St. James High School Career And Technology Education



Majors Guide 2023 - 2024

Each major course list in this guide was compiled based on the SCDE Collections and Reporting Guide for 2021-2022

CTF	Cluster	Onick	Reference	Guide
	CIGSCCI	KAICI	THE ICICIES	Galac

Business Information Management	Business, Management and Administration	521206
General Management	Business, Management and Administration	520201
Carpentry	Architecture and Construction	460201
Business Finance	Finance	520804
Health Science	Health Science	510000
Sports Medicine	Health Science	310505
Family and Consumer Science	Human Services	110901
Marketing Communications	Marketing	520401
Game and Interactive Media Design	Information Technology	500411
Programming and Software Development	Information Technology	110201
Web Design and Development	Information Technology	110801

CTE Cluster Careers Quick Reference Guide

For more information about Career Clusters, visit O*NET to discover and explore more career paths including earning potential.

Business Information Management: Information Systems Managers, Sales Manager

General Management: Compliance Managers, Financial Managers, Payroll Managers

Carpentry: Architects, Drafters, Iron Workers, Carpenters, Construction Managers

Business Finance: Financial Analysts, Loan Officers and Counselors, Financial Advisors

Health Science: Nurses, Pharmacists, X-Ray Technicians

Sports Medicine: Physical Therapists, Coaches, Fitness and Sport Trainers

Family and Consumer Science: Social Workers, Daycare Managers, Chefs, Fashion Designers

Marketing Communications: Brand Ambassadors, Social Media Managers, Public Relations

Game and Interactive Media Design: Game Designers, Game Developers, Animators

Programing and Software Development: Computer Systems Analysts, Computer Programmers

Web Design and Development: Multimedia Programmers, Web Content Managers

What does it mean to complete a program at SJH?

Career clusters are groupings of occupations and broad industries based on commonalities.

Career clusters link what students learn in high school with the knowledge and skills they need for success in college and careers. Career clusters identify pathways from high schools to two- and four-year colleges, graduate school, and the workplace so that students can learn in school what they can do in the future.

Business Information Management 520206

Career Cluster: Business Management and Administration

Required Courses:

Digital Publication Design⁵¹⁷⁶ Image Editing 1 5340

Choose Two of the Following Courses:

Accounting 1⁵⁰⁰¹ Advanced Web Page Design and Development 5033 Advertising⁵⁴⁷⁰

Business Data Applications 5021

Business Law⁵⁰⁴⁴

Business Principles and Management 5092

Digital Multimedia 5030

Digital Technologies⁵¹⁸⁰

Digital Workplace Applications 5020

Discovering Computer Science 5061

Entrepreneurship 5400

Foundations of Animation 5422

Fundamentals of Business, Marketing and Finance⁵⁰⁹⁰

Fundamentals of Computing 5023

Fundamentals of Project Management 5480

Fundamentals of Web Page Design & Development 5031

Google Applications 5007

IT Fundamentals 5025

Principles of Digital Technology⁵¹⁸⁰

Professional and Leadership Development 5178

Social Media Marketing 5034

Workplace Communications 5041

Business Mgmt. & Admin. Internship, Work-Based Credit 5490

Completer Certifications Available:

MICROBURST

CERTIPORT IC3

OSHA 10 GENERAL

Career Occupations:

Accounting Clerk

Chief Technology Officer

Auditor • Bookkeeper

Budget Analyst

Billing Supervisor

Merger & Acquisitions Manager

Price Analyst

Chief Financial Officer

Project Manager

Librarian • Adjuster

Payroll Accounting Clerk

Top Collections Executive



Business Information Management is an umbrella

term covering those careers that provide a bridge between business processes, initiatives, and Information Technology. Employees in this area help to

align business and IT goals.

If you want to:

- Work with computers and software
- Interested in solving problems
- Aspire to creative thinking
- Improve your life skills

For more information contact:

Mrs. Johnson in C155, Ms. Oliver in room E235, or talk to your guidance counselor.

General Management 520201

Career Cluster: Business Management and Administration

General Management

focuses on careers that plan, organize, direct, and evaluate all or part of a business organization through the allocation and use of financial, human, and material resources.

