

# CAREER AND TECHNICAL EDUCATION



## Our MISSION:

To empower  
students to be college  
and/ or career ready.

## SIMPSON COUNTY SCHOOLS

400 South College Street

Franklin , KY 42134

270-586-3273

<http://simpson.k12.ky.us>



# FRANKLIN- SIMPSON



# CAREER PATHWAYS

- Administration Support
- Agriculture Power
- Animal Science
- Business Management
- Culinary
- Digital Game & Game Development
- Early Childhood Education
- Horticulture
- Information Support & Services
- Marketing
- Masonry
- Pharmacy Tech
- Pre-Nursing
- Welding

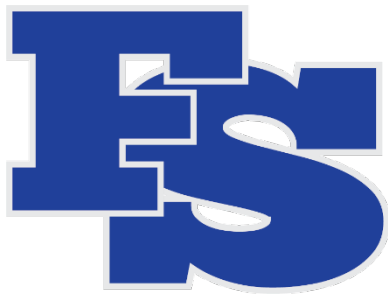
## WHERE DO I FIND INFORMATION ON CAREER OPTIONS?

- 8th Grade Tours
- Freshmen Registration
- Individual Guidance
- Club Fairs
- Poster / Literate
- Program Teachers



## WHAT CLUBS ARE AVAILABLE?





**Administrative  
Support  
CIP 52.0401.00**

### COURSES

Business and Marketing  
Essentials

Digital Literacy or  
Computer Literacy

Accounting or  
Personal Finance

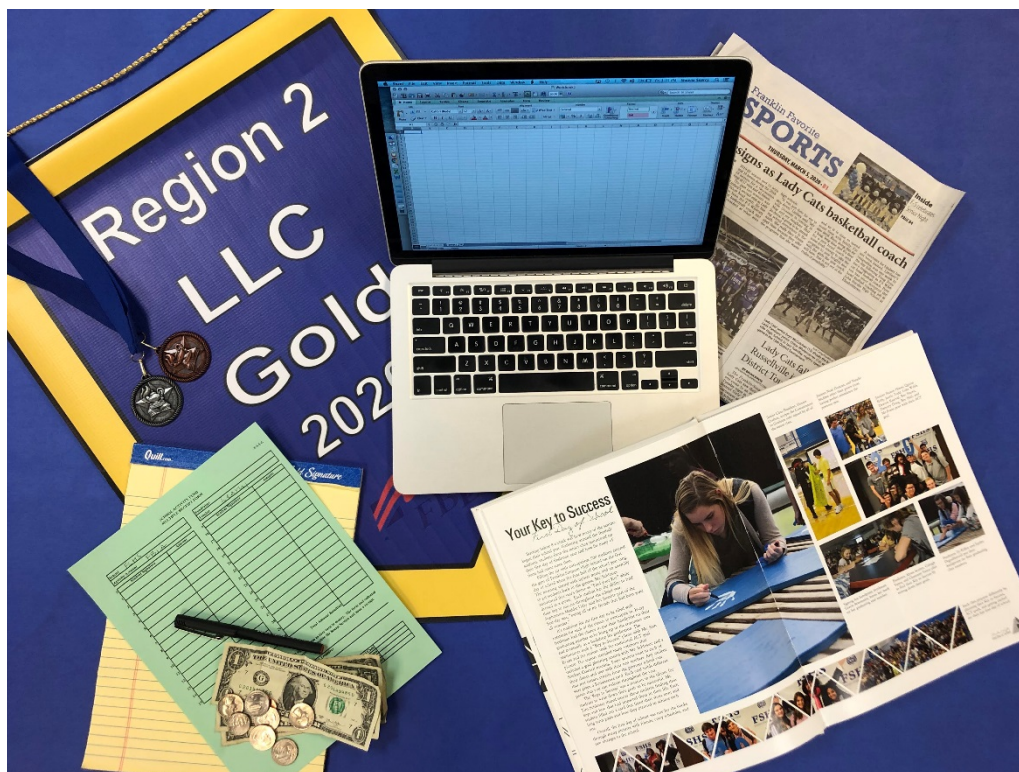
Co-Op/Internship

### CAREER READY ACADEMIC CERTIFICATIONS

- Certiport Digital Literacy IC3
- MOS:  
Microsoft Office Specialist
- ASK:  
Fundamental Business Concepts

### POST-SECONDARY EDUCATION

**Bachelor of Science**  
*BUSINESS*



## ADMINISTRATIVE SUPPORT

### What Secretaries & Administrative Assistants Do:

Secretaries and administrative assistants perform routine clerical and administrative duties.

**Work Environment:** Although secretaries and administrative assistants work in nearly every industry, many are employed in schools, hospitals, and government, legal, and medical offices. Most work full time.

### How to Become a Secretary or Administrative Assistant:

High school graduates who have experience using computer software applications usually qualify for entry-level positions. Although most secretaries learn their job in several weeks, many legal and medical secretaries require additional training to learn industry-specific terminology. Executive secretaries usually need several years of related work experience.

**Pay:** The median annual wage for secretaries and administrative assistants was \$38,880 in May 2018.

**Job Outlook:** Most job openings will result from the need to replace workers who leave the occupation.

### What Administrative Services Managers Do:

Administrative services managers plan, direct, and coordinate supportive services of an organization.

**Work Environment:** Most administrative services managers work full time. Some work more than 40 hours per week.

### How to Become an Administrative Services Manager:

Although educational requirements for administrative services managers vary by the type of organization and the work they do, they usually have a bachelor's degree and must have related work experience.

