

# SOUND ENGINEERING

## UNIVERSITY COURSE

2024 - 2025



**UNIMORE**  
UNIVERSITÀ DEGLI STUDI DI  
MODENA E REGGIO EMILIA

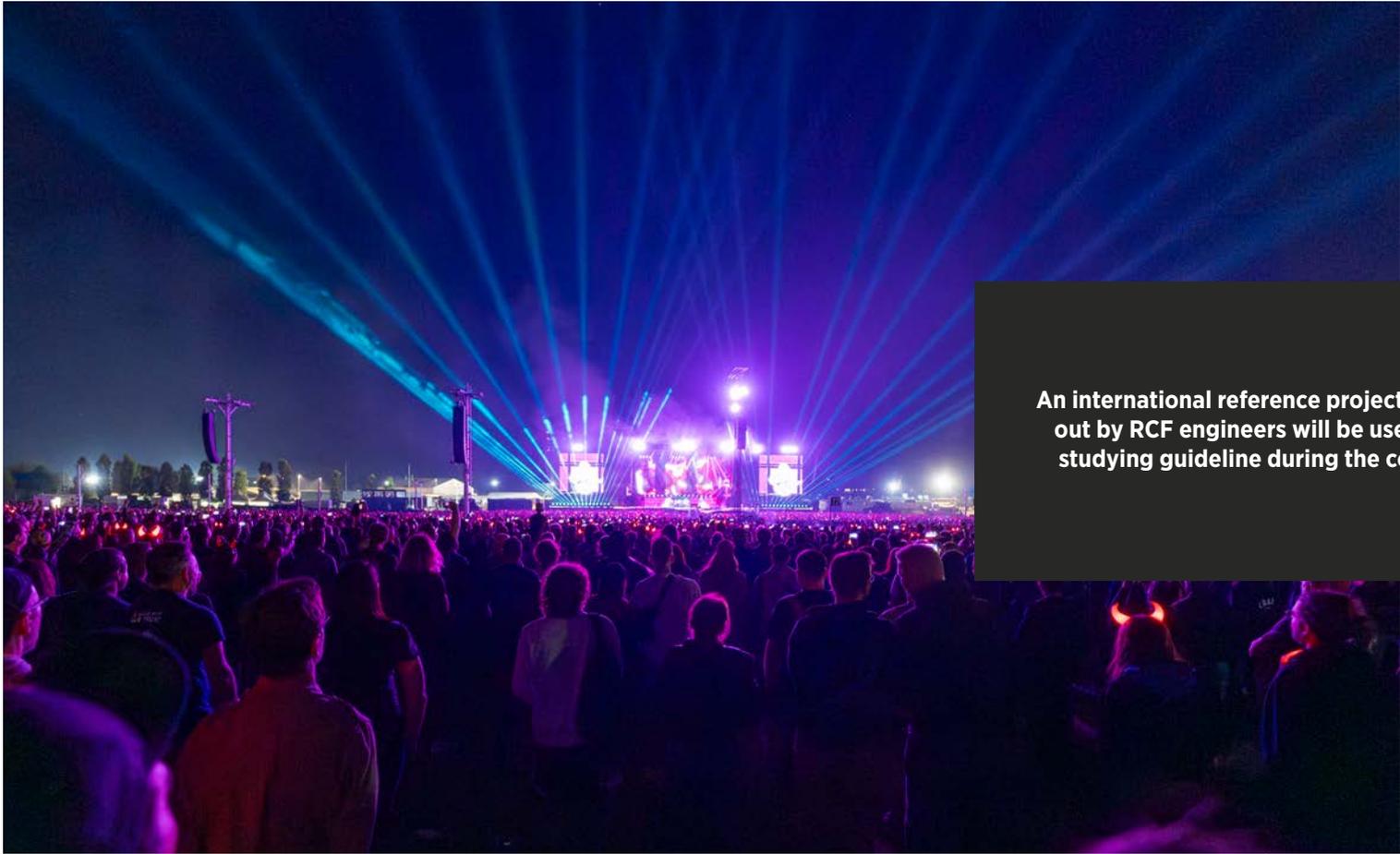


# EDUCATIONAL OBJECTIVES

The objective of the course is to provide fundamental theoretical knowledge for the comprehension, analysis and design of modern sound diffusion systems.

