

# summerschool UTRECHT

## Data Science: Introduction to Machine learning and Data Analysis (S31) 20 - 24 July 2026

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Day	Time	Activity	Description	Location
Monday	09:00 - 12:00	Lecture + lab	Course Introduction: Data Science Workflow, Course Overview and Data Visualization	Utrecht Science Park Exact location to be announced
	12:00 - 13:00	Lunch		
	13:15 - 17:00	Lecture + lab	Supervised Learning: Regression and Classification, Bias-Variance, Model Selection, and Cross-Validation	
Tuesday	09:00 - 12:00	Lecture + lab	Regression: Linear Models (Simple, Polynomial & Spline) and Regression Trees	
	12:00 - 13:00	Lunch		
	13:15 - 17:00	Lecture + lab	Regression: Feature Selection, Regularization (Ridge & Lasso), and PCA	
Wednesday	09:00 - 12:00	Lecture + lab	Classification: Logistic Regression, and Discriminant Analysis	
	12:00 - 13:00	Lunch		
	13:15 - 17:00	Lecture + lab	Classification: Trees, Ensembles (Random Forests & Boosting), and Support Vector Machines	
Thursday	09:00 - 12:00	Lecture + lab	Unsupervised learning: PCA	
	12:00 - 13:00	Lunch		
	13:15 - 17:00	Lecture + lab	Unsupervised learning: Clustering	
Friday	09:00 - 12:00	Lecture + lab	Dealing with missing data in machine learning problems	
	12:00 - 13:00	Lunch		
	13:15 - 17:00	Presentations	Participant Data Discussions, Presentations and Feedback Session	

For information about the Social Programme,  
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