

NSEL REGULATIONS

The Newmark Structural Engineering Laboratory (NSEL) is under the umbrella of Department of Civil and Environmental Engineering with the goal of providing a state-of-the-art structural and material testing facility. The intent of this section is to define the regulations and insures equal access for all researchers, while not placing a financial burden on the Department of Civil and Environmental Engineering. The following items also protect the scientific integrity of ongoing experiments and safety of all individuals in the laboratory.

- 1) **General.** The overall objective of NSEL has been and will continue to be to maintain a state-of-the-art materials and structures testing laboratory. Since the very beginning, the high quality of the tests performed has been possible thanks to a regular upgrade process of instrumentation, sensors, actuators, and hydraulic power supplies. Scheduled maintenance of lab equipment guarantees that reliable testing can take place. Well-trained staff, together with talented undergraduate and graduate students, have been essential to the success of NSEL.
- 2) **Users.** Both staff and students who have an interest in utilizing NSEL instrumentation shop or want to work on project within NSEL, must complete shop use and safety training as well as NSEL safety and equipment operations training. The training program is provided for a user on an as needed basis. The shop use and safety training is coordinated by the Research Lab Shop Supervisor for a fee (\$21.70/hour). The NSEL safety and equipment training is provided by the NSEL testing admiration staff.
- 3) **NSEL Working Committee.** The NSEL working committee is formed of the NSEL Operations Director, Research Engineer, and Research Laboratory Shop Supervisor. The committee meets with the NSEL Director every other week or as needed to discuss the progress of the work in the lab and all other lab related matters including but not limited to scheduling of new projects, assigning space in the lab, upgrading and maintaining of lab equipment, new staff hiring, upgrading the lab website, etc.
- 4) **NSEL Advisory Committee.** The NSEL Advisory Committee (AC) is assigned by the Department Head. The committee is formed primarily of faculty members from multiple disciplines within the CEE department. The AC should provide the NSEL Director with advice on developing future vision and initiatives for the lab and machine shop, upgrading the lab policies and regulations, and any other issues that the director may need assistance with. The AC meets every other week or as needed and the meeting is chaired by the NSEL Director.
- 5) **New Project Scheduling.** Lab users who wish to schedule a new project should contact the NSEL Operations Director and Research Engineer. The NSEL Operations Director will schedule a kickoff meeting for the new project. The meeting should be attended by NSEL Working Committee members, the Principal Investigator (PI) of the new project, and the student(s) assigned to the project. During the meeting all services required to complete the project should be discussed (instrumentation, testing equipment, labor, etc.) as well as

logistical issues pertinent to the project including project duration, specimen disposal policy/agreement, and space availability.

- 6) **Cost.** Fees are assessed on a per day basis, see Table 1 below. There are 3 fee schedules in NSEL:

The basic intent of the research fee structure is to cover maintenance costs of equipment, but not discourage more formidable experiments. If the NSEL personnel are involved in the setup and testing activities associated with the research programs, the hourly rates will apply according to their individual hourly rate. Projects are charged according to a daily rate; meaning 1 day is defined as a period of time 24 hours or less, during which the equipment is being used. Projects that involve usage of equipment during test set-up will be charged one day for set-up in addition to the days of testing.

Table 1. User fees for equipment usage at the Newmark Structural Engineering Laboratory.

Description	Charge Per Day
22/50/100 kip Load Frames (including pump)	\$ 387.31
600kip Load Frame (including pump)	\$ 1,311.34
Single Actuator	\$ 387.31

- 7) **Lifting Heavy Loads and Delivery.** Structural testing requires usage of lifting equipment for specimens, fixtures, and loading actuators as well as delivery of items ordered through vendors. NSEL has 2 cranes, a 20 ton and 40 ton, 2 forklift trucks, and pickup truck available for that purpose. A scissor lift and 30' boom lift is also available. Lifting equipment is primarily maintained and operated by NSEL and machine shop staff that received appropriate training. CEE students that need to utilize CEE pickup truck for delivering purchased items should contact NSEL/machine shop staff.
- 8) **Hours of Operation.** NSEL operates on 24 h per day and 7 days per week bases. The normal operating hours of the staff at NSEL are Monday – Friday 8am – 4pm. The NSEL Operations Director and Research Engineer provides services during normal operating hours.

Hydraulic Power Supply (HPS), Instrumentation, Sensors, Data Loggers, and Student Instrumentation Workshop (SIW). If there is a need for HPS or any use of instrumentation, sensors, data loggers or for scheduling training at the SIW, please contact Dr. Greg Banas at (217)649-0915 or gbanas@illinois.edu

Research Lab Machine Shop. If there is a need to perform work at the machine shop or for scheduling shop use and safety training, please contact Mr. Kyle Cheek at (217)333-6913 or kcheek@illinois.edu.