## **Railroad Electronics Certificate**

This certificate is a comprehensive program of study that covers the fundamental electronic principles used by railroad signal control systems technicians. Upon successful completion of this program, the student should be able to apply basic digital and analog theory required in the maintenance of right-of-way crossing and train control systems.

Enrollment in the program is subject to the approval of the BNSF training director and JCCC division administrator.

(Major Code 4540; State CIP Code 49.0208)

• Railroad Science (http://www.jccc.edu/academics/transportation/railroad)

## **Required Courses**

Total Hours		33
RREL 286	Applied Microprocessors*	2
RREL 285	Microprocessor Techniques*	6
RREL 284	Electronic Communications*	6
RREL 183	Digital Techniques*	6
RREL 182	Semiconductor Devices and Circuits*	6
RREL 181	Circuit Analysis DC/AC*	6
RREL 180	Introduction to Railroad Electronics*	1

**Total Program Hours: 33**