**Pay:** The median annual wage for administrative services managers was \$96,180 in May 2018.

**Job Outlook:** Employment of administrative services managers is projected to grow 7 percent from 2018 to 2028, faster than the average for all occupations. Tasks such as managing facilities and being prepared for emergencies will remain important in a wide range of industries.

### Administrative Support Career Pathway 4 Year Course of Studies

Advanced Placement Options\*/Dual Credit†/Optional‡

FRESHMEN	SOPHOMORE	JUNIOR	SENIOR
English	English	English*	English*†
Math	Math	Math*	Math*
Science	Science	Science	Humanities
Social Studies*	Social Studies*	Social Studies*†	Personal Finance
Health/PE	Choice	Choice	Choice
<b>Business and Marketing Essentials</b>	<b>Digital Literacy or Computer Literacy†</b>	<b>Accounting</b>	<b>Co-op/Internship</b>



**Agriculture Power,  
Structural,  
Technical Systems  
01.0201.00**

**COURSES**

Principles of  
Agriculture/Agriscience

Ag. Construction Skills

Small Engines

Ag. Structures and Designs

Ag. Power  
Machinery and Operation

**CAREER READY  
ACADEMIC CERTIFICATIONS**

- EETC Small Engine Certification
  - and/or ◦
- EOP Assessment Ag. Power

**POST-SECONDARY  
EDUCATION**

**Bachelor of Science  
AGRICULTURE**



**AGRICULTURE POWER**

**What Electricians Do:** Electricians install, maintain, and repair electrical power, communications, lighting, and control systems.

**Work Environment:** Almost all electricians work full time. Work schedules may include evenings and weekends. Overtime is common.

**How to Become an Electrician:**

Most electricians learn through an apprenticeship, but some start out by attending a technical school. Most states require electricians to be licensed.

**Pay:** The median annual wage for electricians was \$55,190 in May 2018.

**Job Outlook:** Employment of electricians is projected to grow 10 percent from 2018 to 2028, faster than the average for all occupations. Homes and businesses continue to require wiring, and electricians will be needed to install the necessary components.

Bureau of Labor Statistics, U.S. Department of Labor, Occupational Outlook Handbook, Computer Support Specialists, on the Internet at <https://www.bls.gov/ooh/construction-and-extraction/electricians.htm>

**What Small Engine Mechanics Do:** Small engine mechanics inspect, service, and repair motorized power equipment.

**Work Environment:** Small engine mechanics generally work in well-ventilated but noisy repair shops. They sometimes make onsite repair calls, which may require working in poor weather conditions. Although most work full time, seasonal workers often see their hours fluctuate. Workers frequently are busiest during the spring and summer, when equipment use is the highest.

**How to Become a Small Engine Mechanic:**

Small engine mechanics typically enter the occupation with a high school diploma or postsecondary non-degree award and learn their trade through on-the-job training.

**Pay:** The median annual wage for electricians was \$55,190 in May 2018.

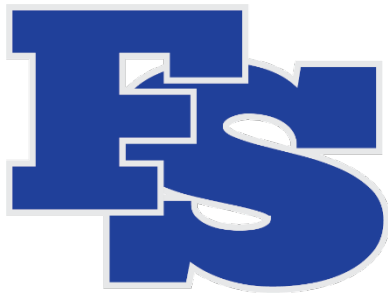
**Job Outlook:** The median annual wage for small engine mechanics was \$37,060 in May 2018.

Bureau of Labor Statistics, U.S. Department of Labor, Occupational Outlook Handbook, Computer Support Specialists, on the Internet at <https://www.bls.gov/ooh/installation-maintenance-and-repair/small-engine-mechanics.htm>

**Information Support Career Pathway 4 Year Course of Studies**

Advanced Placement Options\*/Dual Credit†/Optional◊

FRESHMEN	SOPHOMORE	JUNIOR	SENIOR
English	English	English*	English*†
Math	Math	Math	Math*
Science	Science	Science	Personal Finance (.5)
Social Studies*	Social Studies*	Social Studies*†	Humanities (.5)
Health/PE	Choice	Choice	Choice
Choice	Choice	Choice	Choice
Principles of Ag/Agriscience	Ag. Construction Skills/Small Engines	Ag. Structures and Designs	Ag. Power Machinery and Operation



## Animal Science Systems 01.0901.00

### COURSES

*DUAL CREDIT OPTIONS\**

Principles of  
Agriculture/Agriscience

Animal Science

Advanced Animal Science\*

Veterinary Technology\*

Animal Systems

### CAREER READY ACADEMIC CERTIFICATIONS

- ICEV Elanco Animal Science Certification
  - and/or ○
- EOP Assessment Animal Science

### POST-SECONDARY EDUCATION

Bachelor of Science in Agriculture  
VETERINARY TECHNOLOGY



## ANIMAL SCIENCE SYSTEMS

**What Veterinarian Technicians Do:** Veterinary technologist and technicians perform minute test under the supervision of a licensed veterinarian is the diagnosing the injuries in illnesses of animals

**Work Environment:** Veterinary technologist and technicians working for the clinics, laboratories, and animal hospital. The job will be physically or emotionally demanding. Many work evenings, weekends, and holidays.

**How to Become a Veterinarian Technicians:** Veterinary technologist indications must complete a post secondary program in the new technology. Technologist need a four-year bachelors degree, and technicians need a two year's associates degree. Typically, the technologist indications mistake a credentialing exam and must become registry, bison, or depending on the requirement of the state in which they work.

