

Laboratory Access

Personnel Assignment to Laboratories:

All space assignments for graduate students and research staff are coordinated by the Baha and Walid Bassatne Department of Chemical Engineering and Advanced Energy (BWB CEAE) chairperson to check space availability and to ensure that the priority system [described below] is followed. Faculty members may not promise space to a student or Research Associate without the written authorization of the department chairperson.

The department chair's written authorization shall specify: the particular laboratory, the duration of the authorization, and any special terms or conditions of use. The lab manager will keep on file the currently authorized lab users and be responsible for enforcing the policy.

The department provides limited office or laboratory space to graduate students and research staff normally in the lab in which they are conducting their research in the following priority:

- Post-doctoral staff, research associates, full-time research assistants.
- Full-time graduate students who have a 100% appointment (GA, GRA, or some combination). The greater the number of semesters in the program, the higher the priority.
- Graduate students who have 50% appointment as GRA.
- Full-time graduate students who have GA appointments. The greater the percentage of the appointment, the higher the priority.
- New graduate students who do not have a GA or GRA appointment have the lowest priority in space assignment.

Assignment of Computers:

- Normally, students assigned a space in the CEAE Labs will also be given use of a desktop computer. No more than two students may be assigned to a single computer.
- Computers purchased with funds from a specific grant are normally assigned to students working on the grant project, by the faculty member in charge of the grant. These computers may not be used for other purposes during the life of the grant.
- Only students with assigned office space are eligible for a computer assignment. Students without office space may use the IT Unit shared computing resources.
- Graduate students who have their own laptops should be given IP addresses by the system administrator to access the internet and the AUB database.

Use of Laboratories:

The chemical engineering program builds on the existing strength at AUB in mechanical, civil, environmental, and computer engineering; as well as chemistry, biology, physics, and mathematics. Instructional labs are dedicated to supporting undergraduate courses and have as custodian, the CHEN lab manager in coordination with the faculty members using the labs during a certain semester. Research laboratories are generally used for research and to support graduate courses. One or more faculty member working in a specific area are usually designated as custodians for a research lab. AUB laboratories that could support the graduate program in chemical engineering, which also designate the type of the lab and the current custodian(s).

Laboratory	Type	Place	Custodian(s)
Physical Chemistry Lab	Instruction	Chemistry Bldg.	Lara Abramian
Analytical Lab	Instruction	Chemistry Bldg.	Lara Abramian
Organic Chemistry Lab	Instruction	Chemistry Bldg.	Lara Abramian
Instrumentation and Control Lab	Instruction	IOEC 420	MECH LABS
Fluid Dynamics Lab	Research	IOEC 319	Ghanem Oweis
Heat Transfer and Air Conditioning Lab	Instruction	IOEC 321	MECH LABS
Hydraulic Lab	Research/Instruction	IOEC 210A/B	Helmi El Khatib
Environmental Lab	Research/Instruction	IOEC 128-129	RAMEZ ZAYYAT
Computer Labs	Teaching Educational	SRB 209	Kamal Mikati
Central Research Science Lab	FAS	Physics Bldg.	Physics core lab
Chemical Lab	Research	SRB 304	CHEN Labs
Reaction Engineering Lab	Research/Educational	IOEC 324	CHEN Labs
Unit Operation Lab	Research/Educational	IOEC 302	CHEN Labs
Chemical Research Lab	Research	IOEC 417	CHEN Labs
Chemical Engineering lab	Research/Educational	FS1 106	CHEN Labs

The use of CHEN laboratories is limited to individuals in one or more of the following categories:

- Faculty members and instructors of the CHEN program including graduate and undergraduate teaching assistants who are using laboratories to carry out their teaching, research, or service obligations.
- Permanent and part-time employees, including work study students and part-time student workers, who perform duties in the laboratories related to the CHEN program mission.

- CHEN students using laboratories to carry out work which is assigned as part of a course in which they are currently enrolled.
 - Undergraduate or graduate students who have received written authorization from the department chair to carry out university-related work.
 - Any other person who has received the authorization of the department chairperson to use a particular laboratory.
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Other Rules for the Use of the Lab Office Space and Computers:

- All students who are not assigned office space are not allowed to use dedicated CHEN lab computers but can use the IT unit computers which is open for 24 hours.
 - All software available in SRB will also be made available in the IT Unit, and new software required by graduate students and approved by the professor with whom the student is working should be installed at a specified computer[s].
 - Faculty who wish to assign an office area to a student shall coordinate the assignment with the chair to insure space availability and assignment priorities are followed. Students cannot be promised office space before clearing the assignment with the department chair.
 - Graduate students who have their own laptops should be given IP addresses by the system administrator to access the internet and the AUB database..
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Computer / Internet Facilities:

Computer services required by faculty members, students, and staff of the FEA are provided through MSFEA IT Unit, which is divided into three sub-units offering the following services: (i) Administrative, (ii) Technical support, and (iii) Web and Software. The MSFEA IT Unit has six computer rooms with 25–30 computers in each lab to support classes and student needs. In addition, a wireless network has been in operation since March 2005.

The student computer labs are used for course instruction by various departments and for personal use by students. Many popular and specialized PC software packages are available on the lab servers.

Software Library:

The MSFEA has many commercial software packages that are used in teaching and research. The operating software used for programming are mainly: C++, JAVA, Fortran, Visual Basic, and Matlab. Other major softwares that include: ANSYS/Gambit for Computational Fluid Dynamics, Airpak, Flowlab, ALGOR, ABAQUS, CHEMKIN, MATLAB, ALGOR, NASTRAN, PRO-E, AUTOCAD, TRNSYS, Tecplot, and SolidEdge. The CEAE department acquired the following educational and research software in AY 2009-10 SuperPro Designer, Aspen HYSYS, Aspen Plus, Aspen, Kappa (Saphire), Simple-ware, Schlumberger Simulation Launcher (SSL), Eclipse, IAM, Merak, OFM, PIPESIM, PIPESCOM, Techlog, Petrel, Super Pro Designer, Loop-pro, Spyder-Python-Anaconda and the rest of the AspenTech package.