



Career and Technical Education

The Road to Success ~
Willowbrook CTE



Mrs. Barney
CTE Dept Chair



CTE Department

- Business Education
- Family and Consumer Science
- Industry and Technology

DUAL CREDIT – IN CTE

- Transfers as elective or department credit to any college/university who accepts credit from College of DuPage
- *FREE TUITION - WITH CTE WBHS INSTRUCTORS*

- | | | |
|---|---|--|
| • KEYBOARDING | = | OFTI 1100 - 2 credits |
| • ACCOUNTING 2 Honors | = | ACCY 1140 - 4 credits |
| • COLLEGE & CAREER TECH | = | OFTI 1210 - 3 credits |
| • SPEECH TECHNOLOGY | = | OFTI 1250 – 3 credits |
| | | |
| • AUTO UPKEEP | = | AUTO 1040 - 3 credits |
| • PHOTOGRAPHY 1 | = | PHOTO 1100 - 3 credits |
| • PHOTOGRAPHY 2 | = | PHOTO 1102 - 3 credits |
| • DIGITAL IMAGING | = | PHOTO 1101 – 3 credits |
| • COMPUTER REPAIR | = | CIT 1100 - 2 credits |
| • ARCH CAD | = | ARCH 1211 – 3 credits |
| | | |
| • FITNESS & NUTRITION | = | PHYS 1554 - 1 credit |
| • CULINARY 3 | = | CULN1120 – 2 credits & FSSMCertification |
| • PRESCHOOL INTERNS | = | PHYS 2254 – 3 credits |
| • HUMAN GROWTH/CHILD DEV/ PRESCHOOL 1 | = | * 4 state certifications/ University articulation |
| | | |
| • ALSO Pending – ECEC 1100 PRESCHOOL 2/INTERNS | | |
| • Pending – AUTO 1110 - 3 credits Automotive 1 in progress | | |
- Savings:*
- **AVERAGE 3 CREDIT HOUR CLASS AT COD - \$475**
 - **AVERAGE 3 CREDIT HOUR CLASS AT U of I - \$1240**
-
- **35 total credit hours = over 1 year of college credit in CTE alone!**

Business Education



- According to Princeton Review—the number 1 major at colleges/universities in the United States is Business Administration and Management
- Why wait to learn about the business world???
- Get ahead of future class mates and coworkers by taking these classes now!
- <http://www.princetonreview.com/college>



KEYBOARDING/ WORD PROCESSING

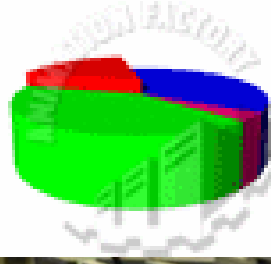


- One semester - grades 9-12
- Emphasis on improving speed/technique while keying accurately
- **TRANSFERS to most colleges & universities**
- Learn to format several documents – skills for personal & professional use
- Increase **speed and accuracy** for reports and the upcoming New online **ACT/PARCC EXAM**
- **DUAL CREDIT transferrable TO or FROM COD for all 4 grades!**



COLLEGE & CAREER TECH

- “Hands-on” experience with MS Office (Word, Excel, Access)
- Assists greatly with other courses taken in high school/college, and in the world of work
- (Honors Option)
- Grades 9-12 (One Semester)
- **DUAL CREDIT**
transferrable TO or FROM
COD for all 4 grade levels!
- **#1 Need for current employers!**



SPEECH TECHNOLOGY

(One Semester) Grades 10,11,12

- Able to use PowerPoint, Prezi & other Presentation software while presenting speeches
- 4 Speeches : Personal, Career, Informative, Persuasive
- **DUAL CREDIT** transferrable TO or FROM COD for all 9-12 grades!
As OFTI (Business elective)
- **TRANSFERS** to most colleges & universities
- GREAT pairing for semester course with Consumer!
- Fulfills **Speech Graduation Requirement** for WBHS (English credit) plus **DUAL CREDIT**



CONSUMER MANAGEMENT

~ new online version 9th hour available **

(10,11,12 grades)

(One Semester)

- Satisfies required Consumer Education graduation credit



• Real World topics:

- Budgeting
- Using Credit WISELY
- Being an informed consumer
- Advertising practices
- Checking Account Simulation
- Savings and Investing
- Insurance & Taxes
- BE INFORMED!



