

Railroad Electronics (RREL)

Courses

RREL 110 Introduction to Railroad Signal Systems* (4 Hours)

Prerequisites: Approval of the railroad training administrator and the JCCC department approval.

This course is the first of a series of four designed to provide entry (apprentice) level training to new signal employees, or those seeking to enter this trade. Upon successful completion of this course, the student should be able to describe basic company organization, operating and safety rules pertaining to signalmen, basic principles of electricity and measurement as well as protective devices. Also he or she should have a basic understanding of signal systems, track circuits, and Federal Railroad Administration (FRA) rules. 44 hrs. lecture 16 hrs. instructional lab/total.

RREL 112 Track Circuits and Systems* (4 Hours)

Prerequisites: Successful completion of RREL 110 and approval of the railroad training administrator and the JCCC department approval.

This course is the second of a series of four designed to provide entry (apprentice) level training to new signal employees, or those seeking to enter this trade. Upon successful completion of this course, the student should be able to describe and explain the operation of various track circuits, relay and control circuits, traffic control systems, locks, and applicable rules and standards. 44 hrs. lecture 16 hrs. instructional lab studio/total.

RREL 114 Traffic Control, Switch Machines Locks* (4 Hours)

Prerequisites: RREL 112 and approval of the railroad training administrator and the JCCC department approval.

This course is the third of a series of four designed to provide entry (apprentice) level training to new signal employees, or those seeking to enter this trade. Upon successful completion of this course the student should be able to describe and maintain automatic block signaling systems, centralized traffic systems, power switches and locks. He should also be familiar with ground testing and isolation, as well as applicable rules and standards. 44 hrs. lecture 16 hrs. instructional lab studio/total.

RREL 116 Interlocking, Classification, Crossings Gates* (4 Hours)

Prerequisites: RREL 114 and approval of the railroad training administrator and the JCCC department approval.

This course is the last of a series of four designed to provide entry (apprentice) level training to new signal employees, or those seeking to enter this trade. Upon successful completion of this course, the student should be able to perform interlocking plant and route plant analysis, explain classification yards, grade crossing warning systems, gates, and other devices, as well as applicable rules and standards. 44 hrs. lecture 16 hrs instructional lab/total.