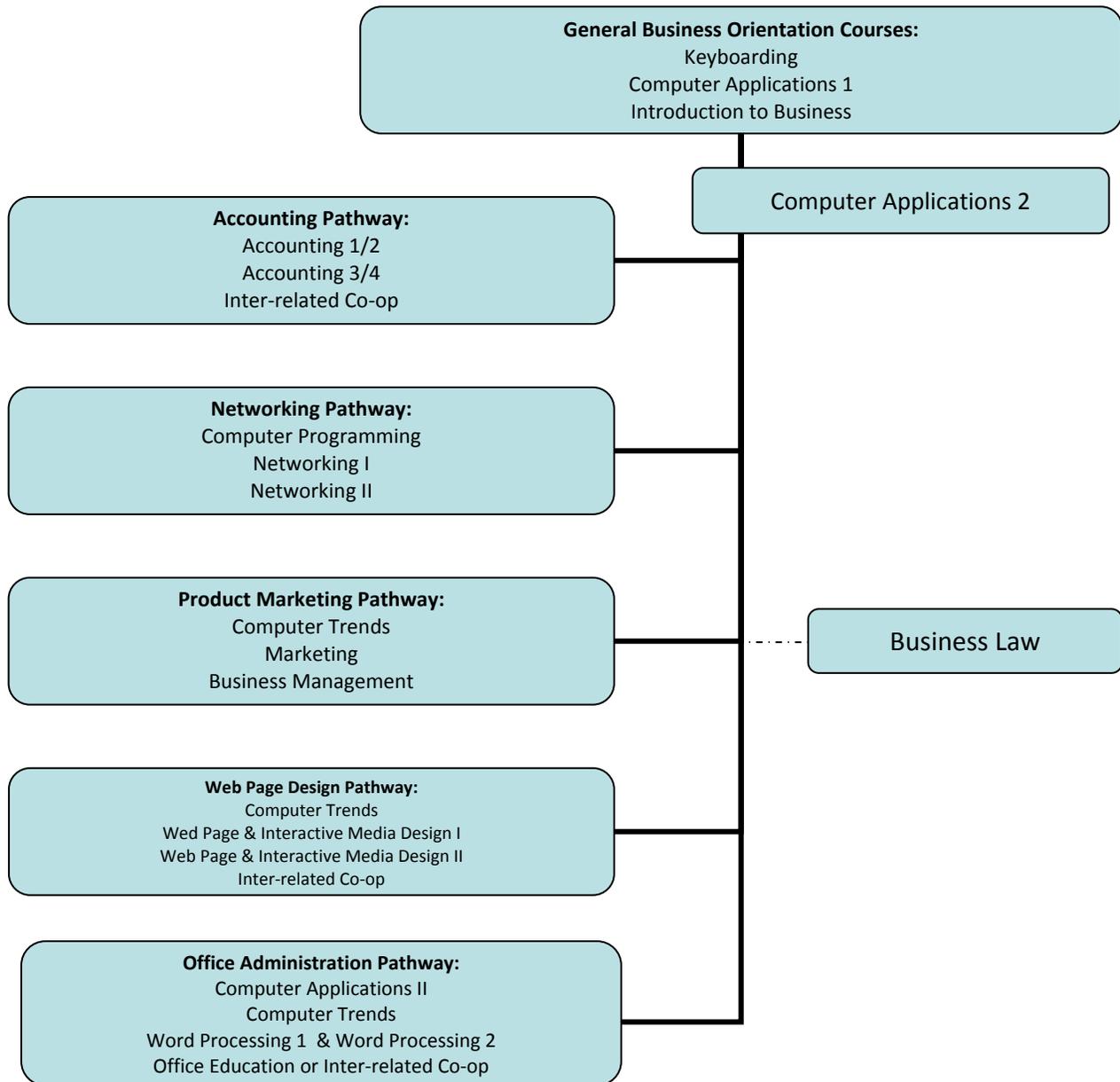# CAREER AND TECHNICAL EDUCATION

(<u>Two semesters</u> of Career and Technical Education credit are <u>required</u> for graduation.)
Courses in Business Education, Industrial Technology, and Family and Consumer Sciences are in the Career and Technical Education Division. Any of these courses, except Consumer Education, can count toward fulfillment of the graduation requirement of 1 unit (2 semesters) of Career and Technical Education OR 2 units (4 semesters) of the same foreign language. Options for the Illinois requirement for Consumer Education are listed separately.
<u>NCAA Eligibility rules do not approve any computer courses or other Business electives, because they are not core academic classes.</u>*

