

Career Technical

BUTLER TECHNOLOGY AND
CAREER DEVELOPMENT SCHOOLS
Programs
2009-2010

Career Technical Opportunities
available at

D. Russel Lee Career-Technology Center (DRL)
3603 Hamilton Middletown Road
Fairfield Township, OH 45011
and
Greentree Health Science Academy
225 Macready Avenue
Monroe, OH 45050

Students will be transported to the D. Russel Lee Career Center (DRL) and Greentree on Fairfield busses if necessary.

AUTO COLLISION TECHNOLOGY

The Collision Repair Technician career path is designed to provide students with knowledge and skills applicable to careers in automobile dealerships and independent collision repair shops. Experienced technicians can start their own businesses, work as adjusters for insurance companies or become factory representatives for industry suppliers.

Job titles include: Collision Repair Technician, Refinish Technician, Aircraft Structural Repair and Refinish Technician, Restoration Technician, Auto Damage Appraiser, Auto Claims Adjuster, Estimator, Examiner, Auto Glass Installer, Auto Repair and Maintenance, Auto Detailer Technician, Coating and Spraying Machine Operator, Welding and Metal Worker, Fabricator, Accessory Installer, Parts Specialist and Auto Part Sales.

Location: *D. Russel Lee Career Technology Center*

AUTO TECHNOLOGY (COLLEGE TECH PREP)

Because computers have made today's automobile engines highly complex, the role of the automotive technician has become highly technical. Auto Technology offers an opportunity for students to blend the basic concepts of engines, electric circuits, computer technology and customer relations into today's professional highly trained, automotive technician.

Auto Technology College Tech Prep prepares future automotive technicians to continue their education at a two or four year college. Students may qualify to work with a mentor in an automotive dealership.

(Program offered with either traditional or College Tech Prep academics).

Location: *D. Russel Lee Career-Technology Center*

BUSINESS OFFICE EDUCATION – COLLEGE TECH PREP

Business Office Education simulates a true business environment with state-of-the-art computers. During the first year of the program, basic skills will be developed in the areas of business communications, office procedures, system management, Microsoft Office software, financial functions, records management and office support tasks. During the second year, specialize in administrative office technology or accounting. In administrative office technology, students will develop advanced skills in the areas listed above, excluding financial functions, preparing them for work in the office environment after graduation. MOS certifications are also available. Qualified Level II students participate in a six-week internship with local employers, receiving hands-on experience working side-by-side with experienced professionals and mentors. Students with an interest in the accounting field, including college-preparatory coursework in English, math, science and social studies, that uniquely prepares them for college and beyond should strongly consider this program. Requirements for the Accounting Tech Option include: minimum 2.50 GPA, demonstration of good attendance (90%), junior status (no credit deficiencies), and successful completion of both Algebra I and Biology I. Students are expected to participate in Business Professionals of America activities as a part of the program and are assessed a \$20 annual fee to cover BPA membership.

(Program offered with either traditional or College Tech Prep academics)

Location: *D. Russel Lee Career-Technology Center*

CARPENTRY

Professional carpenters are skilled craft persons who are in high demand for the construction and repair of residential and commercial buildings.

Skills will be developed in carpentry procedures; layout work; footer and foundation walls; floor, wall, and roof framing; roofing; interior and exterior finishing; insulation; stair construction; and maintenance of related equipment.

Location: *D. Russel Lee Career-Technology Center*

COMMERCIAL ARTS

Build on your art skills in the Commercial Arts lab and get started on your future career in art. Create many real work art projects on professional equipment that will give your portfolio the advantage you need. Enhance your creativity and skills with studies in illustration, typography, logo design, digital photography and advertising/marketing.

Get started today on your future career in graphic design, illustration animation and fashion marketing. There will always be a demand for artist to design the visual language, so design your dreams in the Commercial Arts studio.

Location: *D. Russel Lee Career-Technology Center*

COMMUNICATION BROADCASTING

The field of Communications is exploding with opportunities! If you are interested in taking the first steps toward a rewarding, creative career, the Communications/Broadcasting program is for you. Learn to be a director, audio visual specialist, writer, on-air talent, videographer, disk jockey, animator, advertising executive, digital video editor, producer and many other careers available in the communication industry.

