DEKALB TECHNICAL COLLEGE
Clarkston Campus and Covington Campus

INDUSTRIAL SYSTEMS TECHNOLOGY
INDUSTRIAL SYSTEMS FUNDAMENTALS

TECHNICAL CERTIFICATE OF CREDIT

The Industrial Systems Technology Certificate of Credit programs prepare students for employment in a variety of positions in today's industrial systems production equipment maintenance field. The programs provide learning opportunities that introduce, develop, and reinforce academic and technical knowledge, skills, and attitudes required for job acquisition, retention, and advancement. The program provides opportunities to retrain or upgrade present knowledge and skills. Graduates of the program are qualified as industrial systems technician helper.

Course Number	Course	Class Hours	Lab Hours	Total Hours	Credit Hours	Prerequisites/Corequisites
IFC 100	Industrial Safety Procedures	20	10	30	2	
IFC 101	Direct Current Circuits I	30	20	50	4	MAT 103
IFC 102	Alternating Current I	30	20	50	4	IFC 101
MAT 103	Algebraic Concepts	50	0	50	5	*
SCT 100	Introduction to Microcomputers	10	40	50	3	

*Program admission level math competency required
**Or Advisor Approval

CIP CODE: 47.030301 **MAJOR CODE: ISF1** **REQUIRED CREDIT HOURS: 18** **10/07**

COURSE DESCRIPTIONS

IFC 100 – INDUSTRIAL SAFETY PROCEDURES (2)
Provides an in-depth study of the health and safety practices required for maintenance of industrial equipment. Topics include: introduction to OSHA regulations; tool safety, fire fighting equipment, personal protective equipment, chemical safety, fall protection, confined space entry, lock out procedures; first aid and CPR.

IFC 101 – DIRECT CURRENT CIRCUITS I (4)
Prerequisites/Corequisites: Program admission level English, reading and math scores, MAT 101 (non-program diploma students)
Introduces direct current (DC) concepts and applications. Topics include: electrical principles and laws; batteries; DC test equipment; series, parallel, and simple combination circuits; and laboratory procedures and safety practices.

IFC 102 – ALTERNATING CURRENT I (4)
Prerequisite/Corequisite: IFC 101
Introduces the theory and application of varying sine wave voltages and current. Topics include: magnetism, AC wave generation, AC test equipment, inductance, capacitance, and basic transformers.

MAT 103 – ALGEBRAIC CONCEPTS (5)
Prerequisite: Approved admission level math score **or** completion of MAT 098 with a grade of "S"
Introduces concepts and operations which can be applied to the study of algebra. Course content emphasizes: basic mathematical concepts, basic algebraic concepts, and intermediate algebraic concepts. Class includes lecture, applications, and homework to reinforce learning. Computer and Internet technology are an integral part of this course. A minimum grade of "C" is required in this course.

SCT 100 - INTRODUCTION TO MICROCOMPUTERS (3)
Introduces the fundamental concepts and operations necessary to use microcomputers. Emphasis is placed on basic functions and familiarity with computer use. Topics include: computer terminology, introduction to the Windows environment, introduction to networking, introduction to word processing, introduction to spreadsheets, introduction to databases, and introduction to presentation graphics.

ESTIMATED PROGRAM COSTS

INDUSTRIAL SYSTEMS FUNDAMENTALS

Tuition/Fees $544.00*
Books 252.00
Total **$796.00**

*Based on one quarter

Tuition/fees and cost of books/supplies are estimates only and are subject to change without notice. Tuition is based on Georgia residency

10**/07**