Such knowledge ranges from the fundamental principles of acoustics, to transducers and speakers, electronic amplifying systems and digital sound filtering, and also soundproofing systems.

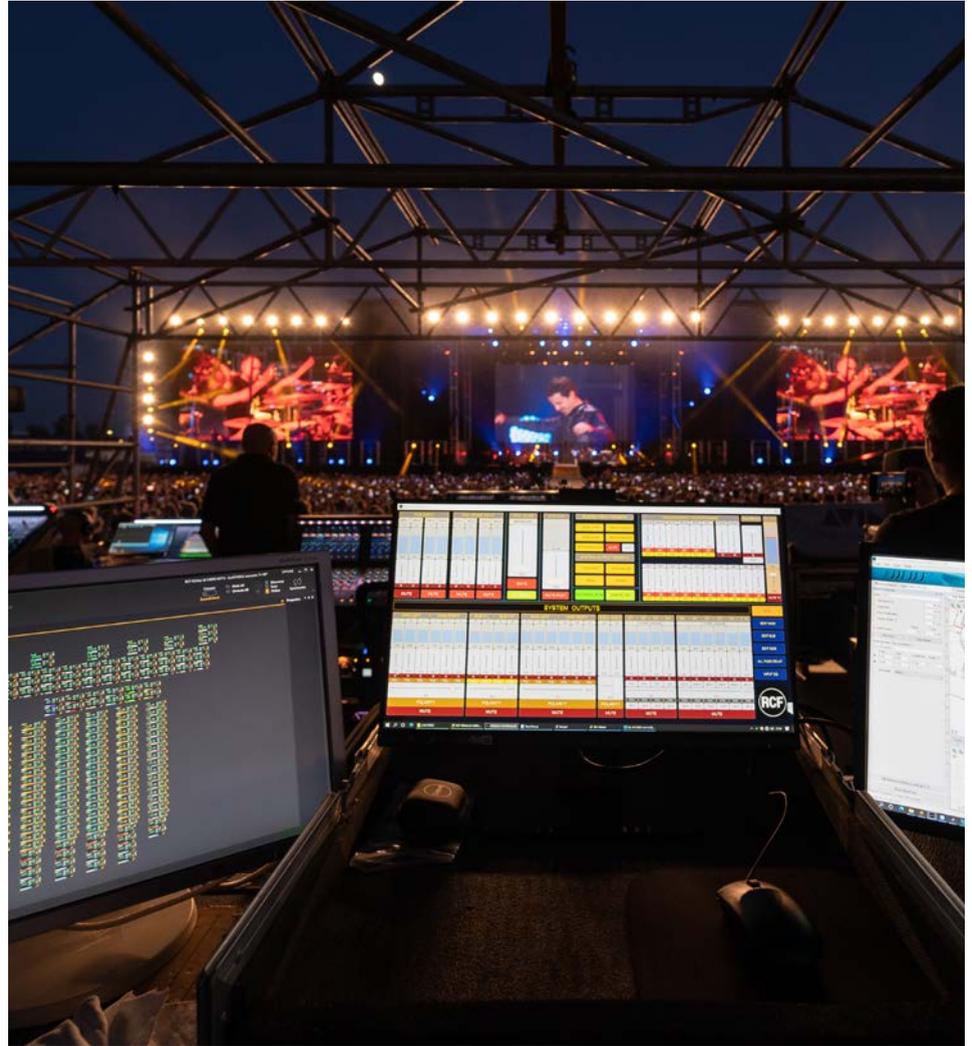




**An international reference project carried out by RCF engineers will be used as a studying guideline during the course.**

# MAIN TOPICS

1. Acoustics in open air and indoor spaces including design and simulation methods.
2. Transducers and speaker systems including clusters, arrays and point source configurations.
3. Electronics including circuit analysis, filters, amplifiers and DSP.
4. Sound system design including practical experience in measurements, listening tests and tuning.