BUSINESS EDUCATION ELECTIVES
Business/Marketing/IT/Finance Career Clusters

General Business Orientation Courses:
Keyboarding
Computer Applications 1
Introduction to Business

Computer Applications 2

Accounting Pathway:
Accounting 1/2
Accounting 3/4
Inter-related Co-op

Networking Pathway:
Computer Programming
Networking I
Networking II

Product Marketing Pathway:
Computer Trends
Marketing
Business Management

Business Law

Web Page Design Pathway:
Computer Trends
Wed Page & Interactive Media Design I
Web Page & Interactive Media Design II
Inter-related Co-op

Office Administration Pathway:
Computer Applications II
Computer Trends
Word Processing 1 & Word Processing 2
Office Education or Inter-related Co-op

BUSINESS EDUCATION ELECTIVES

ACCOUNTING 1/2
Offered: *Year Course*
For: *11, 12*
Prerequisite: *Credit in Accounting 1 for Accounting 2.*
Fees: *None*
Students are provided with an understanding of basic accounting concepts and principles. They have an opportunity to learn about the work-flow of an accounting system, the basic methods of processing business data and financial activities of a service and merchandising business. Students learn the necessary background for future study in accounting and are also provided with career and technical skills that contribute to success in entry-level jobs such as bookkeeper, bank teller, and payroll clerk. Computers are integrated into the course; however, students do not need previous computer experience, but keyboarding skills are helpful.

ACCOUNTING 3/4
Offered: *Year Course*
For: *11, 12*
Prerequisite: *Credit in Accounting 1/2.*
Fees: *None*
Students are provided with the opportunity to develop sound understanding of basic accounting to the whole business organization. They learn how management uses accounting records to make decisions and form policies and are provided the necessary background for additional study in college accounting courses. Students also learn to use microcomputers to process accounting data. No previous computer experience is required, but students will find keyboarding skills helpful.

BUSINESS LAW
Offered: *Year or Semester Course*
For: *11, 12*
Prerequisite: *None*
Fees: *None*
Since business law is important to each individual in his day-to-day personal business activities, students in this course study material about legal topics such as crime, contracts, torts and consumer law. Students also learn the general concepts required for contract law. In the second semester of Business Law students concentrate exclusively on various aspects of contract law with regard to specific business-oriented topics such as labor, property (real and personal), sales, finance, proprietorship, partnership, incorporation, government regulations, marriage contracts, divorce and wills.

BUSINESS MANAGEMENT
Offered: *Semester Course (1st Semester Only)*
For: *11, 12*
Prerequisite: *None*
Fees: *None*
Students in this one-semester course are introduced to starting and/or managing a business. Their study includes proprietorships, partnerships, franchises and corporations as well as the basic principles of free enterprise, financing, marketing, pricing information and advertising. Students will learn problem-solving, management and decision-making techniques.

COMPUTER APPLICATIONS 1
Offered: *Semester Course*
For: *9, 10, 11, 12*
Prerequisite: *None; Credit in Keyboarding recommended.*
Fees: *None*
This is a beginning-level course that covers Microsoft Word, Excel, Access and PowerPoint. In Word, students will be entering, formatting, editing text; inserting and editing graphics; and preparing MLA research papers, including sources and works cited pages. In Excel, students will enter and format text and numbers; use formulas; and create embedded and format 2- and 3-D charts. In Access, students will design and create

databases, tables, and custom reports. In PowerPoint, students will be creating, formatting, editing presentations; inserting and editing graphics and video; slide transitions and animation; and printing handouts.

