

Industrial Science (ISC)

ISC 110. Workplace Safety. 1.0 Credit. Class-1.0. Clinical-0.0. Lab-0.0. Work-0.0

This course introduces the basic concepts of workplace safety. Topics include fire, ladders, lifting, lock-out/tag-out, personal protective devices, and other workplace safety issues related to OSHA compliance. Upon completion, students should be able to demonstrate an understanding of the components of a safe workplace.

ISC 112. Industrial Safety. 2.0 Credits. Class-2.0. Clinical-0.0. Lab-0.0. Work-0.0

This course introduces the principles of industrial safety. Emphasis is placed on industrial safety and OSHA regulations. Upon completion, students should be able to demonstrate knowledge of a safe working environment and OSHA compliance.

ISC 115. Construction Safety. 2.0 Credits. Class-2.0. Clinical-0.0. Lab-0.0. Work-0.0

This course introduces the basic concepts of construction site safety. Topics include ladders, lifting, lock-out/tag-out, personal protective devices, scaffolds, and above/below ground work based on OSHA regulations. Upon completion, students should be able to demonstrate knowledge of applicable safety regulations and safely participate in construction projects.

ISC 131. Quality Management. 3.0 Credits. Class-3.0. Clinical-0.0. Lab-0.0. Work-0.0

This course provides a study and analysis of the aspects and implications of quality management that lead to customer satisfaction through continuous quality improvement. Topics include Total Quality Management, ISO 9000, organizing for quality, supplier/vendor relationships, and the role of leadership in quality management. Upon completion, students should be able to demonstrate an understanding of quality management concepts and techniques.

ISC 212. Metrology. 2.0 Credits. Class-1.0. Clinical-0.0. Lab-2.0. Work-0.0

This course covers the principles and techniques of modern practical metrology and inspection methods. Topics include precision, accuracy, standards, and calibration. Upon completion, students should be able to perform various roles within a metrology system.

ISC 220. Lean Manufacturing. 3.0 Credits. Class-2.0. Clinical-0.0. Lab-2.0. Work-0.0

This course introduces students to the concept of lean manufacturing as a means of waste reduction. Topics include the examination of manufacturing operations and the incorporation of lean techniques to reduce waste, cost, time, and materials in manufacturing processes. Upon completion, students should be able to demonstrate an understanding of lean manufacturing systems and how they benefit the environment and business.