This University course features technical content directly informed by the extensive expertise of RCF laboratories. With a legacy dating back to 1949, RCF has been at the forefront of designing and manufacturing cutting-edge audio systems used in a wide range of professional environments, including theaters, concerts, airports, cruise ships, shopping malls, cinemas, and stadiums.

# ORGANIZATION

## Course director:

Prof. Emilio Lorenzani

*Department of Science and Methods for Engineering, University of Modena and Reggio Emilia*

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[www.soundengineering.unimore.it](http://www.soundengineering.unimore.it)

## Date, time and location:

E-learning lessons will be available from November 3rd, 2024.

The course will be in e-learning mode and will require **one week attendance from March 24th to March 28th**, 2025 at the RCF Audio Academy and Department of Science and Methods of Engineering in Reggio Emilia, Italy.

**Completion date with written examination: March 28th, 2025.**



# GENERAL INFORMATION

**Contents:** The course is comprised of four modules: Acoustics, Electroacoustics, Electronics, and Sound Systems. The week spent at the RCF Audio Academy will include practical activities. The complete program is available on [www.soundengineering.unimore.it](http://www.soundengineering.unimore.it)

**Language:** The course will be held in English.

**Number of participants:** Max. 40 people, selected by the Course committee on the basis of CV and information provided

**Requirements:** Degree or High-School Diploma with experience in the sector, plus good English knowledge

**Costs:** Participation fee will be covered by sponsorship of RCF SpA.

**Enrolment fee to Unimore:** 850,00 Euro (including application taxes).



### **Professionals**

Each participant should contact his or her association of professional engineers for the recognition of learning credits in the framework of continuing professional development (CPD).



### **Recognition of ECTS**

Students and professionals gain 15 learning credits (called “CFU” in Italy and “ECTS” in Europe) for the Sound Engineering university course, after passed the final test.



### **Foreign students**

The course can be recognized in their home universities with a 1 CFU = 1 ECTS proportion.



### **Certificate of attendance**

Each student and professional will obtain a certificate of participation.

# CANDIDATES' APPLICATIONS

The submission deadline for applications is the 18th of October 2024 at 1.00 p.m. (CET)

At the end of the selection process, the Commission will draw up the list of qualified

candidates, based on the total score awarded to each of them. Within a maximum of ten days, candidates admitted according to the list of qualifying students, shall enroll in the Post Graduate Course. The submission of applications and final enrollments have to be done using University website: [www.esse3.unimore.it](http://www.esse3.unimore.it).

For any assistance send an email to [soundengineering@unimore.it](mailto:soundengineering@unimore.it).



# HOW TO REACH THE RCF AUDIO ACADEMY



From the A1 highway Reggio Emilia's exit. It will take about 5 minutes.



The Reggio Emilia Railway Station is 6.4 km away from the RCF Audio Academy. It will take about 10 minutes by taxi.



The Reggio Emilia High Speed Railway Station is 1.5 km away from RCF Audio Academy. It will take about 2 minutes by taxi.



Airport near to Reggio Emilia are **Guglielmo Marconi Airport, Bologna** (~70 Km)  
Valerio Catullo Airport, Verona (~120 Km)  
Aeroporto Linate, Milano (~150 Km)  
Aeroporto Malpensa, Milano ( 200 Km)