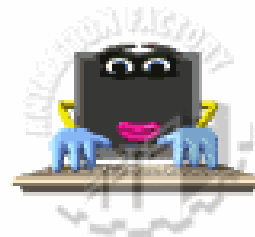
INTRODUCTION TO BUSINESS

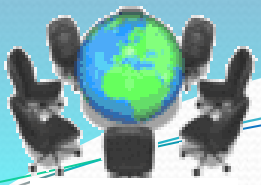
(Full Year Course; 9- 12 grades)

Satisfies required Consumer Education graduation credit



- Understanding the Economy and World Trade
- More In-depth studies than consumer semester
- Basic Skills in Consumer Topics including Budgeting, Credit, Insurance, Taxation, Comparison Shopping, Savings, and Investing





BUSINESS EXPLORATIONS

(One Semester) All grade levels

Discover a **variety of business fields of study and ranges of career opportunities**, technical and service based training, & future openings

- Advertising, Accounting, Law,
- Management, Marketing
- Desktop and Website Publishing
- International Business, Technology



ACCOUNTING I / ACCY II

(Full Year Course) (10, 11, 12) *2 Year sequence



- Business Terminology
- **MUST for anyone interested in majoring in accounting, finance, economics, marketing, hotel management!!**
- Learn how to keep the books for a company
- Real-Life Applications
- (Honors Option Available
- Automated Accounting Software
- Careers in Accounting
- **DUAL CREDIT transferrable TO or FROM COD – 1 OF ONLY 2 PROGRAMS IN DUPAGE COUNTY! 4 credits!!**



BUSINESS LAW

(One Semester) (10,11,12 grades)
(Honors Option Available)



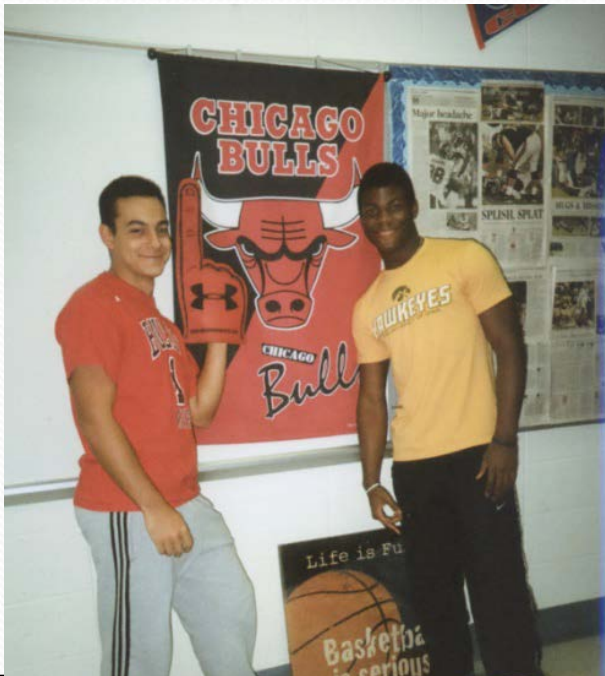
- Criminal Law/ Civil Law/Tort Cases
- Ethics/business
- State/Federal Courts
- Contract & Employment Law
- Debates
- & MOCK TRIAL
- Careers in
Criminal Justice,
Business contracts,
Attorney, Judge



Sports and Entertainment Marketing

(One Semester) Honors Option Available
10, 11, 12 grades

- Sales and Advertising
- Entertainment & Sports Careers
- Sports Agents, Advisors, Athletes
- Marketing – Entertainment Industry
- International Business Advisors, Managers



- Music Industry; Online Companies, Magazines, Sports Editors

Entrepreneurship

(One Semester) (10, 11,12 grades)

- Owning Your Own Business
 - Research/Planning Venture
 - Marketing Strategies
 - Leadership Styles
 - Managerial Skills
 - Communication Skills
 - Changes in the Workplace
- (Honors Option Available)



DECA – COMPETITIVE BUSINESS CLUB –

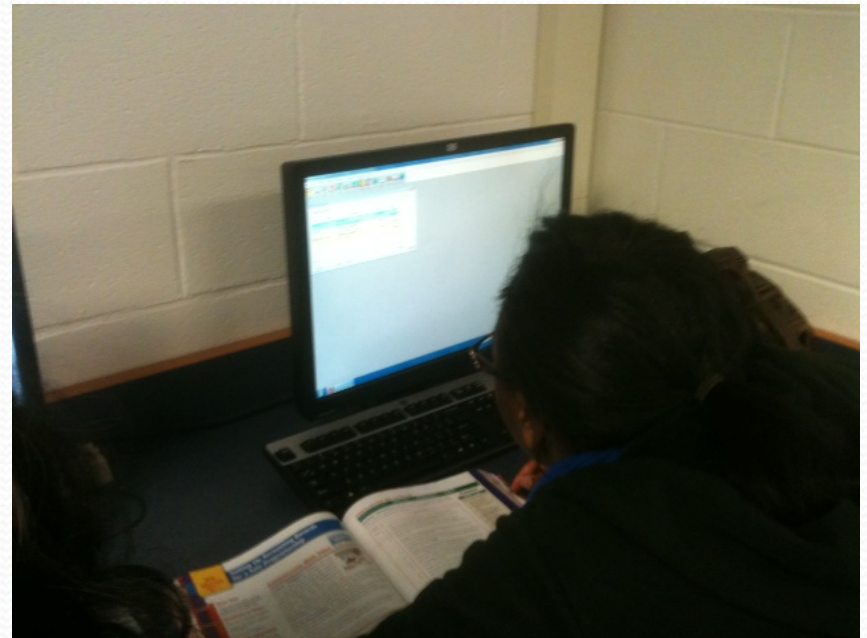
**Last month– Marketing at
United Center & BULLS GAME!**

