

Career Technical Education Dual Credit College Step Up





CTE Offerings

What is CTE?

Career Technical Education (CTE) provides students with the academic and technical skills, knowledge and training necessary to succeed in future careers and to become lifelong learners. CTE prepares students for the world of work by introducing them to workplace competencies, and makes academic content accessible to students by providing it in a hands-on context.

- Accounting
- Automotive Technology
- Barbering
- **Building Construction**
- Business
- Child Care
- Coding, APP & Web Development
- **Collision Repair**
- Computer Science Principles
- Cosmetology
- Culinary Arts
 - Digital Photography
- Electricity

- Engineering
- Foundations of Teaching
- Graphic Design
- Microsoft Office Technology
- Professional Development for the 21st Century
- Interrelated Cooperative Education (ICE)
- TV Production

Business		
EGI		ation
Rusinos		
Education Business Writing & Technical Concepts Introduction to the Microsoft Office Suite, which includes Word, PowerPoint, and Excel. Emphasis is placed on the creation and enhancement of business, educational, and personal documents, which reinforce communication and problem-solving skills Proper keyboarding techniques are practiced throughout.		
*College credit is available with South Suburban College for students that earns a C or better for the entire year		
Career	Median Salary	Microsoft Office Technology Learn the skills necessary to become a <u>MICROSOFT OFFICE SPECIALIST</u> . Become
Database Administrator	\$87,020	prepared to effectively use software as a tool to develop professional type documents. Learn the components of the Microsoft Office Suite, which include Word, Excel, Access, and PowerPoint. Become Microsoft Certified & employable. "College credit is available with South Suburban College for students that earns a C or better for the entire year."
Accountants & Auditors	\$69,350	Coding, App & Web Development
Financial Analyst	\$84,300	Are you interested in creating video games, websites and apps? Learn the latest industry used programing language such as JAVA script, HTML and CSS. Throughout the years students will building upon a personal web page that highlights their programming skills and interests.
Web Site Developer	\$67,990	Advanced Coding, App & Web Development
Computer Programmer	\$82,240	Students will learn the creative aspects of programming, abstractions, algorithms, large data sets, the Internet, cybersecurity concerns, and computing impacts. The course is designed for students to take the AP Computer Science Principles exam at the end of the year to earn college credit.
Sports statistical analyst	\$81,950	Accounting
Personal Financial Advisor	\$90,640	Interested in a career in business? The foundation of all business activities is accounting. ACCOUNTING is the language of business and mastery of fundamental accounting concepts, skills, and competencies is crucial to making informed business decisions. Students will have extensive exposure to QuickBooks and Microsoft Excel. Give yourself a leg up in your college

business classes by creating a solid foundation that is essential for success.

Program highlights

- Dual Credit Opportunity
- Microsoft Office Certifications
- Industry recognized software: QuickBooks, Microsoft Office Suite
- AP Computer Science Principles



Child Care



<u>Program highlights</u>

Introduction to Child Care: 11th grade

Child Care Practicum: 12th grade



 Students gain hands on experience running a preschool



Introduction to Child Care

Intro to Child Care is the foundation for all the child care courses. Child Development studies ways in which children grow and develop from birth to age 6. Emphasis is placed on the needs of the child as well as appropriate child care skills needed for each stage of development. This course is designed for students who are interested in a career in the fields of early childhood education, elementary ed., and pediatric care, as well as those interested in the area of child care.

Child Care Practicum Grade 12, Double Period

Child Care Practicum is a double-period course which provides the student with an in-depth preschool experience based on the activities and behavior of children enrolled in the program. Students plan, supervise and implement lessons with the children. Students interested in careers such as child care aide, child care directors, child psychologist, pediatrician, social worker, and early childhood education teachers should enroll in this class.

> Early **DEVELOPMENT** is fundamental to the **GROWTH** of your child.

Child Care

Culinary Arts Program highlights

 Field trips to 4-star restaurants, networking with James Beard winners, and other culinary attractions.