COMPUTER APPLICATIONS 2
Offered: *Semester Course*
For: *9, 10, 11, 12*
Prerequisite: *Credit in Computer Applications 1; Credit in Keyboarding recommended.*
Fees: *None*
This is an intermediate-level course that continues to cover Microsoft Word, Excel, Access and PowerPoint. In Word, students will review MLA formatted papers, adding additional sources and increasing their types of works cited references; prepare tables; resumes; and cover letters. In Excel, students will enter and format text and numbers; use formulas; create a variety of chart sheets; create What-If Analysis worksheets; and Goal Seek worksheets. In Access, students will create Queries for databases, join tables, perform calculations within databases, and learn how to maintain databases. PowerPoint will emphasize appropriate design, sounds, and animations for intended audiences while integrating other MS software applications. Successful completion of Computer Applications 1 is required to take this course.

COMPUTER PROGRAMMING
Offered: *Semester Course*
For: *10, 11, 12*
Prerequisite: *None; Credit in Keyboarding and Computer Applications recommended.*
Fees: *None*
Students are provided with a general understanding of the use of computers, disk drives and printers to process information. They have the opportunity to learn to use the computer for office use, study the fundamentals of programming in the **VISUAL BASIC** language and learn the logical approach to problem-solving.

COMPUTER TRENDS
Offered: *Semester Course*
For: *10, 11, 12*
Prerequisite: *Credit in Computer Applications 1; Credit in Keyboarding recommended.*
Fees: *None*
Students will learn about various computer applications based on the current technology and software available. Possible topics include Desktop Publishing (create business cards, menus, flyers), multimedia applications, evaluating hardware (CD-ROM, scanners, printers), and software, Windows applications, and using the Internet.

COMPUTER NETWORKING I
Offered: year Credits per semester .5
Grade level: 11, 12
Prerequisite: *Credit in Computer Applications recommended. Credit in Computer Programming helpful.*
Fees: *None*
Computer Networking I is a skill-level course designed to provide students with the skills needed to setup, configure, test, troubleshoot, maintain, and administer a data network using various network operating systems such as Novell, Windows, and Linux. Instruction will include network planning decisions, such as choosing an appropriate network configuration, determining the performance level requirements considering the differences among operating systems, and recommending network interface cards and cabling. Students will also learn how to setup and manage file systems and resources, and network topologies, protocols, and system utilities to efficiently run software applications on a network. Students will learn to use basic operating system commands, install and configure networks, set up user accounts and rights, and establish user security and permissions.

COMPUTER NETWORKING II
Offered: *yearlong* Credits per semester .5
Grade level: 12
Prerequisite: *Credit in Computer Networking I*
Fees: *None*
Computer Networking II is a skill-level course for students who have completed Computer Networking I. Students will continue to learn skills to set up, configure, test, troubleshoot, maintain, and administer a data

network using various network operating systems such as Novell, Windows, and Linux. Students will learn to use troubleshooting services, system monitoring utilities, and data backup and recovery systems. Instruction will include setting up and configuring various network services such as TCP/IP, DHCP, DNS, VPN, terminal services, e-mail, content filtering, and web services. Students will learn techniques to secure and protect network servers and data. Students will be introduced to some basic concepts regarding web server configuration. Students will also learn to use standard software tools to determine system vulnerabilities and correct these vulnerabilities by reconfiguring the operating system. Students will diagnose network problems using public domain network sniffers such as Ethereal. Instruction will include setting up and configuring a firewall, intrusion detection system, and encryption software for identifying and preventing potential network attacks.

INTRODUCTION TO BUSINESS 1
Offered: Semester Course
For: 9, 10
Prerequisite: None
Fees: None
Students are introduced to the business and economic institutions of our free enterprise system and the present-day problems which affect U.S. and world citizens in buying, budgeting, banking, and borrowing.

INTRODUCTION TO BUSINESS 2
Offered: Semester Course
For: 9, 10
Prerequisite: Credit in Introduction to Business 1
Fees: None
Students are introduced to the business and economic institutions of our free enterprise system and the present-day problems which affect U.S. and world citizens in saving, investing, insuring, and budgeting.

KEYBOARDING
Offered: Semester Course
For: 9, 10, 11, 12
Prerequisite: None
Fees: None
Keyboarding is for students who want to be familiar with the keyboard in order to enter data or take additional computer classes. Students learn the entire keyboard while developing basic techniques plus speed and accuracy. This is then applied to creating formatted documents more effectively.

