Course Title: Accounting I **Course #: 500100CW**
Grade Level: 10th - 12th **Credits:** 1 Unit Elective Credit **Campus:** DCIT
Prerequisite(s): Must pass Algebra I and English I with at least a 75 average in each class.

Course Description: Students will gain an understanding of how money flows in a business, how businesses are organized, and the steps in the accounting cycle. They will also learn and be able to apply various concepts, principles, and practices utilized in the business world. Excel software will be used for simulated activities. This course is required to earn completer status in the Business Financial Management and Accounting program of study.

Majors: Architecture ~ Automotive Industry ~ Building Construction ~ Business Information and Support Systems ~ Business Information Management ~ Financial Management and Accounting ~ Marketing and Communications ~ Military Science ~ Teaching and Training

Course Title: Accounting II **Course #: 500500CW**
Grade Level: 11th - 12th **Credits:** 1 Unit Elective Credit **Campus:** DCIT
Prerequisite(s): Accounting I and must pass Algebra I and English I with at least a 75 average in each class.

Course Description: Students will be introduced to management, cost, not-for-profit accounting, and financial analysis. Students develop competence in using subsidiary ledgers, preparing payroll and financial statements, and performing end-of-period procedures. Excel software will be used for simulated activities. This course is required to earn completer status in the Business Financial Management and Accounting program of study.

Majors: Architecture ~ Automotive Industry ~ Building Construction ~ Business Information and Support Systems ~ Business Information Management ~ Financial Management and Accounting ~Marketing and Communications ~ Military Science ~ Teaching and Training

Course Title: Agriculture Mechanics and Technology for the Workplace I **Course #: 560400CD**
Grade Level: 10th - 11th **Credits:** 2 Units Elective Credit **Campus:** DCIT
Prerequisite(s): Must pass Algebra I and English I with at least a 75 average in each class.

Course Description: This course is designed to provide the foundation for Agricultural Mechanics Technology II and potentially lead to postsecondary training and/or employment in farming, business or industry. Typical hands-on instructional activities include work on agricultural power units, construction of agricultural facilities and the mechanical practices associated with irrigation, water conservation, erosion control, metal fabrication and data processing. Participation in Future Farmers of America (FFA), development of leadership skills and work-based learning activities will be encouraged.

Majors: Agri-Science ~ Automotive Industry ~ Building Construction ~ Engineering and Engineering Technology ~ Environmental Science ~ Horticulture ~ Industrial Technologies ~ Mathematics ~Military Science ~ Teaching and Training

Course Title: Agriculture Mechanics and Technology for the Workplace II **Course #: 560500CD**
Grade Level: 11th - 12th **Credits:** 2 Units Elective Credit **Campus:** DCIT
Prerequisite(s): Must pass Agriculture Mechanics and Technology for the Workplace I with at least an 85 average and have a teacher recommendation.

Course Description: This course is designed to lead to postsecondary training and/or employment in farming, business or industry and qualify students for entry-level positions in selling, selecting and servicing agribusiness technical equipment and facilities, including computers, specialized software, power units, machinery, equipment, structures and utilities. Instructional activities will include advanced work on agricultural power units, planning and construction of agricultural facilities, irrigation, water conservation, erosion control, metal fabrication and data processing. Problem-solving skills will be emphasized and participation in Future Farmers of America (FFA), community involvement and work-based learning activities will be strongly encouraged.

Majors: Agri-Science ~ Automotive Industry ~ Building Construction ~ Engineering and Engineering Technology ~ Environmental Science ~ Horticulture ~ Industrial Technologies ~ Mathematics ~Military Science ~ Teaching and Training

Course Title: Auto Collision Repair I **Course #: 602000CD**
Grade Level: 11th **Credits:** 2 Units Elective Credit **Campus:** DCIT
Prerequisite(s): Must pass Algebra I and English I with at least a 75 average in each class.

Course Description: This course involves a study of every major area of auto collision repair and refinishing with a special emphasis on practical applications. Students will study vehicle construction technology, develop a basic knowledge of service information, specifications, and measurements, and gain hands-on experience using hand and power tool technology.

Majors: Automotive Industry ~ Engineering and Engineering Technology ~ Military Science ~ Teaching and Training

Course Title: Auto Collision Repair II **Course #: 602100CD**
Grade Level: 12th **Credits:** 2 Units Elective Credit **Campus:** DCIT
Prerequisite(s): Must pass Auto Collision Repair I with at least an 85 average and have a teacher recommendation.

Course Description: This course is a continuation of the level I course. This more advanced course stresses frame repair and damage appraisal. Class and contractual projects are important components of this course. Students can take part in district, state, and national competitions. Students may also elect to seek CO-OP education credit while enrolled in this course.

Majors: Automotive Industry ~ Engineering and Engineering Technology ~ Military Science ~ Teaching and Training

Course Title: Auto Collision Repair III **Course #: 602200CD**
Grade Level: 12th **Credits:** 2 Units Elective Credit **Campus:** DCIT
Prerequisite(s): Must pass Auto Collision Repair II with at least an 85 average and have a teacher recommendation.

