

Curriculum Vitae Ulf Carlsson

Work Experience

Since 1985 I have worked at KTH Technical Acoustics. Presently I am employed at KTH, Engineering Mechanics, The Marcus Wallenberg laboratory for Sound and Vibration research. I have worked with sound and vibration research, course development, teaching and pedagogic development at KTH, Stockholm, since 1983. My course development and teaching experience includes courses at universities in several foreign countries, ie university Brescia Italy, university Dehli India, Bangladesh university of engineering and Technology Dacca Bangladesh, university Engineering Tashkent Uzbekistan. Finally, I have, together with Ulf Orrenius, given the Technical Acoustics for two academic years at the University of Genova.

My doctoral thesis treated frequency response function models applied to transmission and propagation of structure-borne sound. During my employment at KTH I have been course responsible and examiner for four courses.

SD1105 Matlab

SD1116 Design of Silent and Vibration-free Products

SD1120 Noise and Vibration Control

SD2150 Experimental Structure Dynamics

I have also been dean of studies and responsible for our laboratory facilities for a number of years. From 2013 to 2017 I was the pedagogic developer at the department.

Education and Training

1977-1982, Master of Science, Engineering Physics, KTH Stockholm

1983-1993, Dr Engineering, Technical Acoustics, KTH, Stockholm

Personal Skills

Mother tongue: Swedish

Other languages: English (fluent).

Work related skills

- Talented teacher. 2018 I was appointed best teacher at KTH by the KTH students.
- I have both theoretical and experimental experience and skills in acoustics and vibrations.

Digital skills

Coding experience in ...

- Fortran
- Algol
- Python
- Matlab, I give a Matlab course at KTH

Additional Information

Relevant publications – Course materials

(1) Sound & Vibration, course book and collection examples, cowriter, and main editor

Covers fundamental acoustics and vibrations with a focus on machine acoustics. Used for both bachelor and master level courses.

(2) Experimental Structure Dynamics, course book

Covers frequency response function models of vibration and vibroacoustic systems and, extraction of system mode parameters (poles and mode shapes) from frequency response functions. Used as course book in a master level course.

(3) Engineering vibrations, course book, cowriter, and main editor

Covers fundamental vibrations including measurement techniques and signal processing to extract useful information from measured vibration signals. Suitable for master level courses.

(4) An Introduction to Matlab, cowriter

A first introduction to coding in Matlab. Suitable for bachelor level course or as part of other courses using Matlab as a tool. Used in bachelor level Matlab course.

(5) Miscellaneous Exercises in Matlab

A collection of Matlab exercises with suggested solutions. Most of the examples has a vibration or acoustic context. Used together with (4) above.