest • Gradient Boosting • Model Validation 	
2	<ul style="list-style-type: none"> • Support Vector Machines 	
2	<ul style="list-style-type: none"> • MLP • Introduction to APIs 	
2	<ul style="list-style-type: none"> • Kmeans • Hierarchical Clustering 	
2	<ul style="list-style-type: none"> • Text processing • Classification of Text 	
2	<ul style="list-style-type: none"> • Embedding techniques 	
2	<ul style="list-style-type: none"> • Deep learning with RNN and LSTM 	
4	<ul style="list-style-type: none"> • SPARK 	
2	<ul style="list-style-type: none"> • BIG query • Database management in google Cloud 	