

2017-18

ESSEX COUNTY VOCATIONAL TECHNICAL SCHOOLS

CTE PROGRAMS OF STUDY

James Pedersen, Ed.D.

Superintendent

Dixiana Carbonell, Ed. S.

Assistant Superintendent of Curriculum & Instruction

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Director of Career & Technical Education

Salvatore Lima

Supervisor of STEM

Cathleen Smith, Ed.D.

Supervisor of Law & Public Safety

Emily Bonilla

Supervisor of Business & Digital Arts and Communication

WEST CALDWELL TECH

ANIMAL SCIENCE

An instructional program that focuses on Animal Science and related sciences and that prepares individuals to apply specific knowledge, methods, and techniques to the management and performance of animal care related fields. Includes a Research and Development course and potential internships with local animal hospitals and veterinary clinics.

AGS101 AG, FOOD, NATURAL RESOURCES

AGS202 PRINCIPLES OF ANIMAL SCIENCE

AGS303 ANIMAL BIOTECHNOLOGY

AGS401 RESEARCH & DEVELOPMENT

CONSTRUCTION TRADES TECHNOLOGY

A program that prepares individuals to apply technical knowledge and skills to residential and commercial building construction and remodeling. Includes instruction in construction equipment and safety; site preparation and layout; construction estimating; blueprint reading; building codes; framing; masonry; heating, ventilation, and air conditioning; electrical and mechanical systems; interior and exterior finishing; and plumbing.

CON102 INTRO TO CONSTRUCTION TRADES

CON202 CONSTRUCTION TRADES TECHNOLOGY I

CON301 CONSTRUCTION TRADES TECHNOLOGY II

CON401 CONSTRUCTION TRADES TECHNOLOGY III

COMMUNICATION/AUDIO VIDEO TECHNOLOGY & COMMUNICATIONS

Music Technology - A program that focuses on the creative aspects of the blending of music and technology; and that prepares individuals to apply technical knowledge and skills to the composition, recording, synthesis, and performance of music; audio-visual production; scoring for film and multimedia; and software and multimedia development.

MUS101 INTRO TO MUSIC TECHNOLOGY

MUS202 MUSIC TECHNOLOGY I

MUS302 MUSIC TECHNOLOGY II

MUS402 MUSIC TECHNOLOGY III

HOSPITALITY & TOURISM

Culinary Arts/Chef Training – A program that prepares individuals to provide professional chef and related cooking services in restaurants and other commercial food establishments. Includes instruction in the management of restaurants and food service establishments.

CUL102 INTRO TO CULINARY ARTS
CUL103 INTRO TO CULINARY ARTS
CUL228 INTRO TO KITCHEN ESSENTIALS
CUL225 INTRO TO BAKING
CUL320 INTERNATIONAL FOOD PREP
CUL322 ADVANCED BAKING
CUL421 REGIONAL AMERICAN CUISINE
CUL423 ADVANCED PASTRIES
CUL445 INTRO TO RESTAURANT MANAGEMENT I
CUL446 INTRO TO RESTAURANT MANAGEMENT II

HUMAN SERVICES

Cosmetology – A program that generally prepares individuals to cut, trim, and style scalp, facial, and body hair; apply cosmetic preparations; perform manicures and pedicures; massage the head and extremities; and prepares for practice as NJ State Licensed Cosmetologist.

COS103 INTRO TO COSMETOLOGY
COS201 COSMETOLOGY I
COS302 COSMETOLOGY II
COS402 COSMETOLOGY III

MARKETING

Special Products Marketing

A program that prepares individuals to perform marketing and sales operations connected with the promotion of special products, including floristry, food, and home and office products. Course includes instruction in principles of marketing research, advertising, media relations, and applicable technical and administrative skills.

MKT111 INTRO TO RETAIL CAREERS
MKT211 RETAIL CAREERS I
MKT311 RETAIL CAREERS II
MKT411 RETAIL CAREERS III

SCIENCE, TECHNOLOGY, ENGINEERING & MATHEMATICS (STEM)

Computer Science- A program that prepares individuals to apply technical knowledge and skills to design programs using various computer languages. Includes instruction that culminates in the AP Computer Science exam.

