

# **GENERAL INFORMATION**

## **Laboratory Sessions**

**(Semester 3 / Semester 5)**

Session 2018/2019  
Department of Mechanical Engineering  
National University of Singapore

## LABORATORY SESSIONS

### 1. Purpose

Laboratory sessions provide training in practical engineering skills. With the modular system, the laboratory sessions are part and parcel of a module. The grades obtained for the laboratory sessions will contribute towards the final grade of the module.

### 2. Organisation

The attached laboratory time-table is for students taking the recommended modules for the semester. Students not taking any of the listed modules need not attend the respective attached laboratory sessions. The laboratory sessions are compulsory for students taking the modules.

### 3. Laboratory Classes

#### 3.1. Attendance

**Attendance is compulsory.** The department will not entertain requests for re-scheduling of laboratory sessions due to student negligence (e.g. forgetting or mis-reading the schedule), or personal reasons (e.g. birthday celebration, hall activities, driving test). Documentary evidence must be produced for exceptional circumstances (e.g. illness) before a re-scheduling is permitted. The students concerned have to seek permission from the laboratory co-ordinator for re-scheduling. You have to seek permission from the experimental supervisor if there is any urgent need for you to leave the lab session earlier. You will not be permitted to attend any session if you are late by more than fifteen minutes.

Students who are absent without any valid reason **may be barred** from taking the respective examinations.

#### 3.2 Lab Report

Students are required to write lab report(s) for all the lab session(s). You can download the lab manuals from the IVLE system (<https://ivle.nus.edu.sg/>) when the semester starts. Generally, the lab reports have to be completed within the 3-hour sessions, unless decided otherwise by the lecturers-in-charge. Penalty will be imposed for late submissions.

## GUIDELINE FOR WRITING LAB REPORTS

In general, the report should consist of:

- 1) Title
- 2) Aim or Objective
- 3) Record(s) of data and plots
- 4) Discussions
- 5) Conclusion

The report is to be handed in for grading at the end of the experiment.

#### 3.3 Safety

As you will be working with electrical and mechanical equipment, you **are required to wear toe-covered shoes** and take appropriate precautions when you are in the laboratory or workshop. The workshop and some laboratories require the students to put on long pants. Students not in compliance with the safety requirement **will be barred** from the laboratory session.

#### 4. Copying

Students are hereby warned that copying of lab reports is a serious offence and it may lead to **expulsion from the University**. The technologists have been instructed to confiscate all copies of lab reports not belonging to the students concerned during the lab sessions.

#### 5. Queries

You may contact Dr. ONG Eng Teo (6516-2556, [mpeoet@nus.edu.sg](mailto:mpeoet@nus.edu.sg)) for general queries regarding the lab sessions.

If there is a need to **re-schedule** for the lab session, please contact the respective lab tutor for permission, and cc the lab staff for the following up action. Note that you are required to produce the **documentary evidence** (e.g. Medical Certificate) upon attending the make-up lab session.

| Module | Session | Topics                               | Contacts  |
|--------|---------|--------------------------------------|---|
| ME2112 | 1       | Beam Bending - Stresses & Deflection | Mr Abdul Malik Bin Baba (Lab Staff); <a href="mailto:mpeamb@nus.edu.sg">mpeamb@nus.edu.sg</a><br>A/Prof Quan C. (Lab Tutor); <a href="mailto:mpeqcg@nus.edu.sg">mpeqcg@nus.edu.sg</a>   |
|        | 2       | Torsion of Circular Shafts           |   |
| ME2134 | 1       | Stability of Floating Body           | Mr James Ng Chun Phew (Lab Staff); <a href="mailto:mpengcp@nus.edu.sg">mpengcp@nus.edu.sg</a><br>A/Prof Shu C. (Lab Tutor); <a href="mailto:mpeshuc@nus.edu.sg">mpeshuc@nus.edu.sg</a>  |
|        | 2       | Flow and Energy Loss                 |   |
| ME2151 | 1       | Cooling Rate                         | Mr Theodore Tang Yee Wei (Lab Staff); <a href="mailto:mpettyw@nus.edu.sg">mpettyw@nus.edu.sg</a><br>A/Prof Thian E.S. (Lab Tutor); <a href="mailto:mpetes@nus.edu.sg">mpetes@nus.edu.sg</a>   |
|        | 2       | Metallography                        |   |
| ME3162 | 1       | Milling Process                      | Mr Tan Choon Huat (Lab Staff); <a href="mailto:mpetanch@nus.edu.sg">mpetanch@nus.edu.sg</a><br>Prof Seah K.H. (Lab Tutor); <a href="mailto:mpeskh@nus.edu.sg">mpeskh@nus.edu.sg</a>   |
|        | 2       | Turning Process                      |   |
| ME2142 | 1       | Speed/Position Control               | Mr Sakthiyavan s/o Kuppasamy (Lab Staff); <a href="mailto:mpesk@nus.edu.sg">mpesk@nus.edu.sg</a><br>A/Prof M.H. Ang Jr (Lab Tutor); <a href="mailto:mpeangh@nus.edu.sg">mpeangh@nus.edu.sg</a>  |
|        | 2       | Frequency Response                   |   |
| ME3122 | 1       | Temperature Measurements             | Mr Nyan Nay Oo (Lab Staff); <a href="mailto:mpennoo@nus.edu.sg">mpennoo@nus.edu.sg</a><br>Asst Prof Koh Y.K. (Lab Tutor); <a href="mailto:mpekyk@nus.edu.sg">mpekyk@nus.edu.sg</a><br>A/Prof Yang W.M. (Lab Tutor); <a href="mailto:mpeywm@nus.edu.sg">mpeywm@nus.edu.sg</a><br>Asst Prof Park S.Y. (Lab Tutor); <a href="mailto:mpeps@nus.edu.sg">mpeps@nus.edu.sg</a> |
|        | 2       | Forced Convection Heat Transfer      |   |

Use the following request slip when writing to the lab tutor and staff, with the email subject ***“Request to reschedule lab session”***.

Upon receiving the permission from the lab tutor, the lab staff will proceed with the re-scheduling and notify you on the make-up lab session via this slip.

| <b>Student Request</b>          |  |
|---------------------------------|--|
| Name                            |  |
| Matriculation Number            |  |
| Reason for your request         |  |
| Original Lab sub-group assigned |  |
| Proposed sub-group(s) to join*  |  |
| <b>Lab Staff Reply</b>          |  |
|                                 |  |

\* You can proposed up to **three** lab sessions to do the make-up. But in the event if the proposed lab sessions are not available, you will be given the next available one.