



MANSFIELD ISD  
CAREER & TECHNICAL EDUCATION

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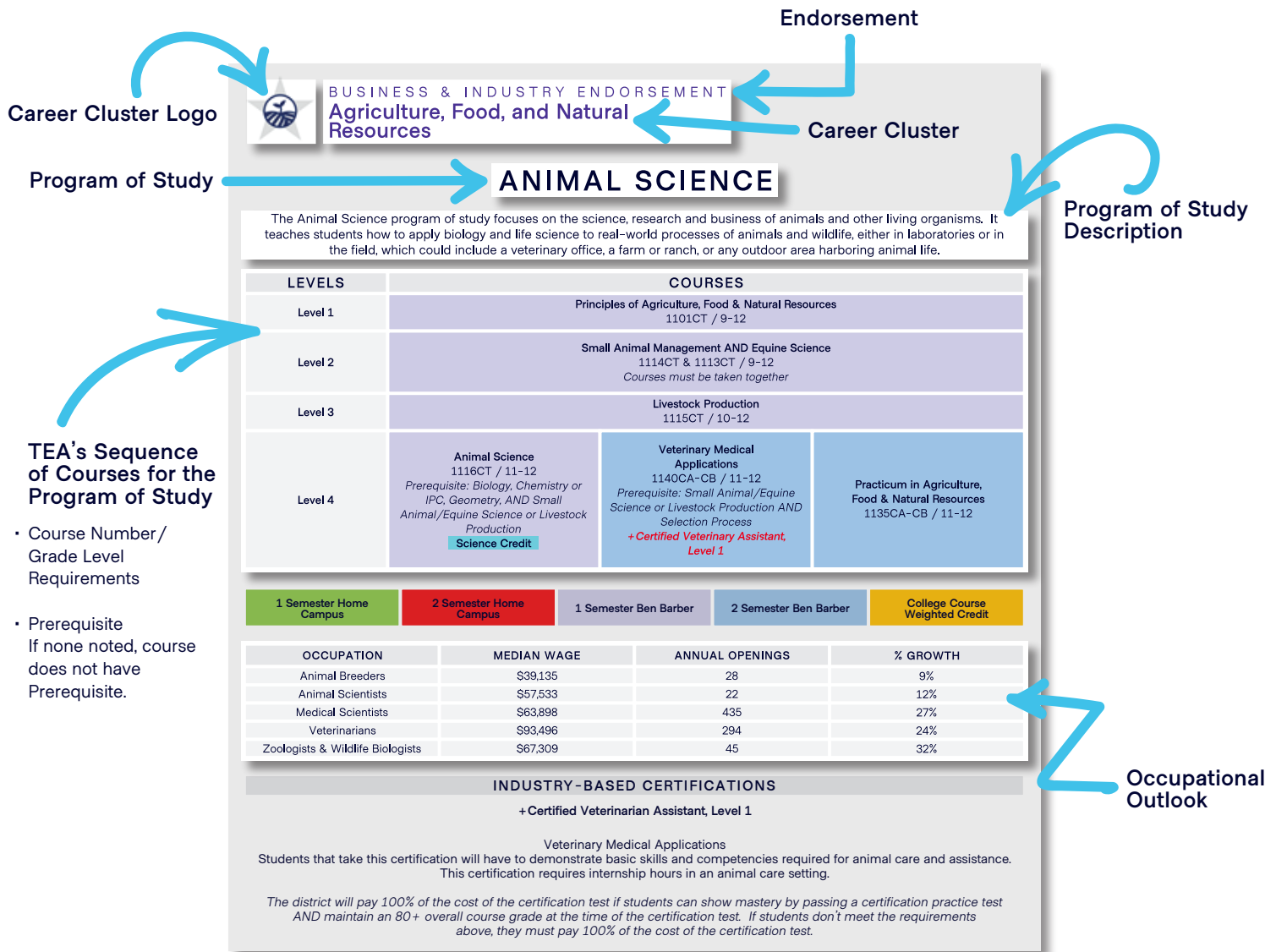
# Career Tech Courses 2022–2023



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# QUICKSTART GUIDE TO FLOW CHARTS



## REMINDERS:

- 1 semester at Ben Barber = 1 credit AND 1 semester at home campus = .5 credit
- 2 semesters at Ben Barber = 2 credits AND 2 semesters at home campus = 1 credit
- The state's programs of study are aligned to endorsements.
- To earn a CTE endorsement, a student must successfully complete four or more credits in the same endorsement area. Two of those courses must be in the same program of study with one being a level three or four course.
- For a student to be considered a CTE concentrator, the student must successfully complete two courses for two or more credits in a program of study.
- For a student to be considered a CTE completer, the student must successfully complete three or more courses for four or more credits in a program of study. One of those credits must be a level three or four course.
- CCMR certifications are most often offered in level three and four courses and count towards the district's state accountability.



# AGRIBUSINESS

The Agribusiness program of study explores the occupations & educational opportunities associated with the business of farming & agriculturally related business that supplies farm inputs, such as machinery & seeds. This program of study may also include exploration into the marketing of farm products, the purchase of farm products either for future processing or resale & grading or classifying unprocessed food or other agricultural products.

LEVELS	COURSES
Level 1	Principles of Agriculture, Food & Natural Resources 1101CT / 9-12
Level 2	Professional Communications 2246 / 9-12
Level 3	Agribusiness Management & Marketing 1117CT / 10-12 <i>Prerequisite: Principles of Agriculture, Food &amp; Natural Resources</i>
Level 4	Practicum in Agriculture, Food & Natural Resources 1135CA-CB / 11-12 <i>Selection Process</i>

1 Semester Home Campus	2 Semester Home Campus	1 Semester Ben Barber	2 Semester Ben Barber
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OCCUPATION	MEDIAN WAGE	ANNUAL OPENINGS	% GROWTH
Farmers, Ranchers & Other Agricultural Managers	\$59,134	405	9%
Farm & Ranch Loan Officers	\$45,494	268	25%
Buyers & Purchasing Agents, Farm Products	\$46,488	102	20%

Students must have successfully completed a level 1 or 2 course AND a level 3 or 4 to take a practicum course.

To earn a CTE endorsement, an MISD student must take 4 or more credits in the same endorsement area, with at least 2 of 4 credits within the same program of study and must include at least one Level 3 or Level 4 CTE course.



## ANIMAL SCIENCE

The Animal Science program of study focuses on the science, research and business of animals and other living organisms. It teaches students how to apply biology and life science to real-world processes of animals and wildlife, either in laboratories or in the field, which could include a veterinary office, a farm or ranch, or any outdoor area harboring animal life.

LEVELS	COURSES		
Level 1	Principles of Agriculture, Food & Natural Resources 1101CT / 9-12		
Level 2	Small Animal Management AND Equine Science 1114CT & 1113CT / 9-12 <i>Courses must be taken together</i>		
Level 3	Livestock Production 1115CT / 10-12		
Level 4	Animal Science 1116CT / 11-12 <i>Prerequisite: Biology, Chemistry or IPC, Geometry, AND Small Animal/Equine Science or Livestock Production</i> <b>Science Credit</b>	Veterinary Medical Applications 1140CA-CB / 11-12 <i>Prerequisite: Small Animal/Equine Science or Livestock Production AND Selection Process</i> <b>+ Certified Veterinary Assistant, Level 1</b>	Practicum in Agriculture, Food & Natural Resources 1135CA-CB / 11-12 <i>Selection Process</i>

1 Semester Home Campus	2 Semester Home Campus	1 Semester Ben Barber	2 Semester Ben Barber
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OCCUPATION	MEDIAN WAGE	ANNUAL OPENINGS	% GROWTH
Animal Breeders	\$39,135	28	9%
Animal Scientists	\$57,533	22	12%
Medical Scientists	\$63,898	435	27%
Veterinarians	\$93,496	294	24%
Zoologists & Wildlife Biologists	\$67,309	45	32%

### INDUSTRY-BASED CERTIFICATIONS

#### + Certified Veterinarian Assistant, Level 1 - Veterinary Medical Applications

Students that take this certification will have to demonstrate basic skills and competencies required for animal care and assistance. This certification requires internship hours in an animal care setting.