- JAN– Regional Competition
- FEB – 12 STATE QUALIFIER



FINANCIAL MATH

- Math skills for personal and corporate everyday use
- Loans & credit
- Home & Car ownership
- Profit & loss
- **SATISFIES Math graduation requirement**
- 11 & 12 grades only





Family and Consumer Science

- Includes classes that will help in your personal lives and in possible careers in the food industry, medical, entertainment, child care, education, social work, counseling, and hotel/restaurant.
- **FCCLA – FACS CLUB**



Culinary Arts I/II

(One Semester Each) (9-12 grades)



- Prepare Recipes for everyday cooking and those who aspire to work in food service industries. Classroom and Lab settings; safety and sanitation training.
 - Pastas, Fruits, Vegetables; Chili & Soups; Cake Decorating
 - Pies, Breads, Pizzas
- CULINARY 2 – FOOD HANDLER CERTIFICATION**

92% -



Culinary Arts III –

(2 Semesters, Option to repeat; may take as 1 or 2 block period



- *The Brook Catering Company*

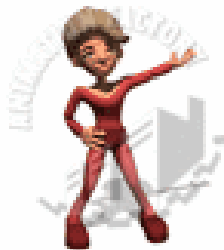
- Planning/Themes
- Scaling Recipes
- Ordering Groceries
- Figuring Costs
- **DUAL CREDIT** transferrable TO or
- **FROM COD** for all 4 grades! PLUS
- **FSSM-CERTIFICATION** - 5 year Cert.
- Plating/Garnishing/serving
- Careers in Food Service



Fitness & Nutrition



- Inter-department co-taught between CTE and PE departments
- Can **fulfill Physical Education graduation requirement**
- 11 and 12 grades
- 1 year; repeatable



- **DUAL CREDIT**
transferrable TO or FROM
COD for all grades
- Physical fitness with nutritional needs
- Lab experiences in nutritional food prep and conditional – such as yoga





Human Growth & Child Development

(One Semester) (9, 10, 11, 12 grades)

- Learn techniques to promote healthy physical, social, emotional, intellectual, and moral development
 - 2 of 4 EARLY CHILDHOOD CERTIFICATIONS VIA ECE GATEWAYS
 - Weekend with Computerized “baby think it over”
 - Care/Nutrition
 - Parenting Styles
 - Assisting/Observing
- Little Warrior Preschool



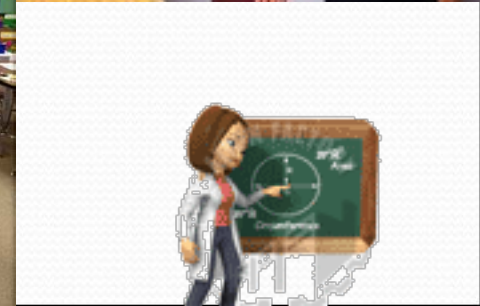
Pre-School One

(One Semester) (ALL grades)

- Assisting/Observing Little Warrior Preschool
- Future career knowledge for teaching and other careers related to young children
- 4 EARLY CHILDHOOD CERTIFICATIONS VIA

ECE GATEWAYS

PreReq to DUAL CREDIT



Pre-School Two - Practicum

(One Semester) (10, 11, 12 grades)

(sequence continues 11 & 12 grades as well)



- Research, explore, implement current teaching trends with a variety of needs in Little Warrior Preschool
- Gain advanced career knowledge for teaching and other child related Professions
- ASSIST LITTLE WARRIOR PRESCHOOL – with Preschool Interns
- Plan Lessons
- Create Bulletin Boards



PRESCHOOL TEACHING INTERNSHIP

- 1 semester – within Preschool I/II
- 11 or 12 grade
- Enroll with Instructor approval
- Observe, plan, implement, and teach
- **Work as individual lead teacher in Little Warrior Preschool**
- Internship conducted during school day at WBHS
- **DUAL CREDIT** transferrable TO or FROM COD for all grade levels – **NEW 2016!!**
- **Infant, Child, Adult CPR Certification & AED Training**



Fashion I

(One Semester) (9-12 grades)

- Personal Figure Analysis
- Sketching Designs
- Color Analysis
- Select Clothing for various Figures
- Select Shoes/Accessories
- Interested in Careers like in

Sweet Home Alabama



No Sewing Involved



Interior Design

(One Semester) (9 – 12 grades)

