

Data Supplement to Understanding Career Education Options for Columbus Students



Columbus City Schools Career-Technical Education Program Descriptions

Career Education Program	Career Education Program Description
Auto Collision Repair	Receive instruction in vehicle design and manufacture, basic collision repair and refinishing technologies, proper usage of tools, equipment, and materials. Certification and college credit available.
Auto Technology	Obtain the skills needed for an entry-level position in auto mechanics including alignment, steering, braking systems, and electronics. Certification and college credit available.
Biomedical Science	Students study the following concepts: body system function, DNA, forensics.
BioScience Technology	Students learn how living organisms like cells, plants, and animals can be used to solve real life problems related to crime, hunger, the environment, nutrition, and health.
Bricklaying and Concrete Systems	Learn bricklaying, concrete work, block laying, tuck pointing, and stone work. Certification and college credit available.

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This data supplement and its accompanying report are available at www.KidsOhio.org



Career-Technical Education Program Descriptions - continued

Career Education Program	Career Education Program Description
Business Management	Students learn how to manage a business.
Carpentry	Learn the basic and advanced skills through actual work on-site at building and remodeling projects. Certification and college credit available.
Cosmetology	Students develop skills in all areas of cosmetology, including hair cutting, coloring, permanents, relaxers, and design. Students who complete the program are eligible to take the state cosmetology licensing exam.
Criminal Justice	Students will network with professionals in the industry and learn the importance of teamwork through classroom learning, lab activities, real world assignments, and community service projects. College credit available.
Culinary and Food Service Operations	Students learn through the ProStart® curriculum developed by the National Restaurant Association. ProStart® is the restaurant and food service industry's leading career-building program for high school students interested in culinary arts and food service management. Certification and college credit available.
Dental Assistant	Students develop skills necessary to assist dentists and hygienists with patient care, office tasks, and lab duties. Certification and college credit are available.
Early Childhood Education	Students learn to manage, guide, and direct developmentally appropriate learning activities. College credit available.
Construction Electricity	Gain the skills necessary to install and maintain electrical systems in residential and commercial buildings. Certification and college credit available.
Engineering Science	Students learn drafting skills, 3D design modeling software, blueprint reading, and use computer-aided drafting software. National certification is available.
Entrepreneurship	Students gain skills to solve the complex challenges of managing the day-to-day operations of a business.
Environmental Control Technologies	Students participate in a hands-on environment focusing on heating and cooling unit installation, maintenance, and repair. Certification and college credit available.
Exercise Science and Sports Medicine	Students are trained to become physical trainers, instructors, managers, and programmers. Successful students will be certified in First Aid and CPR, along with industry certification opportunities and college credit available.
Financial Services	Students are prepared for employment in the finance and banking career fields. They are introduced to personal and commercial finance, investing, and employability skills.
Health Science	Prepares students for health care jobs or continuing education through hands-on instruction.
Horticulture	Students develop skills in artistic floral design, worldwide marketing, environmental science, computer generated landscape design, landscape maintenance, golf course management, and small business development. Certification and college credit are available.
Information Support and Services	Students learn to build a computer from scratch, set up wireless networks, and install and configure the latest operating systems. CompTIA A+ Industry Certification available.

Career-Technical Education Program Descriptions - continued

Career Education Program	Career Education Program Description
Interactive Media	Students master the skills needed to become proficient in creating, designing, and producing interactive multimedia products and services. Interactive Media focuses on the development of digitally generated and computer-enhanced media. Adobe Certified Associate (ACA) in Photoshop, Dreamweaver, and Flash certification available.
Job Training Coordinating	This program was designed to equip students with special education needs with job and interpersonal skills.
Legal Management and Support	Students learn about legal concepts, procedures, and legal documentation.
Media Arts	Students are prepared for employment in digital and photographic fields.
Medical Assistant	Students are trained to help care for patients primarily in medical offices and clinics. Successful students may transition to partnering post-secondary institutions to complete the requirements for the Medical Assisting Associate's or Bachelor's Degree in a time-shortened program. College credit available.
Medical Lab Technology	Students learn how to perform diagnostic procedures in the health care setting, such as chemical analysis of body fluids, classification of blood cells, identification of disease-producing microorganisms, and the selection of compatible donor blood for transfusions. Associate degree completion and college credit available.
Network Systems	Students learn how to manage internal communications networks.
Nursing	Students learn how to serve hospital patients under the supervision of a licensed nurse.
Performing Arts	Students study dance, music, or theatre. College credit is available.
Precision Machining	Students learn how to cut raw material into a variety of shapes and sizes.
Programming and Software Development	Students are trained in the areas of software programming and analysis by learning to design, develop, test, document, implement, and maintain computer systems and software. Sun Certified Java Associate certification available.
Surgical Technology	Students are trained to work alongside surgeons and nurses delivering patient care. Students may complete the requirements for the Surgical Technology Certificate at CSCC in a time-shortened program. College credit available.
Teaching Professions	Students learn instructional strategies, how to create a positive instructional environment, how children learn, and lesson development. College credit and internships available.
Visual Design and Imaging	Students explore all aspects of the graphics communications industry. Adobe certification and college credit are available.
Welding and Cutting	Students develop skills in several types of welding and cutting, brazing, blueprint reading, fabrication, and manufacturing. Industry certification opportunities and college credit available.