If you want to:

- Manage a team of colleagues
- Start up and carry out projects
- Make decisions and take risks
- Work with computers and software

For more information contact:

Ms. Oliver in room E235, or talk with your guidance counselor.

Required Courses:

Entrepreneurship⁵⁴⁰⁰
Accounting 1 ⁵⁰⁰¹

Choose Two of the Following Courses:

Accounting 2⁵⁰⁹⁵

Advanced Business Law⁵⁰⁴⁹

Business Data Applications 5021

Business Finance 5274

Business Law⁵⁰⁴⁴

Business Principles and Management 5092

Digital Workplace Applications 5020

Fundamentals of Business, Marketing & Finance 5090

Fundamentals of Human Resource Management 5093

Fundamentals of Project Management 5480

Fundamentals of Web Page Design & Development 5031

Google Applications 5007

International Business⁵⁰³²

Marketing⁵⁴²¹

Marketing Management⁵⁴³¹

Professional and Leadership Development ⁵¹⁷⁸

Social Media Marketing⁵⁰³⁴

Virtual Enterprise 1⁵¹⁵⁰, 2⁵¹⁵¹, 3⁵¹⁵², 4⁵¹⁵³

Workplace Communications 5041

Business Mgmt. & Admin. Internship, Work-Based Credit⁵⁴⁹⁰

Completer Certifications Available:

MICROBURST

CERTIPORT IC3

OSHA 10 GENERAL

Career Occupations:

General Manager

Accounts Payable Manager

Business & Development Manager

Compensation & Benefits Manager

Public Relations Manager

Human Resource Manager

Purchasing Manager

Government Manager

First Line Supervisor

Senior Manager

Management Trainee

Small Business Owner



Carpentry 460201

Career Cluster: Architecture and Construction

A career in **Carpentry** can literally build our future! These are the people who build and remodel houses, apartments, industrial buildings, warehouses, office buildings, churches, schools and recreational facilities.

You will:

- Work with your hands
- Be creative
- Work as a member of team
- Cooperate and assist others
- Acquire skills needed in the carpentry field

For more information contact:

Mr. McCann in room D140, or your guidance counselor.

Required Courses:

Carpentry 1 (9-10th)⁶⁰⁹¹

Carpentry 2 (10-11th)⁶⁰⁹²

Carpentry 3 (12th Intern)⁶⁰⁹³

Carpentry 4 (12th Intern)⁶⁰⁹⁴

Carpentry 3 & 4:

Internship Requirements for

- ⇒ Must have a valid driver's license
- ⇒ Obtain a construction job prior to application
- ⇒ Have passed Carpentry 1 & 2 with an **80%** or better
- ⇒ Have a interview process with teacher prior to application
- \Rightarrow Approved by HCS District as acceptable
- ⇒ Have taken and passed 10 hour OSHA safety course

Completer Certifications Available:

OSHA 10 GENERAL

Career Occupations:

Apprentice carpenters
Beam builders • Brattice builders
Building carpenters
Commercial carpenters
Construction carpenters
Counter installers • Finish carpenters
Custom wood stair builders
Hardwood floor installers
House carpenters
Industrial carpenters
Residential carpenters
Wood floor layers



Business Finance 520804

Career Cluster: Finance

The **Business Finance**

function in a company is to manage policy and strategy for (and the implementation of) capital structure, budgeting, acquisition and investment, financial modeling and planning, funding, dividends, and taxation.

If you want to:

- Work in international markets
- Know how to secure your financial future
- Solve problems in creative ways
- Follow the stock market

For more information contact:

Mrs. Johnson in room C155, or your guidance counselor.

