

CAMD Microfabrication Access Document

In order to become a user of CAMD microfabrication resources, including the cleanroom, successful completion of each of the following steps is required. Potential users are encouraged to begin this access and training process *one (1) month* before he/she is ready to begin working inside the cleanroom. These guidelines provide adequate time to complete paperwork, tests, and training. The [training schedule](#) is posted on the web page. All aspects of Cleanroom Training will be held in a designated schedule for lectures and equipment training.

1. The first step is to contact the microfabrication director, Jost Goettert (jost@lsu.edu)

He can advise you on the feasibility of your proposed project, or will direct you to one of his expert staff for discussion of further details. The intention is to quickly verify (2 days) if your project can be successfully completed at CAMD and to prepare the next step by conducting a technical discussion that will determine the specific user project needs (equipment, chemicals, processes, materials,.....).

2. Microfabrication Project Proposal Form

All users must complete a project proposal form. The purpose of the project proposal form is two-fold – to provide basic administrative information and to briefly summarize the technical discussion conducted in step 1 defining the scope of work and the user requirements. The proposal will be formally approved and assigned a Project Proposal Number (PRN) which serves as reference for this research project. The form will be completed by the project PI he is the key contact for this research project. The proposal is available on the CAMD webpage and shall be completed and signed before submitting to CAMD, att. Jost Goettert, either by fax (225-578-6954) or campus mail.

3. Radiation Test

Access to CAMD requires knowledge of the radiation hazards and emergency situations present. A test to ensure fundamental knowledge of these hazards is required by the CAMD Safety Officer. Prospective Users can access [Radiation Safety Information](#) via the CAMD Safety website. After studying the material, the [Radiation Safety Test](#) can be taken online through the CAMD Safety website. User must score (24/30 = 80%). Once the test has been passed users will be directed to an automatically generated form to apply for a dosimeter badge. Thereafter, your badge will be available for pick-up in room 112 {Dr. Lorraine Day}. Upon completing the test, you should send a digital picture to day@lsu.edu to complete your application. The dosimeter badge must be worn at all times while at CAMD and you will be given an assigned drawer to store badges when you leave the facility.

Mandatory updates/refreshers are held annually and will be announced through email and on the website. Failure to re-train automatically de-activates your CAMD status

4. Chemical Safety Test

Perspective Cleanroom Users should study the [Cleanroom Safety Material](#) *in color* to prepare for the Chemical Safety Test. The Chemical Safety Test is administered in person and is a closed-book exam. The test can be taken during a prearranged time one week before Cleanroom Training. Please see website for dates for documents to be completed. To schedule an appointment to test, the perspective user should contact [Shaloma Malveaux](#). A minimum score of 90% is required to pass the Chemical Safety Test. If the first test is not passed, then another test is administered at a later time.

5. Cleanroom Practical Training

The Cleanroom Practical Training is a 3-hour seminar that includes rules on safety, basic chemical handling (storage, use, and disposal), cleanroom protocol and a cleanroom tour with an introductory practical demonstration. Users must attend the lecture session before scheduling any equipment training sessions. The [training schedule](#) is posted on the web page.

6. MEMS Technology Primer

Based on the fact that there is no mandatory lecture required for potential Clean room users CAMD staff will hold lectures, approx. 2 half-days (**tba**), introducing user to key MEMS processes and CAMD equipment. This is not replacing any lectures/classes given in various departments (ME, ECE,...) but is specifically geared to prepare users with our techniques and give them an opportunity to meet the CAMD experts. The class is mandatory for first time users to proceed to the equipment training.

7. Equipment Training

Users are trained on clean room logistics, and operation of [General Equipment](#). This tour is an applied training session which usually takes 3 hours. Three sessions will be scheduled during the week according to machine and process needs. The [training schedule](#) is posted on the web page.

For use of equipment not part of the general equipment inside the clean room, please contact the perspective managers for training and access. The machine manager will determine training guidelines

8. Access Cards

Once perspective users have completed the dosimeter badge form, a user file will be created and an access card processed for entrance to the experimental hall during normal working hours only. A \$10 deposit is required to receive the access card and will be refunded when the card has been returned after project completion. The User can obtain the card from [Craig Stevens](#) room #106 after all training requirements have been met.

9. Final Administrative Actions

After the final step is completed the user's access card is updated for entry to the Clean room. Card updates will be made within (3) working days after all training sessions are completed. A user profile will be created and trained users will be issued an login-id and login-password to serve as access to the booking (machine reservation) system and power to machines.

If a New User does not use the facilities within (6) months of training; or if an experienced user has not accessed the facility after (1) year, access will be removed and re-training is required.

Clean room refresher courses as well as safety and protocol seminars held annually are mandatory. Announcements are posted through email and the webpage. Users are required to attend in order to maintain continued access to the clean room.

Reminders and correspondences are emailed to users as needed. It is the user's responsibility to keep contact information updated with clean room staff and also check our website periodically for any news and announcements.

By signing the microfabrication project proposal form users (PI and students assigned to the project by the PRN) agree to the terms of being a user at CAMD as listed on the form. It is understood that projects expire at the end of every calendar year. Automatic renewal is granted for users who have submitted their reports and met the other user obligations. If students complete their studies they should inform CAMD about any changes. PI's shall inform CAMD if new students are added to an ongoing project.