- Design Your Own Spaces
 - (Bedroom, TV Room)
- Use Color Schemes
- Draw Floor Plans
- Furniture Template
- Construction basics for the interior design industry
- Interest in *HGTV*, *Fixer Upper*, *Vacation House for Free* & other makeover home shows



Animation Factory
MEMBERS ONLY



Industry & Technology

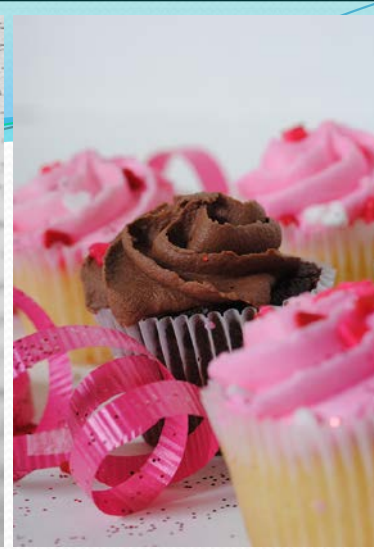
- Photography, Screen Printing
- Automotive, Engineering
- Woodworking, Technology & Repair
- For college, career, and real world skills readiness...



Photography 1 & 2

(One Semester Each) (10, 11, 12)

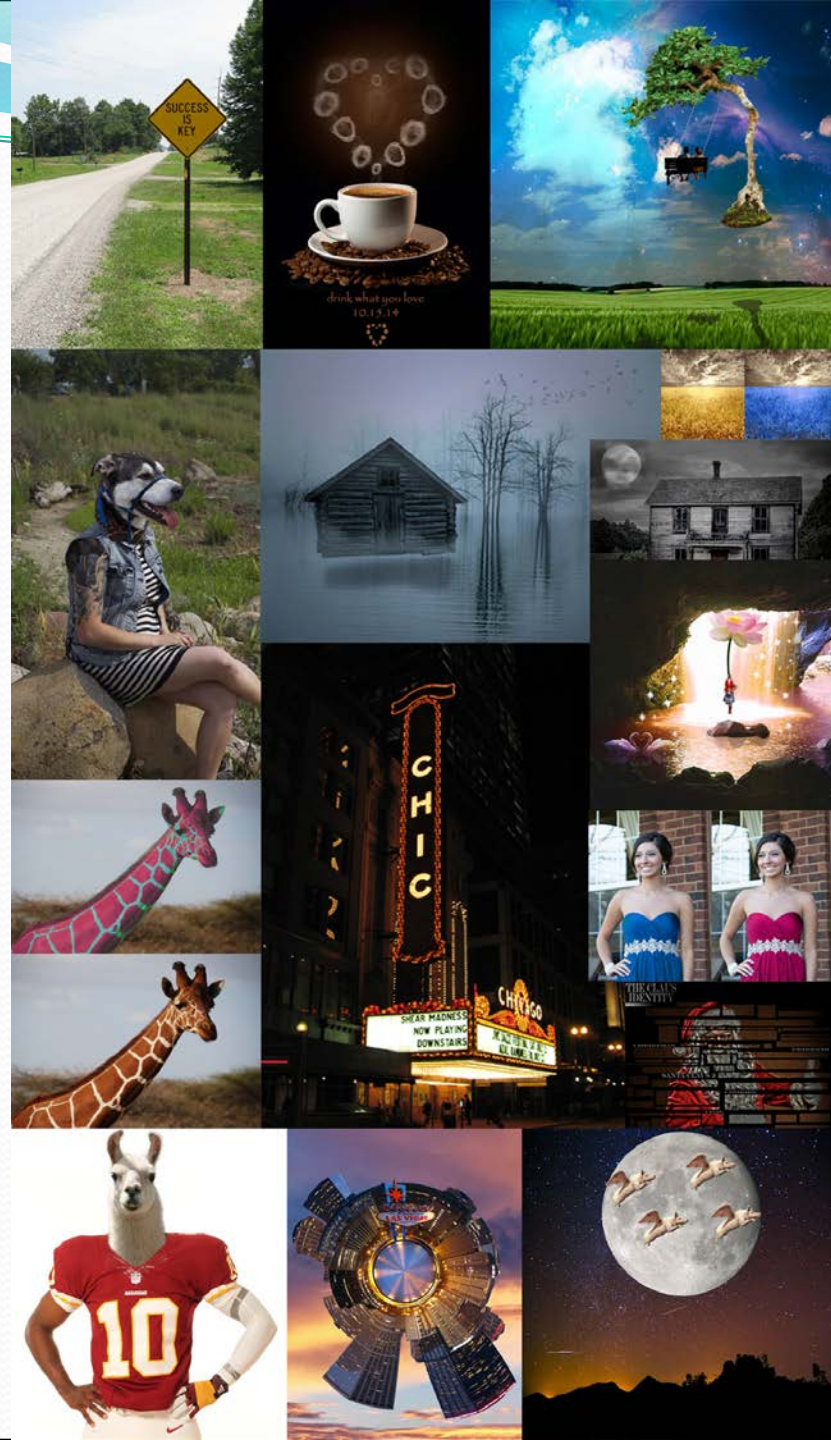
- Process Black/White Film
- Use “Dark Room” Techniques
- Learn to take Quality Pictures
- Photo Composition
- Digital Photography
- **EACH CLASS IS DUAL CREDIT transferrable TO or FROM COD!**