Location: *D. Russel Lee Career-Technology Center*

CONSTRUCTION ELECTRICITY

Construction electricity involves the layout, design, installation, servicing, and maintenance of residential and commercial electrical wiring systems. Students learn the various electrical systems in four component areas while progressing at their own pace. Construction Electricity gives you the opportunity to acquire skills in job safety, residential wiring, commercial wiring, blueprint reading, electrical maintenance, electrical troubleshooting, conduit bending and installation, cost estimating, motor control, National Electrical Code requirements and Auto-CAD. Construction Electricity uses NCCER (National Center for Construction Education and Research) curriculum, which is a nationally recognized curriculum.

The construction industry always has a demand for qualified electricians. Individuals who qualify can gain experience by working at a job in the field, with pay, while still in high school.

Location: *D. Russel Lee Career-Technology Center*

COSMETOLOGY

Cosmetology is both a science and an art. Students provide personal care for patrons' hair, skin, and/or nails to aid them in enhancing their appearance. Skills will be developed in scalp and hair care treatments, shaping and styling hair, permanent waving, hair pressing and hair relaxing, hair coloring, manicuring, pedicuring, facial treatments, reception duties, and salon operations.

Cosmetology is a state licensed program. Students are required to pass both lab and theory competencies according to Ohio State Board of Cosmetology standards.

Students that have passed all competencies and required academics are then eligible and required to take the licensing exam. **Location:** *D. Russel Lee Career-Technology Center*

CRIMINAL JUSTICE

The Criminal Justice program is designed to help prepare individuals to uphold the laws of the State of Ohio and the Constitution of the United States.

Students learn techniques of crowd control, arresting, fingerprinting, and other police procedures. Many students continue their education at a four year college before pursuing a career in law enforcement, probation or criminal investigation.

Location: *D. Russel Lee Career-Technology Center*

CULINARY ARTS

Express your creativity in the world of fine cuisine through the Culinary Arts program. Skills like menu planning and design, nutrition, food preparation and service, sanitation, safety, inventory control and calculation of food quantities, are topics that will be taught in this career driven program. Your education will be open doors to career options such as executive chef, baker, or restaurant owner. Other opportunities in this field include caterer, personal cook, food stylist, maitre d', garde manager, baker or pastry chef. Jobs are available in hotels, restaurants, country clubs and commercial bakeries.

Students enrolled in this program operate the practice restaurant, *Café Lee*, on the D. Russel Lee campus. Health and safety regulations require that a uniform be worn while in the culinary lab. A uniform consists of a standard chef's coat, checkered chef's pants, closed-toed shoes and a chef's hat. Students will also purchase a professional knife kit.

Butler Tech participates in the Miami Valley Tech Prep Consortium. This means that any student who is enrolled in tech prep will receive credit hours at Sinclair College in Dayton. Tech prep students are also eligible for multiple scholarship opportunities.

Butler Tech Culinary Arts also participates in the national certification program called ProStart. This program is sponsored by the National Restaurant Association. Students who pass level one and level two of the national ProStart tests, will be eligible for national certification that recognizes skills as a chef. Through this program, scholarship money is available for students who are planning to continue their culinary training in college.

Location: *D. Russel Lee Career-Technology Center*

EARLY CHILDHOOD EDUCATION

The Early Childhood Education program is designed to give students an opportunity to learn about and work with children birth through elementary school. While working with children in our licensed child care center and area elementary schools, students utilize child development principles and curriculum development concepts to develop creative and innovative lesson plans.

Students who take this course receive state required in-service hours in First Aid, CPR, Communicable Disease recognition and Child Abuse detection.

Upon completion of this program, students will be qualified to work as infant, toddler or preschool teachers. Use the skills you acquire in this program to enter a two or four year Early Childhood Education post secondary licensure program or own and operate a licensed early childhood education facility.

Students enrolled in the Early Childhood Education program are members of Family, Career, Community Leaders of America (FCCLA) and gain invaluable experience in leadership and public speaking skills.

Location: *D. Russel Lee Career-Technology Center*

FIREFIGHTING TECHNOLOGY

Join the ranks of our nation's Firefighters and Emergency Medical Technicians through the Firefighting Technology program. Master firefighting skills through the 240 level 2 firefighting certification as well as earning certification as an Emergency Medical Technician – Basic. Introduction to such advanced disciplines as hazardous materials response, vehicle extrication, rope rescue, and confined space rescue are provided as part of the exciting curriculum.

Use your newly acquired skills to enter a Paramedic program, corporate emergency management, private or emergency ambulance operations, firefighting, fire safety inspection, or industrial safety management.