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Students must have successfully completed a level 1 or 2 course AND a level 3 or 4 to take a practicum course.

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## ENVIRONMENTAL & NATURAL RESOURCES

The Environmental & Natural Resources program of study explores the occupations and educational opportunities associated with the research, design and planning of engineering or technical duties in the prevention & control of environmental hazards.

LEVELS	COURSES
Level 1	Principles of Agriculture, Food & Natural Resources 1101CT / 9-12
Level 2	Wildlife, Fisheries & Ecology Management 1103CT / 9-12 <i>TPW Hunter Safety Certification Possible</i>
Level 3	Range Ecology Management 1134CT / 10-12
Level 4	Practicum in Agriculture, Food & Natural Resources 1135CA-CB / 11-12 <i>Selection Process</i>

1 Semester Home Campus	2 Semester Home Campus	1 Semester Ben Barber	2 Semester Ben Barber
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OCCUPATION	MEDIAN WAGE	ANNUAL OPENINGS	% GROWTH
Environmental Engineering Technicians	\$53,352	101	32%
Environmental Engineers	\$86,757	288	25%
Environmental Science & Protection Technicians	\$40,268	508	17%
Environmental Scientists & Specialist	\$77,896	644	24%
Zoologists & Wildlife Biologists	\$67,309	45	45%

### SUPPORTING CERTIFICATIONS

**Texas Parks & Wildlife Hunter Safety Certification** - Wildlife, Fisheries & Ecology Management  
A Texas Hunter Safety Course is required to hunt in Texas if you are born on or after September 2, 1971.

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## PLANT SCIENCE

The Plant Science program of study focuses on the science, research and business of plants and other living organisms. It teaches students how to apply biology and life science to real-world life processes of plants & vegetation, either in laboratories or in the field.

LEVELS	COURSES	
Level 1	Principles of Agriculture, Food & Natural Resources 1101CT / 9-12	
Level 2	No courses offered at Level 2 in this program of study	
Level 3	Floral Design I 1110CT / 9-12 Fine Arts Credit <i>+ Texas State Floral Association Floral Skills Knowledge Based Certification Possible</i>	Horticulture Science 1109CT / 10-12
Level 4	Floral Design II 1124CT / 11-12 <i>Prerequisite: Floral Design</i>	Practicum in Agriculture, Food & Natural Resources 1135CA-CB / 11-12 <i>Selection Process</i>

1 Semester Home Campus	2 Semester Home Campus	1 Semester Ben Barber	2 Semester Ben Barber
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OCCUPATION	MEDIAN WAGE	ANNUAL OPENINGS	% GROWTH
Soil & Plant Scientists	\$54,662	116	21%
Tree Trimmer & Pruners	\$32,240	589	14%
Pesticide Handlers, Sprayers & Applicators	\$36,733	196	22%
Landscape Supervisors	\$44,408	807	19%
Biological Technicians	\$42,931	452	17%

### INDUSTRY BASED CERTIFICATIONS

**+ Texas State Floral Association Floral Skills Knowledge Based Certification - Floral Design I**

This certification exam measures the following competencies such as industry-specific vocabulary, plant identification and the scientific and common names of plants.

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## ARCHITECTURAL DESIGN

The Architectural Design program of study explores the occupations and educational opportunities associated with developing, engineering, and designing building structures and facilities. This program of study may also include exploration into collecting and interpreting graphic information, researching and preparing maps, and interior design.

LEVELS	COURSES	
Level 1	Principles of Architecture 1819CT / 9-12	
Level 2	Architectural Design I 1660CT / 10-12 <i>Prerequisite: Principles of Architecture AND English I AND Algebra I</i>	
Level 3	Architectural Design II 1665CA/CB / 11-12 <i>Prerequisite: Architectural Design I AND Geometry</i> <b>+Autodesk Certified User in Revit Architecture Certification Possible</b>	Civil Engineering & Architecture (PLTW) 1861CT / 10-12 <i>Prerequisite: Principles of Engineering</i> <b>Weighted Credit</b>
Level 4	Practicum in Architectural Design 1668CA/CB / 12 <i>Prerequisite: Architectural Design II AND Selection Process</i>	

1 Semester Home Campus	2 Semester Home Campus	1 Semester Ben Barber	2 Semester Ben Barber
OCCUPATION	MEDIAN WAGE	ANNUAL OPENINGS	% GROWTH
Architects	\$77,043	808	16%
Geographic Information Analysts & Surveyors	\$58,926	162	27%
Architectural/Civil Drafters	\$50,170	1,068	9%
Civil Engineering	\$89,960	2,394	12%
Construction Managers	\$87,402	2,401	14%

### INDUSTRY BASED CERTIFICATIONS

#### **+ Autodesk Certified User in Revit Architecture Certification – Architectural Design II**

An Autodesk AutoCAD Certified User will demonstrate entry-level knowledge using building information software for careers in architecture, interior design and construction management.

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# CONSTRUCTION TECHNOLOGY

The Construction Technology program of study explores the occupations and educational opportunities related to constructing, installing or repairing structures and fixtures made of wood, such as concrete forms (including frameworks, partitions, joists, studding, rafters and stairways).

LEVELS	COURSES	
Level 1	<b>Principles of Construction</b> 1824CT / 9-12 <i>+NCCER Core Certification Possible</i>	<b>Principles of Architecture</b> 1819CT / 9-12
Level 2	<b>Construction Technology I</b> 1820CA/CB / 10-12 <i>Prerequisite: Principles of Construction</i> <b>OSHA 10 Hour</b>	
Level 3	<b>Construction Technology II</b> 1825CA/CB / 11-12 <i>Prerequisite: Construction Technology I</i> <b>OSHA 10 Hour</b>	
Level 4	<b>Practicum in Construction Technology</b> 1827CA/CB / 12 (E) <i>Prerequisite: Construction Technology II AND Selection Process</i>	

1 Semester Home Campus	2 Semester Home Campus	1 Semester Ben Barber	2 Semester Ben Barber
OCCUPATION	MEDIAN WAGE	ANNUAL OPENINGS	% GROWTH
Carpenters	\$35,922	5,031	26%
Cost Estimators	\$63,939	2,239	21%

## INDUSTRY BASED CERTIFICATIONS

### +NCCER Core - Principles of Construction

The NCCER Core is a Prerequisite to all other Level 1 craft curriculum. The learning objectives and performance tasks cover topics such as Basic Safety, Communication Skills and Instruction to Construction Drawings.

## SUPPORTING CERTIFICATIONS

### OSHA 10 Hour Certification - Construction Technology II

The 10 Hour Construction Safety certification is intended to provide an entry level construction worker's general awareness on recognizing & preventing hazards on the job.

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## DESIGN & MULTIMEDIA ARTS

The Design & Multimedia program of study explores the occupations and educational opportunities associated with designing or creating graphics to meet specific commercial or promotional needs, such as packaging, displays or logos.

LEVELS	COURSES			
Level 1	<b>Digital Media</b> 1280CT & 1280A-B / 9-12		<b>Video Game Design</b> 1269CT / 9-12	
Level 2	<b>Graphic Design I</b> 1891CA-CB / 9-12 + <b>Adobe Photoshop</b> <i>Certification Possible</i>	<b>Animation I</b> 1897CA-CB / 9-12 + <b>Adobe Photoshop</b> <i>Certification Possible</i>	<b>Commercial Photography I</b> 1889CA-CB / 9-12 + <b>Adobe Photoshop</b> <i>Certification Possible</i>	<b>Video Game Programming I</b> 1273CT / 9-12 <i>Prerequisite: Video Game Design</i>
Level 3	<b>Graphic Design II</b> 1893CA-CB / 10-12 <i>Prerequisite: Graphic Design I</i> + <b>Adobe Illustrator</b> <i>Certification Possible</i>	<b>Digital Art &amp; Animation</b> 1053BB / 10-12 <i>Prerequisite: Animation I</i> <b>Fine Arts Credit</b> <i>Recommend taking Digital Art AND 3D Modeling</i>	<b>Commercial Photography II</b> 1888CA-CB / 10-12 <i>Prerequisite: Commercial Photography I</i>	<b>Video Game Programming II</b> 1274CT / 10-12 <i>Prerequisite: Video Game Programming</i> + <b>Unity Certified Programmer</b>
Level 4	<b>Practicum in Graphic Design</b> 1899CA-CB / 11-12 <i>Prerequisite: GD II AND Selection Process</i> + <b>Adobe InDesign</b> <i>Certification Possible</i>	<b>Practicum in Animation</b> 1898CA-CB / 11-12 (E) <i>Prerequisite: Digital Art &amp; Animation OR 3D Modeling &amp; Animation AND Selection Process</i>	<b>Practicum in Commercial Photography</b> 1884CA-CB / 11-12 (E) <i>Prerequisite: Com Photo II AND Selection Process</i>	

1 Semester HC

2 Semester HC

1 Semester Ben Barber

2 Semester Ben Barber

Ben Barber or HC

OCCUPATION	MEDIAN WAGE	ANNUAL OPENINGS	% GROWTH
Graphic Designers	\$44,824	1,433	15%
Multimedia Artists & Animators	\$67,392	186	21%

### INDUSTRY BASED CERTIFICATIONS

+ **Adobe Certified Associate Photoshop** - Graphic Design I, Animation I & Commercial Photography I

This certification exam measures project setup & interface, organizing video projects, creating visual elements & publishing digital media.