**Pay:** The median annual wage for veterinary technologist and technicians what is 34,420 now in the 2018.

**Job Outlook:** Employment of veterinary technologist indications is projected to grow 20% from 2016 to 2026, much faster than the average for all occupations. Employment is expected to grow as veterinarians continue to utilize technicians and technology do you don't care and lab work on household pets  
Bureau of Labor Statistics, U.S. Department of Labor, Occupational Outlook Handbook, Computer Sup-port Specialists, on the Internet at  
<https://www.bls.gov/ooh/healthcare/veterinary-technologists-and-technicians.htm>

### Information Support Career Pathway 4 Year Course of Studies

Advanced Placement Options\*/Dual Credit†/Optional◇

FRESHMEN	SOPHOMORE	JUNIOR	SENIOR
English	English	English*	English*†
Math	Math	Math	Math*
Science	Science	Science	Personal Finance (.5)
Social Studies*	Social Studies*	Social Studies*†	Humanities (.5)
Health/PE	Choice	Choice	Choice
Principles of Ag/Agriscience	Animal Science	Advanced Animal Science/Vet. Tech	Advanced Animal Science/Vet. Tech



## Management and Entrepreneurship CIP 52.0701.00

### COURSES

Business Essentials

Business Management

Accounting or  
Business Math

Personal Finance

### CAREER READY ACADEMIC CERTIFICATIONS

- KOSSA:  
Business Management
- ASK:  
Fundamental Business Concepts

### POST-SECONDARY EDUCATION

Bachelor of Science  
*BUSINESS*



## MANAGEMENT AND ENTREPRENEURSHIP

### What Top Executives Do:

Top Executives devise strategies and policies to ensure an organization meets its goals.

**Work Environment:** Top executives work in nearly every industry. They work for both small and large businesses and frequently travel to attend meetings and conferences or to visit their company's local, regional, national, and international offices.

**How to Become One:** Although education and training requirements vary widely by position and industry, most top executives have at least a bachelor's degree and a considerable amount of work experience. Many advances within their own firm, moving up from lower level management or supervisory positions.

**Pay:** The median annual wage for top executives was \$189,600 in May 2018.

**Job Outlook:** Overall employment of top executives is projected to grow 6% from 2018 - 2028, about as fast as the average for all occupations.

### What Administrative Services Managers Do:

Administrative services managers plan, direct, and coordinate supportive services of an organization.

**Work Environment:** Most administrative services managers work full time. Some work more than 40 hours per week.

### How to Become an Administrative Services Manager:

Although educational requirements for administrative services managers vary by the type of organization and the work they do, they usually have a bachelor's degree and must have related work experience.

**Pay:** The median annual wage for administrative services managers was \$96,180 in May 2018.

**Job Outlook:** Employment of administrative services managers is projected to grow 7 percent from 2018 to 2028, faster than the average for all occupations. Tasks such as managing facilities and being prepared for emergencies will remain important in a wide range of industries.

### Management & Entrepreneurship Career Pathway 4 Year Course of Studies

Advanced Placement Options\*/Dual Credit†/Optional‡

FRESHMEN	SOPHOMORE	JUNIOR	SENIOR
English	English	English*	English*†
Math	Math	Math	Math*
Science	Science	Science	Humanities (.5)
Social Studies*	Social Studies*	Social Studies*†	Choice
Health/PE	Choice	Choice	Choice
Choice	Choice	Choice	Choice
<i>Business Essentials</i>	<i>Business Management</i>	<i>Accounting or Business Math</i>	<i>Personal Finance</i>



## Culinary Arts CIP 12.0500.00

### COURSES

Foods and Nutrition

Culinary I

Culinary II

Advanced Foods

### CAREER READY ACADEMIC CERTIFICATIONS

- ServSafe Certification

### POST-SECONDARY EDUCATION

Associate Degree in  
*CULINARY ARTS*



## CULINARY ARTS

### Careers in Culinary Arts:

- Bartenders - Chefs & Head Cooks - Cooks
- Food & Beverage Serving and Related Workers
- Food Preparation Workers
- Waiter & Waitresses

### Work Environment:

People in food service work in restaurants, private households, and other establishments where food is served. They often work early mornings, late evenings, weekends, and holidays. The work can be hectic and fast-paced. Depending on the area of expertise, part-time to full-time positions are available.

Bureau of Labor Statistics, U.S. Department of Labor, Occupational Outlook Handbook, Computer Support Specialists, on the Internet at <https://www.bls.gov/ooh/computer-and-information-technology/computer-support-specialists.htm>

### How to become a Culinary professional:

Because of the wide range of skills used in Culinary, most jobs require on the job training. Some require certifications, associate or bachelor's degrees.

**Pay:** Pay ranges from \$21,000 - \$48,000, based on the career path chosen. Geographical location can also play a big part in income, surpassing the \$48,000 pay range.

**Job Outlook:** Overall employment is projected to grow 11 percent from 2018 to 2028, much faster than the average for all occupations. Job opportunities will result from the combination of employment growth and the need to replace workers who leave the occupation.