Which Career Education Programs Are Offered at the Career Centers and at High

Fort Hayes Career Center Career-Technical Education Program Enrollment		Columbus Downtown High School Career-Technical Education Program Enrollment		District High School Career-Technical Education Program Enrollment	
Health Science	144	Cosmetology	69	Engineering Science*	143
Performing Arts	127	Culinary and Food Service Operations	52	Business Management	39
Job Training Coordinating	95	Criminal Justice	44	Biomedical Science	33
Visual Design and Imaging	90	Business Management	37	Interactive Media	21
Media Arts	76	IT Core	30	Network Systems	10
Auto Technology*	43	Early Childhood Education	29	Information Support and Services	2
Nursing	34	Information Support and Services	20	Carpentry	1
Bricklaying and Concrete Systems	31	Engineering Science	18	Media Arts	1
Auto Collision Repair	27	Legal Management and Support	11	Total Juniors and Seniors	250
BioScience Technology	26	Programming and Software Development	11		
Construction Electricity	26	Financial Services	6		
Carpentry	25	Interactive Media	6		
Environmental Control Technologies	21	Teaching Professions	6		
Horticulture	19	Visual Design and Imaging	6		
Medical Assistant	18	Entrepreneurship	5		
Exercise Science and Sports Medicine	17	Job Training Coordinating	2		
Welding and Cutting	15	Precision Machining	2		
Surgical Technology	11	Total Juniors and Seniors	354		
Dental Assistant	10				
Medical Lab Technology	10				
IT Core	3				
Engineering Science	1				
Total Juniors and Seniors	869				

*One student was enrolled in two programs simultaneously – Auto Technology at Fort Hayes Career Center and Engineering Science at West High School.

Fort Hayes Career Center offered 22 career programs, serving 869 juniors and seniors, in school year 2013-2014. Columbus Downtown High School offered 17 career programs, serving 354 juniors and seniors. Eight career programs, serving 250 juniors and seniors, were offered at district high schools, rather than at a career center. The charts above reflect junior and senior enrollment.

Which Columbus High Schools Had the Highest Percentages of Juniors and Seniors Enrolled in Career Education Courses?

Home High School	Number of Career Education Juniors and Seniors	Percentage of Career Education Juniors and Seniors
Fort Hayes Arts & Academic High School	129	44%
West High School*	110	37%
East High School*	57	36%
Brookhaven High School*	72	34%
Columbus North International School*	85	34%
Linden-McKinley STEM*	46	33%
Centennial High School	115	33%
Eastmoor Academy*	90	33%
Briggs High School*	107	32%
Africentric Early College	34	29%
Marion-Franklin High School*	62	26%
Northland High School*	105	25%
Independence High School	62	23%
Whetstone High School	78	23%
Columbus Scioto 6-12	8	23%
Walnut Ridge High School	61	22%
South High School	40	21%
Mifflin High School	30	13%
Beechcroft High School	32	13%
Columbus Global Academy	9	12%
Columbus Alternative High School	30	11%

*These high schools offered career education courses on site. Fort Hayes Arts and Academic High School shares a campus with Fort Hayes Career Center.

In school year 2013-2014, eight of 21 Columbus City Schools high schools, including Fort Hayes Arts & Academic High School, West High School, East High School, Brookhaven High School, Columbus North International High School, Linden-McKinley High School, Eastmoor Academy, and Centennial High School, each had at least one-third of juniors and seniors enrolled in career education.