Location: *D. Russel Lee Career-Technology Center*

INFORMATION TECHNOLOGY TECH PREP ACADEMY – IT TECH

The Information Technology Tech Prep Academy offers “hands-on/real world” computer/networking training. A two year program at D. Russel Lee CTC with the opportunity to go on to a two/four-year post-secondary educational track with scholarship awards. This application-oriented program provides the student a chance

to learn the following skills: application software, computer networking, the Internet, computer technology, telecommunications/electronics, game design / animation and modeling, operating systems, and interactive media. Students are given certification training for Comptia, Cisco, NACSE, Microsoft and LPI/RedHat. Voucher certification discounts are also made available.

Butler Tech is committed to keeping the curriculum current and in pace with technology in order to meet the demands of the global economy. With the experiences gained, you could get that “dream” job through co-op on-the-job training that may help pay your way through college. College partners include Cincinnati State, Miami University Hamilton/Middletown, Sinclair Community, Southern State Community, University of Cincinnati, Wright State, University of Dayton, and Shawnee State.

College Tech Prep Prerequisite: 11th Grade with an entrance GPA of at least a 2.0, Algebra I with a “C” or better, good attendance and on track with college prep curriculum and high school graduation requirements.

Location: *D. Russel Lee Career Technology Center*

POWER EQUIPMENT TECHNOLOGY

This program provides students with the skills needed to succeed in a variety of maintenance areas that are in demand.

Students will learn general lube service, auto cleanup/detailing, welding skills, basic carpentry, small engine maintenance, and greenhouse production maintenance.

Location: *D. Russel Lee Career-Technology Center*

PRECISION MACHINING

As technology advances, the need for more sophisticated machinery becomes essential. As a qualified trainee, students will have the skills necessary to create this new equipment and repair older models. Skills will be developed in use of power saws, the use of drilling, grinding, and milling machines as well as lathes. Students will also learn to use computer numerical controlled (CNC) lathes and milling machines.

Location: *D. Russel Lee Career Technology Center*

WELDING TECHNOLOGY

Welders are in demand in many areas of industry. You can prepare for a promising future with potential for advancement in related areas by learning welding. Learn the skill of oxy-fuel welding, shielded metal arc welding, thermal cutting, gas metal arc welding, gas tungsten arc welding, and flux core arc welding. There is a high demand for skilled welders in a variety of fields.

Location: *D. Russel Lee Career Technology Center*

BUTLER TECH HEALTH SCIENCE ACADEMY – COLLEGE TECH PREP

The health technology program integrates academic and technical knowledge to prepare students to become competent health care providers in one of many careers available in today’s health care arena. The health care/health core curriculum encompasses college level courses such as medical terminology, anatomy and physiology, allied health, as well as State of Ohio health Technologies core subjects in the therapeutic, diagnostic and health information clusters. As part of the delivery of the curriculum the students participate in activities such as infection control, health

safety, State Tested Nurse Aide Training, CPR and First Aid to list a few. During a two-year curriculum, students participate in clinical experiences, internship opportunities, and job shadowing at various community hospitals and health centers. All students in the Greentree Health Science Academy are members of Skills USA, the Career Technical Student Organization. The student Fees for this program are \$20.00
Location: *D. Russel Lee Career Technology Center*

Butler Tech Natural Science Center

EQUINE SCIENCE

Begin an exciting career in the horse industry through the equine science program. Students learn equine breeding, genetics and nutrition while getting hands-on experiences in English and western horseback riding, grooming, and equine management. The 25.3 billion horse industry offers numerous career paths including equine health care, horse breeding, trainers and judges, riding instructors, as well as occupations related to horse racing. Advanced education can lead to a career as a veterinarian. All students in the Equine Science program are members of the National FFA Organization, the Career Technical Student Organization. The student fees for this program are \$20.00.

Location: *Butler Tech Natural Science Center, Monroe (lab). D Russel Lee Career Technology Center (academics).*

VETERINARY SCIENCES

The Butler Tech Veterinary Science program is a great way to “jump start” your career in the Veterinary Field. This program for Juniors and Seniors in High School and is designed to give you insight into the Veterinary Field and a head start into a competitive college program.

Here are some skills you will learn in this two year program: Safety and Sanitation, Animal Restraining Techniques, Medical Terminology, Hospital Procedures, Laboratory Procedures, Parasitology, Office Management, Principles of Diseases and Animal Behavior. We learn about all animals, both small and large, to give you a well rounded education so you can make the decision as to which career path is right for you. All students in the Veterinary Sciences program are members of the National FFA Organization, the Career Technical Student Organization. The student fees for this program are \$20.00.