# ACCOMODATION

- **Mercure Astoria**  
Via Leopoldo Nobili 2, 42124 Reggio Emilia  
[prenotazioni@mercurehotelastoria.com](mailto:prenotazioni@mercurehotelastoria.com)
- **Remilia**  
Via Danubio 7, 42124 Reggio Emilia  
[ramadaemilia@fabbrihotels.com](mailto:ramadaemilia@fabbrihotels.com)
- **Holiday Inn Express**  
Via Meuccio Ruini 7, 42124 Reggio Emilia  
[info@reggioemilia.hiexpress.it](mailto:info@reggioemilia.hiexpress.it)
- **Citystyle Hotel Reggio Emilia**  
Viale Regina Margherita 30, 42124 Reggio Emilia  
[booking@cshre.it](mailto:booking@cshre.it)

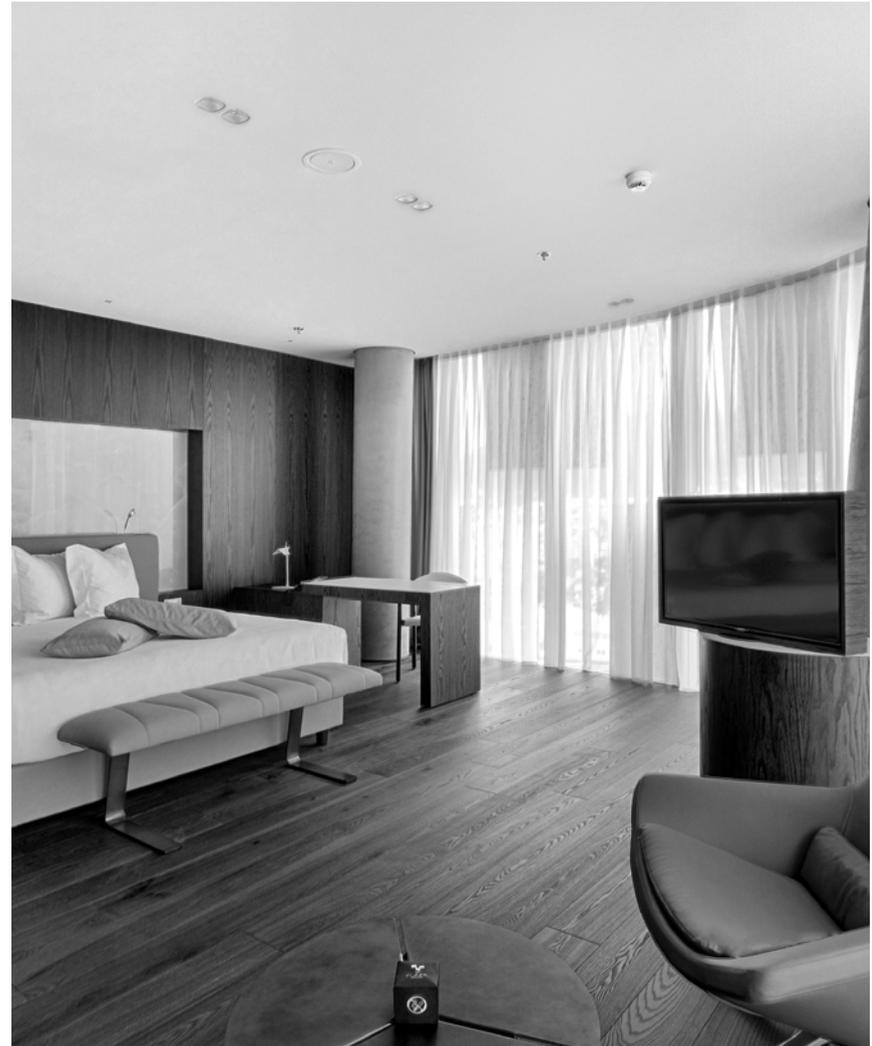
*\*Reservations can be made directly with the hotel*

## How to go from the hotel to RCF Audio Academy

RCF Audio Academy can be reached by:

