

Test Rig Design

1.5 day course

COURSE OUTLINE

- I. Test Rig concept definition
- II. Design criteria
 - A. Stiffness
 - B. Mass
 - C. Strength/durability
 - D. Safety
- III. Component selection
 - A. Bellcranks
 - B. Actuators
 - C. Servovalves
 - D. Hydraulic power supplies
 - E. Accumulators
 - F. Bearings
 - G. Bolted connections
 - H. Reaction bases

This course is available as a companion to the 3-day training course on Durability Testing Technology, or as a stand-alone course. The course focuses on the principles of test rig fixture design for testing vehicle components.

Important mechanical design issues are addressed, including:

- » Restraint
- » Fixture kinematics
- » Safety
- » Performance
- » Component sizing
- » Common test configurations

Who should attend

This course was developed for engineers and technicians who are new to the technology, whether they are new employees of existing facilities or employees involved in setting up a new testing rig or laboratory. It will also be valuable for engineers and technicians who have experience with certain aspects of test technology and who desire expanded knowledge of test rigs and fixtures

Prerequisites

A technical degree or equivalent background in test applications is preferred.