Course Description: The Auto Collision III program includes studies of airbrushing techniques, color coordinating for murals, stencils, and a variety of creative designs and images. Students can take part in district, state, and national competitions. Students may also elect to seek CO-OP education credit while enrolled in this course.

Majors: Automotive Industry ~ Engineering and Engineering Technology ~ Military Science ~ Teaching and Training

Course Title: Automotive Technology I **Course #: 603000CD**
Grade Level: 11th **Credits:** 2 Units Elective Credit **Campus:** DCIT
Prerequisite(s): Must pass Algebra I and English I with at least a 75 average in each class.

Course Description: This course consists of basic automotive theory and shop practice. Students will develop skills by working on laboratory exercises and contractual projects. Instruction will focus on shop safety and the maintenance of tools and equipment. Students will learn to diagnose and repair engines, suspension systems, and brakes. They will also learn to service fuel, cooling, lubrication, and electrical systems. Students must have good reading and math skills.

Majors: Automotive Industry ~ Engineering and Engineering Technology ~ Military Science ~ Teaching and Training

Course Title: Automotive Technology II **Course #: 603100CD**
Grade Level: 12th **Credits:** 2 Units Elective Credit **Campus:** DCIT
Prerequisite(s): Must pass Automotive Technology I with at least an 85 average and have a teacher recommendation.

Course Description: This course is a continuation of the level I course. Students will enter into a more advanced study of diagnosing and repairing engines, suspension systems, and brakes. Students will further develop skills in servicing fuel, cooling, lubrication, and electrical systems.

Majors: Automotive Industry ~ Engineering and Engineering Technology ~ Military Science ~ Teaching and Training

Course Title: Automotive Technology III **Course #: 603200CD**
Grade Level: 12th **Credits:** 2 Units Elective Credit **Campus:** DCIT
Prerequisite(s): Must pass Automotive Technology II with at least an 85 average and have a teacher recommendation.

Course Description: This course is a continuation of the level II course. Students will enter into a more advanced study of diagnosing and repairing engines, suspension systems, and brakes. Students will further develop skills in servicing fuel, cooling, lubrication, and electrical systems.

Majors: Automotive Industry ~ Engineering and Engineering Technology ~ Military Science ~ Teaching and Training

Course Title: Business Law **Course #: 504400CW**
Grade Level: 10th - 12th **Credits:** 1 Unit Elective Credit **Campus:** DCIT
Prerequisite(s): Must pass Algebra I and English I with at least a 75 average in each class.

Course Description: This course is designed to provide students with a basic knowledge of personal and business law. Areas of study include criminal, civil, and contract law, as well as, automobile insurance and employment law. Students will role play a mock trial and take a field trip to observe the circuit court in Darlington. This course may be used to earn completer status in the Business Financial Management and Accounting program of study.

Majors: Architecture ~ Automotive Industry ~ Building Construction ~ Business Information and Support Systems ~ Child Development Services ~ Engineering and Engineering Technology ~ Family and Consumer Sciences ~ Financial Management and Accounting ~ Government Relations ~ Health Diagnosis and Treatment ~ Industrial Technologies ~ Marketing and Communications ~ Medical Science and Research ~ Military Science ~ Physical Fitness ~ Teaching and Training

Course Title: Cabinetmaking **Course #: 608000CD**
Grade Level: 11th - 12th **Credits:** 2 Units Elective Credit **Campus:** DCIT
Prerequisite(s): Must pass Carpentry I with at least an 85 average and have a teacher recommendation.

Course Description: Students will learn to apply wood veneers and plastic laminate. They will also learn to assemble, fasten, and install components. They will work with various finishing surfaces such as paint, lacquer, stain, varnish, and filler. Students will learn to design layout, cut, shape, transport and install cabinets. Additionally, students will learn to perform administrative functions such as how to prepare financial records, take inventory, schedule work assignments, and conduct cash sales.

Majors: Agriculture Science ~ Architecture ~ Building Construction ~ Engineering and Engineering Technology ~ Environmental Science ~ Horticulture ~ Industrial Technologies ~ Mathematics ~ Military Science ~ Teaching and Training

Course Title: Carpentry I **Course #: 609100CD**
Grade Level: 10th - 11th **Credits:** 2 Units Elective Credit **Campus:** DCIT
Prerequisite(s): Must pass Algebra I and English I with at least a 75 average in each class.

Course Description: In this course, students will learn the basics of home construction. They will learn to use manual and power hand tools. Students will learn to build the walls, ceiling, and roof of a house. Basic blueprint terms, components, and symbols will be introduced and students will be expected to interpret and use drawing dimensions. Basic safety, math, communication, and employability skills are also taught.