**Public trasport:** [setaweb.it/re/linee#re1](https://setaweb.it/re/linee#re1)

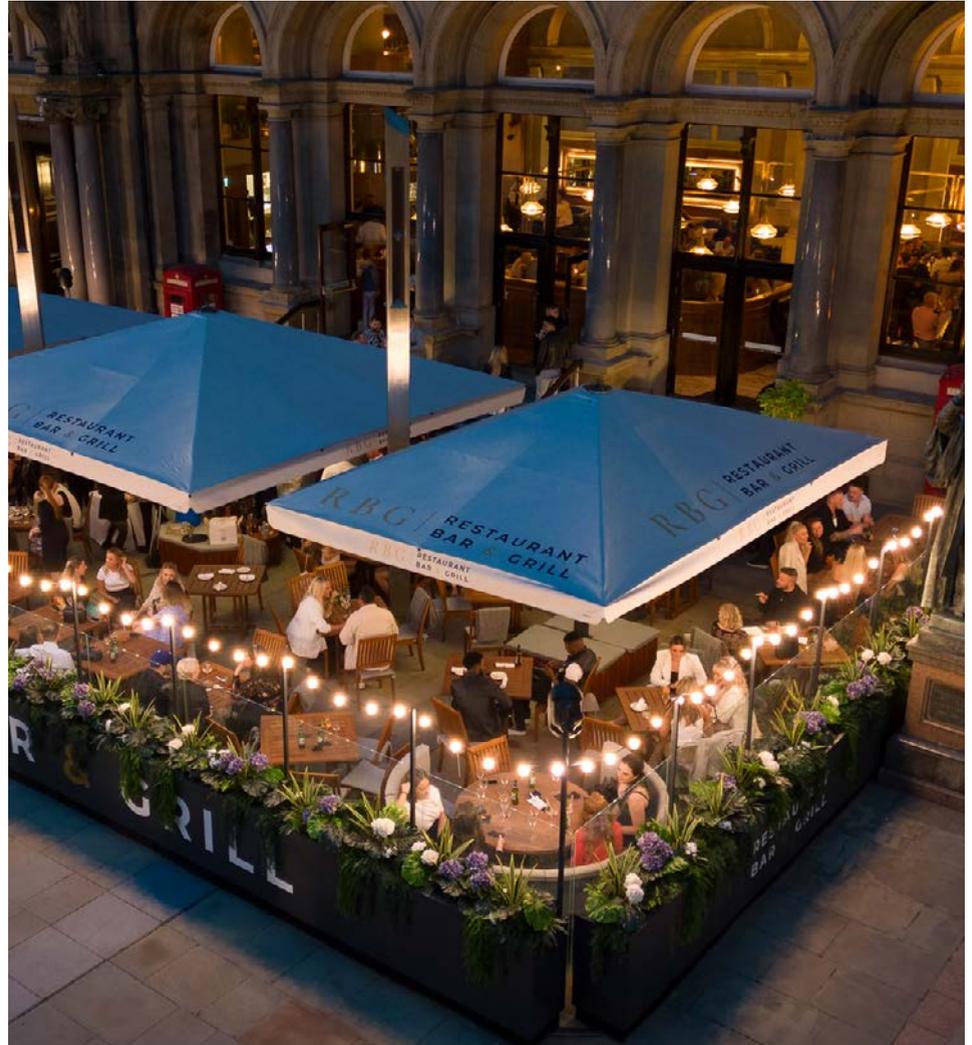
**Taxi:** ☎ +39 0522 45 25 45



# SUGGESTED RESTAURANTS

- **Doppio Malto**  
Via Gramsci, 45 - Reggio Emilia
- **Buontempone**  
Viale Regina Margherita, 53 - Reggio Emilia
- **Pizzikotto Pizzeria**  
Via Gramsci, 52 - Reggio Emilia
- **Nuovo Broletto**  
Via Antonio Gramsci, 98 - Reggio Emilia
- **Shopping Mall “I Petali”**  
Piazzale Atleti Azzurri D'Italia, 5 - Reggio Emilia
- **Supermarket Conad Le Vele**  
Viale Regina Margherita, 33 - Reggio Emilia

*\*Lunch during the week will be provided by RCF*





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