



CATALOG YEAR: 2022-2023
INSTRUMENTATION & ELECTRICAL TECHNOLOGY
PROGRAM GUIDE

FIRST SEMESTER

COURSE NAME	COURSE PREFIX	COURSE NUMBER	CREDIT HOURS
College Algebra or Finite Math (TD & AAS only)	MATH	1100 or 1500	3
Intro to Computer Technology	CSCI	1010	3
Core Industry Safety	CORE	1003	3
Electrical Systems & Equipment	INST	1011	2
Fund of Electricity & Electronics	ETRN	1112	4
SEMESTER CREDIT HOURS			TD 15 AAS 15

SECOND SEMESTER

COURSE NAME	COURSE PREFIX	COURSE NUMBER	CREDIT HOURS
Fund of Semiconductors, Circuits & Transistors	ETRN	1212	4
Students who complete all courses above are eligible to receive the CTS Instrumentation Helper (16 credit hours)			
English Composition (AAS Only)	ENGL	1010	3
Introduction to Speech (AAS Only)	SPCH	1010 or 1200	3
Digital Circuits	ETRN	1420	3
Principles of Process Controls/IIoT	INST	1435	3
SEMESTER CREDIT HOURS			TD 10 AAS 16

THIRD SEMESTER

COURSE NAME	COURSE PREFIX	COURSE NUMBER	CREDIT HOURS
Physical Science (AAS Only)	PHSC	1010	3
Physical Science Lab (AAS Only)	PHSC	1010L	1
Pressure & Level Measurement	INST	1330	3
Flow & Final Control Elements	INST	1425	3
Temperature & Analytical Measurement	INST	2732	3
Motor Controls, VFD & Vibration Analysis	INST	2745	3
SEMESTER CREDIT HOURS			TD 12 AAS 16

FOURTH SEMESTER

COURSE NAME	COURSE PREFIX	COURSE NUMBER	CREDIT HOURS
Choose 3 hours from any Social Science course (AAS Only)	ECON, POLI, PSYC, SOCL	****	3
Programmable Logic Controllers	INST	2741	4
Industrial Electrical Control Systems	INST	2755	4
Industry Troubleshooting Capstone (TD & AAS Only)	INST	2000	3
SEMESTER CREDIT HOURS			TD 11 AAS 14

CTS- Instrumentation Helper = 16 credit hours

TD- Industrial Instrumentation Technology = 48 credit hours

AAS- Instrumentation & Electrical Technology = 61 credit hours