CIS353 AP COMPUTER SCIENCE PRINCIPLES
CIS104 INTRO TO COMPUTER PROGRAMMING
CIS350 COMPUTER SCIENCE APPLICATIONS

TRANSPORTATION, DISTRIBUTION & LOGISTICS

Automotive Mechanics Technology – A program that prepares individuals to apply technical knowledge and skills to repair, service, and maintain all types of automobiles. Includes instruction in brake systems, electrical systems, engine performance, engine repair, suspension and steering, automatic and manual transmissions and drive trains, and heating and air condition systems.

TDL211 AUTOMOTIVE TECHNOLOGY I
TDL312 AUTOMOTIVE TECHNOLOGY II
TDL411 AUTOMOTIVE TECHNOLOGY III

NORTH 13TH STREET

CONSTRUCTION TRADES TECHNOLOGY

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CON202 CONSTRUCTION TRADES TECHNOLOGY I
CON301 CONSTRUCTION TRADES TECHNOLOGY II
CON401 CONSTRUCTION TRADES TECHNOLOGY III

BUSINESS MANAGEMENT & ADMINISTRATION

Instructional programs that prepare individuals to perform managerial, technical support, and applied research functions related to the operation of commercial and non-profit enterprises and the buying and selling of goods and services.

Accounting Technology – A program that prepares individuals to provide technical administrative support to professional accountants and other financial management personnel. Includes instruction in posting transactions to accounts, record-keeping systems, accounting software operation, and general accounting principles and practices.

BUS223 Introduction to Finance
BUS322 Intermediate Finance
BUS221 Introduction to Accounting
BUS323 Intermediate Accounting
BUS424 College Accounting

Marketing – A program that generally prepares individuals to undertake and manage the process of developing consumer audiences and moving products from producers to consumers. Includes instruction in buyer behavior and dynamics, principle of marketing research, demand analysis, cost-volume and profit relationships, pricing theory, marketing campaign and strategic planning, market segments, advertising methods, sales operations and management, consumer relations, retailing, and applications to specific products and markets.

BUS120	Business Essentials
BUS220	Introduction to Marketing
BUS222	Professional Communications Strategies
BUS228	Introduction to Medical Billing
BUS422	Business Organization & Management
BUS224	Introduction to Office Procedures
BUS321	Business Communications & Entertainment
BUS324	Introduction to Economics
BUS325	Marketing
BUS326	Entrepreneurship
BUS425	E-Commerce
BUS426	Introduction to Law
BUS427	Economics
8802	Introduction to Business
TDL221	Global Logistics/Supply Chain Management

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COS402	COSMETOLOGY III

INFORMATION TECHNOLOGY

A program that generally prepares individuals to design, build and maintain websites. Additional components of the program include game design.

Web Design/ Multimedia Management

WEB401	Advanced CSS/JAVA Script
WEB101	Exploratory Web Design/Development
WEB 302	Introduction to Multi Media Applications
WEB301	Introduction to Scripting
WEB201	Introduction to Web Development
WEB403	Webmaster
WEB303	Website Administration
WEB204	INTRO TO GAME DESIGN
WEB410	ADVANCED GAME DESIGN

LAW, PUBLIC SAFETY, CORRECTIONS & SECURITY

Law Enforcement Services- A program that prepares individuals for law enforcement services as well as other aspects of the Judicial System. Includes instruction in Forensic Science and Criminal Law.

LPS423	Advanced Law Enforcement Procedures
LPS420	Criminology
LPS422	Introduction to Corrections
LPS321	Police Role in the Community
LPS222	Introduction to Criminal Law
LPS223	Introduction to Trials/Court
LPS324	Intermediate Forensics
LPS320	Introduction to Criminal Justice
LPS323	Introduction to Law Enforcement
LPS221	Introduction to Forensics

NEWARK TECH

BUSINESS MANAGEMENT & ADMINISTRATION

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HEALTH CAREERS ACADEMY: A program that focuses on the aspects in the field of Health Sciences. Includes instruction in principles and practices of Nursing, Dental and Medical Assisting.

