

# AREAS OF STUDY

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***Giving Students the Edge***

# CTE PATHWAYS

**The High School to College and Career Pathways initiative** helps match education and workplace needs through partnerships with post-secondary institutions, school districts, business, and industry.

**Pathways** identify and group courses within Career and Technical Education (CTE) areas of study that offer students depth of knowledge and skill, linked with specific post-secondary programs culminating in degrees or certificates.

“Ninety percent of the fastest-growing jobs require post-secondary training.”

Margaret Spellings, *U.S. Secretary of Education, speech to the National Press Club, 9/22/06*

For more information about each CTE Pathway, log on to **[www.utahcte.org](http://www.utahcte.org)**.

# AGRICULTURE

## Did You Know?

Agriculture is the nation's largest employer, generating approximately 20 percent of our nation's gross national product and 20 percent of our national employment. However, 10 percent of today's professional jobs in agriculture go unfilled because of a lack of qualified graduates. As the demand increases for agricultural products, so does the demand for qualified individuals.

## Career Pathways in Agriculture:

- ▶ Agricultural Systems Technology
- ▶ Horticulture Science and Management
- ▶ Natural Resources Science and Management
- ▶ Production/Processing Animal Science
- ▶ Production/Processing Plant and Soil Science
- ▶ Production/Processing Science and Management

“Agricultural education and the FFA gave me a place to belong.”—*Tiffany Clegg*

# BUSINESS

## Did You Know?

Business management and administrative services is projected to be one of the fastest growing industries through the year 2014. In Utah, the annual employment growth is estimated to be 4.3 percent. As technology in business advances and the complexity of business increases, so does the need for savvy business professionals. In fact, professional and business services make up nearly 13 percent of Utah's employment base.

## Career Pathways in Business:

- ▶ Accounting and Finance
- ▶ Business Administrative Support
- ▶ Business Entrepreneurship
- ▶ Business Management
- ▶ Business Technology Support

“Career and Technical Education helped guide me in choosing the right career path for me.”

–Vu Doan

# FAMILY & CONSUMER SCIENCES

## Did You Know?

In today's society there are more two-career families than ever before, and the number of personal bankruptcies has risen 400 percent in the past 25 years. Family and Consumer Sciences can give individuals the practical knowledge and critical and creative thinking skills to address problems in diverse family, community, and work environments.

## Career Pathways in FACS:

- ▶ Child Development
- ▶ Consumer Economics Services
- ▶ Family and Human Services
- ▶ Fashion Design, Manufacturing and Merchandising
- ▶ Food Science, Dietetics and Nutrition
- ▶ Food Service and Culinary Arts
- ▶ Hospitality Services
- ▶ Interior Design

“I have used the information I learned in Career and Technical Education in the professional world and in making my life better.”

—Sharyl Mathews

# HEALTH SCIENCE & TECHNOLOGY

## Did You Know?

The health care industry is robust and growing nationwide; however, is experiencing a critical shortage of workers. An increased demand for qualified health professionals is expected to continue through the year 2014, resulting in over 3,300 annual job openings in Utah alone.

## Career Pathways in Health Care:

- ▶ American Sign Language
- Biotech Research and Development
  - ▶ Biotechnology
- Health Informatics
  - ▶ Medical Office Admin. Assistant
- Therapeutic Services
  - ▶ Dental
  - ▶ Pharmacy
  - ▶ Emergency Medical Technician (EMT)
  - ▶ Exercise Science/Sports Medicine
  - ▶ Medical Assistant
  - ▶ Nursing
  - ▶ Optical Technician
  - ▶ Surgical Technician

“My decision to pursue a career in medicine was because of my broad introduction to the health care field in high school.” –*Joel Arvizo*

# INFORMATION TECHNOLOGY

## Did You Know?

The Information Technology (IT) industry is a dynamic and entrepreneurial working environment that has a revolutionary impact on the economy and society. IT is the field of the future and is rapidly growing, with the demand for skilled individuals high. In Utah, IT is projected to have an annual employment growth rate of 2.6 percent through the year 2014.

## Career Pathways in IT:

### Information Support Services

- ▶ Database Development and Administration
- ▶ Technical Support

### Interactive Media

- ▶ Digital Media (Multimedia)
- ▶ Web Development and Administration
- ▶ Network Systems
- ▶ Programming/Software Development

“The multimedia classes I took in high school are what influenced me to pursue a degree in the area of information technology.”

—Katherine Philipp

# MARKETING

## Did You Know?

Marketing is an expansive field that covers industries from advertising to travel and tourism, from retail to sports and entertainment, from real estate to Internet marketing. As people do everything from shopping and dating to trading stock and taking classes on the Internet, e-Commerce is only going to get bigger. As a result, marketing is a rapidly growing field. In fact, it is estimated that worldwide over 30 percent of all workers work in some areas of marketing.

## Career Pathways in Marketing:

- ▶ Marketing Entrepreneurship
- ▶ Marketing Management
- ▶ Sales and Service Marketing
- ▶ Travel and Tourism

“I enjoyed a concentration of business and marketing courses while attending high school, which have been an asset to me as a manager of a local retail store.”

—Ryan Archibald

# SKILLED & TECHNICAL SCIENCES

## Did You Know?

People who work in skilled and technical fields are found everywhere. They are the contractors who build your new home and the factory workers who assemble your stereo. They are the pilots who fly you to your vacation destination and the news anchors who bring you the news. They are the police officers who keep you safe and the auto technicians who use the latest technology to figure out why your car isn't working.

## Career Pathways in Skilled and Technical Sciences (STS):

There are twenty Pathways within STS including the areas of building trades, communication, mechanics and repairs, personal service, precision production trades, protective service, transportation and material moving, and visual arts.

“ My interest in the automotive industry began in high school when I was a class assistant to the auto teacher.”

—Amelia Mitchell

# TECHNOLOGY & ENGINEERING

## Did You Know?

In Utah, engineering is one of the fastest growing industries, having an employment projected growth rate of 4.7 percent through the year 2014. Due to the expansion of jobs in the technical fields and the increasing numbers of engineers who are retiring, the number of job openings in technology and engineering is increasing. There is a critical shortage of engineers and engineering technologists entering the field at a time when technology is reinventing itself every few years.

## Career Pathways in Engineering:

- ▶ Pre-Engineering  
(Utah Pre-Engineering Program)
- ▶ Project Lead the Way  
(National Pre-Engineering Program)

“I enjoy hands-on learning. One of the projects we did [in class] was a pneumatic robot. That is when I knew I wanted to go into engineering.”

—Trent Williams