### Information Support Career Pathway 4 Year Course of Studies

Advanced Placement Options\*/Dual Credit†/Optional◊

FRESHMEN	SOPHOMORE	JUNIOR	SENIOR
English	English	English*	English*†
Math	Math	Math	Math*
Science	Science	Science	Personal Finance (.5)
Social Studies*	Social Studies*	Social Studies*†	Humanities (.5)
Health/PE	Choice	Choice	Choice
<i>Foods &amp; Nutrition</i>	<i>Culinary I</i>	<i>Culinary II</i>	<i>Advanced Foods Co-op</i>



## Digital Design and Game Development 36.0113.00

### COURSES

Game Design and  
Development Principles

Introduction to  
Digital Game Graphics

Advanced 3D Game Development

Computer Literacy

### CAREER READY ACADEMIC CERTIFICATIONS

#### 2 Exams Required

- Adobe Certified Associate: Flash (Animate)
- Adobe Certified Associate: Photoshop
- Certiport Digital Literacy IC3
- MTA: Introduction to Programming Using JavaScript
- MTA: Introduction to Programming Using Python

### POST-SECONDARY EDUCATION

**Associate in Applied Science**  
**COMPUTER AND INFORMATION SYSTEMS**  
**VIDEO GAME DESIGN CERTIFICATE**

**Bachelors of Science**  
**COMPUTER SCIENCE**  
**INTERACTIVE MEDIA**



## DIGITAL DESIGN AND GAME DEVELOPMENT

#### What Multimedia Artist and Animators Do:

Multimedia artists and animators create images that appear to move and visual effects for various forms of media and entertainment.

#### Work Environment:

Many artists and animators work in offices; others work from home.

#### How to Become a Computer Support Specialist:

Most multimedia artists and animators need a bachelor's degree in computer graphics, art, or a related field to develop both an impressive portfolio of work and the strong technical skills that many employers prefer.

**Pay:** The median annual wage for multimedia artists and animators was \$72,520 in May 2018.

#### Job Outlook:

Employment of multimedia artists and animators is projected to grow 4 percent from 2018 to 2028, about as fast as the average for all occupations. Projected growth will be due to increased demand for animation and visual effects in video games, movies, and television.

Bureau of Labor Statistics, U.S. Department of Labor, Occupational Outlook Handbook, Multimedia Artists and Animators, on the Internet at <https://www.bls.gov/ooh/arts-and-design/multimedia-artists-and-animators.htm> (visited January 07, 2020).

#### What Software Developers Do:

Software developers create the applications or systems that run on a computer or another device.

#### Work Environment:

Many software developers work for firms that deal in computer systems design and related services, manufacturing, or for software publishers.

#### How to Become a Computer Support Specialist:

Software developers usually have a bachelor's degree in computer science and strong computer programming skills.

**Pay:** The median annual wage for software developers, applications was \$103,620 in May 2018. The median annual wage for software developers, systems software was \$110,000 in May 2018.

#### Job Outlook:

Employment of software developers is projected to grow 21 percent from 2018 to 2028, much faster than the average for all occupations. Software developers will be needed to respond to an increased demand for computer software.

Bureau of Labor Statistics, U.S. Department of Labor, Occupational Outlook Handbook, Software Developers, on the Internet at <https://www.bls.gov/ooh/computer-and-information-technology/software-developers.htm> (visited January 09, 2020).

### Information Support Career Pathway 4 Year Course of Studies

Advanced Placement Options\*/Dual Credit†/Optional◊

FRESHMEN	SOPHOMORE	JUNIOR	SENIOR
English	English	English*	English*†
Math	Math	Math	Math*
Science	Science	Science	Personal Finance (.5)
Social Studies*	Social Studies*	Social Studies*†	Humanities (.5)
Health/PE	Art 1	Art 2	Art 3
Game Design and Development Principles	Introduction to Digital Game Graphics	Advanced 3D Game Development	Computer Literacy†



## Early Childhood Education CIP 13.1210.00

### COURSES

FACS Essentials

Early Lifespan Development

Child Development Services I

Child Development Services II

### CAREER READY ACADEMIC CERTIFICATIONS

#### 3 Certification Required:

- Commonwealth Child Care Credential
- Early Childhood Orientation Training
- Pediatric Abusive Head Trauma Training

### POST-SECONDARY EDUCATION

**Bachelor of Science**  
*EDUCATION*



## EARLY CHILDHOOD EDUCATION

#### What Preschool teachers and Elementary/Kindergarten teachers do?

Teachers are required to plan and integrate lessons and activities for students with diverse backgrounds and various academic levels.. All educators must be knowledgeable in child development, exceptional abilities, and gifted and talented abilities.

#### Work Environment:

Most early childhood educators work in public school settings (85%) while smaller populations work in private (13%) settings and child care inclusive settings (3%).

<https://www.bls.gov/ooh/education-training-and-library/preschool-teachers.htm>

<https://www.bls.gov/ooh/education-training-and-library/kindergarten-and-elementary-school-teachers.htm>

#### How to Become an Early Childhood Educator?

Early childhood educators must have a bachelor's degree in order to become a head teacher in a classroom. Individuals who hold an associates degree can attain an assistant position in the classroom/childcare setting.

#### Pay:

Bachelor's Degree (\$57,980)  
Associate's Degree (\$29,780)

#### Job Outlook:

The field of Early Childhood Education is projected to grow 3% from 2018-2028. Increasing enrollment of students in the public school systems provides higher demand for teachers in the field.