HCA220	INTRO TO HEALTH CAREERS
HCA221	INTRO TO MEDICAL ASSISTING
HCA222	INTRO TO NURSING
HCA223	DYNAMICS OF HEALTH
HCA224	INTRO TO DENTAL ASSISTING
HCA301	ANATOMY & PHYSIOLOGY I
HCA303	ANATOMY & PHYSIOLOGY II
HCA310	KINESIOLOGY

HCA320	FUNDAMENTALS OF EMERGENCY CARE
HCA321	DENTAL ASSISTING I
HCA322	MEDICAL ASSISTANT I

MANUFACTURING- A program that focuses on the aspects in the field of Manufacturing. Includes instruction in principles and practices of Cabinetmaking and Welding.

Cabinet Making

MAN121	INTRO TO CABINETMAKING
MAN221	CABINETMAKING I
MAN321	CABINETMAKING II
MAN421	CABINETMAKING III

Welding

MAN111	INTRO TO WELDING
MAN211	WELDING I
MAN311	WELDING II
MAN411	WELDING III

SCIENCE, TECHNOLOGY, ENGINEERING & MATHMATICS (STEM)

Pre- Engineering

Intermediate Robotics PRE 203
Introduction to Robotics PRE201

EGN101	INTRO TO ENGINEERING DESIGN
EGN201	PRINCIPLES OF ENGINEERING
PRE207	ENGINEERING I
PRE307	ENGINEERING II
PRE407	ENGINEERING III

TRANSPORTATION, DISTRIBUTION & LOGISTICS

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TDL113	INTRO TO AUTOMOTIVE TECHNOLOGY
TDL211	AUTOMOTIVE TECHNOLOGY I
TDL212	AUTOMOTIVE TECHNOLOGY I

TDL312 AUTOMOTIVE TECHNOLOGY II
TDL411 AUTOMOTIVE TECHNOLOGY III

BLOOMFIELD TECH

ARCHITECTURE & CONSTRUCTION-

Programs that prepare individuals to apply technical knowledge and skills to residential and commercial applications, equipment and safety for Carpentry, Electrical, HVAC/R, Plumbing, and Architectural Drafting.

Architectural Drafting/CAD

CON141 INTRO TO ARCHITECTURAL DRAFTING
CON241 ARCHITECTURAL DRAFTING I
CON341 ARCHITECTURAL DRAFTING II
CON441 ARCHITECTURAL DRAFTING III

Carpentry

CON111 INTRO TO CARPENTRY
CON211 CARPENTRY I
CON311 CARPENTRY II
CON411 CARPENTRY III

Electrician

CON121 INTRO TO ELECTRICAL CONSTRUCTION
CON221 ELECTRICAL CONSTRUCTION I
CON321 ELECTRICAL CONSTRUCTION II
CON421 ELECTRICAL CONSTRUCTION III

HVAC

CON131 INTRO TO HVAC/R
CON231 HVAC/R I
CON331 HVAC/R II
CON431 HVAC/R III

Plumbing

CON151 INTRO TO PLUMBING
CON251 PLUMBING I
CON351 PLUMBING II
CON451 PLUMBING III

ARTS, AUDIO/VISUAL TECHNOLOGY & COMMUNICATIONS

Commercial & Advertising Art Printing Management

DAC141	INTRO TO GRAPHIC ARTS
DAC161	INTRODUCTION TO FASHION
DAC221	COMMERCIAL ART I
DAC241	GRAPHICS ART I
DAC261	FASHION DESIGN I
DAC301	ADVERTISING DESIGN II
DAC303	MULTIMEDIA II
DAC321	ADVERTISING DESIGN I
DAC322	COMMERCIAL ARTS II
DAC341	GRAPHIC ARTS II
DAC561	AP STUDIO ART 2D DESIGN

Radio & TV Broadcasting Technology

DAC111	Introduction to Television Production
DAC211	TV & Video Production I
DAC311	TV & Video Production II
DAC411	TV & Video Production III

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BUS427	Economics
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TDL221	Global Logistics/Supply Chain Management

SCIENCE, TECHNOLOGY, ENGINEERING & MATH (STEM)

Green Energy Academy- A program that prepares individuals to apply technical knowledge and skills to design projects utilizing principles of sustainable energy. Includes instruction that culminates in the AP Environmental Science exam.

PRE211	SUSTAINABLE ENERGY I
PRE311	SUSTAINABLE ENERGY II
PRE411	SUSTAINABLE ENERGY III