Career Courses Offered at Nine District High Schools and Not at the Two Career Centers

District High School Offering Career Education Course	Biomedical Science	Business Management	Carpentry	Engineering Science	Information Support and Services	Interactive Media	Media Arts	Network Systems
Briggs High School		21						10
Brookhaven High School		17						
Columbus North International						21		
East High School				22				
Eastmoor Academy	33							
Linden-McKinley STEM				11	2			
Marion-Franklin High School				9				
Northland High School			1	46				
West High School		1		55*			1	
TOTAL	33	39	1	143	2	21	1	10

*One student took two courses simultaneously – Auto Technology at Fort Hayes Career Center and Engineering Science at West High School.

Eight programs are offered at nine Columbus high schools. Engineering Science is offered at five Columbus high schools and enrolls the highest number of juniors and seniors (143 students).

Columbus City Schools: All-Student Career-Technical Education Programs Capacity, School Year 2015-2016 (as of October 9, 2015)

Career Education Program	Total Program Seats	Total Seats Occupied	Total Open Seats	Percentage of Open Seats
Job Training Coordinating	90	92	-2	NA
Teaching Professions	25	8	17	68%
Medical Lab Technology	25	9	16	64%
Auto Collision Repair	50	25	25	50%
Horticulture	50	25	25	50%
Construction Electricity	50	27	23	46%
Financial Services	25	14	11	44%
Welding and Cutting	36	21	15	42%
Precision Machining	50	30	20	40%
Bricklaying and Concrete Systems	50	31	19	38%
BioScience Technology	50	32	18	36%
Dental Assistant	25	16	9	36%
Engineering Science	50	32	18	36%
Interactive Media	50	33	17	34%
Entrepreneurship	25	17	8	32%
Media Arts	200	144	56	28%

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Columbus City Schools: All-Student Career-Technical Education Programs
Capacity, School Year 2015-2016
(as of October 9, 2015) - continued

Career Education Program	Total Program Seats	Total Seats Occupied	Total Open Seats	Percentage of Open Seats
Surgical Technology	25	18	7	28%
Carpentry	50	37	13	26%
Environmental Control Technologies	50	37	13	26%
Biomedical Science	125	97	28	22%
Cosmetology	100	78	22	22%
Auto Technology	75	59	16	21%
Business Management	50	40	10	20%
Early Childhood Education	50	40	10	20%
Exercise Science and Sports Medicine	25	20	5	20%
Nursing	50	40	10	20%
Medical Assistant	25	21	4	16%
Culinary and Food Service Operations	100	85	15	15%
Performing Arts	226	193	33	15%
Information Support and Services	50	43	7	14%
Programming and Software Development	50	43	7	14%
Criminal Justice	50	46	4	8%
Health Science	175	172	3	2%
TOTAL	2,127	1,625	502	24%

NOTES:

- Performing Arts includes: Audio Production; Dance, Music & Theatre Performance; and Filmmaking & TV Production.
- Media Arts includes: Art Portfolio, Graphic Arts & Design, Interior Design, and Photography.
- Biomedical Science is housed only at East High School and Eastmoor Academy High School.
- Comprehensive high schools with Engineering programs:
 - Northland High School: 109 students
 - Linden-McKinley STEM: 36 students
 - Marion-Franklin High School: 18 students
 - East High School: 16 students
 - West High School: 197 students
- Teaching Professions is the Columbus Teaching Academy (1 year, senior program) at The Ohio State University.
- Health Science: 1st year is the Health Science Core and 2nd year is in one of six specialization areas. Specialization areas are: Dental Assisting, Fitness & Wellness, Medical Assisting, Medical Laboratory Technician, Nursing, and Surgical Technology.

Program Designed for Students with Special Education Needs

One of 37 career programs, Job Training Coordinating, was designed specifically for students with special education needs, equipping them with soft skills and basic job skills. The program serves 97 juniors and seniors.

When Job Training Coordinating is factored out, the rate of students with special education needs among career education students enrolled in the other 36 programs dropped to 17 percent, which is slightly lower than the rate for all juniors and seniors (18 percent).

Four programs enrolled 50 percent or more of its students with special education needs: Job Training Coordinating (98 percent), Horticulture (84 percent), Bricklaying and Concrete Systems (52 percent), and Precision Machining (50 percent).