- Smith & Wollensky, Eatlay
 - Chicago
- Sanitation Certificate
- Professional kitchen labs

Industry used tools and equipment





Collision Repair

Program highlights

- World of Wheels Winner
- RPM Restoration Project
- Skills USA State Champions
 - 2017/2018
- Custom Paint and Graphics after school club program



 2018 CREF Grant Awardee \$25,000

COLLISION REPAIR

Introduction to Collision Repair, 11-12 Semester I, Double Period

Introduction to Collision Repair is designed to introduce students to the basic information needed when beginning a career in the Collision and Repair Industry. Students learn and follow the proper safety procedures throughout the shop area. Emphasis is placed on the safe use of tools and equipment. Students learn the functions of basic tools, the proper procedures for handling hazardous materials and the foundation skills necessary to repair non-structural damage. Students also learn the foundation techniques required to paint and refinish automobiles.

> Collision Repair II is designed for students to gain practical experience in repairing dents and damage to the body of vehicles using various methods. Students learn how to repair vehicles' exterior panels using aluminum replacement parts. Students also learn about interval safety components including air bags. Applications of higher-level critical things skills are required to troubleshoot repairs on various types of plastics and composites according to industry standards. Students apply their Collision Repair I knowledge training to execute the removal and installation of stationary and moveable glass as well as advanced MIG welding and refinishing.

CAREER PROGRAM

Collision Repair I, 11-12 Semester II, Double Period

<u>Collision Repair I</u> is designed for students to learn how to safely replace, adjust, fit and align sheet metal and similar components. Through hands-on projects, students are trained on the proper method of sheet metal replacement, aligning and fitting of these parts according to industry standards. According to industry standards, students are trained in the use of proper structural welding, systematic procedures in MIG welding and plasma cutting as well as refinishing techniques and repair for non-structural and structural damage.

Collision Repair II, Senior Year Yearlong, Double Period

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Automotive Technology

Program highlightsHands on learning





Industry standard garage and equipment

- After school Auto Technology Club
- Skills USA Competition



Automotive



Automotive Technology I 11-12 Semester 2, Double Period

This course is available to students who successfully complete Introduction to Auto Tech. During this course, students gain additional knowledge on brake fundamentals and they learn diagnosis and repair of brake systems to include ABS, as well as engine theory, diagnosis, minor repairs and support systems of the automobiles. The following topics are covered: power tools and lifts, testing and repair, battery theory, testing and service, fuel system theory, and fundamentals, testing and repair of engines, cooling systems, and lubrication systems. Introduction to Automotive Technology 11-12 Semester 1, Double Period

This course teaches students the basics of shop safety and procedures, automotive care and automotive maintenance. The following topics are covered: careers, hand tools, shop safety (floor jacks and jack stands), measuring, fasteners and gaskets, automotive math, service manuals and abbreviations, maintenance and fluid services (fluid checks and changes, belts and hoses), tires and wheels (balancing and changing), brake fundamentals and engine fundamentals.

Automotive Technology II

Yearlong, Double Period

This course is available to students who successfully complete Auto Tech I. This third level course provides students with a more indepth study of previous sections including on the job auto mechanic experience.

Students study engine performance and major repairs as well as clutches, drive trains, and wheel alignments.



CAREER PROGRAM

Building Construction

Program highlights

- Dual credit opportunity
- Apprenticeship Opportunities
- Pre-apprenticeship skills training
- Industry grade professional tools.
- Community Based Projects
- 10 hour OSHA certification

BUILDING & CONSTRUCTION





Building & Construction

Introduction to Construction introduces the study of materials and processes used in the construction of residential structures. Students learn and follow the proper safety procedures throughout the shop area. A large emphasis is placed on safety. Students use some of the same power and hand tools used in industry. Students will learn excavation, foundation systems and slabs.

Building & Construction I

Building & Construction I places emphasis on learning terminology as well as hands on applications constructing a 4x4 freestanding floor and wall section. The process includes the methods involved in designing for construction, floor, wall, and roof systems, plus electrical and plumbing systems. Students experience a wide variety of learning activities including areas such as; reading and interpreting house plans and becoming familiar with the local building codes; foundation work, faming of walls, floors and roof, plumbing, electrical, windows and doors, flooring installations, siding installation or repair, and deck or patic construction.





