**Mechanical workshop rules and regulations**

1. **Training for using equipment in Mechanical Workshop:**

* Procedure of using equipment in the workshop:

1. File and submit the “**Request Training Form**” (take the form from the entrance door of the Workshop) to the Laboratory Executive of the Mechanical Workshop.
2. Attend and pass the training provided by the Mechanical Workshop.
3. Submit the “**Indemnity Form**” (available online) for the requested facilities in Mechanical Workshop.

* Upon approval the user can use the facilities in the workshop during standard operation hours. The machines can only be operated if a staff member of the Mechanical Workshop is present.
* Do not operate any machines until you read the **Standard Operation Procedure** (the document is usually located near the machine), pass the training, fully understand the operation of the equipment and submit the indemnity form to the mechanical staff. Do strictly follow the rules of the Mechanical Workshop when using the facilities.
* ASK if there is anything you do not fully understand.

1. **Safety:**

* Always use safety glasses, closed-toed shoes, hearing protection, face shield (if necessary) and lab coat (if necessary) and other suitable protective equipment during machining.
* No rings, wrist watches, bracelets or jewellery that can get caught in the equipment are allowed when using the machines. If you have long hair, make sure it is tied back and will not touch any part of the machine in particular the rotating spindle. Keep hands and arms well clear of the rotating spindle or other parts.
* Only operate the machine after informing the staff of the Mechanical Workshop. Make sure someone else knows that you are using the machine and is available in case of emergency.
* Do not interrupt anyone when they are operating the machine. Wait until they finish machining.
* Do not run in the workshop, it may cause severe accident. Always be patient and never rush in the workshop.
* Use the appropriate speed for the bit.
* Always remove the chuck key after tightening the chuck to avoid the chuck key from flying off during the start-up which can cause serious injury or death.
* Report any defective equipment to the mechanical staff.
* The gangway through the workshop must be kept clear. Any oil spillage, grease,… must be cleaned immediately and reported.

1. **Emergency contact:**

* Always know where the emergency stop button of the machine is. Press it if an accident occurs during machining.
* In case of any technical problems, call Abdul Rahman at **9657 6742** or Thao at **8297 5561**.
* In case of accidents, administer proper First Aid (near the entrance door) and contact Abdul Rahman at **9657 6742**, Thao at **8297 5561**, Campus Security at **6790 4777** or Ambulance at **995**.

1. **Clean up:**

* Turn off the machine after use.
* Remove the bit after use and put it back to their proper location into the tool cabinet.
* Clean up the shaving debris, equipment and the working place thoroughly using brush. Wipe off the coolant and oil if using.
* Fill the log book properly.

1. **Borrowing tools or equipment from Mechanical Workshop:**

* Ask the mechanical staff and fill the loan book when borrowing or taking any tools or equipment from the workshop. Return after use.

1. **Requesting Mechanical Workshop on fabrication of components**

* Fill the order form properly with your supervisor signature (take the form from the entrance door of the Workshop).
* Submit the order form together with the drawings (hard copy), and discuss the feasibility of fabricating the requested items with the Laboratory Executive of the workshop.
* Upon approval and acceptance of the request, the workshop will place the job in the workshop queue list.
* You can check the progress of the fabrication from the team site:

[http://teamsites.ntu.edu.sg/SPMS/SPMS/PAPMechanicalWorkshop/Shared%20Documents/Forms/AllItems.aspx](https://webmail2007.ntu.edu.sg/owa/redir.aspx?C=Iupb76FNYkijQFWOm_tM49rVgo3ig9BIiAxAHFG8yViTviZk7cTLPkoB17XAkOp_VTquWExq3kg.&URL=http%3a%2f%2fteamsites.ntu.edu.sg%2fSPMS%2fSPMS%2fPAPMechanicalWorkshop%2fShared%2520Documents%2fForms%2fAllItems.aspx)

1. **Punishment:**

*Machining can be very dangerous!*

If you break the rules, ***your supervisor will be informed and*** you may be ***banned to use the equipment or enter the workshop***.

--Mechanical Workshop--

September 2013