Digital Imaging

(One Semester) (9-12 grades)

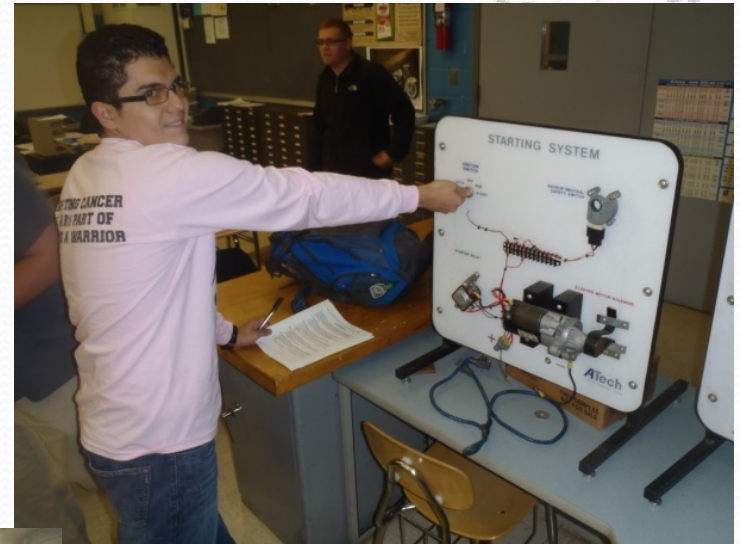
- Explore applications of digital media
- Adobe PhotoShop- Editing and Manipulation of original student work
- Adobe LightRoom – Storage, organization and editing
- **DUAL CREDIT** transferrable TO or FROM COD for all grade levels – *new 2016*



Auto Maintenance/Upkeep

(One Semester) (9-12)

- Basic Operation and Upkeep for ALL current and future car owners
- fundamental knowledge and experience in owning and maintaining an automobile.
- **DUAL CREDIT** transferrable TO or FROM COD for all grade levels



AUTOMOTIVE TECHNOLOGY I * (10-12)

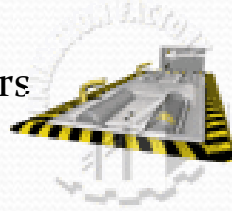


- For students interested in becoming Automotive Technician and/or learn basic auto repair for personal use.
- Engines – rebuild, inspect, reassemble
- Brakes, Steering, Suspension and Wheel Alignments



AUTOMOTIVE TECHNOLOGY II (Full Year – 1 Period* 11, 12)

- Engine Mechanical Diagnostics & Electrical
- Scanners & pressure testers
- Emissions analyzers
- Fuel injection
- Brake repair
- AC & transmissions



AUTOMOTIVE TECHNOLOGY III (Full Year – 1 Period* 12) or Internships

- Currently in progress with COD for NATEF certification
- Transferable Dual Credit – Engines;
- Auto 1
- 10-12 grade levels



Introduction to Engineering Design

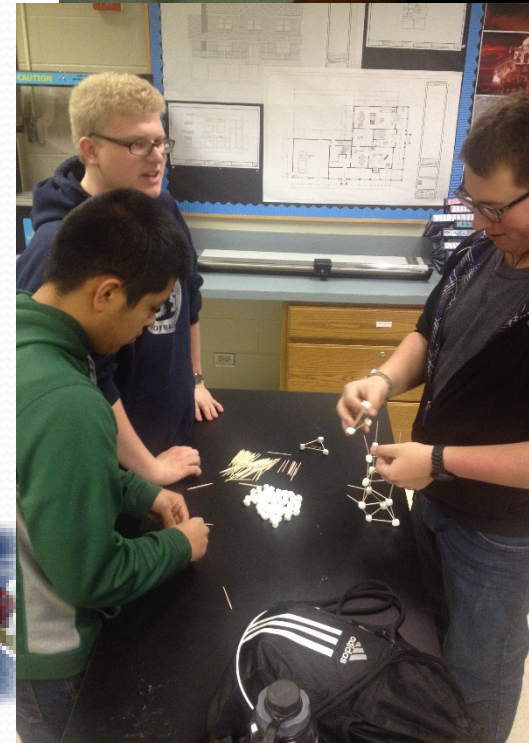
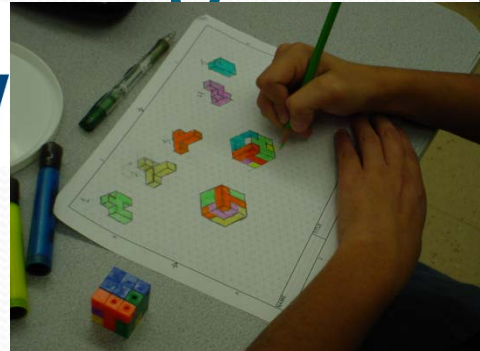
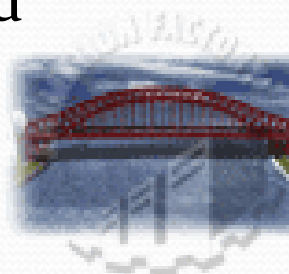
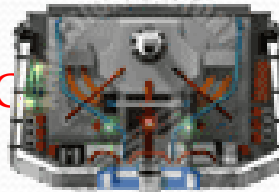
(Full year) (9-12 grades) - in 4th year*