Majors: Agriculture Science ~ Architecture ~ Building Construction ~ Engineering and Engineering Technology ~ Environmental Science ~ Horticulture ~ Industrial Technologies ~ Mathematics ~ Military Science ~ Teaching and Training

Course Title: Carpentry II **Course #: 609200CD**
Grade Level: 11th - 12th **Credits:** 2 Units Elective Credit **Campus:** DCIT
Prerequisite(s): Must pass Carpentry I with at least an 85 average and have a teacher recommendation.

Course Description: In this course, students will expand their knowledge and skills of basic building site preparation, wall, floor, and ceiling framing, exterior and interior finishes, and more as they learn the technologies of home construction. They'll study building codes and restrictions and prepare for national exams that will qualify them for high-quality jobs with excellent starting salaries.

Majors: Agriculture Science ~ Architecture ~ Building Construction ~ Engineering and Engineering Technology ~ Environmental Science ~ Horticulture ~ Industrial Technologies ~ Mathematics ~ Military Science ~ Teaching and Training

Course Title: Computer Service Technology I **Course #: 532000CD**
Grade Level: 10th - 11th **Credits:** 2 Units Elective Credit **Campus:** DCIT
Prerequisite(s): Must pass Algebra I and English I with at least an 80 average in each class and a 2.5 GPA or higher.

Course Description: This course covers the fundamentals of computer hardware and software. Students who complete this course will be able to describe the internal components of a computer, assemble a computer system, install an operating system, and troubleshoot using system tools and diagnostic software. Cisco's IT Essentials: PC Hardware and Software curriculum is used to prepare students for the CompTIA® A+ certification exams.

Majors: Business Information and Support Systems ~ Business Information Management ~ Engineering and Engineering Technology ~ Industrial Technologies ~ Mathematics ~ Military Science ~ Science ~ Teaching and Training

Course Title: Computer Service Technology II **Course #: 532100CD**
Grade Level: 11th - 12th **Credits:** 2 Units Elective Credit **Campus:** DCIT
Prerequisite(s): Must pass Computer Service Technology I with at least an 85 average and have a teacher recommendation.

Course Description: This course covers the advanced concepts of computer hardware and software. Students who complete this course will be able to connect to the Internet and share resources in a network environment. Additional topics covered include laptops and portable devices, wireless connectivity and basic implementation skills, Voice over Internet Protocol (VoIP), security, safety and environmental issues, applied network configuration and troubleshooting skills, and communication skills. The fundamentals part of the course helps students prepare for the CompTIA A+ Essentials exam (220-701), which covers the fundamentals of computer technology, networking, and security, and validates the communication skills and professionalism required of all entry-level IT professionals. The advanced part of the course helps students prepare for the CompTIA A+ Practical Applications exam (220-702), which builds on the CompTIA A+ Essentials knowledge and skills, with more of a hands-on orientation and scenarios in which troubleshooting and tools must be applied to resolve problems. Students must pass both exams to earn the CompTIA A+ certification.

Majors: Business Information and Support Systems ~ Business Information Management ~ Engineering and Engineering Technology ~ Industrial Technologies ~ Mathematics ~ Military Science ~ Science ~ Teaching and Training

Course Title: Electricity I **Course #: 628700CD**
Grade Level: 11th - 12th **Credits:** 2 Units Elective Credit **Campus:** DCIT
Prerequisite(s): Must pass Algebra I and English I with at least a 75 average in each class.

Course Description: In this course you will learn basic electrical principles and theory as they apply to both residential house wiring and to industrial wiring such as that practiced in local industries. Students will utilize their math and science knowledge to understand the National Electric Codes and how they apply on the job. Students will learn how to wire power circuits, lighting circuits, home electronics and alarm circuits and how to install power service entrances. Students will be introduced to Process Control Technology, Programmable Logic Control Circuits, and to Instrumentation Technologies (careers that are available in local industry). After completing this course, students will be ready to pursue a career as a residential electrician under the supervision of a listened electrician, or to continue into Electricity II.

Majors: Agri-Science ~ Architecture ~ Building Construction ~ Engineering and Engineering Technology ~ Environmental Science ~ Industrial Technologies ~ Military Science ~ Mathematics ~ Physical Science ~ Science ~ Teaching and Training

Course Title: Electricity II **Course #: 628800CD**
Grade Level: 11th - 12th **Credits:** 2 Units Elective Credit **Campus:** DCIT
Prerequisite(s): Must pass Electricity I with at least an 85 average and have a teacher recommendation.

Course Description: In this course you will review the National Electric Codes and the residential electric knowledge and skills learned in Electricity I before going on to study advanced Electricity. You will learn how to utilize computer programs to set up staged electrical systems commonly used in local industry in manufacturing environments. You will learn about the high tech electrical systems and equipment used in Process Control technologies, Programmable Logic Control systems, and Instrumentation technologies. This course will prepare you to enter the job market with high skills worthy of high wages.