+ **Adobe Certified Associate Illustrator** - Graphic Design II

This certification exam measures, project setup & interface, organizing documents, creating visual elements, & publishing digital media.

+ **Adobe Certified Associate Animate** - Animation II

The exam proves a student has the skills necessary to create dynamic and engaging content required for a career in animation & design.

+ **Adobe Certified Associate InDesign** - Practicum in Graphic Design

This exam measures the following domains: working in the design industry, project setup & interface, organizing documents, etc.

+ **Unity Certified Programmer** - Video Game Programming II

This exam measures UI, script user-interactions, integrate visual & audio assets, implement application state logic, simulate physics, etc.

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Students must have successfully completed a level 1 or 2 course AND a level 3 or 4 to take a practicum course.

To earn a CTE endorsement, an MISD student must take 4 or more credits in the same endorsement area, with at least 2 of 4 credits within the same program of study and must include at least one Level 3 or Level 4 CTE course.



## DIGITAL COMMUNICATIONS

The Digital Communications program of study explores the occupations and educational opportunities associated with the production of audio & visual media formats for various purposes, such as TV broadcasts, advertising, video production or motion pictures.

LEVELS	COURSES	
Level 1	<b>Web Communications</b> 1854 / 9-12	<b>Professional Communications</b> 2246 / 9-12
Level 2	<b>Audio/Video Production I</b> 1869CA-CB / 9-12	<b>Digital Audio Technology I</b> 1880CT / 9-12
Level 3	<b>Audio/Video Production II</b> 1871CA-CB / 10-12 <i>Prerequisite: A/V Production I</i> <b>+ Adobe Premiere Certification Possible</b>	<b>Digital Audio Technology II</b> 1885CT / 10-12 <i>Prerequisite: Digital Audio Technology I</i>
Level 4	<b>Practicum in Audio/Video Production</b> 1873CA-CB / 11-12 (E) <i>Prerequisite: Audio/Video Production II AND Selection Process</i>	<b>Practicum in Digital Audio Technology</b> 1887CA-CB / 11-12 <i>Prerequisite: Digital Audio Technology II AND Selection Process</i>
		<b>Sports Broadcasting Practicum</b> 1877CT / 11-12 <i>Prerequisite: Digital Audio Technology II AND Selection Process</i>

1 Semester Home Campus	2 Semester Home Campus	1 Semester Ben Barber	2 Semester Ben Barber
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OCCUPATION	MEDIAN WAGE	ANNUAL OPENINGS	% GROWTH
Sound Engineering Technicians	\$39,562	79	27%
Camera Operators, Television, Video & Motion Picture	\$50,024	129	9%
Audio & Video Equipment Technicians	\$40,581	757	29%
Film & Video Editors	\$47,382	118	23%

### INDUSTRY BASED CERTIFICATIONS

#### **+ Adobe Certified Associate Premiere Pro - Audio/Video Productions II**

This certification exam measures the following domains: working in the video industry, project setup & interface, organizing video projects, creating & modifying visual elements & publishing digital media.

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## ACCOUNTING & FINANCIAL SERVICES

The Accounting & Financial Services program of study teaches how to examine, analyze & interpret financial records. Through this program of study, students will learn the skills necessary to perform financial services, prepare financial statements, interpret accounting records, give advice or audit & evaluate statements prepared by others.

LEVELS	COURSES		
Level 1	Principles of Business Marketing & Finance 1715CT / 9-12	Money Matters 1230CT & 1230A & B / 9-12	BIM I 1240A-B / 9-12 <i>+ Microsoft Office Specialist Word</i>
Level 2	Accounting I 1271CT / 10-12 <i>+ Microsoft Office Specialist Excel</i>	Financial Mathematics 1224CT / 10-12 Prerequisite: Algebra I <b>Math Credit</b>	Banking & Financial Services 1226 / 10-12
Level 3	Accounting II 1272CT / 11-12 Prerequisite: Accounting I <i>+ Microsoft Office Expert Excel</i> <b>Math Credit</b>		
Level 4	Securities & Investments 1225CT / 11-12	Practicum in Entrepreneurship 1722 CA-CB / 11-12 Selection Process	

1 Semester HC	2 Semester HC	1 Semester Ben Barber	2 Semester Ben Barber	Ben Barber or HC
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OCCUPATION	MEDIAN WAGE	ANNUAL OPENINGS	% GROWTH
Accountants & Auditors	\$71,469	14,436	22%
Loan Officers	\$68,598	2,419	19%
Personal Financial Advisors	\$86,965	1,861	52%
Administrative Service Managers	\$96,138	2,277	21%
Insurance Underwriters	\$66,206	594	14%

### INDUSTRY BASED CERTIFICATIONS

#### **+ Microsoft Office Specialist Word - BIM I**

Successful candidates for this certification exam have a fundamental understanding of the Word environment and the ability to complete tasks independently.

#### **+ Microsoft Office Specialist Excel - Accounting I**

Successful candidates for this certification exam have a fundamental understanding of the Excel environment and the ability to complete tasks independently.

#### **+ Microsoft Office Expert Excel - Accounting II**

Candidates for this exam must have approximately 150 hours of instruction & hands-on experience with the product. They will create, manage & distribute professional spreadsheets for a variety of specialized purposes & situations.

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## BUSINESS MANAGEMENT

The Business Management program of study teaches how to plan, direct and coordinate the administrative services & operations of an organization. The students will learn the skills necessary to formulate policies, manage daily operations & allocate the use of materials and human resources.

LEVELS	COURSES		
Level 1	Principles of Business Marketing & Finance 1715CT / 9-12		BIM I 1240A-B / 9-12 <i>+ Microsoft Office Specialist Word</i>
Level 2	Business Law 1215CT & 1215A & B/ 10-12 <i>Prerequisite: Principles of Business, Marketing &amp; Finance</i>	Virtual Business 1203 / 9-12	BIM II 1250A-B / 10-12 <i>Prerequisite: BIM I</i>
Level 3	Business Management 1216CT / 10-12 <i>Prerequisite: 1-Level I or II Business Management Course</i>	Global Business 1202 / 10-12	
Level 4	Practicum in Entrepreneurship 1722 CA-CB / 11-12 <i>Selection Process</i>		

1 Semester HC	2 Semester HC	1 Semester Ben Barber	2 Semester Ben Barber	Ben Barber or HC
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OCCUPATION	MEDIAN WAGE	ANNUAL OPENINGS	% GROWTH
Administrative Service Managers	\$96,138	2,277	21%
Management Analysts	\$87,651	4,706	32%
General & Operations Managers	\$107,640	18,679	20%
Operations Research Analysts	\$78,083	1,128	38%
Supervisors of Administrative Workers	\$57,616	14,982	20%

### INDUSTRY BASED CERTIFICATIONS

#### + Microsoft Office Specialist Word - BIM I

Successful candidates for this certification exam have a fundamental understanding of the Word environment and the ability to complete tasks independently.

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## ENTREPRENEURSHIP

The Entrepreneurship program of study teaches how to plan, direct and coordinate the management and operations of public or private sector organizations. Students will learn the skills necessary to formulate policies, manage daily operations, analyze management structures and plan for the use of material & human resources.

