

## **Workshop use and safety measures**

All students and staff are bound by the Occupational Health and Safety Act when using the laboratories and workshops for practical sessions, projects and assignments.

### **General workshop arrangements**

Only students and staff with bona fide UP assignments, for example research projects (MRN412, MRN422, postgraduate), practicals and assignments will be allowed to use the workshop. No private work or personal projects are allowed.

Operating hours are weekdays from 07:30 to 16:00. No person will be allowed to work after hours and over weekends without proper supervision. This will only be allowed when absolutely necessary and after making approved arrangements.

Make sure that you allow enough time for manufacturing of the required components for your project. Try to do as much manufacturing as possible early in the semester because there is a limit on the resources available in the workshops. This implies proper planning of the tasks, material and equipment you will require to achieve your aims.

### **Workshop contact information:**

The staff members responsible for the workshop is:

- Mr Peet Kruger: Tel: 012 420 2088, e-mail: [peet.kruger@up.ac.za](mailto:peet.kruger@up.ac.za)
- Mr Edwin Mohale: Tel: 012 420 3514, e-mail: [edwin.mohale@up.ac.za](mailto:edwin.mohale@up.ac.za)

### **Minimum requirements to access the workshop**

The minimum requirements to access the workshop are:

- Wear closed shoes of proper strong construction that can protect feet from shavings and bumping against small obstacles (i.e. hand tools that may be dropped)
- Long hair must be tied down
- No loose clothing may be worn
- Students are responsible for keeping their work area clean and neat
- No eating or drinking allowed
- Suitable personal protective equipment (PPE), depending on the task you are performing as well the tasks performed by people around you, is required. You need to perform a risk assessment before starting on any task and use the appropriate PPE. Please ask the staff member if you are unsure. PPE can include protective clothing (e.g. overalls or dust coats), safety shoes, eye protection, respiratory system protection (e.g. dust masks) hearing protection, gloves etc.

Please remember at all times that you are working with, or in the vicinity of potentially dangerous equipment that can cause harm to yourself or people around you.

The workshop staff takes the safety of students and staff as the first priority. You will be denied access if your conduct jeopardises safety in any way.

### **Ways to use the workshop:**

You can engage with the workshop in different ways. The first option (manufacturing service) is to ask workshop staff to do manufacturing for you. The second option (self-service) is to use the training opportunities that are available to upskill yourself so that you can do your own manufacturing. We encourage you to manufacture your own parts (i.e. use the self-service option) wherever possible and ask the staff to assist with more complicated operations.

### **Manufacturing service**

In order to utilise the manufacturing service you need to do the following:

- Plan and schedule early. The manufacturing service operates on a first-come, first served basis. Capacity is limited and during peak times (usually towards the end of the semester) delays can occur.
- Make proper detail manufacturing drawings. In some cases, e.g. where CNC machines will be used, you may have to provide a CAD solids model of your parts and assemblies
- Your study leader, supervisor or lecturer needs to check and sign your drawings to indicate that you have permission to proceed with manufacturing
- Report to workshop staff with signed drawings and material (in some cases material may be available in the workshop)
- The job will be assigned to one of the staff members and you will be given an indication of when it should be finished

### **Self service**

To gain access to the workshops in order to do your own manufacturing, all students and staff are required to watch an introductory video that can be found online at:

<https://www.youtube.com/watch?v=tZAWydc3czE>

After watching the video, you must make appointment with the workshop staff to write a test on basic workshop safety. After passing the test, you will be issued with a workshop card. Specific training on machines will be given by the workshop staff as the need arises. Please ask for assistance or help when in doubt.