



Name of the Activity: An ai waste classification model as an example of waste management

	Outcomes	Teaching and Learning activities	Assessment
	Understand the importance of waste classification for sustainability	Presentation on the role of AI in waste management, including discussions and videos on sustainable waste practices	Group discussions evaluating students' understanding of the concepts
Blended Learning Format - Face-to-face	Identify key AI technologies used in waste classification (e.g., machine learning, image recognition)	Demonstration of different AI tools and their functions, hands-on activity with mock technology	Practical assessment where students identify and describe AI technologies in waste classification
	Analyze the benefits of AI technologies for waste management and resource optimization	Group work: Students evaluate the impact of AI technologies in improving waste sorting and recycling efficiency	Written report analyzing how AI reduces resource wastage
	Design a simple AI-based waste classification system	Students brainstorm and plan a system using sensors and data analytics to classify waste effectively	Group project to develop a mock setup and present their AI waste classification solution
	Evaluate the economic and environmental impact of AI in waste management	Research and group discussion on the long-term impacts of AI technologies on waste management economics and environmental health	Presentation on findings, followed by a class debate on the pros and cons
	Understand the importance of waste classification for sustainability	Presentation on the role of AI in waste management, including discussions and videos on sustainable waste practices	Group discussions evaluating students' understanding of the concepts



Interactive Learning Tasks, Gamification/ Nudging / Online	hint to the importance of dealing with climate change by using waste recycling	H5P-task – Multiple Choice	Assessment via interactive tasks
	learn about machine learning basics	H5P-task – drag the words	Assessment via interactive tasks
	be aware of different affects of different waste materials	H5P-task – single choice	Assessment via interactive task
	Be aware of the importance of sustainable waste management	H5P-task – true/false	Assessment via interactive task