Majors: Agri-Science ~ Architecture ~ Building Construction ~ Engineering and Engineering Technology ~ Environmental Science ~ Industrial Technologies ~ Mathematics ~ Military Science ~ Physical Science ~ Science ~ Teaching and Training

Course Title: Engineering Design I **Course #: 617200CD**
Grade Level: 11th - 12th **Credits:** 2 Units Elective Credit **Campus:** DCIT
Prerequisite(s): Must pass Algebra I and Geometry with at least an 85 average in each class.

Course Description: In this course, the students are introduced to the fundamentals of engineering design and technical drawings. The different disciplines of engineering such as civil, chemical, electrical, mechanical, architectural, biomedical and other branches of engineering will be introduced. Students will design and build models of towers and bridges and then test them in the engineering laboratory. Students will conduct research projects on different engineering technologies and inventions and apply team work skills in solving them. Practical experience will be gained in how to produce mechanical engineering drawings using conventional drawing techniques with standard drawing tools, as well as how to make engineering sketch drawings. Students will also be introduced to computer engineering drawings. They will learn the basic concepts on Computer Assisted Design and Drawings (CADD) using academic and industry standard CADD software. They will learn to create basic shapes and geometry. In both the mechanical and CADD drawings students will learn the fundamentals of multi-view and isometric drawings and obtain practical experience in creating them.

Majors: Architecture ~ Automotive Industry ~ Building Construction ~ Engineering and Engineering Technology ~ Graphics Technology and Printing ~ Industrial Technologies ~ Mathematics ~ Military Science ~ Physical Science ~ Science ~ Teaching and Training ~ Visual Arts and Design

Course Title: Engineering Design II **Course #: 617300CD**
Grade Level: 11th - 12th **Credits:** 2 Units Elective Credit **Campus:** DCIT
Prerequisite(s): Must pass Engineering Design I with at least an 85 average

Course Description: In this course, students expand on what was taught in the Engineering Design I Class by learning advanced engineering design concepts. Through the use of Computer Assisted Design and Drawings (CADD) software, students will use engineering drawings as a blueprint to build engineering models such as advanced bridge, tower, and overhead crane designs that will be tested for strength in the engineering laboratory. Students will use computer simulations for various bridge designs that predict the strength, cost and failure mechanisms. Using CADD, students are introduced to solid modeling and other three dimensional design techniques. Students will design, build and test models in the engineering laboratory. Students will also be taught the basic fundamentals of civil, electrical, mechanical, structural and architectural engineering and taught to solve basic analytical problems. Also, students will build and test scale architectural models of homes or buildings. Students will learn problem-solving and team work skills to design and complete projects. Students will design and build engineering models using 3D printer technology.

Majors: Architecture ~ Automotive Industry ~ Building Construction ~ Engineering and Engineering Technology ~ Graphics Technology and Printing ~ Industrial Technologies ~ Mathematics ~ Military Science ~ Physical Science ~ Science ~ Teaching and Training ~ Visual Arts and Design

Course Title: Entrepreneurship **Course #: 540000CW**
Grade Level: 10th - 12th **Credits:** 1 Unit Elective Credit **Campus:** DCIT
Prerequisite(s): Computer Applications

Course Description: This course is required and is the third of four courses required for a student to earn completer status in the Business Management program of study. Entrepreneurship is designed to provide a general awareness of the American enterprise system with special emphasis being placed on small business ownership. An important part of this course will be development of business and marketing leadership skills as they relate to the functions of planning, organizing, staffing, directing, and controlling a small business.

Majors: Applicable to all majors

Course Title: Foundations of Animation **Course #: 535000CW**
Grade Level: 10th - 12th **Credits:** 1 Unit Elective Credit **Campus:** DCIT
Prerequisite(s): Must pass Algebra I and English I with at least a 75 average in each class.

Course Description: This course teaches students how to create and deliver interactive content across desktops and devices with a focus on establishing a working knowledge of animation tools and techniques. Foundations of Animation examines the features of Adobe's popular Flash CS6 software that is the professional standard for producing high-impact Web sites using animation, video, text, graphics and audio. Students create rich media applications that span a wide variety of digital devices, from desktops to mobile devices. Students are also introduced to Scratch 1.4 and Alice 2.3. **SCRATCH** is a new programming language that lets you create your own interactive stories, animations, games, music, and art. Alice is an innovative 3D programming environment that makes it easy to create an animation for telling a story, playing an interactive game, or a video to share on the web.

Majors: Computer Science ~ Entertainment and Audio Visual Technology ~ Graphics Technology and Printing ~ Mass Communications and Journalism ~ Performing Arts – Band ~ Performing Arts – Chorus ~ Performing Arts − Drama ~ Performing Arts – Orchestra ~ Visual Arts and Design

Course Title: Google Applications **Course #: 500700CW**
Grade Level: 10th - 12th **Credits:** 1 Unit Elective Credit **Campus:** DCIT
Prerequisite(s): Must pass Algebra I and English I with at least a 75 average in each class.