PROJECT LEAD THE WAY

PLTW

- Future careers in ENGINEERING!
- use the design process and industry standard 3D modeling software to design solutions to solve problems.
- COLLEGE CREDIT: ISU, NIU, U OF IOWA, IOWA STATE, PENN STATE, DUKE
- MILWAUKEE SCHOOL OF ENGINEERING
- BRADLEY \$1000 SCHOLARSHIP
- U of IOWA – 3 credits for \$150
- Auto Desk, INVENTOR – 3D solid modeling design software
- Leads to Civil, Aerospace, Bio – Engineer careers
- STEM (Science, Technology, Engineering & Math)

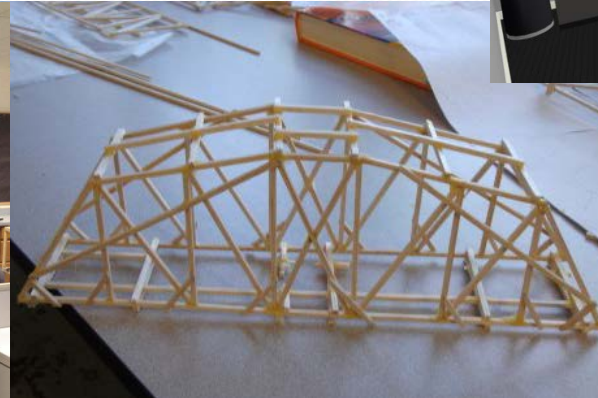
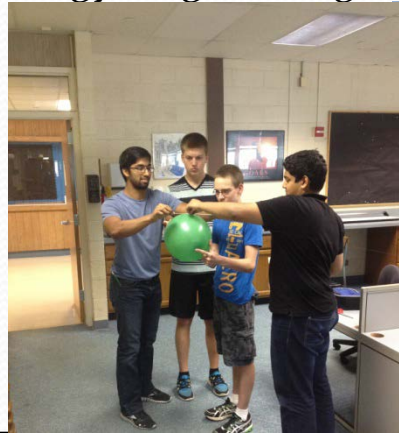
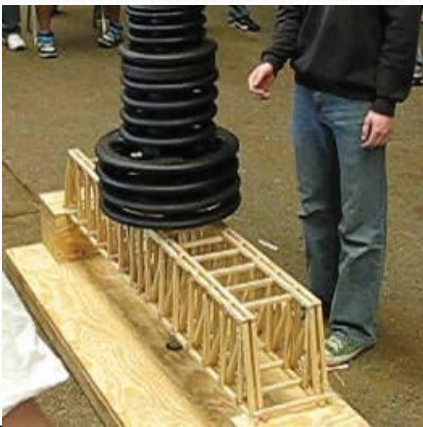


Principles of Engineering

(Full year) (10-12 grades) - 3rd year offered



- Exposure to mechanisms, energy, statics, materials, and kinematics of Engineering careers
- COLLEGE CREDIT: ISU, NIU, U OF IOWA, IOWA STATE, PENN STATE, DUKE
- MILWAUKEE SCHOOL OF ENGINEERING
- BRADLEY \$1000 SCHOLARSHIP; U of IOWA – 3 credits for \$150
- INVENTOR – 3D solid modeling design software
- Leads to Civil Engineering, Architecture, BioTechnical, Aerospace, Digital Electronics, and Computer Integrated Manufacturing career majors.
- STEM (Science, Technology, Engineering & Math)



Architectural Drafting (One Semester)

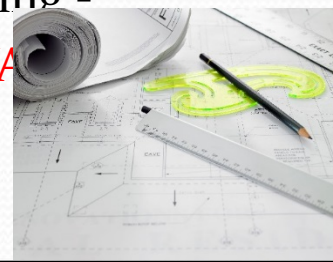
Civil Engineering & Architectural Drafting

(ONE YEAR – PLTW sequence) (all grades * prereq*)



