### UNIVERSITY OF PRETORIA

# DEPARTMENT OF MECHANICAL AND AERONAUTICAL ENGINEERING RULES AND REGULATIONS FOR WORKING IN THE MECHANICAL WORKSHOPS, LABORATORIES AND SASOL LABORATORY

#### **GENERAL**

1. Certain days are allocated for work on final year thesis projects eg: Wednesday for the students from Mechanical and Aeronautical Engineering and Tuesdays for the students from Industrial Engineering. This implies that if a student wants to do some work in the laboratories outside these times the time must be scheduled with the instructor in control of the specific workshop or laboratory. The instructors responsible for the different areas are as follows:

Mr Jan Brand: Responsible overall for scheduling activities in the

Mechanical workshops and laboratories

Mr Willem Ras: Thermo flow and engin laboratory

Mr At du Preez: Mechanical workshop

Mr Frans Windell: SASOL laboratory

Mr Willie Vos: Aerodynamics and combustion laboratory

- No person will be allowed to work in the different areas after hours and over weekends without proper supervision. This will only be allowed when absolutely necessary.
- 3. The workshops and laboratories are closed during lunch hours: 13:00 13:45
- 4. Any person taking tools or measuring equipment from the stores remains responsible for that equipment until it is returned to the stores.
- 5. Only students with bona fide UP assignments (Thesis, practicals and designs) will be allowed to work in the designated areas. No private work is allowed.
- 6. All manufacturing of parts by the instructors will only commence when the instructor is supplied with a proper drawing and the necessary raw material.
- 7. All special manufacturing, where the instructors are required to do the task, must be coordinated by Mr Brand. The will be done on a "first come first serve" basis.
- 8. Any special tests to be done in the SASOL laboratory must be coordinated with Mr Windell.

9. Make sure that you allow enough time for manufacturing of the required components for your thesis. Try to do as much manufacturing as possible in the first semester because there is a limit on the resources available in the workshops. Allow enough time for manufacturing

## **TOOLBOXES**

- The thesis student must make sure that he/she is indeed going to need a toolbox before taking one. There are only 50 toolboxes available. Toolboxes will only be issued after proof of the deposit has been received.
- 2. No toolboxes may change ownership without the knowledge of Mr Brand. If tools are missing the student to whom the toolbox was issued will be held liable.
- 3. The deadlines for issuing and returning of the toolboxes must be adhered to. The necessary dates will be put onto the web page at <a href="www.me.up.ac.za/noticeboard">www.me.up.ac.za/noticeboard</a>. If you return an incomplete toolbox your degree will be kept back until the situation is rectified.
- 4. Thesis students who did not apply for a toolbox will be denied access to the storeroom.

# **GENERAL SAFETY REGULATIONS**

If any of the following rules are not adhered to you will be asked to leave the workshop and laboratory area immediately due to the fact that you are a risk to yourself and are create a danger to other students. Depending on the type of transgression, access to facilities might be denied.

- The attendance register must be signed at arrival and departure, both by the student and the instructor in control of the area. This measure is necessary to ensure that the instructors are at all times aware of the persons working in their area.
- All the regulations, as set out by the machinery and occupations act (Act 85 of 1993) are applicable on the work areas and will be adhered to. A summary of the act is displayed at various places in the laboratories.
- 3. The necessary eye protection **must be worn** at all times when working on or near machines. **You are responsible for your own personal protection equipment**.

- Protective clothing (overall or dust coat) with safety shoes must be worn at all times when working in these areas. NO PERSON WITHOUT THE CORRECT PERSONEL PROTECTION EQUUIPMENT WILL BE ALLOWED IN THE WORKSHOPS AND LABORATORIES.
- 5. Persons with long hair must either use hair nets or must ensure that the hair is secured safely.
- 6. The keys to all the dangerous equipment which is locked up, are available from the instructors, where you will sign that you understand the use of this equipment.
- 7. Students are not allowed to sharpen their own cutting tools. All sharpening must be handled by the instructor on duty.
- 8. The student is responsible for cleaning the area where he was busy working before leaving the premises. No food or soft drinks will be allowed in the designated areas.
- 9. The welding area is locked when not in use. The key is available from Mr's du Preez or Ras after signing of the register. Please make sure that you now how to use the equipment before commencing with manufacturing. No equipment may be removed from this area and no welding is allowed outside this area.
- 10. No non ferrous material may be ground on the bench grinders.
- 11. Make sure that you know the escape route in case of an emergency.
- 12. All the equipment (machines and practicals ) are to be regarded as live at all times.
- 13. Please remember at all times you are working with dangerous equipment that can cause harm to fingers and eyes.
- 14. Keep your fingers away at all times from moving machinery, practicals and test equipment.
- 15. Make sure that you know how to secure the equipment you are working on in case of an emergency.

# 16. IF YOU DO NOT KNOW, PLEASE ASK - IT IS NOT A SHAME

Student:	Student no:	
Signature:		
For Department:		
Date:		