Course Description: This course is designed to introduce the student to the many applications that Google offers. Students will be prepared for learning and working in the 21st century through communication and collaboration tools.

Majors: Applicable to all majors

Course Title: Graphic Communications I **Course #: 620000CD**
Grade Level: 11th **Credits:** 2 Units Elective Credit **Campus:** DCIT
Prerequisite(s): Must pass Algebra I and English I with at least an 80 in each class.

Course Description: Students are taught the technical skills used in the Graphic Communications field. This includes layout and design with professional software. Digital photography, offset printing, and video production are skills learned as students produce a series of projects.

Majors: Architecture ~ Automotive Industry ~ Building Construction ~ Business Information and Support Systems ~ Business Information Management ~ Engineering and Engineering Technology ~ Entertainment and Audio Visual Technology ~ Graphics Technology and Printing ~ Language − English ~ Mass Communications and Journalism ~ Performing Arts – Band ~ Performing Arts – Chorus ~ Performing Arts − Drama ~ Performing Arts – Orchestra ~ Teaching and Training ~ Visual Arts and Design

Course Title: Graphic Communications II **Course #: 620100CD**
Grade Level: 12th **Credits:** 2 Units Elective Credit **Campus:** DCIT
Prerequisite(s): Must pass Graphic Communications I with at least an 85 and have teacher recommendation.

Course Description: This course is a continuation of level I. It will prepare students for a college major or career in Graphic Communications. This course has an emphasis on multi-color production for offset projects. Students will produce a complex series of projects to reinforce their skills. Students will have an electronic portfolio of projects upon course completion.

Majors: Architecture ~ Automotive Industry ~ Business Information and Support Systems ~ Business Information Management ~ Engineering and Engineering Technology ~ Entertainment and Audio Visual Technology ~ Graphics Technology and Printing ~ Language − English ~ Mass Communications and Journalism ~ Performing Arts – Band ~ Performing Arts – Chorus ~Performing Arts − Drama ~ Performing Arts – Orchestra ~ Teaching and Training ~ Visual Arts and Design

Course Title: Graphic Communications III **Course #: 620200CD**
Grade Level: 12th **Credits:** 1 Unit Elective Credit **Campus:** DCIT
Prerequisite(s): Must pass Graphic Communications II with at least an 85 and have teacher recommendation.

Course Description: This course allows students to delve further into the Graphic Communications field through increasingly difficult hands-on projects. It will prepare students for a college major or career in Graphic Communications. There is an emphasis on multi-color production for offset projects. Students will produce a complex series of projects to reinforce their skills. Students will enhance their electronic portfolio of projects.

Majors: Architecture ~ Automotive Industry ~ Business Information and Support Systems ~ Business Information Management ~ Engineering and Engineering Technology ~ Entertainment and Audio Visual Technology ~ Graphics Technology and Printing ~ Language – English ~ Mass Communications and Journalism ~ Performing Arts – Band ~ Performing Arts – Chorus ~ Performing Arts − Drama ~ Performing Arts – Orchestra ~ Teaching and Training ~ Visual Arts and Design

Course Title: Health Science Education I **Course #: 555000CD**
Grade Level: 11th - 12th **Credits:** 2 Units Elective Credit **Campus:** DCIT
Prerequisite(s) Must pass Computer Applications, English I, English II, Biology I and Algebra I with at least an 80 average in each class.

Course Description: This course focuses on therapeutic, diagnostic, support services, and developmental pathways of a medical science program of study. HSE develops healthcare knowledge and skills necessary for clinical or work-based experiences. Standards incorporate anatomy and physiology, medical terminology, communication, healthcare systems, legal and ethical practice, safety, health and wellness, CPR and first aid. "Students must join Health Occupations Students of America – dues $15.00." **Students should have a strong interest in pursuing a job in the health care field.**

Majors: Counseling and Mental Health Services ~ Health Diagnosis and Treatment ~ Life Science ~ Medical Science and Research ~ Physical Fitness ~ Science ~ Teaching and Training

Course Title: Health Science Education II **Course #: 555100CD**
Grade Level: 12th **Credits:** 2 Units Elective Credit **Campus:** DCIT
Prerequisite(s): Must pass Health Science Education I with at least an 85 average. An 80 average or higher is needed in English III CP, Algebra II CP and Chemistry I CP. HSE instructor recommendation is needed.

Course Description: Through expansion of knowledge gained in HSE I, students learn about diseases, therapies, rehabilitation, legal standards, safety, confidentiality, and technical skills. Learning occurs in classroom and healthcare industry environments through job shadowing, clinical rotation, internship, and/or cooperative education. Instruction in this class includes C.N.A., pharmacy technology, and allied health services. Supplies required: uniform, TB skin test, and fees for certification tests. "Students must join Health Occupations Students of America – dues $15.00." **Students should have a strong interest in pursuing a job in the health care field.**

Majors: Counseling and Mental Health Services ~ Health Diagnosis and Treatment ~ Life Science ~ Medical Science and Research ~ Physical Fitness ~ Science ~ Teaching and Training

Course Title: Horticulture for the Workplace I **Course #: 565200CD**
Grade Level: 11th - 12th **Credits:** 2 Units Elective Credit **Campus:** DCIT
Prerequisite(s): Must pass Algebra I and English I with at least a 75 average in each class.