### Information Support Career Pathway 4 Year Course of Studies

Advanced Placement Options\*/Dual Credit†/Optional‡

FRESHMEN	SOPHOMORE	JUNIOR	SENIOR
English	English	English*	English*†
Math	Math	Math	Math*
Science	Science	Science	Personal Finance (.5)
Social Studies*	Social Studies*	Social Studies*†	Humanities (.5)
Health/PE	Choice	Choice	Choice
<b>FACS Essentials</b>	<b>Early Lifespan Development</b>	<b>Child Development Services I</b>	<b>Child Development Services II</b>



## Agriculture Education: Horticulture and Plant Science Systems 01.1101.00

### COURSES

Principles of  
Agriculture/Agriscience

Introduction to Greenhouse

Greenhouse Technology I & II

Landscape Design & Turf  
Management

Floriculture & Floral Design

### CAREER READY ACADEMIC CERTIFICATIONS

- ICEV Bayer Crop and Plant  
Science Certification

○ and/or ○

- EOP Assessment  
Horticulture

### POST-SECONDARY EDUCATION

**Bachelor of Science**  
*AGRICULTURE (HORTICULTURE)*  
*AGRICULTURE*  
*(TURF & GOLF COURSE MANAGEMENT)*  
*AGRICULTURE (AGRONOMY - PLANT)*  
*AGRICULTURE (AGRONOMY - SOIL)*



## HORTICULTURE AND PLANT SCIENCE

**What Horticulturalists Do:** Horticulturists are experts in the growth and care of plants and grasses and other types of plants. Their jobs range from golf course management, floral designer, landscape designers, and much more.

**Work Environment:** Most horticulturists work in research universities, private industry, or the federal government. They work outdoors, in offices, laboratories, and may sometimes work in food production facilities. Most horticulturists work full time.

Bureau of Labor Statistics, U.S. Department of Labor, Occupational Outlook Handbook, Computer Support Specialists, on the Internet at <https://www.bls.gov/ooh/life-physical-and-social-science/agricultural-and-food-scientists.htm>

### How to Become a Agriculture and food Scientist:

Horticulturalists need at least a bachelor's degree from an accredited postsecondary institution, although many get advanced degrees.

**Pay:** The median annual wage for agricultural and food scientists was \$68,975 in May 2018.

**Job Outlook:** Overall employment of horticulturists is projected to grow 7 percent from 2016 to 2026, about as fast as the average for all occupations. Employment of agricultural and food scientists is projected to grow as research into agricultural production methods and techniques continues.

### Information Support Career Pathway 4 Year Course of Studies

Advanced Placement Options\*/Dual Credit†/Optional‡

FRESHMEN	SOPHOMORE	JUNIOR	SENIOR
English	English	English*	English*†
Math	Math	Math	Math*
Science	Science	Science	Personal Finance (.5)
Social Studies*	Social Studies*	Social Studies*†	Humanities (.5)
Health/PE	Choice	Choice	Choice
Principles of Ag/Agriscience	Introduction to Greenhouse	Greenhouse Technology I, Landscape/Turf, or Floral Design	Greenhouse Technology II, Landscape/Turf, Floral Design, or Co- Op/Internship



## IT/Information Support & Services 47.0104.01

### COURSES

Computer Literacy

Computer Hardware and  
Software Maintenance

Internet Technologies

Help Desk Operations

### CAREER READY ACADEMIC CERTIFICATIONS

#### 2 Exams Required

- Certiport Digital Literacy IC3
- MTA: Cloud Fundamentals
- MTA: Mobility and Device Fundamentals
- MTA: Windows Operating System Fundamentals
- MTA: Windows Server Administration Fundamentals

### POST-SECONDARY EDUCATION

**Associate in Applied Science**  
*INTERNET TECHNOLOGIES*

**Bachelor of Science**  
*COMPUTER INFORMATION TECHNOLOGY*  
*COMPUTER INFORMATION SYSTEMS*  
*COMPUTER SCIENCE*



## INFORMATION SUPPORT & SERVICES

#### What Computer Support Specialists Do:

Computer support specialists provide help and advice to people and organizations using computer software or equipment. Some support information technology (IT) employees within their organization. Others assist non-IT users who are having computer problems.

#### Work Environment:

Most computer support specialists have full-time work schedules; however, many do not work typical 9-to-5 jobs. Because computer support is important for businesses, support services may need to be available 24 hours a day. As a result, many support specialists must work nights or weekends.

Bureau of Labor Statistics, U.S. Department of Labor, Occupational Outlook Handbook, Computer Support Specialists, on the Internet at <https://www.bls.gov/ooh/computer-and-information-technology/computer-support-specialists.htm> (visited January 09, 2020).

#### How to Become a Computer Support Specialist:

Because of the wide range of skills used in different computer support jobs, there are many paths into the occupation. A bachelor's degree is required for some computer support specialist positions, but an associate degree or postsecondary classes may be enough for others.

#### Pay:

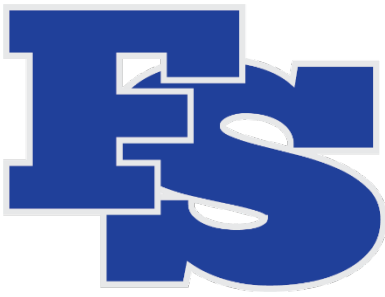
- The median annual wage for computer network support specialists was \$62,770 in May 2018.
- The median annual wage for computer user support specialists was \$50,980 in May 2018.

