

HIST 108 (2210) Current World Affairs

Prerequisite: None

Credit Hours: 3

This course is an in-depth study of current events, trends and developments that affect daily life. In this course, we explore broad forces at play in the world: international economics, national interests, military power, nationalism, ethnicity, the environment and human rights. We will discuss world events as they unfold before our eyes and seek to understand them in light of their historical context. Students will leave this class with both a vision of the world's vast political landscape and the ability to better understand the multitude of events that comprise that landscape.

HIST 201 (2260) Kansas History

Prerequisite: None

Credit Hours: 3

A political, social, cultural, and economic survey of Kansas history from before the arrival of Europeans to the present day, emphasizing how the history of Kansas fits in to the larger scope of American history.

Industrial Technology

INDU 123 Electronic Devices

Prerequisite: INDU 125 Fundamentals of Electronics I w/Lab or Instructor's permission, INDU 167 Fundamentals of Electronics II w/Lab or Instructor's permission

Credit Hours: 3

This course will provide a fundamental knowledge of DC Power Supplies, Diodes, Transistors, Amplifiers and Troubleshooting. Operational Amplifiers, Oscillators, Integrated Circuits, Thyristors, Switch Mode Regulators, and AM/FM Radio Circuits

INDU 125 Fundamentals of Electronics DC/AC

Prerequisite: None

Credit Hours: 3

This course provides a fundamental knowledge of analysis techniques used to solve for current, voltage, wattage, and resistance in various DC/AC circuits.

INDU 127 Digital Logic Circuits

Prerequisite: INDU 125 Fundamentals of Electronics I-DC w/Lab or Instructor's Permission

Credit Hours: 3

This course provides knowledge in theory with building block circuits in logic systems and computers. Small scale ICs are used to learn the basic fundamentals of these systems and subsystems. Analysis techniques are taught to build the student's ability to troubleshoot. Binary mathematics and Boolean concepts are introduced and explained as needed.

INDU 131 Engineering Graphics

Prerequisite: None

Credit Hours: 3

This course is an introduction to the fundamental principles of graphic communication. It is also an introduction in the use of computer aided design software to produce 3-D geometry, assemblies, and dimensioned 2-D orthographic views. Traditional drawing techniques including manual drafting tools and equipment will be utilized as well. Orthographic projection, dimensioning techniques, tolerance methods, fits and allowances, and sectioning methods are covered.

INDU 155 OSHA Safety 10

Reading Placement Test Level: None

Prerequisite: None

Credit Hours: 1

This course will include OSHA standards assuring proper safety techniques for all types of circuits and components.

INDU 167 Fundamentals of Electronics DC/AC Lab

Prerequisite: Enrolled in INDU 125 Fundamentals of Electronics I w/Lab

Credit Hours: 3

Provides a fundamental knowledge of analysis techniques used to solve for current, voltage, wattage, resistance, and impedance in various AC Circuits.

INDU 168 Electronic Devices Lab

Prerequisite: INDU 125 Fundamentals of Electronics DC/AC or Instructor's permission, INDU 167 Fundamentals of Electronics DC/ AC Lab or Instructor's permission, Co-enrolled in, or successful completion of INDU 123 Electronic Devices

Credit Hours: 3

The course will include DC Power Supplies, Diodes, Transistors, Amplifiers, Troubleshooting, Operational Amplifiers, Oscillators, Integrated Circuits, Thyristors, Switch Mode Regulators, and AM/FM Radio Circuits.

INDU 169 Digital Logic Circuits Lab

Prerequisite: Advisor Approval: INDU 125 Fundamentals of Electronics I DC w Lab, or instructor's permission, INDU 167 Fundamentals of Electronics DC/AC Lab, or instructor's permission, and Co-enrolled in or successful completion of INDU 127 Digital Logic Circuits, Co-enrolled in or successful completion of OSHA 155 Safety 10.

Credit Hours: 2

This course will provide lab practices of course INDU 127 with building block circuits in logic systems and computers in a hands-on environment. Small scale IC's are used to learn the basic fundamentals of these systems and subsystems. Analysis techniques are taught to build the student's ability to troubleshoot. Students will also successfully obtain an OSHA 10 certificate from an online source during the course.

INDU 210 Computer Aided Drafting & Design

Prerequisite: INDU 131 Engineering Graphics

Credit Hours: 3

This course will include the use of computer aided design software to generate complex 3-D geometry for the purpose of communicating the following: manufacturing information, detail design information, dimensioning and tolerance data, and surface finish. This course will teach the student more advanced drafting skills. It will take the skills developed in Engineering Graphics I and further develop those skills in the art of drafting. The student will be expected to develop acceptable skills in the art of drafting. Additionally, the following areas will be covered: geometric tolerances, auxiliary views, threads and fasteners, assembly and working drawings, the design process, and pictorial drafting techniques.

Mathematics

MATH 114 College Algebra with Review KRSN MAT1010**

Prerequisite: None

Credit Hours: 5

This course covers the same material as MATH 115 College Algebra with additional instruction. The course covers the properties of functions and their inverses, properties and graphs of the exponential and logarithmic functions, graphing techniques for general higher order polynomials and rational functions, and various solution techniques for solving higher order linear systems of equations. Topics on sequences and series will be presented as time permits. Use of technology such as the graphing calculator and some computer packages will be incorporated into the course.

MATH 115 (1719) College Algebra KRSN MAT1010**

Prerequisite: See Placement Test Recommendation*

Credit Hours: 3

This course continues from MATH 100 Intermediate Algebra to cover and extend the properties of functions and their inverses, properties and graphs of the exponential and logarithmic functions, graphing techniques for general higher order polynomials and rational functions, and various solution techniques for solving higher order linear systems of equations. Topics on sequences and series will be presented as time permits. Use of technology such as the graphing calculator and some computer packages will be incorporated into the course.

*Refer to the Placement Testing Procedure 3.22, page 22 **Refer to Course Transfer, page 17