

LOCOMOTIVE MECHANICAL

Associate in Applied Science

<http://www.sandburg.edu/Academics/Degree-Certificates/Locomotive-Mechanical/index.html>

This degree is an extension of the Locomotive Mechanical certificate. This AAS is designated to introduce the student to the basic mechanical theory and concepts related to locomotive electrical systems, including the operations, maintenance, and troubleshooting of EMD and GE diesel engines and support systems. Also, it includes an introduction to the operation, testing, maintenance and trouble shooting for 26L and 30 ACDW locomotive air brake systems. Further, students will get an introduction to the Federal Railway Administration and Department of Transportation Code of Federal Regulations Title 49, Parts 209, 218, 228, 231 and 232. This program will train graduates for entry level positions in the rail transportation including: Rail Locomotive Mechanics and Repairers.

Certificate

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Admission to the Program: Open First-Time Enrollees

1. Complete an application for admission and, if desired, apply for financial aid.
2. Send an official high school transcript or GED score report to the Admissions and Records Office.
3. Complete the placement exam.
4. Meet with an advisor/counselor to select classes and complete the registration process.

Department of Career & Corporate Development

2400 Tom L. Wilson Blvd.
Galesburg, IL 61401
Phone: 309.341.5313

For Additional Information Contact:

The Welcome Center
Phone: 309.345.3500
welcomecenter@sandburg.edu

For Graduation Requirements:

See the graduation policies and procedures (http://catalog.sandburg.edu/academicinformation/#graduation_policies_and_procedures) page for details.

Course	Title	Semester Hours
First Year		
Fall Semester		
ELT.100	Electrical Fundamentals	3

MAT.101	Technical Mathematics 1	3
MTL.101	Machine Tool Fundamentals 1	3
MTL.103	Manufacturing Processes	2
MFG.100	Introduction to Welding	3
MFG.130	Industrial Safety	2

Spring Semester

BOC.107	Tech Skills for Business Environment	3
MAT.102	Technical Mathematics 2	3
ENG.101	Freshman Composition 1	3
or ENG.120	or Report Writing	
or RDG.120	or Strategies for Success in College	
RRT.120	Introduction to Railroading	1.5
RRT.142	Locomotive Electricity	3
HYD.101	Hydraulics and Pneumatics	3

Summer Session

SPE.110	Interpersonal Communication	3
or SPE.120	or Introduction to Public Speaking	

Second Year

Fall Semester

ICT.110	Computer Software Applications	3
RRT.135	Basic Electro Motive Diesel (EMD)	3
RRT.136	Basic GE Mechanical	3
RRT.137	Locomotive Air Brakes	3
RRT.101	History of Railroading	3

Spring Semester

ELT.213	Process Control & Instrumentation	3
RRT.138	Locomotive FRA	3
RRT.165	Rail Safety Quality & Environment	3
SOC.101	Introduction to Sociology	3
or PSY.101	or Introduction to Psychology	
or PSY.107	or Positive Psychology	

Total Semester Hours 62.5

***All course taken from First Year, Spring Semester must be passed with a "C" or better in order to obtain Basic Industrial & Manufacturing Maintenance Certificate.**

Kellogg, David M

associate dean of career & corporate development

The Center for Manufacturing Excellence (CME) offers classroom space, a computer lab, and houses Carl Sandburg College's industrial programs. Students may take courses in the following subject areas: welding, biofuels, rail, machine tooling, manufacturing or electrical. The electrical lab features a host of components to aid in student learning including AC/DC trainers. In 2014, Sandburg became a designated National Academy of Railroad Sciences (NARS) training site offering courses in locomotive electrical and locomotive mechanical. Instruction is delivered by individuals with industry-specific expertise and includes specialized coursework using technical equipment. Two diesel engines inside the CME are available for training opportunities. The College's welding lab offers 16 bay stations and soon will have an additional ten working spaces. The welding area offers a welding simulator, as well as state of the art multi-process welding machines.