Course Description: Horticulture for the Workplace I provides practical experiences related to the culture of plants used principally for ornamental or aesthetic purposes. Instruction emphasizes knowledge and understanding of the importance of establishing, maintaining, and managing ornamental horticulture enterprises. Activities include propagating, growing, establishing, and maintaining nursery plants and greenhouse crops; tissue culture techniques; designing landscapes; preparing designs; sales analysis and management; participating in personal and community leadership development activities; and other Future Farmers of America (FFA) activities.

Majors: Agri-Science ~ Architecture ~ Building Construction ~ Environmental Science ~ Government Relations ~ Horticulture ~ Industrial Technologies ~ Life Science ~ Science ~ Teaching and Training

Course Title: Horticulture for the Workplace II **Course #: 565300CW**
Grade Level: 11th - 12th **Credits:** 1 Unit Elective Credit **Campus:** DCIT
Prerequisite(s): Must pass Horticulture for the Workplace I with at least an 85 average and teacher recommendation.

Course Description: This course is designed for programs involved in the Horticulture Career Pathway. Instruction emphasizes knowledge and understanding of the importance of establishing, maintaining, and managing ornamental horticulture enterprises. Activities include hands-on experiences with propagating, growing, establishing, and maintaining nursery plants and greenhouse crops; tissue culture techniques; designing landscapes; preparing designs; sales analysis and management; participating in personal and community leadership development activities; and participating in FFA activities.

Majors: Agri-Science ~ Architecture ~ Building Construction ~ Environmental Science ~ Government Relations ~ Horticulture ~ Industrial Technologies ~ Life Science ~ Science ~ Teaching and Training

Course Title: Machine Tool Technology I **Course #: 623000CD**

Grade Level: 12th **Credits:** 2 Units Elective Credit **Campus:** DCIT
Prerequisite(s): Must pass Machine Tool Technology II with at least an 85 average and teacher recommendation.

Course Description: Machine Tool Technology I is designed to provide students with the opportunity to develop the skills and knowledge required for entry-level positions in the machine technology field. Students will gain knowledge of shop practices and the working properties of various metals through advanced projects such as the operation of the engine lathe, vertical and horizontal milling machine, O.D. grinders, welding and heat-treated equipment. The content is ideal for college bound engineering students or individuals who want to go straight to work as it provides opportunities to gain hands-on experience using shop equipment, tools, power sources, and metal working equipment.

Majors: Architecture ~ Automotive Industry~ Engineering and Engineering Technology ~ Industrial Technologies ~ Mathematics ~ Military Science ~ Teaching and Training ~Visual Arts and Design

Course Title: Machine Tool Technology II **Course #: 623200CD**
Grade Level: 12th **Credits:** 2 Units Elective Credit **Campus:** DCIT
Prerequisite(s): Must pass Machine Tool Technology II with at least an 85 average and teacher recommendation.

Course Description: Machine Tool Technology II will prepare students for a career in the machine tool field. Students will be able to produce and complete projects using all basic machine tools with minimum supervision. In this course, advanced work with machine tools and industrial style projects will be accomplished. The development of accuracy, speed, safety, workmanship and skill will be emphasized. This course is designed to provide students with the opportunity to develop the skill and knowledge required in the operation of C.N.C. vertical mills and C.N.C. lathes as well as experience using Computer CAD/CAM systems. The content is ideal for college bound engineering students or individuals who want to go straight to work as it provides opportunities to gain hands-on experience using shop equipment, tools, power sources, and metal working equipment.

Majors: Architecture ~ Automotive Industry~ Engineering and Engineering Technology ~ Industrial Technologies ~ Mathematics ~ Military Science ~ Teaching and Training ~Visual Arts and Design

Course Title: Machine Tool Technology III **Course #: 623100CD**
Grade Level: 12th **Credits:** 2 Units Elective Credit **Campus:** DCIT
Prerequisite(s): Must pass Machine Tool Technology II with at least an 85 average and teacher recommendation.

Course Description: Machine Tool Technology III is designed to provide students with the opportunity to develop the skill and knowledge required in the operation of C.N.C. vertical mills and C.N.C. lathes by using computerized CAD/CAM systems. The content is ideal for college bound engineering students or individuals who want to go straight to work as it provides opportunities to gain hands-on experience using shop equipment, tools, power sources, and metal working equipment.

