

Dear students,

The first part of the course “Dynamics of Structures” dealing with vibrations will start on Wednesday Sept 16 with a 2h lecture from 10h to 12h, and 2h of exercises from 2 to 4 pm.

The organization will be as follows:

- 1) The lectures will be organized in presence, in an auditorium on the Solbosch campus, room S.R.42.5.110 (see campus map <https://www.ulb.be/en/solbosch/campus-map/>, R42 building). The room is equipped with podcast, so the lectures will be recorded and available to watch later at this link [http://podcast.ulb.ac.be/ezplayer/?action=view\\_album\\_assets&album=CNST-H-420-pub&token=TENKQVKG](http://podcast.ulb.ac.be/ezplayer/?action=view_album_assets&album=CNST-H-420-pub&token=TENKQVKG) (you can see examples of recordings of the previous year in the same folder)
- 2) The first lecture will be a regular class, with a presentation of the course, and the presentation of the first two chapters “Introduction to Vibrations” and “One degree of Freedom systems”.
- 3) The first exercise session will be related to these two topics and will take place remotely on TEAMS in a dedicated ‘team’. In order to invite you to this team, **I need your email address, could you please provide it to me at the following link?** [https://docs.google.com/forms/d/e/1FAIpQLSdJIEJ6bgcDt\\_nc-h4F-RN0\\_SlgFkiEwQoTKEBEaHDD--NiYw/viewform](https://docs.google.com/forms/d/e/1FAIpQLSdJIEJ6bgcDt_nc-h4F-RN0_SlgFkiEwQoTKEBEaHDD--NiYw/viewform)
- 4) For the exercise sessions, we will be working with the free software Octave. Please install this software before the exercise session by following this link : <https://www.gnu.org/software/octave/download.html>. Note that for these exercise sessions, Matlab can also be used if you have access to it, as the code is the same (for what we do in these sessions). If you are not familiar with Octave or Matlab, you should do the preliminary introduction session available at the following link <http://homepages.ulb.ac.be/%7Eaderaema/dynamics/INTROMATLAB.pdf>, the correction is given at [http://homepages.ulb.ac.be/%7Eaderaema/dynamics/INTROMATLAB\\_Correction.pdf](http://homepages.ulb.ac.be/%7Eaderaema/dynamics/INTROMATLAB_Correction.pdf)
- 5) For the next lectures, starting Sept 23, we will follow the principle of inverted class. Pre-recorded videos will be available at this page <https://arnoresearch.com/dynamics-of-structures-2020-2021/>. The first two topics are already available. You are expected to watch the pre-recorded videos before the class in the auditorium. During the lecture, you will have the possibility to participate to small quizzes to test your understanding and to ask any question. I will also discuss more practical cases and examples. All information related to the course is available at this same link <https://arnoresearch.com/dynamics-of-structures-2020-2021/>

Should you have any question about this, do not hesitate to contact me ([Arnaud.Deraemaeker@ulb.ac.be](mailto:Arnaud.Deraemaeker@ulb.ac.be)).

- 1) Do not forget to submit your email here so that I can contact you for further information about the course here [https://docs.google.com/forms/d/e/1FAIpQLSdJIEJ6bgcDt\\_nc-h4F-RN0\\_SlgFkiEwQoTKEBEaHDD--NiYw/viewform](https://docs.google.com/forms/d/e/1FAIpQLSdJIEJ6bgcDt_nc-h4F-RN0_SlgFkiEwQoTKEBEaHDD--NiYw/viewform)

Kind regards

Arnaud Deraemaeker