Required Courses:

Accounting 1⁵⁰⁰¹
Business Finance⁵²⁷⁴

Choose Two of the Following Courses:

Accounting 2⁵⁰⁰¹
Banking Services⁵²⁷¹

Business Data Applications 5021

Business Law⁵⁰⁴⁴

Digital Workplace Applications 5020

Entrepreneurship 5400

Fundamentals of Business, Marketing & Finance Insurance and Risk Management 5275

International Business⁵⁰³²

Marketing⁵⁴²¹

Personal Finance 5131

Professional and Leadership Development 5178

Professional Sales⁵⁴⁷¹

Securities and Investments⁵²⁷⁷

Workplace Communications 5041

Finance Internship, Work-Based Credit⁶¹⁹⁰

Completer Certifications Available:

MICROBURST

OSHA 10 GNERNAL

Career Occupations:

Accountants

Financial Analysts

Treasurers • Controllers

Chief Revenue Agents

Auditors • Economist

Tax Auditors • Collectors

Revenue Agents

Benefits Specialists

Real Estate Analysts

Certified Purchasing Professionals

Client Managers



Health Science 510000

Career Cluster: Health Science

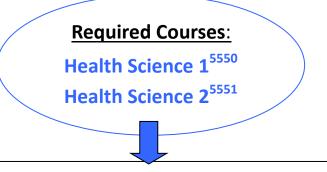
Careers in the **Health Sciences** range from clinical work with patients to office work at private corporations. Because healthcare is such a diverse field, you have the ability to move both laterally and upward as career interests and goals change.

You will:

- Learn about the human body
- Participate as a team player
- Be near the action
- Acquire skills needed in the medical field

For more information contact:

Mrs. Hess in room C167, Mrs. Medved in room A208, Mr. Krauss in room A209, or your guidance counselor.



Choose Two of the Following Courses:

Health Science 3⁵⁵³³

Health Science Clinical Study⁵⁵⁶⁰

Human Body Systems⁵⁵⁸¹

Medical Billing and Coding 5584

Medical Interventions⁵⁵⁸²

Medical Terminology 5540

Pharmacology for Medical Careers⁵⁵⁷⁰

Practical Nursing Phase 1⁵⁵²⁰

Principles of Biomedical Sciences⁵⁵⁸⁰

Sports Medicine 1⁵⁵⁵⁵

Sports Medicine 2⁵⁵⁵⁶

Health Science, Work-Based Credit 5590

Completer Certification

BLS-CPR

Career Occupations:

Cardiovascular Technician
Dental Hygienist
Occupational Therapy Assistant
Respiratory Therapist
Surgical Technician
Biomedical Equipment Technician
EKG Technologist
Pharmacy Technician
Paramedic
Veterinary Technician
Radiation Therapist
Medical Assistant
Anesthesia Technician
Audiology Technician



Sports Medicine 310505

Career Cluster: Health Science

Careers in the **Health Sciences** range from clinical work with patients to office work at private corporations. Because healthcare is such a diverse field, you have the ability to move both laterally and upward as career interests and goals change.

If you:

- Care about others well being
- Have always been interested in science or medicine
- Want to help others recover from injury and prevent future injuries

For more information contact:

Mrs. Hess in room C167, Mrs. Medved in room A208, Mr. Krauss in room A209, or your guidance counselor.

Required Courses:

Sports Medicine 1⁵⁵⁵⁵
Sports Medicine 2⁵⁵⁵⁶

Choose Two of the Following Courses:

Health Science 1⁵⁵³¹
Health Science 2⁵⁵³²

Health Science 3⁵⁵³³

Health Science Clinical Study⁵⁵⁶⁰

Human Body Systems⁵⁵⁸¹

Medical Interventions⁵⁵⁸²

Medical Terminology 5540

Pharmacology for Medical Careers⁵⁵⁷⁰

Practical Nursing Phase 1⁵⁵²⁰

Principles of Biomedical Sciences⁵⁵⁸⁰

Health Science, Work-Based Credit⁵⁵⁹⁰

Sports Medicine, Work-Based Credit 5591

Completer Certification

BLS - CPR

Career Occupations:

Exercise Physiologists

Athletic Trainers

Orthopedic Nurses

Kinesiotherapist

Physical Therapists

Sports Psychologists

Sports Medicine Nurses

Physiatrists

Primary Care Sports Medicines

Orthopedic Surgeons

Nutritionists



Family and Consumer Science 110901

Career Cluster: Human Services

Required Courses:

Family Consumer Science 1

Students must take two levels of at least one course and select courses that show a clear path to a career.

The **Human Services** cluster prepares individuals for employment in career pathways that relate to families and human needs.

If you like to:

- Work with fabric and design clothing
- Take care of small children
- Lead small groups of people
- Help others with social & emotional

For more information contact:

Mrs. Pipkin-Jones in room C109, Mrs. Brown in D106, or talk to your guidance counselor.