**Job Outlook:** Employment of computer support specialists is projected to grow 10 percent from 2018 to 2028, faster than the average for all occupations. More support services will be needed as organizations upgrade their computer equipment and software

### Information Support Career Pathway 4 Year Course of Studies

Advanced Placement Options\*/Dual Credit†/Optional‡

FRESHMEN	SOPHOMORE	JUNIOR	SENIOR
English	English	English*	English*†
Math	Math	Math	Math*
Science	Science	Science	Personal Finance (.5)
Social Studies*	Social Studies*	Social Studies*†	Humanities (.5)
Health/PE	Choice	Choice	Choice
Computer Literacy†	Computer Hardware & Software Maintenance	Internet Technologies	Help Desk Operations



## Marketing 52.1401.01

### COURSES

Marketing Principles

Advertising & Promotion

Advanced Marketing

Travel and Tourism

### CAREER READY ACADEMIC CERTIFICATIONS

CTE End-of-Program (EOP) Assessment  
or  
2 Exams Required

Assessment of Skills and Knowledge for  
Business (ASK) - Fundamental  
Marketing Concepts

AND

Choose 1 of the following  
Google Cloud Certification - G Suite  
Google Analytics Individual Certification  
(GAIQ)

### POST-SECONDARY EDUCATION

#### **Bachelor of Science**

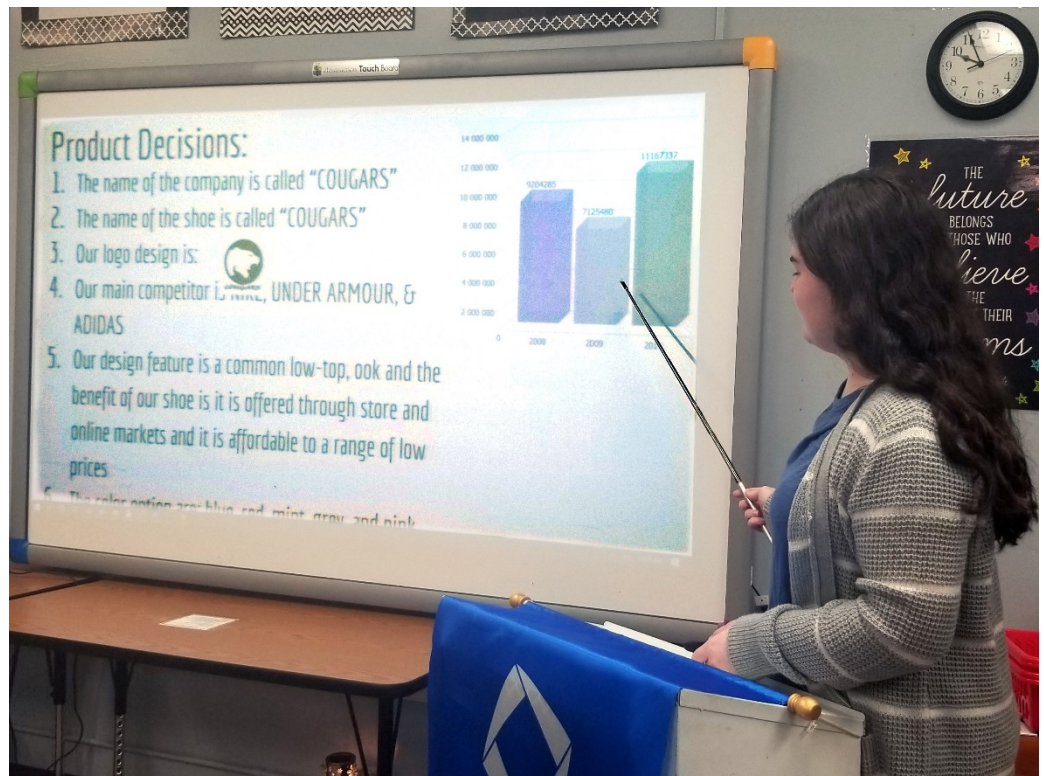
STRATEGIC MARKETING

SOCIAL MEDIA MARKETING

PROFESSIONAL SELLING MARKETING

ADVERTISING

PUBLIC RELATIONS



## MARKETING

### What Marketing Professionals do?

They are responsible for analyzing consumer demand and communicating and delivering messages to customers. This is done through media, such as radio, television, print, social media, online and billboards.

### Work Environment:

Most advertising, promotions, and marketing managers work full time. Some advertising and promotions managers work more than 40 hours per week. The jobs of advertising, promotions, and marketing managers can often be stressful, particularly near deadlines. Additionally, they may travel to meet with clients or media representatives.

### Pay:

The median annual wage for marketing managers was \$134,290 in May 2018. The lowest 10 percent earned less than \$69,840, and the highest 10 percent earned more than \$208,000.

### How to Become a Marketing Professional?

The many facets of marketing allow professionals to branch out into a few different areas, developing specialized skills in areas such as publicity and public relations, market research, online marketing, advertising, and sales management. Most marketing careers require a bachelor's degree, and some require or recommend a graduate degree.

### Job Outlook

The U.S. Bureau of Labor Statistics predicts that employment of marketing managers is expected to grow 13 percent through 2022, about as fast as the average for all other occupations. The field of digital media marketing will see a significant increase as online ecommerce continues to grow.

