



Industrial Engineering & Ergonomics (BMEP- 501)

List of Programs:

1. Design of an office chair based on multiple section data;
2. Evaluation of an automobile driver's work station based on class data and population data using a quarter inch scale grid and jointed anthropometric templates.
3. Measurement of impulsive and 3-second sustained strength as a function of handle grip length;
4. Measurement of reaction time (total time and initiation time) as a function of stimulus mode (light or tone), distance, and accuracy of movement.
5. Measurement of production rate and estimation of fatigue sensation (on a five level descriptive scale) using regular, ball handled, and Yankee screwdrivers;
6. Measurements of hand torque using pliers in the frontal and sagittal planes.
7. Measurement of visual acuity, lumens versus wattage for incandescent and fluorescent lighting.
8. Determination of required and preferred illumination levels for reading various sizes of print.
9. Measurement of wall and floor reflectances (ceiling reflectances are given for reasons of safety).
10. Study of material handling equipments.