Majors: Architecture ~ Automotive Industry~ Engineering and Engineering Technology ~ Industrial Technologies ~ Mathematics ~ Military Science ~ Teaching and Training ~Visual Arts and Design

Course Title: Marketing I **Course #: 542100CW**

Grade Level: 11th - 12th **Credits:** 1 Unit Elective Credit **Campus:** DCIT
Prerequisite(s): Must pass Algebra I and English I with at least a 75 average in each class.

Course Description: Marketing is designed for high school students who are interested in pursuing a career in sales, marketing, and merchandising goods and services. In this course, students will learn business mathematics, economics, advertising, business management functions, and job seeking skills. This program is a foundation for success in DECA.

Majors: Business Information and Support Systems ~ Business Information Management ~ Financial Management and Accounting ~ Government Relations ~ Marketing and Communications ~ Mass Communications and Journalism ~ Military Science ~ Performing Arts – Band ~ Teaching and Training ~ Visual Arts and Design

Course Title: Marketing II **Course #: 543100CW**
Grade Level: 10th - 12th **Credits:** 1 Unit Elective Credit **Campus:** DCIT
Prerequisite(s): Must pass Marketing I with at least an 85 average and teacher recommendation.

Course Description: Marketing Management continues the study of the marketing functions by examining human resource functions, marketing and business fundamentals, distribution, promotion and advertising, and selling as applied in merchandising. Students will participate in essential learning experiences in the classroom, including the use of the necessary supplies, equipment, and modern facility. This program is a foundation for success in DECA.

Majors: Business Information and Support Systems ~ Business Information Management ~ Child Development Services ~ Financial Management and Accounting ~ Government Relations ~ Marketing and Communications ~ Mass Communications and Journalism ~ Military Science ~ Performing Arts – Band ~ Teaching and Training ~ Visual Arts and Design

Course Title: Mechatronics I **Course #: 621000CD**
Grade Level: 10th - 11th **Credits:** 2 Units Elective Credit **Campus:** DCIT
Prerequisite(s): Must pass Algebra I and English I with at least an 85 average in each class.

Course Description: Mechatronics is a study which integrates controls, sensors, and computers to create a variety of electro-mechanical products or mechanisms. Course study includes concepts of electro-mechanical system design, dynamic systems modeling and analysis, sensors and transducers, actuating devices and real time microprocessor interfacing and control. Computer simulation and laboratory projects are utilized to exemplify electro-mechanical design principles and trouble-shooting. In this course mechanical and electrical engineering principles and phenomena are taught.

Majors: Architecture ~ Building Construction ~ Engineering and Engineering Technology ~ Industrial Technologies ~ Mathematics ~ Military Science ~ Teaching and Training

Course Title: Mechatronics II **Course #: 621100CW**
Grade Level: 11th - 12th **Credits:** 1 Unit Elective Credit **Campus:** DCIT
Prerequisite(s): Must pass Mechatronics I with at least an 85 average and teacher recommendation.

Course Description: This course emphasizes advanced electrical and mechanical engineering principles and phenomena. Computer simulations are used extensively as well as advanced laboratory experiments. Individual projects and participation in cooperative education within local manufacturing businesses will be an integral part of the course. Trouble-shooting and problem-solving will be emphasized. Students will function as members of teams within the laboratory to construct functioning manufacturing projects.

Majors: Architecture ~ Building Construction ~ Engineering and Engineering Technology ~ Industrial Technologies ~ Mathematics ~ Military Science ~ Teaching and Training

Course Title: Personal Finance **Course #: 513100CW**
Grade Level: 9th - 12th **Credits:** 1 Unit Elective Credit **Campus:** LHS DCIT

Course Description: This course is designed to introduce the student to basic financial literacy skills which also includes budgeting, obtaining credit, maintaining checking accounts, analyzing the basic elements of finance, computing payroll, recording business transactions, and applying computer operations to financial management.

Majors: Applicable to all majors

Course Title: Principles of Engineering Design **Course #: 605000CD**
Grade Level: 11th -12th **Credits:** 2 Units Elective Credit **Campus:** DCIT
Prerequisite(s): Engineering Design II with at least an 85 average

Course Description: In this course, students expand on what was taught in the Engineering Design II course. Advanced engineering models designed for strength, durability and reliability are tested in the engineering laboratory. Students will learn advanced solid modeling techniques using state of the art CADD software and work on an advanced design project using assembly drawings with notes, annotations and material specifications. The advanced project design drawings will include multi-view drawings and three-dimensional drawings created by solid modeling. Students will be introduced to welding symbols and mechanical fastener standards. Students will use computer simulations that will predict the strength of engineering models and verify the results by building an engineering model and testing it in the engineering laboratory. An emphasis will be placed on the fundamentals of electrical, chemical, environmental and biomedical engineering and solving analytical problems related to these branches of engineering. Students will solve electrical circuit problems analytically and verify the results of their analysis using electrical training equipment in the engineering laboratory. Students will work on solar energy research projects related to chemical and environmental engineering and learn advanced problem-solving and team work skills while working on projects in the engineering laboratory.

