

GENERAL INFORMATION

Laboratory Sessions

(Semester 4)

Session 2016/2017
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 (including the retaking).

3. Laboratory Classes

3.1 Attendance

Attendance is compulsory. The Dept 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 has to 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.

3.2 Log Report

For each module, a student will be required to write two log reports. Generally, the log reports have to be completed within the 3-hour sessions. Penalty will be imposed for late submissions.

The above guidelines are to be strictly observed, unless otherwise specified by the lecturers-in-charge. The formats for the log reports are attached for your reference.

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. Students not in compliance with the safety requirement may 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 A/Prof Joshi Shailendra (Ext. 64496, Rm E1-07-15) for any problem, queries or constructive suggestions with regard to the lab sessions.

6. Warning

Attendance is compulsory. Students who are absent without any valid reason may be barred from taking Examinations.

GUIDELINES FOR WRITING LAB REPORTS

LOG REPORT

All log reports must be completed within the duration of experiments, unless decided otherwise by the lecturers-in-charge. The log book should consist of:-

- 1) Title
- 2) Aim or Objective
- 3) Record(s) of data
- 4) Discussion in point forms
- 5) Conclusion

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

Laboratory Timetable for Semester 4, 2016/2017

Formal reports are to be submitted for the experiments in bold

| Monday 1400-1700 | <u>Monday subgroups</u> | | | | | | | | | | | |
|---|----------------------------------|----------|-----|-----|-----|-----|-----|-----|-----|-----|----|----|
| | 2A1 | 2A2 | 2B1 | 2B2 | 2C1 | 2C2 | 2D1 | 2D2 | 2E1 | 2E2 | | |
| Wednesday 1400-1700 | <u>Wednesday subgroups</u> | | | | | | | | | | | |
| | 2F1 | 2F2 | 2G1 | 2G2 | 2H1 | 2H2 | 2I1 | 2I2 | 2J1 | 2J2 | | |
| Thursday 1400-1700 | <u>Thursday subgroups</u> | | | | | | | | | | | |
| | 2K1 | 2K2 | 2L1 | 2L2 | 2M1 | 2M2 | 2N1 | 2N2 | 2O1 | 2O2 | | |
| 16/01/17 | 18/01/17 (ENGIN DAY) | 19/01/17 | D1 | D8 | D6 | D4 | | D2 | D7 | D5 | | D3 |
| 23/01/17 | 25/01/17 | 26/01/17 | D3 | D1 | D8 | D6 | D4 | | D2 | D7 | D5 | |
| 30/01/17 (CHINESE NEW YEAR) | 01/02/17 | 02/02/17 | | D3 | D1 | D8 | D6 | D4 | | D2 | D7 | D5 |
| 06/02/17 | 08/02/17 | 09/02/17 | D5 | | D3 | D1 | D8 | D6 | D4 | | D2 | D7 |
| 13/02/17 | 15/02/17 | 16/02/17 | D7 | D5 | | D3 | D1 | D8 | D6 | D4 | | D2 |
| 27/02/17 | 01/03/17 | 02/03/17 | D2 | D7 | D5 | | D3 | D1 | D8 | D6 | D4 | |
| 06/03/17 | 08/03/17 | 09/03/17 | | D2 | D7 | D5 | | D3 | D1 | D8 | D6 | D4 |
| 13/03/17 | 15/03/17 | 16/03/17 | D4 | | D2 | D7 | D5 | | D3 | D1 | D8 | D6 |
| 20/03/17 | 22/03/17 | 23/03/17 | D6 | D4 | | D2 | D7 | D5 | | D3 | D1 | D8 |
| 27/03/17 | 29/03/17 | 30/03/17 | D8 | D6 | D4 | | D2 | D7 | D5 | | D3 | D1 |
| ENGIN DAY REPLACEMENT | 05/04/17 | | D1 | D8 | D6 | D4 | | D2 | D7 | D5 | | D3 |
| CHINESE NEW YEAR REPLACEMENT | 03/04/17 | | | D3 | D1 | D8 | D6 | D4 | | D2 | D7 | D5 |

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| D1 | ME2114-1 Strain Gauge Technique – Solid Mechanics Lab (EA-02-21) |
| D2 | ME2114-2 Combined Bending & Torsion – Solid Mechanics Lab (EA-02-21) |
| D3 | ME2135-1 Characteristics of Centrifugal Pump – Fluid Mechanics Lab 1 (WS2-02-46) |
| D4 | ME2135-2 Flow Over an Airfoil – Fluid Mechanics Lab 2 (WS2-01-47) |
| D5 | ME2143-1 Motor Characteristics – Control and Mechatronics Lab 2 (EA-02-18) |
| D6 | ME2143-2 Linear Circuits – Control and Mechatronics Lab 1 (EA-04-06) |
| D7 | ME3112-1 Vibration – Dynamics/Vibration Lab 2 (E1-02-03) |
| D8 | ME3112-2 Gyroscope – Dynamics/Vibration Lab 2 (E1-02-03) |