

MACHINE LEARNING FOR AUDIO & ACOUSTIC ENGINEERING

 **Erasmus+ Blended Intensive Programme (BIP) 2026**

 **Bridge Signal Processing and Artificial Intelligence** in this intensive international programme. Gain hands-on experience in **Python-based audio analysis and machine learning**, and tackle real-world audio challenges alongside students from leading European universities.

KEY DATES & CREDITS

-  **Application deadline:** 15 May, 2026
-  **Virtual Phase:** May / June 2026 (live sessions & virtual labs)
-  **Physical Phase:** June 15–19, 2026
-  **Location:** Linares School of Engineering, Universidad de Jaén (Spain)
-  **ECTS:** 3 credits (2 online + 1 in-person)

WHAT YOU WILL LEARN

-  **Audio Analysis & Pre-processing:** STFT, Mel spectrograms, MFCCs
-  **Machine Learning for Audio:** Classical ML (SVMs, k-NN) and Deep Learning (CNNs, RNNs, Physics-Informed models)
-  **Performance Evaluation:** Data augmentation and model validation
-  **Acoustic and music Applications:** Sound field analysis, Emotion detection, Pitch detection, Source separation

HANDS-ON PROJECTS (IN SPAIN)

-  Work in **international teams** on real MIR and audio challenges
-  Apply ML models to real datasets using state-of-the-art tools
-  Learn through **workshops, mentoring, and collaborative projects**
-  Receive guidance on research-oriented work from expert lecturers

BEYOND THE CLASSROOM

-  Olive oil press visit & tasting
-  Raphael Museum visit in Linares
-  Networking events and campus tours at Universidad de Jaén

TARGET PARTICIPANTS

-  Bachelor's, Master's & PhD students in Engineering, Computer Science, AI, Acoustics, or Music Technology.
-  Partner HEIs: Universidad de Jaén (Spain), Tampere University (Finland), Universidade de Coimbra (Portugal), Politecnico di Milano (Italy)

Interested?

Contact your **International Relations Office** to apply and join this Erasmus+ BIP experience.