Building & Construction II *College Credit Available Grade 12

Construction II covers structural footings, wall systems, physical properties of wood, building materials, and measurement grading. Hands-on projects allow students to thoroughly understand the principles and methods of rough residential carpentry by framing of a mock-up, scaled-down home. Actual house framing including floor, wall and roof construction with special emphasis placed on the framing square for stair stringers, gable and hio rafter lavout.

*College credit is available with South Suburban College for students that earn a C or better for the entire year & have an SAT Math score of 460+. Building & Construction II, high school course = BLD 101 Construction Materials & Methods I-Woods (4 credit hours), SSC course.

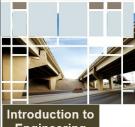




Teamwork

Engineering

ENGINEERING



Engineering Grades 9-11

Introduction to Engineering is designed for students interested in pursuing a career in engineering, architecture, drafting and other related fields. This course teaches the concepts. principles and systems of computer aided design and drafting. Each unit of instruction provides content and techniques of computer aided design as well as projects and drawings that teach the various aspects of engineering and architectural drawing. Students will learn to visualize and graphically describe 2D and 3D solutions to typical drafting problems using Draftsight and Sketchup software as a drafting and design tool. Upon completion of drawings a working prototype of each project will be constructed and tested

Engineering I Grades 10-11

Engineering I students learn the skills employers need by using Design with SolidWorks. This course introduces students to the engineering design process utilizing 3D Computer Aided Design (CAD) software applications. Emphasis on 3D Skills and relevant applications in engineering principles, technology, mathematics and science is explored through a series of lessons. competency based exercises and team projects. Learning 3D design skills is an interactive process applied with the Engineering Design Process, a series of interactive steps to solve a problem. The Engineering Design Process is utilized to develop products across a variety of industries: Consumer, Process, Power, Civil, Agriculture, Electronics/Communications, Furniture and Fixtures, Machinery/Construction, Medical and Scientific, Sheet Metal, Mold, Tool and Die, Aerospace, Automotive and **Transportation**



Solidworks Software



Engineering II *College Credit Available Grades 11-12

Engineering II students use SolidWorks and SimulationXpress software to design and test, with non-destructive methods, advanced machine parts and assemblies. Students demonstrate their knowledge of the material covered in Engineering 1 Design with SolidWorks through their mastery of using SimulationXpress to optimize a solution, acquiring advanced industry skill sets in 3D CAD, developing relevant examples of advanced engineering principles, and preparing students for the olidWorks Certification exam. *College credit is available with South Suburban

College for students that earn a C or better for the entire year; CAD 299, Topics in Compute Aided Design (4 credit hours)



Program highlights

- Dual credit opportunity
- Solidworks Certification
- Engineering by Design
 - Skills development

NIU Field Trip

- SketchUp
- 3D Printing
- Architectural Tours

Thornton Fractional H.S. District 215

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- Barbering
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- Computer Science Principles
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What is Dual Credit?

The Dual Credit program allows District 215 students the opportunity to earn college credits while also completing high school graduation requirements, free of charge.

Checklist for earning college credit for:

- 1. Complete the dual credit registration form in your high school class.
- 2. Provide accurate information, including the **mailing address, email, phone number**.
- **3**. Successfully complete your high school course with a grade of a "C" or higher.
- *

Students enrolled in Thornton Fractional District

215 dual credit courses are required to register for dual college credit through South Suburban College or other accredited dual credit partnerships. Completion of the dual credit registration process will be included in the course grading system for all dual credit courses.