LEVELS	COURSES	
Level 1	Principles of Business, Marketing & Finance 1715CT / 9-12	BIM I 1240A-B / 9-12 <i>+ Microsoft Office Specialist Word</i>
Level 2	Entrepreneurship I 1720CT / 9-12 <i>Prerequisite: Principles of Business, Marketing &amp; Finance</i> <i>+ Entrepreneurship &amp; Small Business Certification Possible</i>	
Level 3	Entrepreneurship II 1721CT / 11-12 <i>Prerequisite: Entrepreneurship I</i>	Mobile Applications Development 1052CT / 9-12 <i>Prerequisite: Algebra I AND Computer Science I</i>
Level 4	Practicum in Entrepreneurship 1722 CA-CB / 11-12 <i>Selection Process</i>	

1 Semester Home Campus	2 Semester Home Campus	1 Semester Ben Barber	2 Semester Ben Barber
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OCCUPATION	MEDIAN WAGE	ANNUAL OPENINGS	% GROWTH
General & Operations Managers	\$107,640	18,679	20%
Management Analysts	\$87,651	4,706	32%
Manager	\$113,110	1,794	26%

### INDUSTRY BASED CERTIFICATIONS

#### **+ Entrepreneurship & Small Business Certification - Entrepreneurship**

Successful candidates for this exam will have a key conceptual knowledge of entrepreneurial & small business principles. Successful completion of this certification will validate skills & knowledge for those students interested in working in a middle-skill trade profession as their own boss & those with entrepreneurship & small business career aspirations.

#### **+ Microsoft Office Specialist Word - BIM I**

Successful candidates for this certification exam have a fundamental understanding of the Word environment and the ability to complete tasks independently.

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BUSINESS & INDUSTRY ENDORSEMENT  
Business, Marketing & Finance

## MARKETING & SALES

The Marketing & Sales program of study teaches how to collect information to determine potential sales of a product or service and/or create a marketing campaign to market or distribute goods and services. Through this program of study, students will learn the skills necessary to understand and apply data on customer demographics, preferences and buying habits.

LEVELS	COURSES		
Level 1	Principles of Business, Marketing & Finance 1715CT / 9-12		
Level 2	Sports & Entertainment Marketing AND Fashion Marketing 1725CT AND 1515CT / 9-12 <i>Courses must be taken together</i>	Sports & Entertainment Marketing 1725CT / 9-12	Virtual Business 1203 / 9-12
Level 3	Social Media Marketing AND Advertising 1727CT AND 1711CT / 10-12 <i>Courses must be taken together</i> <i>+Google Analytics Individual Qualification Certification Possible</i>	Fundamentals of Real Estate 1205 CA-CB / 11-12 <i>Prerequisite: Principles of Business, Marketing &amp; Finance</i>	
Level 4	Practicum in Entrepreneurship 1722 CA-CB / 11-12 <i>Selection Process</i>		

1 Semester Home Campus	2 Semester Home Campus	1 Semester Ben Barber	2 Semester Ben Barber
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OCCUPATION	MEDIAN WAGE	ANNUAL OPENINGS	% GROWTH
Marketing Research Analysts & Marketing Specialist	\$70,346	4,664	40%
Insurance Sales Agents	\$43,181	5,886	30%
Management Analysts	\$87,651	4,706	32%
Wholesale & Retail Buyers	\$51,106	1,299	19%
First-Line Supervisors of Retail Sales Workers	\$72,550	2,826	15%

### INDUSTRY BASED CERTIFICATIONS

**+Google Analytics Individual Qualification** - Sports & Entertainment Marketing AND Social Media Marketing  
This assessment is designed to test knowledge or digital analytics best practices and the Google Analytics platform.

*The district will pay 100% of the cost of the certification test if students can show mastery by passing a certification practice test AND maintain an 80+ overall course grade at the time of the certification test. If students don't meet the requirements above, they must pay 100% of the cost of the certification test.*

Students must have successfully completed a level 1 or 2 course AND a level 3 or 4 to take a practicum course.

To earn a CTE endorsement, an MISD student must take 4 or more credits in the same endorsement area, with at least 2 of 4 credits within the same program of study and must include at least one Level 3 or Level 4 CTE course.



## TEACHING & TRAINING

The Teaching & Training program of study prepares students for careers related to teaching, instruction & creation of instructional & enrichment materials. It familiarizes students with the processes for developing curriculum, coordinating educational content and coaching groups & individuals.

LEVELS	COURSES	
Level 1	Principles of Education 1536CT / 9-12	
Level 2	Human Growth & Development 1537CT / 10-12 <i>Prerequisite: Principles of Education</i>	Communication & Technology in Education 1532CT / 10-12
Level 3	Instructional Practices 1531CA-CB / 11-12 <i>Prerequisite: Human Growth &amp; Development AND Selection Process</i> <b>+ Educational Aide I Certification Possible</b>	
Level 4	Practicum in Education & Training 1535CA-CB / 12 <i>Prerequisite: Instructional Practices AND Selection Process</i> <b>+ Educational Aide I Certification Possible</b>	

1 Semester Home Campus	2 Semester Home Campus	1 Semester Ben Barber	2 Semester Ben Barber
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OCCUPATION	MEDIAN WAGE	ANNUAL OPENINGS	% GROWTH
Adult Basic & Secondary Education & Literacy Teachers & Instructors	\$48,069	862	17%
Middle School Teachers except Special & CTE Education	\$54,510	6,407	15%
CTE Teachers, Secondary	\$56,360	719	9%
SPED Teachers, Secondary	\$56,720	980	18%

### INDUSTRY BASED CERTIFICATIONS

#### **+ Educational Aide I Certification** - Instructional Practices

This certification measures the following domains or competencies: planning, managing & providing education & training services & related learning support services; exploring & understanding needed preparation for Education & Training careers & participating in a field based internship.

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Students interested in pursuing an Education college degree are recommended to talk to their counselors about the Texas Wesleyan University program. This program offered MISD students interested in pursuing a career in Education K-12 the opportunity to complete up to 51 hours of their degree plan while still in high school. This program would begin in the spring semester of their 10th grade year.

Students must have successfully completed a level 1 or 2 course AND a level 3 or 4 to take a practicum course.

**To earn a CTE endorsement, an MISD student must take 4 or more credits in the same endorsement area, with at least 2 of 4 credits within the same program of study and must include at least one Level 3 or Level 4 CTE course.**



## HEALTHCARE INFORMATICS

The Healthcare Informatics program of study focuses on exposing students to the management & use of patient information in the healthcare field. Students may learn about & research recent modifications or computerized healthcare & the process of creating & maintaining hospital & patient records in accordance with regulatory requirements of the healthcare system.

LEVELS	COURSES	
Level 1	Medical Terminology 1443CT / 9-12	Principles of Health Science 1410CT / 9-12
Level 2	<b>BIM I</b> 1240A-B / 9-12 <i>+Microsoft Office Specialist Word</i>	
Level 3	<b>Medical Coding &amp; Billing</b> 1460CT / 11-12 <i>Prerequisite: BIM I, can take concurrently AND Medical Terminology AND Principles of Health Science AND Selection Process</i> <i>+ Medical Coding &amp; Billing Specialist Certification Possible</i> <i>Stop the Bleed Certification Possible</i>	
Level 4	<b>World Health Research</b> 1442CT / 11-12 <i>Prerequisite: Biology &amp; Chemistry</i>	

1 Semester Home Campus	2 Semester Home Campus	1 Semester Ben Barber	2 Semester Ben Barber
OCCUPATION	MEDIAN WAGE	ANNUAL OPENINGS	% GROWTH
Medical Records & Health Information Technicians	\$35,922	1,588	24%
Medical & Health Service Managers	\$57,762	428	24%
Billing & Posting Clerks	\$35,485	5,775	25%

### INDUSTRY BASED CERTIFICATIONS

#### + Microsoft Office Specialist Word - BIM I

Successful candidates for this certification exam have a fundamental understanding of the Word environment and the ability to complete tasks independently.

#### + Medical Coding & Billing Certification - Medical Coding & Billing

This certification helps students gain skills healthcare employers seek when searching for medical insurance billers and coders to fill the important role of recording, registering and tracking patient accounts.

