

Lesson	Lesson Title	Video Lecture (h)	Independent Study (h)	Total Hours	Speaker / Lecturer	Scheduled Dates
1	Introduction to Generative AI	1	2	3	Francesco Pupo	19-feb
2	Intelligent Agent Architectures and Multi-Agent Interaction	1	2	3	Francesco Pupo	20-feb
3	Reinforcement Learning	1	2	3	Francesco Pupo	23-feb
1	Generative Architectures and Transformers	1	2	3	Francesco Pupo	24-feb
2	Prompt Engineering: Foundations and Advanced Techniques	1	2	3	Caterina Perri	25-feb
3	Computer Vision and Diffusion Models	1	2	3	Francesco Pupo	26-feb
1	Introduction to Signals and the Electroacoustic Chain	1	2		Riccardo Sarti	09-mar
2	Sampling and Quantization				Riccardo Sarti	10-mar
3	Frequency Analysis and Domain Transforms					11-mar
4	STFT, Windowing, and Audio Coding					12-mar
5	Digital Filters					13-mar
6	First and Second-Order Filters					16-mar
7	Advanced Filters					17-mar
8	Audio Effects and Dynamics Processors					18-mar
9	Spectral and Modulation Synthesis					19-mar
10	Physical Modeling Synthesis and the Karplus–Strong Algorithm					20-mar
1	Computer-Aided Composition and Musical AI	1	2	3		21-mar
2	AI as a Support for the Compositional Process	1	2	3		23-mar
3	Virtual Orchestration	1	2	3		24-mar
4	Frame-by-Frame Method for Music and Images	1	2	3		25-mar
5	Audio-Video Workflow in Professional DAWs	1	2	3		26-mar
6	"TuttiBot" - the grading tool	1	1	2	Rashmi Chawla	27-mar
7	Human-Robot Interaction (HRI)	1	1	2	Rashmi Chawla	28-mar
1	System Concept and Design	2	0	2	upo - Sarti - Mungiar	07-apr
2	AI Core Development and Audio Integration	3	0	3	upo - Sarti - Mungiar	9/04- 10/04
3	Refinement and Final Rendering	1	0	1	upo - Sarti - Mungiar	11-apr
4	Presentation and Review	1	0	1	upo - Sarti - Mungiar	18-apr