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DEPARTMENT OF
INDUSTRIAL & ELECTRICAL
ENGINEERING TECHNOLOGY

Goals and Student Learning Outcomes of the Industrial Education and Industrial Technology Programs

- Program Goal 1:The students will develop an understanding and acquire knowledge of the nature of technology.
  - Learning Outcome 1.1:The teacher candidate will understand the characteristics and scope of technology.
  - Learning Outcome 1.2: The teacher candidate will be able to apply the core concepts of technology.
  - Learning Outcome 1.3: The teacher candidate understands relationships among technologies and the connections between technology and other fields.

- Program Goal 2:The students will develop an understanding of technology and society.
  - Learning Outcome 2.1:The teacher candidate will understand the cultural, social, economic and political effects of technology.
  - Learning Outcome 2.2:the teacher candidate will be able to understand the effects of technology on the environment.
  - Learning Outcome 2.3:The teacher candidate will understand the role of society in the development and use of technology.
  - Learning Outcome 2.4:The teacher candidate will be able to understand the effects of the influence of technology on history.

- Program Goal 3:The students will develop an understanding of design.
  - Learning Outcome 3.1:The teacher candidate will develop an understanding of the attributes of design.
  - Learning Outcome 3.2:The teacher candidate will develop an understanding of engineering design.
  - Learning Outcome 3.3:The teacher candidate will understand the role of troubleshooting, research and development, invention and innovation, and experimentation in problem solving.

- Program Goal 4:The students will develop abilities for a technological world.
  - Learning Outcome 4.1:The teacher candidate will be able to apply the design process.
  - Learning Outcome 4.2: The teacher candidate will be able to use and maintain technological products and systems.
  - Learning Outcome 4.3:The teacher candidate will have the abilities to assess the impact of products and systems.

- Program Goal 5: The students will develop an understanding of the designed world with practical applications.
  - Learning Outcome 5.1:The teacher candidate will analyze the principles, concepts and applications of medical technologies.
  - Learning Outcome 5.2:The teacher candidate will analyze the principles, concepts and applications of agricultural and related bio- technologies.
  - Learning Outcome 5.3:The teacher candidate will analyze the principles, concepts and applications of energy and power technologies.
  - Learning Outcome 5.4:The teacher candidate will analyze the principles, concepts and applications of information and communication technologies.
  - Learning Outcome 5.5:The teacher candidate will analyze the principles, concepts and applications of transportation technologies.
  - Learning Outcome 5.6:The teacher candidate will analyze the principles, concepts and applications of manufacturing technologies.
  - Learning Outcome 5.7:The teacher candidate will analyze the principles, concepts and applications of construction technologies.

Additional Learning Outcomes for Industrial Education program are:

1. Demonstrate the ability to plan and implement an Industrial Education curriculum.
2. Satisfy University, South Carolina State Department of Education, and CAEP requirements for Teacher Certification.