- **DUAL CREDIT** transferrable TO/ FROM
COD for all grade levels – ARCH CAD
PLTW 3 credits – CEA – 1 year

- Building Codes
- Draw Residential Homes
 - 2D/3D Drawings
- Building a Model Home to Scale
- 3-D CAD software for rendering
 - Bricks, Granite, Cabinetry
- Energy Efficiency/green building practices
- CEA – PLTW architectural drafting and engineering -
- **COLLEGE CREDIT: ISU, NIU, U OF IOWA, IOWA**
- **MILWAUKEE SCHOOL OF ENGINEERING**
- **BRADLEY \$1000 SCHOLARSHIP; U of IOWA – 3 credits for \$150**



Computer Repair — new computers 2014

(One Semester) (All grades)

- **DUAL CREDIT transferrable TO/ FROM COD for all grade levels**
- Designed to equip beginner and semi-experienced students with entry-level computer technician proficiency for career opportunities
- Physical Computer Operation
 - Hardware Components
 - Processor
 - Motherboard
 - Drives, power
 - Ram
 - Hands-On Lab Work
- Follows COMPTIA A+



Math elective choices:

see Mr. Bridges in A200 for more info*

go well with PLTW /Computer Repair choices

Computer Science

- Visual Basic Programming
- Honors Option

AP Computer Science

- JAVA Programming
- AP Credit

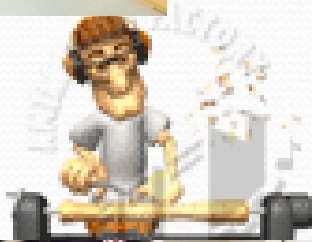
Computer Science 2:Mobile App Development

- New for 2015-2016
- Learn how to make Apps for Smart Phones
- Uses LUA language
- Honors Option

Woods I/ Woods II

(Each One Semester) (All grades)

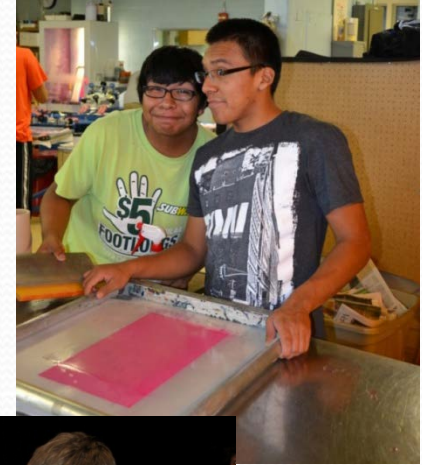
- Basic Woodworking skills
- Using Tools/Safety
- Measurement
- Complex woods projects, safety, machine operation, finishing techniques
- Independent projects – hands-on creations



Screen Printing & Advanced Screen Printing

(One Semester Each) (9, 10, 11, 12)

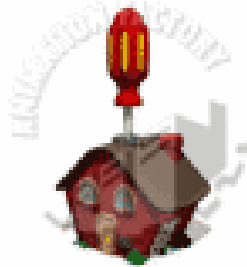
- Graphic Communications on a variety of materials
- Posters & Clothing - Tackle for Cure; Class T's, Lauren Kiefer
- Independent Projects
- Design & Displays



Home Repair and Maintenance

(One Semester) (9-12 grades)

- For students with interest in learning home maintenance and repair work as well as careers in the building trades
- Residential Roofing Systems
- Plumbing
- Windows
- Insulation
- Exterior/Interior Residential Walls
- Painting



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• ARCH CAD	=	ARCH 1211 – 3 credits
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• CULINARY 3	=	CULN1120 – 2 credits & FSSMCertification
• PRESCHOOL INTERNS	=	PHYS 2254 – 3 credits & CPR/AED Certification
• HUMAN GROWTH/CHILD DEV/ PRESCHOOL 1	* 4 state certifications/ University articulation	

- **ALSO Pending – ECEC 1100 PRESCHOOL 2/INTERNS**
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- **(average semester at college = 15 credit hours)**