WEB PAGE AND INTERACTIVE
MEDIA DEVELOPMENT I
Offered Year course Credits per semester .5
Grade level: 11
Prerequisite: Credit in Computer Applications recommended.
Fees: None
Web Page and Interactive Media Development is a skill-level course designed to prepare students to plan, design, create and maintain web pages and sites. Students will learn the fundamentals of web page design using HTML, HTML editors, and graphic editors as well as programming tools such as JavaScript. Students will work in a project-based environment to create a working website. Students will learn to create pages, add hyperlinks, make tables and frames, create forms, integrate images, and set styles. Students will use image-editing programs to manipulate scanned images, computer graphics, and original artwork. Instruction will include creating graphical headers, interactive menus and buttons, and visually appealing backgrounds. Students will use hardware and software to capture, edit, create, and compress audio and video clips.

WEB PAGE AND INTERACTIVE
MEDIA DEVELOPMENT II
Offered: Yearlong   Credits per semester .5
Grade level: 12
Prerequisite: Credit in Web Page and Interactive Media Development I
Fees: None
Web Page and Interactive Media Development II is a skill-level course for students who have completed Web Page and Interactive Media Development I. Instruction will include using multimedia authoring applications and programming tools such as JavaScript to create a web site that combines text, hyperlinks, images, video, and sound. Instruction will include using hardware and software to capture, edit, create, and compress audio and video clips as well as create animated text, graphics, and images. Other topics will include using tables to align images with text, creating newspaper-style columns, and inserting side menus and call-outs. Students will learn how to use templates, cascading style sheets and interactive elements to enhance web pages. Students will learn to create dynamic forms that include multiple-choice questions, comment boxes, and buttons. Students will learn how to connect to a database and retrieve and write data. Students are encouraged to develop a portfolio project that demonstrates their expertise in areas such as multimedia authoring, web development, audio and video editing, and advanced JavaScript applications to create interactive web pages.

WORD PROCESSING 1
Offered: Semester Course
For: 9, 10, 11, 12
Prerequisite: Credit in Keyboarding
Fees: None
Students are introduced to word processing and the personal computer. Word processing students develop speed and accuracy at the computer keyboard using the Microsoft Word software program. Students learn to create, edit, save, print, and retrieve documents. Formatting of a variety of business correspondence plus text enhancements is practiced.   Understanding and using proofreader's marks and language arts are also emphasized.

WORD PROCESSING 2
Offered: Semester Course
For: 9, 10, 11, 12
Prerequisite: Credit in Word Processing 1
Fees: None
Word processing students learn more advanced features of the Microsoft Word software program such as merging documents, macros, sorting, columns, outlines, footnotes and endnotes, and tables. Students will accomplish production tasks using business correspondence, tabulation, rough drafts, editing and other business forms. Proofreading, grammar, punctuation, increasing speed and accuracy, and career opportunities are also emphasized.

MARKETING
Offered: Semester Course (2nd Semester Only)
For: 11, 12
Prerequisite: None
Fees: None
Students will be exposed to Marketing through four main areas-*The Product, Price, Place, and Promotion*. The four areas will be covered through a variety of ways–case studies, videos, computer simulations, and field trips. Students will also come to recognize the potential job opportunities available in Marketing as they gain an understanding of how products reach the consumer through the aid of Marketing.

COOPERATIVE WORK-STUDY COURSES

DISTRIBUTIVE EDUCATION (DE)
Offered: *Year Course (Meets 1 period per day; 2 credits per year: .5 credit for class work each semester; .5 credit for employment work each semester)*
For: *12 or by Administrative Approval*
Prerequisite: *Special assignment by the administration. One unit of Business Education elective is required.*
Fees: *None*
Distributive Education is a career and technical work program in the area of retailing/distribution. Students receive supervised on-the-job experience working for a company in some area of retailing/distribution for a minimum average of 15 hours per week. In the classroom they study units about human relations, merchandising, display, advertising, job interview, salesmanship and stock control. Students coordinate work experience with classroom instruction to gain practical application of all units studied. They learn values, ethics and job-related knowledge enabling them to become productive employees. Students do not need to be employed to enroll. They will be given assistance by the teacher-coordinator in locating suitable employment and are to be given early dismissal from school to receive on-the-job training. The student organization, DECA, will be an integral part of the course. Students are encouraged to attend periodic meetings for individual and group instruction. Interested students **MUST APPLY** and be interviewed by the teacher-coordinator and receive Administrative Approval.