Five programs had no students with special education needs: Teaching Professions, Medical Assistant, Legal Management, Financial Services, and Entrepreneurship. An additional five programs had fewer than 10 percent of students with special education needs: Nursing (9 percent), Engineering Science (7 percent), Environmental Control Technologies (5 percent), BioScience Technology (4 percent), and Biomedical Science (3 percent).

Demographics by Career Education Status: 1,472 Juniors and Seniors Completed a Career Education Course in 2013-2014

Demographic	Not Career Education Student		Career Education Student		All Juniors and Seniors	
	Count	Percentage	Count	Percentage	Count	Percentage
Female	1,883	51%	721	49%	2,604	50%
Male	1,802	49%	751	51%	2,553	50%
Asian	127	3%	32	2%	159	3%
Black	2,443	66%	922	63%	3,365	65%
Hispanic	223	6%	91	6%	314	6%
Multiracial	76	2%	33	2%	109	2%
Native American	7	0%	6	0%	13	0%
White	809	22%	388	26%	1,197	23%
Junior	1,955	53%	815	55%	2,770	54%
Senior	1,730	47%	657	45%	2,387	46%
Not Special Education	3,130	85%	1,141	78%	4,271	83%
Special Education	555	15%	331	22%	886	17%
Not Limited English Proficiency	3,376	92%	1,394	95%	4,770	92%
Limited English Proficiency	309	8%	78	5%	387	8%
Not Economic Disadvantage	1,165	32%	508	35%	1,673	32%
Economic Disadvantage	2,520	68%	964	65%	3,484	68%

Columbus City Schools 2013-2014 Career-Technical Education Programs by the Number and Percentage of Female Juniors and Seniors

Career Education Program	Number of Female Juniors and Seniors	Percentage of Female Juniors and Seniors
Health Science	120	83%
Performing Arts	74	58%
Cosmetology	69	100%
Business Management	48	63%
Engineering Science	46	29%
Visual Design and Imaging	45	47%
Job Training Coordinating	36	37%
Media Arts	35	45%
Nursing	32	94%
Early Childhood Education	27	93%
Biomedical Science	24	73%
Culinary and Food Service Operations	21	40%
BioScience Technology	19	73%
Criminal Justice	18	41%
Medical Assistant	18	100%
Interactive Media	11	41%
Legal Management and Support	11	100%
Surgical Technology	10	91%
Medical Lab Technology	9	90%
Exercise Science and Sports Medicine	7	41%
IT Core	7	21%
Dental Assistant	6	60%
Auto Technology	5	12%
Teaching Professions	5	83%
Financial Services	4	67%
Entrepreneurship	3	60%
Horticulture	3	16%
Welding and Cutting	2	13%
Auto Collision Repair	1	4%
Bricklaying and Concrete Systems	1	3%
Construction Electricity	1	4%
Information Support and Services	1	5%
Network Systems	1	10%
Precision Machining	1	50%
Carpentry	0	0%
Environmental Control Technologies	0	0%
Programming and Software Development	0	0%

Columbus City School 2013-2014 Career-Technical Education Programs by the Number and Percentage of Male Juniors and Seniors

Career Education Program	Number of Male Juniors and Seniors	Percentage of Male Juniors and Seniors
Engineering Science	115	71%
Job Training Coordinating	61	63%
Performing Arts	53	42%
Visual Design and Imaging	51	53%
Media Arts	42	55%
Auto Technology	37	88%
Culinary and Food Service Operations	31	60%
Bricklaying and Concrete Systems	30	97%
Business Management	28	37%
Criminal Justice	26	59%
IT Core	26	79%
Auto Collision Repair	26	96%
Carpentry	26	100%
Construction Electricity	25	96%
Health Science	24	17%
Information Support and Services	21	95%
Environmental Control Technologies	21	100%
Interactive Media	16	59%
Horticulture	16	84%
Welding and Cutting	13	87%
Programming and Software Development	11	100%
Exercise Science and Sports Medicine	10	59%
Biomedical Science	9	27%
Network Systems	9	90%
BioScience Technology	7	27%
Dental Assistant	4	40%
Nursing	2	6%
Early Childhood Education	2	7%
Financial Services	2	33%
Entrepreneurship	2	40%
Surgical Technology	1	9%
Medical Lab Technology	1	10%
Teaching Professions	1	17%
Precision Machining	1	50%
Hybrid: Auto Tech at Fort Hayes Career Center and Engineering at West High School	1	100%
Cosmetology	0	0%
Medical Assistant	0	0%
Legal Management and Support	0	0%