### SUPPORTING CERTIFICATIONS

#### Stop the Bleed Certification - Medical Coding & Billing

Studies have shown that the help given by an immediate responder can often make the difference between life and death, even before medical professionals arrive. The American College of Surgeons Committee on Trauma is leading the effort to save lives by teaching individuals how to provide vital initial response to stop uncontrolled bleeding in emergency situations. The Bleeding Control Basics course gives participants the necessary tools to become an empowered initial responder.

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**To earn a CTE endorsement, an MISD student must take 4 or more credits in the same endorsement area, with at least 2 of 4 credits within the same program of study and must include at least one Level 3 or Level 4 CTE course.**



## HEALTHCARE DIAGNOSTICS

The Healthcare Diagnostics program of study introduces students to occupations & education opportunities related to performing complex medical laboratory tests for the diagnosis, treatment & prevention of disease.

LEVELS	COURSES		
Level 1	Principles of Health Science 1410CT / 9-12		
Level 2	Medical Terminology 1443CT / 9-12		
Level 3	<b>Health Science Theory</b> 1411CT / 10-12 <i>Prerequisite: Biology AND Principles of Health Science OR Medical Terminology OR Introduction to Dental Science</i> <b>CPR Certification Possible</b>	<b>Medical Microbiology</b> 8120CT / 10-12 <i>Prerequisite: Biology &amp; Chemistry AND Principles of Health Science OR Introduction to Dental Science</i> <b>Science Credit</b>	
Level 4	<b>Anatomy &amp; Physiology</b> 0810CT OR 8100A-B / 11-12 <i>Prerequisite: Biology &amp; 1 other science credit AND Principles of Health Science OR Introduction to Dental Science</i> <b>Science Credit</b>	<b>Pathophysiology</b> 8125CT / 11-12 <i>Prerequisite: Biology &amp; Chemistry AND Principles of Health Science</i> <b>Science Credit</b>	<b>Practicum in Health Science*</b> 1431CA-CB / 12 <i>Prerequisite: Health Science Theory AND any Level 3 Healthcare Therapeutic Course AND Selection Process</i>
<b>*Students cannot take Pharmacy Tech AND Practicum in Health Science.</b>			

1 Semester Home Campus	2 Semester Home Campus	1 Semester Ben Barber	2 Semester Ben Barber
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OCCUPATION	MEDIAN WAGE	ANNUAL OPENINGS	% GROWTH
Diagnostic Medical Sonographers	\$69,909	495	35%
Nuclear Medicine Technologists	\$75,962	91	13%
Radiologic Technologists	\$55,494	1,196	19%
Magnetic Resonance Image Technologists	\$68,661	217	21%

### SUPPORTING CERTIFICATIONS

#### CPR Certification - Health Science Theory

Sudden cardiac arrest (SCA) is a leading cause of death among adults in the United States. Cardiopulmonary resuscitation (CPR) dramatically increases the chance of survival for a victim suffering from SCA. CPR is a combination of chest compressions and breaths, and provides critical blood flow and oxygen to the heart and brain.

*The district will pay 100% of the cost of the certification test if students can show mastery by passing a certification practice test AND maintain an 80+ overall course grade at the time of the certification test. If students don't meet the requirements above, they must pay 100% of the cost of the certification test.*

Students must have successfully completed a level 1 or 2 course AND a level 3 or 4 to take a practicum course.

To earn a CTE endorsement, an MISD student must take 4 or more credits in the same endorsement area, with at least 2 of 4 credits within the same program of study and must include at least one Level 3 or Level 4 CTE course.



# HEALTHCARE THERAPEUTIC

The Healthcare Therapeutic program of study introduces students to occupations & educational opportunities related to diagnosing & treating acute, episodic or chronic illness independently or as part of a healthcare team.

LEVELS	COURSES					
Level 1	Principles of Health Science 1410CT / 9-12			Introduction to Dental Science 1465CT / 9-12		
Level 2	Medical Terminology 1443CT / 9-12			Dental Anatomy & Physiology 1461CT / 10-12 <i>Prerequisite: Introduction to Dental Science</i>		
Level 3	Anatomy & Physiology 0810CT OR 8100A-B / 11-12 <i>Prerequisite:</i> Biology & 1 other science credit AND Principles of Health Science OR Medical Terminology OR Introduction to Dental Science <b>Science Credit</b>	Health Science Theory 1411CT / 10-12 <i>Prerequisite:</i> Biology AND Principles of Health Science OR Medical Terminology OR Introduction to Dental Science <b>CPR Certification Possible</b>	Medical Microbiology 8120CT / 10-12 <i>Prerequisite:</i> Biology & Chemistry AND Principles of Health Science OR Medical Terminology OR Introduction to Dental Science <b>Science Credit</b>	Phlebotomy* 1424CT / 11-12 <i>Prerequisite:</i> Principles of Health Science OR Medical Terminology AND another Level 3 course AND Selection Process <b>+Phlebotomy Technician Certification Possible</b>	EKG/ECG* 1426CT / 11-12 <i>Prerequisite:</i> Principles of Health Science OR Medical Terminology AND another Level 3 course AND Selection Process <b>+Certified EKG/ECG Technician Possible</b>	
Level 4	Pathophysiology 8125CT / 11-12 <i>Prerequisite:</i> Biology & Chemistry AND Principles of Health Science OR Medical Terminology <b>Science Credit</b>	Certified Nurse Aide/Assistant* 1471CT / 12 <i>Prerequisite:</i> Health Science Theory AND any Level 3 Healthcare Therapeutic Course AND Selection Process <b>+Certified Nurse Aide/Assistant Certification Possible</b>	Pharmacy Technician* 1421CA-CB / 12 <i>Prerequisite:</i> Health Science Theory AND any Level 3 Healthcare Therapeutic Course AND Selection Process <b>+Certified Pharmacy Technician Certification Possible</b>	Emergency Medical Technician* 1451CA-CB / 12 <i>Prerequisite:</i> Health Science Theory AND any Level 3 Healthcare Therapeutic Course AND Selection Process <b>+Emergency Medical Technician Basic Certification Possible</b>	Medical Assistant* 1413CA-CB / 12 <i>Prerequisite:</i> Health Science Theory AND Phlebotomy OR EKG/ECG AND Selection Process <b>+Certified Medical Assistant Certification Possible</b>	Practicum in Health Science* 1431CA-CB / 12 <i>Prerequisite:</i> Health Science Theory AND any Level 3 Healthcare Therapeutic Course AND Selection Process

*\*Students cannot take Medical Assistant AND EMT. Students cannot take Pharmacy Tech AND Practicum in Health Science. Students can ONLY take Phlebotomy, EKG/ECG OR Certified Nurse Aide/Assistant.*

1 Semester Home Campus	2 Semester Home Campus	1 Semester Ben Barber	2 Semester Ben Barber
OCCUPATION	MEDIAN WAGE	ANNUAL OPENINGS	% GROWTH
Diagnostic Medical Sonographers	\$69,909	495	35%
Nuclear Medicine Technologists	\$75,962	91	13%
Radiologic Technologists	\$55,494	1,196	19%
Magnetic Resonance Imagine Technologists	\$68,661	217	21%

## INDUSTRY BASED CERTIFICATIONS

### **+ Phlebotomy Technician Certification - Phlebotomy**

This certification exam content domains can include quality & professional issues, infection control & safety, patient id & site preparation, orders & equipment selection, blood collections & processing.

### **+ Certified EKG/ECG Technician - EKG/ECG**

EKG/ECG technicians carry the responsibility of administering electrocardiogram tests, which help practitioners understand the state of a patient's heart.

### **+ Certified Nurse Aide/Assistant - Certified Nurse Aide/Assistant**

The purpose of this exam is to test that a candidate understands & can safely perform the job of an entry-level nurse aide. The exam has the following competencies: physical care skills to include nutrition, hydration, elimination, infection control, data collection, psychological care skills & the role of nurse aide.

### **+ Certified Pharmacy Technician - Pharmacy Technician**

This certification exam assesses the skill attainment of students in performing tasks such as: receiving prescription requests from patients & doctors' offices, accurately measuring medication amounts, packaging & labeling prescription, establishing & maintaining patient records, accepting payment for prescriptions, processing insurance claims & managing inventory.