OFFICE EDUCATION (OE)
Offered: *Year Course (Meets 1 period per day; 2 credits per year: .5 credit for class work each semester; .5 credit for employment work each semester)*
For: *12 or by Administrative Approval*
Prerequisite: *Special assignment by the administration. One unit of business education is required.*
Fees*: None*
Office Education is a career and technical work program in the area of office careers. Students receive on-the-job experience working for a company in some area of the office for a minimum average of 15 hours per week. In the classroom they study units about human relations, job interview, office procedures, resumes, technology, and word processing. Students coordinate work experience with classroom instruction to gain practical application of all units studied. They learn values, ethics and job-related knowledge enabling them to become productive employees. Students do not need to be employed to enroll. They will be given assistance by the teacher-coordinator in locating suitable employment and may be given early dismissal from school to receive on-the-job training. The student organization, Business Professionals of America, will be an integral part of the course. Students will be required to attend periodic meetings for individual and group instruction. Interested students **MUST APPLY** and be interviewed by the teacher-coordinator and receive Administrative Approval.

INTERRELATED CO-OPERATIVE EDUCATION
Offered: *Year Course (Meets 1 hour per day for 1 credit per semester = 2 credits per year: .5 credit for class work per semester; .5 credit for employment work per semester.*
For: *Grade 12 or Administrative Approval*
Prerequisite: *Successful interview with co-op teacher-coordinator; Special assignment by the AP in charge of the program; and the successful completion of at least one unit of Industrial, Family Consumer Science, Business, or Horticulture Education. Students must be on track for graduation.*
Fee: *None*
This class will provide 12th grade students with the opportunity to participate in CE instruction. Students enrolled in any CTE occupational area may enroll in Interrelated Cooperative Education. The program will be coordinated by a teacher coordinator who is qualified in any one of the five occupational areas.
Students interested in learning horticulture occupations, accounting, business/marketing, trade or service occupations will benefit from this program. Students are expected to work a minimum of (15) hours per week. Students need not be employed to enroll. They will be given assistance in looking for suitable employment. Students are released from school for their paid cooperative education work experience. They participate in 200 minutes per week of related classroom instruction focusing on job survival skills, career exploration skills related to the job, and human relations skills. A qualified CTE instructor is responsible for supervision and is given appropriate release time to do so. Written training agreements and individual student training plans are

developed and agreed upon by the employer, student and coordinator. The coordinator, student and employer assume compliance with federal, state and local laws and regulations. Students will be given instruction and experiences in line with the district reading, writing, math, and critical thinking across the curriculum initiatives. In the classroom students will learn employment information and study specific topics concerning on-the-job experiences related to their occupational area. Student organizations will be an integral part of the course. Students are encouraged to attend periodic meetings for individual and group instruction. Interested students MUST APPLY and be interviewed by teacher-coordinator.

AVAILABLE RESOURCES

WORKKEYS
WorkKeys® is a system for measuring the skills required in the everyday workplace. WorkKeys® helps to improve America's workforce by sharpening the workplace skills of students or employees. Employees are then placed in jobs where they can be more successful. This system benefits individuals, businesses and educators by providing a common language for describing basic skills needed for jobs.
WorkKeys is required in Illinois for Day 2 of State PSAE testing for all Juniors. The sections included on the PSAE are Applied Reading and Applied Math.
KeyTrain® is the complete interactive training system for the WorkKeys® basic workplace skills. KeyTrain provides a comprehensive learning system for common skills required by all jobs, based on ACT's WorkKeys® employment system. http://www.keytrain.com/
Ask your teacher or counselor how you can incorporate Keytrain practice for WorkKeys into your high school experience!

DUAL CREDIT
See your counselor for a current list of courses available for Dual Credit with Morton College. Applications and enrollment qualification requirements are also available through your counselor.