Location: *Butler Tech Natural Science Center, Monroe (lab) D. Russel Lee Career Technology Center (academics)*

BUTLER TECH ONLINE

Often times students are not successful in a traditional classroom setting. There are students who need the ability to control the pace of their learning and receive feedback and reinforcement from their online instructor. Many students have social, medical or disciplinary issues that keep them from attending school. Butler Tech Online may be the answer for these students.

Butler Tech Online offers online classes in Mathematics, Science, Social Studies, English, Art, Health, Music, Technology, PE, Foreign Language and Consumer and

Family Sciences. Courses are available in Advanced Placement, College Preparatory or Foundation levels. The program provides students with the opportunity to enroll in high quality, engaging courses online anywhere, anytime. Students have control over the pace at which they complete lessons and are always virtually connected to their instructors. Students may complete their work at school during the school day if their schedule and school resources permit or they may enroll in classes at home or do both.

Check out the Butler Tech Online website for more information and a complete list of our course offerings:

www.butlertechonline.org

Location: *Online*

INTRODUCTION TO INFORMATION TECHNOLOGY

With the growing job field of information technology, this course can be considered a prerequisite to this field. It will give the students an introduction to many of the computer technology courses offered at Fairfield High School. The course gives you an introduction to web page design, integration of computer applications, computer trouble shooting and repair, networking of computers, computer software skills and PowerPoint, introduction to computer programming and several other enjoyable skills. These skills can be used in many other opportunities throughout life and your high school career. Project formats are used in the teaching process, enabling students to work at their own pace.

This course is open to **Sophomore Students** only. The fee for this course is \$20.00.

Location: *Fairfield High School*

PROGRAMMING AND SOFTWARE DEVELOPMENT —College Tech Prep

This course is step one of a two-year program for Programming and Software Development. There are several certification tests students will be able to take at the end of the program including Inet+ and MOUS Certifications. The course offers articulation agreements with area colleges so that once a student completes the two-year program, he/she may be eligible to earn college credit for the course and/or may be able to test out of college courses in order to take more advanced courses. The course is based upon the core skills drawn from the itWORKS.OHIO.ORG profile.

This course is open to **juniors** only. The fee for this course is \$20.00.

Prerequisite: 11th Grade with an entrance GPA of at least a 2.0; Algebra I with a “C” or better; and on track with high school graduation requirements.

Location: *Fairfield High School*

PROGRAMMING AND SOFTWARE DEVELOPMENT- College Tech Prep

This course is a continuation of Programming and Software Development. The main concentration is computer software design and computer programming. The course offers articulation agreements with area colleges so that once a student completes the two-year program, he/she may be eligible to earn college credit for the course and/or may be able to test out of college courses in order to take more advanced courses. The course is based upon the core skills drawn from the itWORKS.OHIO.ORG profile.

This course will be open to **seniors** only. Students should end the program with a 2.25 or higher. The students will have the opportunity to take multiple attempts at the

college entrance tests as well, for example the compass test. The fee for this course is \$20.00.

Prerequisite: Successful completion of the Applied Technology I course, 12th Grade standing, a GPA of at least a 2.0, Algebra I with a “C” or better, and on track with high school graduation requirements.**Location:** *Fairfield High School*

ENGINEERING DESIGN I

(Grade 11 only) 2 2 terms \$20.00

The Engineering Design I program is the first step in a two year program that offers introductory to intermediate training in computer-aided drafting and design. Students will be introduced to Mechanical and Architectural theory and design basics which will be used to prepare computer generated drawings. The latest and newest versions of software (Solid Works, A+ Cad, Archicad and others) will be utilized along with state of the art equipment (Pentium 4 computers, 2D Plotter and 3D Printer). There are no prerequisites for this class although Engineering & Manufacturing Foundations or Introduction to Drafting & CAD is highly recommended. All students who select this class are automatically enrolled into the career technical student organization SKILLS USA. The fee for this class is \$20.00.

Location: *Fairfield High School*

ENGINEERING DESIGN II

(Grade 12 only) 2 2 terms \$20.00

The Engineering Design II program is the second step in a two year program. This class offers intermediate to advanced training in computer-aided drafting and design. Utilizing the latest and newest versions of software (Solid Works, A+ Cad, Archicad and others) and state of the art equipment (Pentium 4 computers, 2D Plotter and 3D Printer) this class will delve deeper into the development of three dimensional drawings, models and architectural details. This class will also assist the student in the preparation of a portfolio which will benefit in the pursuit of further education or employment. All students who select this class are automatically enrolled into the career technical student organization SKILLS USA. The fee for this class is \$20.00.

