TECHNISCHE UNIVERSITÄT DRESDEN

Faculty of Mechanical Engineering

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FAKULTÄT MASCHINEN WESEN

Dresden, 1. April 2021

Dear students of the Faculty of Mechanical Engineering,

Just before the start of the lecture period, here's some information that's good for the first few days and for orientation in what is now the third, largely digital semester (and none of it is an April Fool's joke!).

First of all, the problems surrounding **rail vehicle technology** in the KST specialisation have now definitely been solved - at least for the summer semester, there are plans for the winter (and that is still a long way off) and then the successor to Mr Löffler should also be clarified. But what is important at the moment - despite all the problems, the course programme is currently being offered in its entirety, with the exception of one module. Just to give an example of how this is planned, here is the really comprehensive - and very coherent - solution for the module MW-MB-KST-11:

The module (with 6 SWS lectures) should consist of the following courses in the coming semester:

1. **Electric vehicles**
   - 3 SWS lecture (optional if interested: 1 SWS exercise as evidence)
   - Lecturer: Prof. Stephan
   - Contents among others: Main components of electric vehicles (from the current collector to the earthing contact), auxiliary operations, mechanical drives/integration of the traction motor, control technology of rail vehicles, drive control of 3AC machines.
2. **Traction motors**
   - 2 SWS lecture (optional if interested: 2 SWS exercise)
   - Lecturer: Dr. Nieke (VEM Sachsenwerk)
   - Contents include: Dimensioning of 3AC asynchronous traction motors, drive integration, design of magnetic circuit and windings.
3. **Theory of electric transport systems (only part on asynchronous machine as preparation for "traction motors")**
   - Approx. 6 lectures = approx. 1 SWS (optional if interested: the remaining 15 lectures).
   - Lecturer: Prof. Stephan
   - Contents: a. o.: Design, mode of operation, steady-state operating behaviour (voltage equation, locus of current curve, speed-torque characteristic), start-up and control of the asynchronous machine.

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Access
Side entrance George-Bähr-Str. 3c, marked parking spaces in the courtyard. Parking spaces in the inner courtyard

Internet
http://tu-dresden.de/mw
No access for electronically signed and encrypted documents.

The schedule for **module MW-MB-15** is online in the Opal course.

And the **catalogue modules are** also ready and the associated catalogues are also online.

And finally, the **timetables** are also complete and filed in the course "Mechanical Engineering without Lecture Hall" (https://tud.link/pu2y). Important for the now upcoming selection of courses: Please inform yourself in the OPAL courses of the courses about the respective teaching forms and teaching offers. All face-to-face and hybrid offerings are planned subject to Corona-related restrictions and changes.

Apart from that, there is nothing significantly new at the moment, so the email will be a little shorter.

However, I don't want to close without mentioning two really important things: Firstly, I would like to urge you all once again to persevere! I know that "motivation" is a difficult word right now, but it doesn't make sense to hang our wings now. We can already get a bit away from "teaching without a lecture hall" this summer with the hybrid events, and who knows - maybe things will get a bit better in the winter. In any case, we - i.e. the faculty lecturers - are doing everything we can to offer you a complete programme again this summer. And just like last time, I would like to ask you to **take advantage of this offer**: **Keep up your studies with full energy and try to go through with the programme even under the currently unpleasant boundary conditions. This is the only way we can prevent the virus from damaging your future beyond the direct consequences of the pandemic!!!**

The second point is a personal matter: For literally a year now, I have had exactly two days on which I have not worked at least half the day. That's really getting to me by now. Starting today and in the week after Easter, I want to try to calm down a bit and would therefore like to ask you NOT to send me any emails during these 10 days. In very vital cases, i.e. for things that do not have time until 12.04.21, please contact Ms. Türk, from there the really unavoidable problems will then be reliably forwarded to me. Unfortunately, simply "not reading emails" does not help, because when you come back after a few days, you have to deal with almost 2000 of them ☹.

So much for now,
stay healthy and

Happy Easter!

Stefan Odenbach