### **+ Emergency Medical Technician Basic - Emergency Medical Technician**

This certification exam measures important competencies as part of a comprehensive EMS response system. The exam covers the entire spectrum of EMS care including: airway, respiratory & ventilation, cardiology & resuscitation, trauma, etc.

### **+ Certified Medical Assistant - Medical Assistant**

This certification competencies may include clinical patient care, general patient care, administrative assisting, patient care & education & infection control.

## SUPPORTING CERTIFICATIONS

### **CPR Certification - Health Science Theory**

Sudden cardiac arrest (SCA) is a leading cause of death among adults in the United States. Cardiopulmonary resuscitation (CPR) dramatically increases the chance of survival for a victim suffering from SCA. CPR is a combination of chest compressions and breaths, and provides critical blood flow and oxygen to the heart and brain.

*The district will pay 100% of the cost of the certification test if students can show mastery by passing a certification practice test AND maintain an 80+ overall course grade at the time of the certification test. If students don't meet the requirements above, they must pay 100% of the cost of the certification test.*

Students must have successfully completed a level 1 or 2 course AND a level 3 or 4 to take a practicum course.

**To earn a CTE endorsement, an MISD student must take 4 or more credits in the same endorsement area, with at least 2 of 4 credits within the same program of study and must include at least one Level 3 or Level 4 CTE course.**



## CULINARY ARTS

The Culinary Arts program of study introduces students to occupations & educational opportunities related to planning, directing or coordinating activities of a food & beverage organization or department. It also explores opportunities involved in directing & participating in the preparation & cooking of food.

LEVELS	COURSES	
Level 1	<b>Introduction to Culinary Arts</b> 1542CT OR 1542A-B / 9-12	
Level 2	<b>Culinary Arts</b> 1546CA-CB / 10-12 <i>Prerequisite: Introduction to Culinary Arts</i> <b>+ServSafe Manager Certification Possible</b>	
Level 3	<b>Baking &amp; Pastry</b> 1558CA-CB / 11-12 <i>Prerequisite: Culinary Arts</i>	
Level 4	<b>Practicum in Culinary Arts I</b> 1547CA-CB / 11-12 <i>Prerequisite: Culinary Arts AND Selection Process</i> <b>+Certified Fundamentals Cook Certification Possible</b>	<b>Practicum in Culinary Arts II</b> 1549CA-CB / 12 <i>Prerequisite: Culinary Arts AND Selection Process</i>

1 Semester HC	2 Semester HC	1 Semester Ben Barber	2 Semester Ben Barber	Ben Barber or HC
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OCCUPATION	MEDIAN WAGE	ANNUAL OPENINGS	% GROWTH
Food Service Managers	\$55,619	1,561	28%
Chef & Head Cooks	\$43,285	1,366	25%
Food Science Technicians	\$34,382	236	11%
Food & Beverage Managers	\$55,619	1,561	28%

### INDUSTRY BASED CERTIFICATIONS

#### + ServSafe Manager - Culinary Arts

This is a food safety program providing high quality food safety education & training for the restaurant & food service industry. Learn about food borne illness, how to prevent it & how to train employees in food sanitation.

#### + Certified Fundamentals Cook Certification - Practicum in Culinary Arts I

This certification exam measures the following competencies: recipes, knife skills, large & small equipment, sanitation & safety, cold food preparation, meat, poultry, fish & seafood, dairy products, receiving & storage, nutritional values & customer service.

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Students must have successfully completed a level 1 or 2 course AND a level 3 or 4 to take a practicum course.

To earn a CTE endorsement, an MISD student must take 4 or more credits in the same endorsement area, with at least 2 of 4 credits within the same program of study and must include at least one Level 3 or Level 4 CTE course.



## FAMILY & COMMUNITY SERVICES

The Family & Community Services program of study introduces students to knowledge & skills related to social services, including child & human development & consumer sciences. Students may learn about or practice managing social & community services or teaching family & consumer sciences.

LEVELS	COURSES				
Level 1	Principles of Human Services 1505A-B / 9-12	Professional Communications 2246 / 9-12	Interpersonal Studies 1517 / 9-12	Dollars & Sense 1220 / 9-12	Principles of Community Services 1523A-B / 9-12
Level 2	Child Development 1520A-B / 10-12		Human Growth & Development 1537CT / 10-12		Lifetime Nutrition & Wellness 1513 / 9-12
Level 3	Counseling & Mental Health 1514A-B / 11-12 <i>Prerequisite: 2 credits from Level I or II in Family &amp; Community Services</i>			Family & Community Services 1518A-B / 11-12 <i>Prerequisite: Principles of Human Services + Community Health Worker Certification Possible</i>	
Level 4	Practicum in Human Services 1526 CA-CB / 11-12 (E) <i>Selection Process</i>				

1 Semester Home Campus	2 Semester Home Campus	1 Semester Ben Barber	2 Semester Ben Barber
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OCCUPATION	MEDIAN WAGE	ANNUAL OPENINGS	% GROWTH
Child, Family & School Social Workers	\$41,350	2,221	17%
Social & Community Services Manager	\$65,146	608	33%
Marriage & Family Therapists	\$42,266	217	35%
Social & Human Service Assistants	\$32,448	2,822	25%
Mental Health & Substance Abuse & Behavioral Disorder Counselors	\$42,120	576	39%

### INDUSTRY BASED CERTIFICATIONS

#### + Community Health Worker Certification

This certification develops the following 8 core competencies: communication, interpersonal, service coordination, capacity-building, advocacy, teaching, organizational skills, knowledge based on specific health issues.

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Students must have successfully completed a level 1 or 2 course AND a level 3 or 4 to take a practicum course.

To earn a CTE endorsement, an MISD student must take 4 or more credits in the same endorsement area, with at least 2 of 4 credits within the same program of study and must include at least one Level 3 or Level 4 CTE course.



## BUSINESS & INDUSTRY AND STEM ENDORSEMENT Information Technology

# NETWORKING SYSTEMS

The Networking Systems program of study explores the occupations & educational opportunities associated with designing & implementing computer & information networks, such as local area networks, wide area networks, intranets, extranets & other data communications networks.

LEVELS	COURSES	
Level 1	<b>Computer Science I (PLTW)</b> 1050CT / 9-12 <i>Prerequisite: Algebra I</i> <b>LOTE Credit</b>	<b>Principles of Information Technology</b> 1850CT / 9-12
Level 2	<b>AP Computer Science Principles</b> 1266CT / 9-12 <i>Prerequisite: Algebra I</i> <b>Weighted &amp; LOTE Credit</b>	<b>Computer Maintenance</b> 1829CA-CB / 10-12 <i>Prerequisite: Principles of IT</i> <b>+ CompTIA A+ Certification Possible</b>
Level 3	<b>Networking</b> 1831CA-CB / 11-12 <i>Prerequisite: Computer Maintenance</i>	
Level 4	<b>Practicum in Information Technology</b> 1851CA-CB / 12 <i>Prerequisite: 2 courses in Information Technology OR STEM AND Selection Process</i> <b>+ Oracle Certified Database Associate Certification Possible</b>	

1 Semester Home Campus	2 Semester Home Campus	1 Semester Ben Barber	2 Semester Ben Barber
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OCCUPATION	MEDIAN WAGE	ANNUAL OPENINGS	% GROWTH
Database Administrator	\$83,075	1,063	19%
Computer Hardware Engineer	\$111,738	343	24%
Computer Systems Analyst & Support	\$87,568	5,937	29%
Computer Network Architects	\$111,633	1,082	23%
Computer Network Support Specialists	\$68,037	1,824	19%

### INDUSTRY BASED CERTIFICATIONS

#### +CompTIA A+ Certification - Computer Maintenance

This certification exam measures various objectives including: mobile devices, networking technology, hardware, network troubleshooting, installing & configuring operating systems, expanded security, and software troubleshooting.

#### + Oracle Certified Database Associate Certification - Practicum in Information Technology

This certification exam measures the following objectives: using basic select statements, definite table joins, defining select statements, using single-row function to customize output, using conversion function & conditional expressions, etc.

