

# Railroad Freight Car Certificate

This nine hour Freight Car vocational certificate program is designed to provide the student training in the inspection, testing, and repair of freight cars. This is accomplished in accordance with established federal (Federal Railroad Administration), industry (American Association of Railroads), and company (Burlington Northern Santa Fe Railway) procedures, in a safe and professional manner.

For information visit the National Academy of Railroad Sciences (<http://www.railroadtraining.com>). Hover your cursor over the "New Careers" tab and choose from the list.

Students must earn a grade of "C" or higher in all coursework.

(Major Code 4360; State CIP Code 49.0208)

## Required Courses

RRTM 130	Freight Car Yard Inspection*	3
RRTM 131	Freight Car Repair Track Inspector*	3
RRIT 122	Elements of Welding*	3
RRTM 152	Freight Car Air Brakes, Basic*	2
Total Hours		11

**Total Program Hours: 11**

## Courses

### RRTM 130 Freight Car Yard Inspection\* (3 Hours)

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

This course is the first of a series of three for freight car training. It is designed to introduce the student to the safe inspection, testing, and repairing of freight cars in a repair track environment in accordance with Federal Railroad Administration (FRA), Association of American Railroads (AAR), and BNSF Railway procedures and policies. 32 hrs. lecture, 8 hrs. instructional lab/total.

### RRTM 131 Freight Car Repair Track Inspector\* (3 Hours)

**Prerequisites:** RRTM 130 and approval of the railroad training administrator and JCCC department approval

This course is the second of a series of three for freight car training. It is designed to introduce the student to the safe inspection, testing, and repairing of freight cars in a repair track environment in accordance with Federal Railroad Administration (FRA), Association of American Railroads (AAR), and BNSF Railway procedures and policies. 32 hrs. lecture, 8 hrs. instructional lab/total.

### RRTM 135 Basic EMD Mechanical\* (3 Hours)

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

This is the first in a series of four courses in Locomotive Mechanics. This course is designed to introduce the student to the basic operation, maintenance, repair requirements and trouble shooting for EMD diesel engines and support systems. 40 hrs. integrated lecture lab/total.

### RRTM 136 Basic GE Mechanical\* (3 Hours)

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

This is the second in a series of four courses in Locomotive Mechanics. This course is designed to introduce the student to the basic operation, maintenance, repair requirements and trouble shooting for GE diesel engines and support systems. 40 hrs. integrated lecture lab/total.

### RRTM 137 Locomotive Air Brake\* (3 Hours)

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

This course is the third in a series of four courses in Locomotive Mechanics. It is designed to provide the student an introduction to the operation, testing, maintenance, and troubleshooting for 26L and 30 ACDW locomotive air brake systems. This course also emphasizes FRA air brake requirements applicable to locomotives. 40 hrs. integrated lecture lab/total.

### RRTM 138 Locomotive FRA\* (3 Hours)

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

This course is the fourth in a series of four courses in Locomotive Mechanics. This course is designed to introduce the student to the Federal Railway Administration and Department of Transportation Code of Federal Regulations Title 49, Parts 209, 218, 229, 231, and 232. 40 hrs. integrated lecture lab/total.

**RRTM 142 Locomotive Electricity\* (3 Hours)**

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

This is the first in a series of four courses in Locomotive Electrical. This course is designed to introduce the student to the basic electrical theory and concepts related to locomotive electrical systems. 40 hrs. integrated lecture lab/total.

**RRTM 143 Low Horsepower Electrical\* (3 Hours)**

**Prerequisites:** Approval of the railroad training administrator and the JCCC program assistant dean

This is the second in a series of four courses in locomotive electrical. This course is designed to introduce the student to the operation, maintenance, and troubleshooting of EMD Low Horsepower locomotive electrical systems. 40 hrs. integrated lecture lab/total.

**RRTM 144 EMD Basic Electrical\* (3 Hours)**

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

This is the third in a series of four courses in Locomotive Electrical, this course is designed to introduce the student to the basic operation, maintenance, repair requirements and trouble shooting of EMD diesel engines and support systems. 40 hrs. integrated lecture lab/total.

**RRTM 145 GE Dash 8/9 Electrical Systems\* (3 Hours)**

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

This is the last in a series of four courses in Locomotive Electrical. This course is designed to introduce the student to the basic operation, maintenance, repair requirements and trouble shooting of GE Dash 8/9 locomotive systems. 40 hrs. integrated lecture lab/total.

**RRTM 152 Freight Car Air Brakes, Basic\* (2 Hours)**

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

This course is designed to provide the student with a basic working knowledge of Freight Car Air Brake Equipment as well as a firm understanding of both Association of American Railroads (AAR) and Federal Railroad Administration (FRA) rules and requirements with emphasis on safe work practices. 40 hrs. integrated lecture lab/total.