

## Industrial Engineering Department Laboratories

### Name of the Laboratory: Human Factors Engineering Laboratory

Location: B15-G-017

Human factors laboratory is a state-of-the-art undergraduate laboratory, for understanding, designing products and systems to match the abilities, needs, and limitations of people to improve productivity, safety, performance, and user happiness. The laboratory focuses on cognitive, ergonomics and environmental aspects of human factors and its influence on productivity and quality. The equipment in the lab comprises of anthropometry, hand strength evaluation kit, voluntary static lifting etc. are available.



**Name of the Laboratory: Method and Work Study Laboratory**

**Location: B15-G-071**

Students explore through experiments, systematic examination of the methods of carrying on activities so as to improve the effective use of resources and to set up standards of performance for activities being carried out in work study lab. Students learn method study, time study, and motion study and work measurements through various experiments. Some of the experiments performed at this lab are finger dexterity test, pegboard, two hand coordination, eye-hand coordination etc. Various equipment available in the Industrial Engineering.



**Name of the Laboratory: Optimization and Simulation Laboratory**

**Location: B15-G-009**

The Statistical Laboratory is an explorative and interactive lab designed both to support education in statistics and provide a tool for the simulation and solution of statistical problems. The laboratory encompasses various software to assist the students in understanding statistical and probability analysis of real-world problems.



**Simulation Laboratory: B15-G-009**

The objective of Simulation laboratory is to assist students in understanding the simulation of industrial problems by programming using Arena. The students simulate the real-world problems and find answer to optimality. They get hands on experience on Arena.



***Operations Research Laboratory: B15-G-009***

The OR lab serves as center for teaching as well as for basic and applied research in the fields such as optimization, stochastic models, manufacturing logistics and service operations. The OR laboratory involves the construction of mathematical models of the organization under investigation.



**Name of the Laboratory: Computer Aided Design and Computer Aided Manufacturing Laboratory**

**Location: B15-G-005**

Computer Integrated Manufacturing (CIM) Laboratory provides students with many challenging hands-on experiences such as manufacturing design and control. It is the state-of-the-art laboratory consisting of various equipment classes including material processing class-(CNC) machine centers (mill and lathe), material handling class-industrial robots, material transportation class, conveyor system, and material inspection class, vision-based system.

***Name of the Laboratory: Safety System Laboratory***  
***Location: B15-G-004***

The lab includes machines and training set;

- Methods of air purification from gaseous impurities.
- Modern Lighting Management Trainer.
- Training laboratory stand (safety regulations, electric safety).
- Safety regulations, lighting.
- Lighting, investigation of workplace lighting conditions.
- Set for the study of the mechanical vibrations.
- Anti-theft system trainer.
- Soundproofing and sound absorption.
- Dust chamber for determining air dustiness by mass method.
- Video surveillance mobile trainer.
- Lighting –lighting engineering.
- Protection against microwave radiation.
- Safety regulations, fire safety.
- Life safety, burglar alarm and video observation.
- Firefighting electrical wiring trainer.
- Fire alarm system training kits.