Choose Three of the Following Courses:

Child Development 1⁵⁸⁰⁰ Child Development 2 ⁵⁸⁰¹

Early Childhood Education 1⁵⁷⁰⁰

Family Life Education 1⁵⁸²⁰

Family Life Education 2⁵⁸²¹

Financial Fitness 1⁵⁸¹²

Financial Fitness 2⁵⁸¹³

Foods and Nutrition 1⁵⁸²⁴

Foods and Nutrition 2⁵⁸²⁵

Human Development: Responsible Life Choices 1⁵⁸³⁴ Human Development: Responsible Life Choices 2⁵⁸³⁵

Parenting Education 1⁵⁸¹⁶

Parenting Education 2 5817

Sports Nutrition 1⁵⁷⁵⁹

Sports Nutrition 2⁵⁷⁶⁰

Family Consumer Science 1⁵⁸⁰⁸

Family Consumer Science 2⁵⁸⁰⁹

Fashion, Fabric, and Design 1⁵⁸⁰⁴

Fashion, Fabric, and Design 2⁵⁸⁰⁵

Housing and Interiors 1⁵⁸³⁰

Housing and Interiors 2⁵⁸³¹

Family and Consumer Sciences, Work-Based Credit⁵⁸⁹⁰

Completer Certification

SERVSAFE FOOD HANDLER
FCS PRE-PROFESSIONAL (AAFCS)

Career Occupations:

Preschool Teachers • Nannies

Childcare Assistant

Career Counselors

Residential Advisors

Community Service Director

Social Services Workers

Home Care Aides

Companions

Sales Consultants

Customer Service Representatives

Financial Advisors

Consumer Advocates



Marketing Communications 99993

Career Cluster: Marketing

Required Courses:

Advertising⁵⁴⁷⁰ or Digital Media Marketing⁵⁴²²
Marketing⁵⁴²¹

Marketing

Communications employees plan, coordinate and implement marketing strategies advertising promotion and public relations activities Because of the importance and high visibility of their jobs, these individuals often are prime candidates for advancement.

If you like to:

- Communicate with people
- Design things on the computer
- Be creative

For more information contact:

Ms. Oliver in room E235, Mr. Randall in C159, or talk to your guidance counselor.



Choose Two of the Following Courses:

Accounting I⁵⁰⁰¹

Advanced Web Page Design & Development 5033

Business Data Applications 5021

Digital Multimedia 5030

Digital Publication Design⁵¹⁷⁶

Digital Workplace Applications 5020

Entrepreneurship 5400

Fundamentals of Web Page Design & Development 5031

Google Applications 5007

Image Editing I⁵³⁴⁰

Marketing Analytics 5423

Professional and Leadership Development 5178

Professional Sales 5421

Social Media Marketing 5034

Sports and Entertainment Marketing 5425

Virtual Enterprise 1⁵¹⁵⁰, 2⁵¹⁵¹, 3⁵¹⁵², 4⁵¹⁵³

Workplace Communications 5041

Marketing Internship, Work-Based Credit⁵⁰⁹¹

Completer Certifications Available:

MICROBURST

OSHA 10 General

Career Occupations:

Advertising Managers

Public Relations Managers

Public Information Directors

Sales Promotion

Promotions Managers

Creative Directors

Account Executives

Sales Representatives

Marketing Associates

Contract Administrators

Copywriters • Research Specialists

Research Assistants

Customer Service Representatives

Interactive Media Specialists



Game and Interactive Media Design 500411

Career Cluster: Information Technology

Careers in **Game and**Interactive Media help you to understand games from inside out and develop the core design and creative storytelling expertise and gain an in-depth understanding of the writing, art, gameplay, audio, music and animation skills needed to create immersive and interactive games.

If you like to:

- Work with computers
- Participate as a team
- Communicate with people
- Design computer software

For more information contact:

Mr. Williams in E239, or talk to your guidance counselor.