CTE DUAL CREDIT STATISTICS

	FY 13	FY 14	FALL - 2014	SPRING 2015 & YEAR LONG		FY 15 total	FY 16 <i>projected</i>
COURSES	1	7	11	11		11	13
SECTIONS	2	7	10	15		25	25
STUDENTS:							
RECEIVING CREDIT	10	139	293	298		591	690
ELIGIBLE	60	167	308	320		628	700
% SIGNED UP	17%	83%	95%	95%		95%	98%
% RECEIVING DUAL CREDIT	100%	100%	100%	98%		9%	98%
TOTAL CREDITS	20	407	796	1004		1795	1900
TOTAL TUITION SAVINGS @ COD	\$ 3,200	\$ 66,200	\$ 119,825	\$ 151,175		\$ 271,000	\$292,000
COURSES/CREDITS	OFTI 1100	OFTI 1100	OFTI 1100	keyboarding	2		
		OFTI 1210	OFTI 1210	college tech	3		
		ACCY 1140	OFTI 1250	speech tech	3		
		AUTO 1040	ACCY 1140	accounting 2	4		
		PHOTO 1100	AUTO 1040	auto upkeep	3		
		PHOTO 1102	PHOTO 1100	photo 1	3		PHOTO 1101 Digital Imaging
		PHYS 1554	PHOTO 1102	photo 2	3		
			PHYS 1554	fit & nutrition	1		
			CA 1120	catering 3	2		
			CIT 1111	computer repair	3		
			ARCH 1211	arch cad	3		
IN ADDITION TO COD DUAL CREDIT:			AUTO 1110	Auto 1 in progress with NATEF & COD			
Human Growth & Preschool1			*ECE - Gateway - 4 certifications; 3 hours articulated University credit				
PLTW – 3-6- 9 credits articulated			POE/IED			CEA - new 2016	

CAREER & TECH ED

DECA FCCLA FORD AAA SKILLS USA

Remember ... C T E -
IT'S THE PLACE TO BE!

IT'S RIGHT FOR ME
Business, FACS, and IT!

DUAL CREDIT SEQUENCES:

- KEY/ CCTECH/SPEECH TECH
- ACCOUNTING I/II
- **CULINARY I/II/III**
- **FITNESS & NUTRITION**
- PHOTO I/II
- **HG & CHILD/ PRESCHOOL I/II/Intern**
- **ARCH CAD/ CEA / COMPUTER REPAIR**
- **AUTO I /II/III & UPKEEP**
- **IED/POE/CEA**



2016 SENIORS IN CTE:

- Dan, Brandon, Zach, Max, Matt Accounting 1/2, Speech TECH, Business Law Honors, Entrepreneurship, Consumer, Sports Marketing, Keyboarding
- Anthony, Mark, Gio, – Brook Catering and Culinary 1,2,3
- Emily, Maggie- Preschool sequence
- Vince, Max, Alex, James, Bryce Autos 1 , 2, 3;
- Jordan, Bryce, Silver,– Arch CAD, Screen Printing
- Jonathon, Zach, Sean – Photography 1, 2; Digital Imaging
- Joe, Amos, Guillermo, Intro to Engineering, Principles of Engineering (PLTW)
- Alex, Teddy Woods 1
- PLEASE SEE ANY CTE TEACHER FOR QUESTIONS ABOUT CLASSES –
or ANY OF THESE SENIORS ABOVE!! Dual Credit
- Dept office A161; Mrs. Barney – CTE DC – A160
- CTE Classrooms: A303 308, 310, 312; A103, 105, 107; A119, 123, 129, 137
- BARNEY, CHOJNACKI, LOPEZ, NGO; ENNIS, SCAPARDINE,
NOWAK, DUNK, VALA, QUINN, ZWART

QUESTIONS



2015 SENIORS IN CTE:

- Joe, James, Liam, Alexis Accounting 1/2, Consumer, Speech TECH, Business Law Honors, Entrepreneurship, IED,
- Juan, JJ – Brook Catering and culinary classes, ACCY 2
- Sarah - Preschool sequence
- Vince, Josh, Austin, Rob Brian, –Auto 1, 2, 3; Woods 1
- Morgan & Caitlyn – Photography, Screen Printing, Digital Imaging
- Austin, Kevin, Intro to Engineering, Principles of Engineering (PLTW) Auto ½, Arch CAD
- *PLEASE SEE ANY CTE TEACHER FOR QUESTIONS ABOUT CLASSES – or ANY OF THESE SENIORS ABOVE!!*
- Dept office A161; Mrs. Barney – CTE DC – A160
- CTE Classrooms: A303 308, 310, 312; A103, 105, 107; A119, 123, 129, 137
- BARNEY CHOJNACKI DEGEORGE LOPEZ; ENNIS, SCAPARDINE, NOWAK, CHABALOWSKI, DUNK, VALA

2014

SENIORS IN CTE:

- **Robert and Omer:** Accounting, Intro to Business, Consumer, Business Explorations, Speech TECH, Business Law Honors, Entrepreneurship, Sports Marketing, Digital Imaging, Screen Printing, AUTO 1, Woods 1, Home Repair, Computer Repair
- **Jada** – Brook Catering and culinary classes
- **Billy** – Intro to Engineering
- **Zena, Morgan, and Caitlyn** – Photography, Screen Printing, Digital Imaging
- **Joe and Jon** – Woods, Auto 1, 2
- *PLEASE SEE ANY CTE TEACHER FOR QUESTIONS ABOUT CLASSES – OR ANY OF THESE SENIORS ABOVE!!*
- *Dept office A161; Mrs. Barney – CTE DC – A160*
- *CTE Classrooms: 308, 310, 312; 103, 105, 107; 119, 123, 129, 137*