Majors: Architecture ~ Automotive Industry ~ Building Construction ~ Engineering and Engineering Technology ~ Graphics Technology and Printing ~ Industrial Technologies ~ Mathematics ~ Military Science ~ Teaching and Training ~ Visual Arts and Design

Course Title: Virtual Enterprise I **Course #: 515000CW**
Grade Level: 10th - 12th **Credits:** 1 Unit Elective Credit **Campus:** DCIT
Prerequisite(s): Integrated Business Applications I (can be taken concurrently), must pass Algebra I, English I, and Computer Applications with at least a 75 average in each class

Course Description: This course is required to earn completer status in Small Business Management. As part of a national curriculum, Virtual Enterprise allows students to experience what it is like to be an employee in a business firm. Students are able to run simulated offices within their school and engage in virtual trading with other virtual businesses from around the globe. The program provides students an interdisciplinary instructional environment and an in-school, work-based learning experience.

Majors: Business Information and Support Systems ~ Business Information Management ~ Financial Management and Accounting ~ Marketing and Communications

Course Title: Virtual Enterprise II **Course #: 515100CW**
Grade Level: 11th - 12th **Credits:** 1 Unit Elective Credit **Campus:** DCIT
Prerequisite(s): Must pass Virtual Enterprise I with at least an 85 average and teacher recommendation.

Course Description: This course is required to earn completer status in Small Business Management. Virtual Enterprise II provides advanced and intensive experiences that provide students opportunities to simulate the business environment within the high school classroom. In this course, students investigate and select an appropriate business and organize a company so that every student has an area of business responsibility.

Majors: Business Information and Support Systems ~ Business Information Management ~ Financial Management and Accounting ~ Marketing and Communications

Course Title: Web Page Design and Development **Course #: 503100CD**
Grade Level: 10th - 12th **Credits:** 1 Unit Elective Credit **Campus:** DCIT
Prerequisite(s): Keyboarding 5100 (or SCDE state Keyboarding Proficiency Test) and one of the following: Computer Applications Integrated Business Applications

Course Description: This course is designed to provide students with the knowledge and skills needed to design Web pages. Students will develop skills in designing, implementing, and maintaining a Web site using authoring tools. Successful completion of this course will prepare the student to take industry certification test(s). **NOTE:** Web pages created by students in this course are not to be published without following district guidelines.

Majors: Architecture ~ Building Construction ~ Business Information and Support Systems ~ Business Information Management ~ Engineering and Engineering Technology ~ Entertainment and Audio Visual Technology ~ Family and Consumer Sciences ~ Financial Management and Accounting ~ Graphics Technology and Printing ~ Marketing and Communications ~ Mass Communications and Journalism ~ Performing Arts – Band ~ Performing Arts – Chorus ~ Performing Arts – Drama ~ Performing Arts – Orchestra ~ Teaching and Training ~ Visual Arts and Design

Course Title: Welding Technology I **Course #: 634000CD**
Grade Level: 10th - 11th **Credits:** 2 Units Elective Credit **Campus:** DCIT
Prerequisite(s): Must pass Algebra I and English I with at least a 75 average in each class.

Course Description: This course emphasizes studies in safety, power tool operations, torch safety, setup and operations, oxy-acetylene cutting and welding, basic MIG welding, basic ARC welding, plasma cutting, fabrication and working with others in a team environment. Math and print reading problems related to welding are also included.

Majors: Agri-Science ~ Automotive Industry ~ Building Construction ~ Engineering and Engineering Technology ~ Environmental Science ~ Industrial Technologies ~ Military Science ~ Teaching and Training

Course Title: Welding Technology II **Course #: 634100CD**
Grade Level: 11th - 12th **Credits:** 2 Units Elective Credit **Campus:** DCIT
Prerequisite(s): Must pass Welding Technology I with at least an 85 average and teacher recommendation.

Course Description: This course emphasizes advanced welding and fabrication using ARC, MIG, and TIG welding techniques. Instruction is also focused on safety, working effectively in a team environment and achieving AWS certification.

Majors: Agri-Science ~ Automotive Industry ~ Building Construction ~ Engineering and Engineering Technology ~ Environmental Science ~ Industrial Technologies ~ Military Science ~ Teaching and Training

Course Title: Welding Technology III **Course #: 634200CD**
Grade Level: 11th - 12th **Credits:** 2 Units Elective Credit **Campus:** DCIT
Prerequisite(s): Must pass Welding Technology II with at least an 85 average and teacher recommendation.

Course Description: This course emphasizes advanced welding and fabrication using ARC, MIG, and TIG welding techniques. Instruction is also focused on safety, working effectively in a team environment and achieving AWS certification.

Majors: Agri-Science ~ Automotive Industry ~ Building Construction ~ Engineering and Engineering Technology ~ Environmental Science ~ Industrial Technologies ~ Military Science ~ Teaching and Training