### Information Support Career Pathway 4 Year Course of Studies

Advanced Placement Options\*/Dual Credit†/Optional‡

FRESHMEN	SOPHOMORE	JUNIOR	SENIOR
English	English	English*	English*†
Math	Math	Math	Math*
Science	Science	Science	Personal Finance (.5)
Social Studies*	Social Studies*	Social Studies*†	Humanities (.5)
Health/PE	Choice	Choice	Choice
Marketing Principles	Advertising & Promotion Sports Marketing	Advanced Marketing Sports Marketing	Travel and Tourism



## Masonry: Bricklayer Assistant 46.0101.01

### COURSES

Introductory Masonry

Intermediate Masonry

Industrial Safety (.5)  
Basic Blueprint Reading (.5)

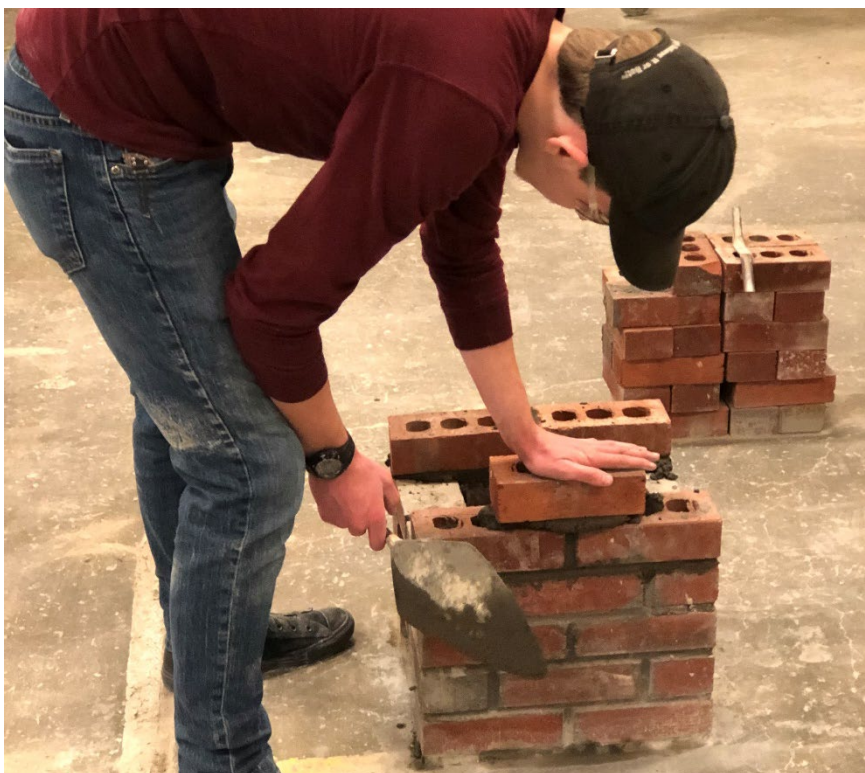
Concrete Finishing

### CAREER READY ACADEMIC CERTIFICATIONS

- NCCER Level 1 - Masonry

### POST-SECONDARY EDUCATION

**Associate in Applied Science**  
*CONSTRUCTION TECHNOLOGIES*



## MASONRY: BRICKLAYER ASSISTANT

### What Masonry Workers Do

Masonry workers use bricks, concrete blocks, concrete, and natural and manmade stones to build masonry structures.

### Work Environment

The work is physically demanding because masons lift heavy materials and often must stand, kneel, and bend for long periods. Poor weather conditions may reduce work activity because masons usually work outdoors. Most masons work full time.

Bureau of Labor Statistics, U.S. Department of Labor, Occupational Outlook Handbook, Masonry Workers, on the Internet at <https://www.bls.gov/ooh/construction-and-extraction/brickmasons-blockmasons-and-stonemasons.htm> (visited January 29, 2020).

### How to Become a Masonry Worker

Most masons have a high school diploma or equivalent and learn either through an apprenticeship program or on the job.

### Pay

The median annual wage for masonry workers was \$44,810 in May 2018.

### Job Outlook

Employment of masonry workers is projected to grow 11 percent from 2018 to 2028, much faster than the average for all occupations. Population growth will result in the construction of more schools, hospitals, homes, and other buildings. Workers with experience in construction should have the best job opportunities

### Information Support Career Pathway 4 Year Course of Studies

Advanced Placement Options\*/Dual Credit†/Optional◊

FRESHMEN	SOPHOMORE	JUNIOR	SENIOR
English	English	English*	English*†
Math	Math	Math	Math*
Science	Science	Science	Personal Finance (.5)
Social Studies*	Social Studies*	Social Studies*†	Humanities (.5)
Health/PE	Choice	Choice	Choice
<b>Introductory Masonry</b>	<b>Intermediate Masonry</b>	<b>Industrial Safety (.5) Basic Blueprint Reading (.5)</b>	<b>Concrete Finishing</b>



## Pharmacy Technician 51.0805.01

### COURSES

Principles of Health Science  
A & B

Medical Terminology &  
Emergency Procedures

Body Structures & Functions

Pharmacy Technician

### CAREER READY ACADEMIC CERTIFICATIONS

- Pharmacy Technician  
Certification Exam (PTCE)

### POST-SECONDARY EDUCATION

Associate in Applied Science  
*PHARMACY TECHNICIAN*



## PHARMACY TECHNICIAN

**What Pharmacy Technicians Do:** Pharmacy technicians help pharmacists dispense prescription medication to customers or health professionals.

**Work Environment:** Pharmacy technicians work in pharmacies, including those found in drug, general merchandise, and grocery stores, and in hospitals. Most work full time, but many work part time.

Bureau of Labor Statistics, U.S. Department of Labor, Occupational Outlook Handbook, Computer Support Specialists, on the Internet at <https://www.bls.gov/ooh/computer-and-information-technology/computer-support-specialists.htm>

### How to Become a Pharmacy Technician:

Pharmacy technicians usually need a high school diploma or equivalent and learn their duties through on-the-job training, or they may complete a postsecondary education program in pharmacy technology. Most states regulate pharmacy technicians, which is a process that may require passing an exam or completing a formal education or training program.