Required Courses:

Foundations of Animation⁵⁰⁵⁰

Game Design and Development⁵³⁵²

Choose Two of the Following Courses:

Accounting 1⁵⁰⁰¹

Advanced Animation 5351

Computer Repair and Service⁵³²⁰

Cyber Security Fundamentals 5370

Digital Art and Design 1 6120

Entrepreneurship 5400

Fundamentals of Computing 5023

Fundamentals of Web Page Design and Development 5031

Introduction of Computer Programming 5050

Media Technology⁶¹²⁴

Networking Fundamentals⁵³¹⁰

PLTW- Computer Science A⁶³⁷³

PLTW- Computer Science Essentials⁶³⁷²

PLTW- Computer Science Principles⁶³⁷⁷

PLTW- Cybersecurity⁶³⁷⁸

Information Technology, Work-Based Credit⁵³⁹⁰

Completer Certification

CERTIPORT IC3
COMPTIA ITF+

Career Occupations:

Lead Designer

Game Programmer

Game Artist

Game Animator

Lead Quality Assurance

Software Engineer

Game Designer

Software Developer

Game Writer

Visual Artist/Designer

3D Modeling Artist

Audio/Sound Effects Developer

Level Designer



Programming and Software Development 110201

Career Cluster: Information Technology

Required Courses:

Introduction to Computer Programming 5050
Intermediate Computer Programming 5051

People with expertise in

Programming and Software
Development work with cutting
-edge technologies to develop
tomorrow's products for use by
businesses and consumers.

If you like to:

- Work with computers
- Participate as a team
- Communicate with people
- Design computer software

For more information contact:

Mr. Williams in E239, or talk to your guidance counselor.

Choose Two of the Following Courses:

Advanced Animation 5351

Advanced Cyber Security⁵³⁷²

Advanced Web Page Design and Development 5033

Computer Forensics 5374

Cyber Security Fundamentals 5370

Entrepreneurship 5400

Fundamentals of Computing 5023

Fundamentals of Web Page Design and Development 5031

Foundations of Animation⁵³⁵⁰

Game Design and Development 5352

GIS Technology 1⁵³⁶¹

GIS Technology 2⁵³⁶²

IT Fundamentals 5025

Java Fundamentals and Java Programming 5058

Professional and Leadership Development

SAS Programming 1⁵³²⁷

SAS Programming 2⁵³²⁸

Information Technology, Work-Based Credit 5390

Completer Certification

CERTIPORT IC3
COMPTIA ITF+

Career Occupations:

Applications Analyst

Computer Engineer

Data Modeler

Programmer Analyst

Development Engineer

Program Manager

Administrator Test Engineer

Programmer • Tester

Software Applications Specialist

Design Engineer

Administrator



Web Design and Development 110801

Career Cluster: Information Technology

Careers in **Web Design and Development** involve creating, designing and producing interactive multimedia products and services, including development of digitallygenerated or computer-enhanced media used in business, training, entertainment, communications and marketing.

If you like to:

- Work with computers
- Participate as a team
- Communicate with people
- Design computer software

For more information contact:

Mr. Williams in E239, or talk to your guidance counselor.

Required Courses:

Fundamentals of Web Design and Development 5031

Advanced Web Design and Development 5033

Choose Two of the Following Courses:

Advanced Animation 5351

Introduction to Computer Programming 5050 Intermediate Computer Programming 5051

Digital Publication Design⁵¹⁷⁶

Digital Technologies⁵¹⁸⁰

Digital Media Marketing 5030

Digital Multimedia 5030

Entrepreneurship 5400

Fundamentals of Computing 5023

Foundations of Animation 5350

Game Design and Development 5352

Google Applications 5007

Image Editing 1⁵³⁴⁰

Information Technology Foundations 5270

IT Fundamentals 5025

Java Fundamentals and Java Programming 5058

Professional and Leadership Development 5178

Social Media Marketing 5034

Information Technology, Work-Based Credit⁵³⁹⁰

Completer Certification

CERTIPORT IC3
COMPTIA ITF+

Career Occupations:

2D/3D Artist • Designer
Audio/Video Engineer
Media Specialist • Author
Developer • Specialist Producer
Production Assistant
Programmer • Producer
Streaming Media Specialist
Page Developer • Site Developer
Social Networking Specialist



Blog Developer

NOTES

Students that need courses to complete, updates needed for next year, etc.