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Students must have successfully completed a level 1 or 2 course AND a level 3 or 4 to take a practicum course.

**To earn a CTE endorsement, an MISD student must take 4 or more credits in the same endorsement area, with at least 2 of 4 credits within the same program of study and must include at least one Level 3 or Level 4 CTE course.**



## BUSINESS & INDUSTRY AND STEM ENDORSEMENT Information Technology

# WEB DEVELOPMENT

The Web Development program of study explores the occupations & educational opportunities associated with designing, creating and modifying websites.

LEVELS	COURSES	
Level 1	Principles of Information Technology 1850CT / 9-12	
Level 2	Computer Science I (PLTW) 1050CT / 9-12 Prerequisite: Algebra I <b>LOTE Credit</b>	Web Communications 1854 / 9-12
Level 3	Web Design 1855CT / 10-12 <i>+ WD Certified Web Design Certification Possible</i>	
Level 4	Practicum in Information Technology 1851CA-CB / 12 Prerequisite: 2 courses in Information Technology OR STEM AND Selection Process <i>+ Oracle Certified Database Associate Certification Possible</i>	

1 Semester Home Campus	2 Semester Home Campus	1 Semester Ben Barber	2 Semester Ben Barber
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OCCUPATION	MEDIAN WAGE	ANNUAL OPENINGS	% GROWTH
Web Developers	\$67,912	1,079	39%
Web Administrators, Computer Occupations	\$85,197	1,616	20%
Software Developers	\$104,499	6,311	30%

## INDUSTRY BASED CERTIFICATIONS

### + WD Certified Web Design Certification - Web Design

This certification exam measures the following objectives: basic internet history & computer knowledge, web graphics concepts, HTML5 and CSS, JavaScript & PHP/MySQL, client & server side scripting and website administration.

### + Oracle Certified Database Associate Certification - Practicum in Information Technology

This certification exam measures the following objectives: using basic select statements, definite table joins, defining select statements, using single-row function to customize output, using conversion function & conditional expressions, etc.

*The district will pay 100% of the cost of the certification test if students can show mastery by passing a certification practice test AND maintain an 80+ overall course grade at the time of the certification test. If students don't meet the requirements above, they must pay 100% of the cost of the certification test.*

Students must have successfully completed a level 1 or 2 course AND a level 3 or 4 to take a practicum course.

To earn a CTE endorsement, an MISD student must take 4 or more credits in the same endorsement area, with at least 2 of 4 credits within the same program of study and must include at least one Level 3 or Level 4 CTE course.



## LAW ENFORCEMENT

The Law Enforcement program of study teaches students about the development of, adherence to & protection of law. Students may learn how to appropriately & legally respond to breaches in the law accordingly to statutory rules & regulations as well as investigate how & why the breaches occurred.

LEVELS	COURSES		
Level 1	Principles of Law, Public Safety, Corrections & Security 9400CT / 9-12		
Level 2	<b>Law Enforcement I</b> 9410CT / 9-12 <i>Prerequisite: Principles of Law</i> <b>FEMA – Intro to Incident Command Certification Possible</b>	<b>Federal Protective Services</b> 9450CT / 9-12 <i>Prerequisite: Principles of Law</i> <b>FEMA – Community Emergency Response Team Certification Possible</b>	<b>Criminal Investigation</b> 9411CT / 10-12 <i>Prerequisite: Principles of Law</i> <b>What Every Officer Should Know About DNA Evidence Certification Possible</b>
Level 3	<b>Law Enforcement II</b> 9420CT / 10-12 <i>Prerequisite: Law Enforcement I</i> <b>+ Non-Commissioned Security Officer Level II</b>	<b>Correctional Services</b> 9440CT / 12 <i>Prerequisite: Principles of Law</i>	<b>Forensic Psychology</b> 9431CT / 11-12 <i>Prerequisite: Principles of Law</i> <b>Law 101: Legal Guide for Forensic Expert Certification Possible</b>
Level 4	<b>Practicum in Law, Public Safety, Corrections &amp; Security</b> 9422CA-CB / 11-12 <i>Selection Process</i>		<b>Forensic Science</b> 9430CT / 11-12 <i>Prerequisite: Criminal Investigation AND Biology AND Chemistry</i> <b>Crime Scene &amp; DNA Basics Certification Possible</b> <b>Science Credit</b>

1 Semester Home Campus	2 Semester Home Campus	1 Semester Ben Barber	2 Semester Ben Barber
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OCCUPATION	MEDIAN WAGE	ANNUAL OPENINGS	% GROWTH
Police & Sheriff's Patrol Officer	\$60,112	5,241	13%
Probation Officer & Correctional Treatment Officers	\$44,054	793	9%
Correctional Officers & Jailers	\$40,186	4,683	9%
Immigration & Customs Inspectors	\$78,104	1,236	9%
First-Line Supervisors of Police & Detectives	\$91,312	253	25%

### INDUSTRY BASED CERTIFICATIONS

**+ Non-Commissioned Security Officer Level II – Law Enforcement II**

A student who completes this certification could work in a variety of occupations, including security guard & personal security.

### SUPPORTING CERTIFICATIONS

These certifications are used to support curriculum and reinforce knowledge & skills

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Students must have successfully completed a level 1 or 2 course AND a level 3 or 4 to take a practicum course.

**To earn a CTE endorsement, an MISD student must take 4 or more credits in the same endorsement area, with at least 2 of 4 credits within the same program of study and must include at least one Level 3 or Level 4 CTE course.**



## LEGAL STUDIES

The Legal Studies program of study introduces students to the occupations & educational opportunities related to representing clients in criminal & civil litigations & other legal proceedings, as well as assisting lawyers & preparing legal documents.

LEVELS	COURSES	
Level 1	Principles of Law, Public Safety, Corrections & Security 9400CT / 9-12	
Level 2	Court Systems & Practices I 9415CT / 10-12	Business Law 1215CT & 1215A & B / 10-12 <i>Prerequisite: Principles of Business, Marketing &amp; Finance</i>
Level 3	Court Systems & Practices II 9416CT / 11-12 <i>Prerequisite: Court Systems &amp; Practices</i>	
Level 4	Practicum in Law, Public Safety, Corrections & Security 9422CA-CB / 11-12 <i>Selection Process</i>	

1 Semester HC	2 Semester HC	1 Semester Ben Barber	2 Semester Ben Barber	Ben Barber or HC
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OCCUPATION	MEDIAN WAGE	ANNUAL OPENINGS	% GROWTH
Lawyers	\$126,131	2,801	19%
Paralegals & Legal Assistants	\$50,544	2,837	19%

### INDUSTRY BASED CERTIFICATIONS

No certifications offered at this time.

*The district will pay 100% of the cost of the certification test if students can show mastery by passing a certification practice test AND maintain an 80+ overall course grade at the time of the certification test. If students don't meet the requirements above, they must pay 100% of the cost of the certification test.*

Students must have successfully completed a level 1 or 2 course AND a level 3 or 4 to take a practicum course.

To earn a CTE endorsement, an MISD student must take 4 or more credits in the same endorsement area, with at least 2 of 4 credits within the same program of study and must include at least one Level 3 or Level 4 CTE course.



# MANUFACTURING TECHNOLOGY

The Manufacturing Technology program of study focuses on the development & use of automatic & computer-controlled machines, tools, & robots that perform work on metal or plastic. Students will learn how to set up & operate a variety of machine tools to produce precision parts & instruments.