**Pay:** The median annual wage for pharmacy technicians was \$32,700 or \$15.72/hour in May 2018.

**Job Outlook:** Employment of pharmacy technicians is projected to grow 7 percent from 2018 to 2028, faster than the average for all occupations. Increased demand for prescription medications will lead to more demand for pharmaceutical services.

### Information Support Career Pathway 4 Year Course of Studies

Advanced Placement Options\*/Dual Credit†/Optional‡

FRESHMEN	SOPHOMORE	JUNIOR	SENIOR
English	English	English*	English*†
Math	Math	Math	Math*
Science	Science	Science	Personal Finance (.5)
Social Studies*	Social Studies*	Social Studies*†	Humanities (.5)
Health/PE	Choice	Choice	Choice
Principles of Health Science A & B	Medical Terminology + & Emergency Procedures	Pharmacy Technician	Body Structures & Functions



## Pre-Nursing 51.2699.01

### COURSES DUAL CREDIT OPTION+

Principles of Health Science

Medical Terminology+/  
Emergency Procedures

Medicaid Nurse Aide

Body Structures and Functions  
Or Co-op (Nursing)

### CAREER READY ACADEMIC CERTIFICATIONS

- Medicaid Nurse Aide State Registry
- NOCTI Healthcare Core

### POST-SECONDARY EDUCATION

Associate in Applied Science  
*NURSING*



## PRE- NURSING

**What Nursing Assistants Do:** Nursing assistants help patients with activities of daily living like eating and bathing. Nursing assistants, sometimes called *nursing aides*, help provide basic care for patients in hospitals and residents of long-term care facilities, such as nursing homes.

**Work Environment:** Nursing assistants held about 1.5 million jobs in 2018. The largest employers of nursing assistants were as follows:

- Nursing care facilities (skilled nursing facilities) 38%
- Hospitals; state, local, and private 27%
- Assisted living and retirement communities 11%
- Home health care 5%
- Government 5%

**How to Become a Nursing Assistant:** Nursing assistants must complete a state-approved education program in which they learn the basic principles of nursing and complete supervised clinical work and must pass their state's competency exam.

**Pay:** The median annual wage for nursing assistants was \$28,540 in May 2018. The median wage is the wage at which half the workers in an occupation earned more than that amount and half earned less. The lowest 10 percent earned less than \$21,290, and the highest 10 percent earned more than \$39,560.

**Job Outlook:** Employment of nursing assistants is projected to grow 9 percent from 2018 to 2028, faster than the average for all occupations

Bureau of Labor Statistics, U.S. Department of Labor, Occupational Outlook Handbook, Computer Support Specialists, on the Internet at <https://www.bls.gov/ooh/computer-and-information-technology/computer-support-specialists.htm>

### Pre-Nursing Career Pathway 4 Year Course of Studies

Advanced Placement Options\*/Dual Credit+/Optional0

FRESHMEN	SOPHOMORE	JUNIOR	SENIOR
English	English	English*	English*†
Math	Math	Math	Math*
Science	Science	Science	Personal Finance (.5)
Social Studies*	Social Studies*	Social Studies*†	Humanities (.5)
Health/PE	Choice	Choice	Choice
Principles of Health Science A&B	Medical Terminology+/ Emergency Procedures	Medicaid Nurse Aide	Body Structures & Functions Or Co-op (Nursing)



## Welder-Entry Level CIP 48.0508.01

### COURSES

Shielded Metal Arc Welding  
(SMAW)

Gas Metal Arc Welding  
(GMAW)

Gas Tungsten Arc Welding  
(GTAW)

Oxy-fuel Systems

### CAREER READY ACADEMIC CERTIFICATIONS

- AWS 2F CERTIFICATION

### POST-SECONDARY EDUCATION

Associate in Applied Science  
*WELDING TECHNOLOGY*



## WELDER ENTRY LEVEL

### What Welders, Cutters, Solderers, and Brazers

**Do:** Welders, cutters, solderers, and brazers use hand-held or remotely controlled equipment to join, repair, or cut metal parts and products.

**Work Environment:** Welders, cutters, solderers, and brazers may work outdoors, often in inclement weather, or indoors, sometimes in a confined area. They may work on a scaffold, high off the ground, and they occasionally must lift heavy objects and work in awkward positions. Most work full time and overtime is common.

Bureau of Labor Statistics, U.S. Department of Labor, Occupational Outlook Handbook, Welders, Cutters, Solderers, and Brazers, on the Internet at <https://www.bls.gov/ooh/production/welders-cutters-solderers-and-brazers.htm> (visited January 07, 2020).

### How to Become a Computer Support Specialist:

A high school diploma or equivalent, combined with technical and on-the-job training, is typically required for anyone to become a welder, cutter, solderer, or brazer.

**Pay:** The median annual wage for welders, cutters, solderers, and brazers was \$41,380 in May 2018.

**Job Outlook:** Employment of welders, cutters, solderers, and brazers is projected to grow 3 percent from 2018 to 2028, slower than the average for all occupations. The nation's aging infrastructure will require the expertise of welders, cutters, solderers, and brazers to help rebuild bridges, highways, and buildings.

### Information Support Career Pathway 4 Year Course of Studies

Advanced Placement Options\*/Dual Credit†/Optional‡

FRESHMEN	SOPHOMORE	JUNIOR	SENIOR
English	English	English*	English*†
Math	Math	Math	Math*
Science	Science	Science	Personal Finance (.5)
Social Studies*	Social Studies*	Social Studies*†	Humanities (.5)
Health/PE	Choice	Choice	Choice
<b>SMAW</b>	<b>GMAW</b>	<b>GTAW</b>	<b>OXY FUEL</b>