EEM — Electronics Technology

EEM 105 Basic Electricity 2-0-2

This course is a survey of basic electrical principles, circuits, and measurements.

EEM 117 AC/DC Circuits I 3-3-4

This course is a study of direct and alternating theory, Ohmâ €™s Law, series, parallel, and combination circuits. Circuits are constructed and tested.

EEM 118 AC/DC Circuits II 3-3-4

Prerequisites: *EEM 117*

This course is a continuation of the study of direct and alternating current theory to include circuit analysis using mathematics and verified with electrical measurements

EEM 121 Electrical Measurements 1-6-3

Prerequisites: *EEM 117 and EEM 140*

This course covers the basic principles of electrical measuring instruments and how they are used in industries.

EEM 140 National Electrical Code 3-0-3

This course is a study of the national electrical code and is based on the latest codes as published by the national fire protection association (NFPA). Students will learn how the NEC is divided and subdivided so that appropriate codes applying to specific electrical install scenarios may easily be found, interpreted, and applied.

EEM 145 Control Circuits 3-0-3

Prerequisites: *EEM 117 and EEM 140*

This course covers the principles and applications of component circuits and methods of motor control.

EEM 151 Motor Controls I 2-6-4

Prerequisites: *EEM 118*

This course is an introduction to motor controls, including a study of the various control devices and wiring used in industrial processes.

EEM 165 Residential/Commercial Wiring 2-6-4

This course is a study of wiring methods and practices used in residential and commercial applications.

EEM 170 Electrical Installation 1-6-3

Prerequisites: *EEM 117 and EEM 140*

This course covers electrical wiring techniques commonly used in commercial, industrial, and residential wiring.

EEM 172 Electrical Print Reading 4-0-4

This course is a study of electrical prints as they pertain to layout, planning, and installation of wiring systems in residential, commercial and/or industrial complexes.

EEM 204 SCWE in Residential/Comm Elec 0-12-3

Prerequisites: *EEM 165*

This course integrates residential/commercial electrical skills with an approved job environment related to the residential/commercial industry.

EEM 215 DC/AC Machines 2-3-3

This course is a study of applications, operations, and construction of DC and AC machines.

EEM 221 DC/AC Drives 2-3-3

This course covers the principles of operation and application of DC drives and AC drives.

EEM 231 Digital Circuits I 1-6-3

This course is a study of the logic elements, mathematics, components, and circuits utilized in digital equipment. Emphasis is placed on the function and operation of digital integrated circuit devices.

EEM 235 Power Systems 3-0-3

Prerequisites: *EEM 117 and EEM 140*

This course is a study of the design, operation, and installation of power distribution applications. Load analysis rate and power economics are covered.

EEM 251 Programmable Controllers 1-6-3

This course is an introduction to programmable control systems with emphasis on basic programming techniques. A variety of input/output devices and their applications are covered.

EEM 252 Programmable Controllers Appli 1-6-3

Prerequisites: *EEM 251*

This course covers the application of programmable controller theories and operation procedures. Topics such as interfacing data manipulation and report generation are covered. Programmable controller projects are constructed, operated, and tested.

EEM 274 Technical/Sys Troubleshoot 2-6-4

This course is a study of systematic approaches to troubleshooting and repair of electronic, electrical, and electromechanical systems.