

COMPOSITION	CYCLE: 2 <sup>^</sup>	YEAR I
COURSE CODE: COME/05	COMPULSORY	CREDITS: 6 PER YEAR
<b>LG</b>	ATTENDANCE; IN PERSON	LANGUAGE: ITALIAN/ENGLISH

UNIT NAME  
**Audio Sampling, Synthesis and Digital Processing**

TEACHERS  
to be recruited

PREREQUISITES  
Admission to the Masters course.

COURSE CONTENTS  
The course is intended to all intents and purposes as an "Introduction to Music Production" course, obviously made by computer means.  
The theoretical and practical knowledge for the use of DAWs (Digital Audio Workstation), software used for music production.  
The program includes: elements of acoustics, introduction to synthesis techniques, use of music production software, sound processing, editing techniques, mixing and audio mastering.

- Elements of acoustics: waveform, harmonic spectrum, critical band and masking
- Properties of sound: Propagation, amplitude, frequency, timbreDisplay of sound
- Synthesis techniques: Sine Wave Generator, Subtractive Synthesis, Sampling, FM
- Digital sound: Sample rate, Quantization, Conversion AD DA, Audio Files.
- Software: DAW, Connections, Synth, Effects and Virtual Processors, Channel Strip, MIDI Protocol, MIDI and Audio Editing
- Microphones: Line and micro levels
- Historical notes and listening, practical exercises

ASSESSMENT CRITERIA  
Examination modalities will be communicated by the teacher