Dual Credit Offerings

Accounting

- SSC Course: ACC 120
- Emphasis is on accounting cycle, analysis of related transactions
 - 4 College Credits

Business Writing & Technical Concepts

- SSC Course: MIS 101
- Computer Literacy and Applications
 - 3 College Credits &
- SSC Course: OAT 100
- Basic Keyboarding Skills
 - 1.5 College Credits

Barbering I

- SSC Course: BAR 101 Intro to Barbering
 3 College Credits
- SSC Course: BAR 102 Art of Barbering I

 3 College Credits
- SSC Course: BAR 103 Salon Operations I

 4 College Credits
- SSC Course: BAR 113 Salon Operations II
 4 College Credits
- SSC Course: BAR 202 Art of Barbering III
 3 College Credits
- SSC Course: BAR 212 Advanced Barbering I
 - 3 College Credits

Dual Credit Offerings

Barbering II

- SSC Course: BAR 112 Art of Barbering II 3 College Credits 0
- SSC Course: BAR 114 Barber Styling 3 College Credits Ο
- SSC Course: BAR 203 Art of Barbering III 4 College Credits 0
- SSC Course: BAR 210 Chemical Services I 0
 - 3 College Credits

Barbering II

- SSC Course: BAR 213 Advanced Salon **Operations** I
 - 4 College Credits 0
- SSC Course: BAR 220 Chemical Services II 3 College Credits Ο
- SSC Course: BAR 223 Advanced Salon **Operations II**
 - 4 College Credits 0
- SSC Course: BAR 225 Barber Management
 - **3** College Credits 0

Dual Credit Offerings Continued

Microsoft Office Technology

- SSC Course: MIS 101
- Computer Literacy and Applications
 - 3 College Credits

Engineering II

- SSC Course: CAD 299
- Topics in Computer Aided Design
 - 4 College Credits

Building Construction II

- SSC Course: BLD 101
- Construction Materials & Methods I, Wood
 - 4 College Credits

<u>Health</u>

- SSC Course: HLT 101
- Basic factors which influence the health of the individual
 - 2 College Credits

Foundations of Education

- SSC Course: Edu 110
- Historical & philosophical roots of the educational system
 - 3 College Credits

Senior Only – Early Release Options

ICE Work Program

- Receive high school credit for your work experience.
- Reap the benefits of an early release to earn money and fine tune your employability skills.

College Step UP Program

- Receive high school credit for taking college course.
- Reap the benefits of an early release to earn college credit and get a jump start on your college degree.

Seniors Only

College Step-up Program South Suburban College * Tuition Free & Early Release Opportunity

Seniors have an opportunity to earn up to 12 college credits tuition free or at a reduced tuition cost. District 215 has partnered with South Suburban College to offer this unique opportunity for our senior students. Students' first course at SSC is tuition free. If students choose to take a second course in the same semester, they will pay only 1/3 of the tuition. SSC discounts the tuition by 1/3 and District 215 pays 1/3 of the tuition. Students earning an A or B in one of the courses can then enroll semester for one course tuition free and a second course at the reduced tuition rate. A senior student at District 215 can graduate with potentially 12 college credits already completed. *Student must take the COMPASS test and qualify for a 100 level course to earn the tuition waivers. Student fees and books are to be paid for by the student/parent

Work Program Interrelated Cooperative Education (ICE)

Early Release Opportunit

ICE is a two-credit program: one credit for classroom preparation (ICE Class); one credit for work or volunteer experience (ICE Job); both designed to prepare students for the world of work. Experience is gained through employment, job shadows, volunteer service, and meaningful fieldtrips that are related to animated classroom discussions, projects, and presentations. Extensive instruction is given to create cover letters. resumes, references, electronic portfolios, and financial literacy. Students will receive the necessary tools to generate & practice successful interviewing strategies during our Mock Interviews, use a variety of technology and software to help them find the right career, consider future education and training opportunities, and manage personal finances

If a student is unable to fit the vearlona work proaram into their schedul they can enroll in PD21. a semester version of the ICE Class



<u>What is the College Step Up Program?</u> The College Step Up program allows District 215 senior students to take college classes at South Suburban College <u>tuition free</u> or at a <u>reduced rate</u>.

Checklist for earning college credit for:

- 1. Complete the SSC registration form with Ms. Barnhart or Mrs. Donovan
- 2. Attend scheduling meeting with Ms. Barnhart or Mrs. Donovan in the spring to select and register for classes.
- 3. Attend orientation..
- 4. Attend class...
- 5. Successfully complete your class with a "B" or better.
- 6. Repeat steps 1 & 2 for the following semester



