



UNIVERSITÀ DEGLI STUDI  
DI MODENA E REGGIO EMILIA

# SOUND ENGINEERING UNIVERSITY COURSE

THIRD EDITION  
MAY 2014



IN COOPERATION WITH



RCF SPA  
REGGIO EMILIA  
ITALY





## SOUND ENGINEERING - UNIVERSITY COURSE

The course is organized by the Department of Science and Methods for Engineering of the University of Modena and Reggio Emilia, in cooperation with **RCF SpA**, a leading international manufacturer of professional sound products and systems.

The primary goal is to provide engineers with a specific knowledge of the **state-of-the-art technologies related to sound, transducers and speaker systems and their applications in the professional market**. The course is organized in modules taking the participants through a learning process from the **basis of electro-acoustics components like transducers, amplifiers and digital processors till the design of a complete audio project based on a real case study**. An international reference project carried out by RCF engineers will be used as a studying guideline to be followed during the course.

The learning topics are grouped into four modules as follows:

- 1) Environmental Acoustics in open air and inner 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 systems design including practical experiences in measurements, listening tests and tuning.

The technical contents provided in this University course will be completed by the direct experience of RCF laboratories, since 1949 involved in the design, manufacturing and market applications of professional products and systems for theatres, concerts, auditoriums, airports, cruise ships, shopping malls, cinemas, stadia.

**Organization:**

- Department of Science and Methods for Engineering  
University of Modena and Reggio Emilia, Italy, [www.dismi.unimore.it](http://www.dismi.unimore.it)
- RCF SpA, via Raffaello 13, Reggio Emilia, Italy, [www.rcf.it](http://www.rcf.it)

**Course director:**

Prof. Luca Larcher, Department of Science and Methods for Engineering, University of Modena and Reggio Emilia.

**Date and time:**

120 hours, divided in a five week period, from Monday through Friday.

Starting date: May 5th, 2014.

Finishing date: June 6th, 2014.

**Language:**

The course will be held in English.

**Location:**

RCF Audio Academy premises, located in Reggio Emilia, Italy.

**Number of participants:**

10-20 people, selected by the Course committee on the basis of CV and information provided.

**Requirements:**

Degree in Engineering or similar educational background, good English knowledge.

**Costs:**

Participation fee will be covered by sponsorship of RCF SpA.

Enrolment fee: 350,00 Euro (including application taxes).

Special conditions for lodging expenses in Reggio Emilia will be available to the participants.

A limited number of scholarships will be assigned by RCF SpA as a contribution to the lodging expenses.

**Contents:**

The course is comprised of four modules: Environmental acoustics, Transducers and speaker systems, Electronics, Sound systems design. The complete program is available on request.

**Candidates' applications:**

You will be requested to send your personal data and CV including studies and professional experience if any  
**before March 28th, 2014.**

## Contacts:

For more information and assistance please contact:

### Prof. Luca Larcher

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Find out what the students have to say about the "First edition 2012" at this link:

<http://www.youtube.com/watch?v=TetNefoI8do>



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