Location: *Fairfield High School*

INTRODUCTION TO CONSTRUCTION TECHNOLOGY

Construction is a foundation level course that will give students an opportunity to explore the trades associated with the building industry. Students will learn basic carpentry, electrical, heating and air-conditioning, plumbing, along with other trades associated with construction. Students in the program are required to join the Career Technical Student Organization know as Skills USA. The fee for the course is \$20.00.

Location: *Fairfield Freshman*

INTRODUCTION TO TRANSPORTATION SYSTEMS - TRANSPORTAION

Transportation is a foundation level course that will give students an opportunity to explore the industries associated with the transportation industry. Students will work with space exploration, flight, hovering, magnetic-levitation, automotive related and other industries associated with transportation. Students in the program are required to join the Career Technical Student Organization know as Skills USA. The fee for the course is \$20.00.

Location: *Fairfield Freshman*

INTRODUCTION TO ENGINEERING & MANUFACTURING TECHNOLOGY

10th grade only 1 1 term \$20.00

Engineering Foundations class is an introductory course for sophomores interested in engineering and engineering related fields. The main focus of the class is centered on computer aided drafting and manufacturing related topics. Using SolidWorks and A+ Cad, students will learn computer aided drawing skills to create working drawings. Students will also build projects in the manufacturing shop. Building projects out of wood, metal and plastics students will increase students problem solving skills. Students will also be introduced to machinery used in the manufacturing setting. (such as a Computer Numerically Controlled Mill) This class is highly recommended for all sophomores interested in pursuing a career in manufacturing, engineering architecture, or other technical field. All students who select this class are automatically enrolled into the career technical student organization SKILLS USA. The fee for this class and this organization is \$20.00.

Location: *Fairfield High School*

INTRODUCTION TO COMMERCIAL ART

This class is for the beginning art student who wants to learn more about how Commercial Art affects everyday life. While it is grounded in learning the principles and elements of design, it also explores art projects that are 2-D, 3-D, and even done digitally on the computer using several different kinds of software including Adobe Photoshop and Painter. Some of the projects include gif animation, logo design and basic drawing tutorials. While it is a stepping stone and required credit for the beginning art student to later take Advanced Art classes, it can also be used as a foundation class to further pursue a two year Commercial Art/Graphic Design program at Butler Tech. All students are expected to join and participate in Business Professionals of America chapter club for this class. The fee for this course is \$55.00

Location: *Fairfield High School*

INTRODUCTION TO DRAFTING AND CAD

Intro Drafting and CAD is an entry level course open only to sophomores that will provide the student with a solid foundation of basic drafting practices conforming to current industry standards. Line conventions, lettering practice, dimensioning and projection theory form the basis for experience on the computer using CAD software. Students in the program are required to join the Career Technical Student Organization know as Skills USA. The fee for the course is \$20.00.

Location: *Fairfield High School*

LEADERSHIP AND COACHING IN EDUCATION

This nine week course will explore a variety of educational professions ranging from pre-school to post secondary education with an emphasis on leading large and small groups of students, including peer counseling, one on one tutoring, group leadership, and coaching team activities. This is a sophomore-restricted class and students will be expected to join **Future Educators Association**, which includes a \$20 membership fee.

Location: *Fairfield High School*

OPTIONS ACADEMY—BUSINESS

A Partnership between Butler Tech and Local Restaurant Franchises

The Options Academy-Business is a unique partnership between Butler Tech and local

franchises of international businesses that allows students the opportunity to get on a fast track to management positions. This program will offer students 17 years or older, one year training with hands-on instruction in restaurant management, food safety, and customer courtesy. Options Academy-Business contains all the components to help graduates begin a successful career in business management. Furthermore, students receive core academic courses through electronic curriculum.

OPTIONS ACADEMY—ARTS

A Fitton Center for Creative Arts—Butler Tech Partnership

Options Academy- the Arts is a career-technical program designed especially for high school students interested in a career in the arts or wishing to pursue higher education options in the arts. Art labs are offered in the Visual Arts (Drawing and Painting, Sculpture and Ceramics, Digital Media, and Jewelry/Crafts); Vocal and Instrumental Music (Rock and Jazz), Dance, and Theater. Sophomores, juniors and seniors in high school who enroll in this program will spend the entire school day at the Fitton Center for the Creative Arts in Hamilton, Ohio. Core academic courses required for graduation are computer-based with assistance from lab monitors and a part-time mathematics teacher. Options Academy-the Arts offers student internships in entertainment marketing areas, helps develop student leadership through participation in Arts Alliance, and provides students with many opportunities to demonstrate their talents and gifts through performances and exhibitions.