LEVELS	COURSES	
Level 1	<b>Principles of Manufacturing</b> 1809CT / 9-12	
Level 2	<b>Diversified Manufacturing</b> 1828CT / 9-12 <i>Prerequisite: Principles of Manufacturing</i>	
Level 3	<b>Precision Metal Manufacturing I</b> 1806CA-CB / 10-12 <i>Prerequisite: Principles of Manufacturing</i> <b>OSHA 10 Hour Certification Possible</b>	<b>Computer Integrated Manufacturing (PLTW)</b> 1838CT / 10-12 <i>Prerequisite: Introduction to Engineering</i> <b>Weighted Credit</b>
Level 4	<b>Precision Metal Manufacturing II</b> 1807CA-CB / 11-12 <i>Prerequisite: Precision Metal Manufacturing I</i> <b>+NIMS Level I CNC Milling Certification Possible</b>	<b>Practicum in Manufacturing</b> 1822CA-CB / 12 (E) <i>Prerequisite: Precision Metal Manufacturing I AND Selection Process</i>

1 Semester Home Campus	2 Semester Home Campus	1 Semester Ben Barber	2 Semester Ben Barber
OCCUPATION	MEDIAN WAGE	ANNUAL OPENINGS	% GROWTH
Mechanical Engineering Technicians	\$57,117	453	9%
Production & Operating Technicians	\$62,171	5,094	9%
CNC Machine Programmers	\$54,891	222	13%

## INDUSTRY BASED CERTIFICATIONS

### + NIMS Level I CNC Milling Certification - Precision Metal Manufacturing II

This certification exam includes these domains: arithmetic, IPM calculations, SFM to RPM conversions, configurations, fittings, holder applications, feature control frame, geometric control symbols, features with size verification, etc.

## SUPPORTING CERTIFICATIONS

### OSHA 10 Hour Certification - Precision Metal Manufacturing I

The 10 Hour Construction Safety certification is intended to provide an entry level construction worker's general awareness on recognizing & preventing hazards on the job.

*The district will pay 100% of the cost of the certification test if students can show mastery by passing a certification practice test AND maintain an 80+ overall course grade at the time of the certification test. If students don't meet the requirements above, they must pay 100% of the cost of the certification test.*

Students must have successfully completed a level 1 or 2 course AND a level 3 or 4 to take a practicum course.

To earn a CTE endorsement, an MISD student must take 4 or more credits in the same endorsement area, with at least 2 of 4 credits within the same program of study and must include at least one Level 3 or Level 4 CTE course.



## BUSINESS & INDUSTRY ENDORSEMENT Manufacturing

# WELDING

The Welding program of study focuses on the development & use of automated & computer-controlled machines, tools & robots that perform work on metal or plastic. Students will learn how to modify parts to make or repair machine tools or maintain individual machines & how to use hand-welding or flame-cutting equipment.

LEVELS	COURSES	
Level 1	Principles of Manufacturing 1809CT / 9-12	
Level 2	<b>Welding I</b> 1813 CA-CB / 10-12 <i>Prerequisite: Principles of Manufacturing</i> <b>+AWS D1.1 Structural Steel Tack Welder AND</b> <b>OSHA 10 Hour Certification Possible</b>	<b>TCC WLDG 1430 Intro to Gas Metal Arc Welding</b> 0177 / 10-12 <i>No TSI Requirement</i> <b>Weighted Credit</b> This course will be completed in the 2nd semester
Level 3	<b>Welding II</b> 1814CA-CB / 11-12 <i>Prerequisite: Welding I</i> <b>+AWS D1.1 Structural Steel Welder</b> <b>Certification Possible</b>	<b>TCC WLDG 1428 Intro to Shielded Metal Arc Welding</b> 0176 / 10-12 <i>No TSI Requirement</i> <b>Weighted Credit</b>
		<b>TCC WLDG 1417 Intro to Layout &amp; Fabrication</b> 0178 / 11-12 <i>Prerequisite of WLDG 1430 OR WLDG 1428</i> <i>No TSI Requirement</i> <b>Weighted Credit</b>
Level 4	<b>Practicum in Manufacturing</b> 1822CA-CB / 12 (E) <i>Prerequisite: Welding I AND Selection Process</i>	

1 Semester HC	2 Semester HC	1 Semester Ben Barber	2 Semester Ben Barber	College Course Weighted Credit
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OCCUPATION	MEDIAN WAGE	ANNUAL OPENINGS	% GROWTH
Welders, Cutters, Solderers & Brazers	\$41,350	6,171	9%

### INDUSTRY BASED CERTIFICATIONS

#### +AWS D1.1 Structural Steel Tack Welder Certification - Welding I

Students must demonstrate the ability to produce welds meeting the prescribed standards in accordance to AWS D9.1 tack welding code.

#### +AWS D1.1 Structural Steel Welder Certification - Welding II

Students must demonstrate the ability to produce welds meeting the prescribed standards in accordance to AWS D1.1 Structural Steel welding code.

### SUPPORTING CERTIFICATIONS

#### OSHA 10 Hour Certification - Welding II

The 10 Hour Construction Safety certification is intended to provide an entry level construction worker's general awareness on recognizing & preventing hazards on the job.

*The district will pay 100% of the cost of the certification test if students can show mastery by passing a certification practice test AND maintain an 80+ overall course grade at the time of the certification test. If students don't meet the requirements above, they must pay 100% of the cost of the certification test.*

Students must have successfully completed a level 1 or 2 course AND a level 3 or 4 to take a practicum course.

To earn a CTE endorsement, an MISD student must take 4 or more credits in the same endorsement area, with at least 2 of 4 credits within the same program of study and must include at least one Level 3 or Level 4 CTE course.

Students can earn a TCC Basic Welding Certificate of Completion by completing the 3 TCC courses listed above AND completing TCC 1312 Intro to Flux Cored Arc Welding and TCC 1434 Intro to Gas Tungsten after high school.



## CYBERSECURITY

The Cybersecurity program of study includes the occupations & educational opportunities related to planning, implementing, upgrading or monitoring security measures for the protection of computer networks & information.

LEVELS	COURSES		
Level 1	<b>Foundations of Cybersecurity</b> 1853CT / 9-12		<b>Principles of Information Technology</b> 1850CT / 9-12
Level 2	<b>Computer Science I (PLTW)</b> 1050CT / 9-12 <i>Prerequisite: Algebra I</i> <b>LOTE Credit</b>	<b>AP Computer Science Principles</b> 1266CT / 9-12 <b>Weighted &amp; LOTE Credit</b>	<b>Computer Maintenance</b> 1829CA-CB / 10-12 <i>Prerequisite: Principles of IT</i> <b>+ CompTIA A+ Certification Possible</b>
Level 3	<b>AP Computer Science A - Math/LOTE</b> 1055CA-CB / 10-12 <i>Prerequisite: AP Computer Science Principles</i> <b>Weighted &amp; 1 Credit in Math &amp; 1 Credit in LOTE</b>		<b>Networking</b> 1831CA-CB / 10-12 <i>Prerequisite: Computer Maintenance</i>
Level 4	<b>Practicum in Information Technology</b> 1851CA-CB / 11-12 <i>Prerequisite: 2 courses in Information Technology OR STEM AND Selection Process</i> <b>+ Oracle Certified Database Associate Certification Possible</b>		

1 Semester Home Campus	2 Semester Home Campus	1 Semester Ben Barber	2 Semester Ben Barber
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OCCUPATION	MEDIAN WAGE	ANNUAL OPENINGS	% GROWTH
Information Security Analysts	\$91,915	814	29%
Network & Computer Systems Administrator	\$82,597	2,814	19%
Computer Systems Analyst	\$87,568	5,937	29%

### INDUSTRY BASED CERTIFICATIONS

#### +CompTIA A+ Certification - Computer Maintenance

This certification exam measures various objectives including: mobile devices, networking technology, hardware, network troubleshooting, installing & configuring operating systems, expanded security, and software troubleshooting.

#### + Oracle Certified Database Associate Certification - Practicum in Information Technology

This certification exam measures the following objectives: using basic select statements, definite table joins, defining select statements, using single-row function to customize output, using conversion function & conditional expressions, etc.

*The district will pay 100% of the cost of the certification test if students can show mastery by passing a certification practice test AND maintain an 80+ overall course grade at the time of the certification test. If students don't meet the requirements above, they must pay 100% of the cost of the certification test.*

Students must have successfully completed a level 1 or 2 course AND a level 3 or 4 to take a practicum course.

To earn a CTE endorsement, an MISD student must take 4 or more credits in the same endorsement area, with at least 2 of 4 credits within the same program of study and must include at least one Level 3 or Level 4 CTE course.



# ENGINEERING

The Engineering program of study focuses on the design, development and use of engines, machines & structures. Students will learn how to apply science, mathematical methods & empirical evidence to the innovation, design, construction, operation and maintenance of different manufacturing systems.

LEVELS	COURSES				
Level 1	Introduction to Engineering (PLTW) 1835CT / 9 -12 Weighted Credit				
Level 2	No courses offered at Level 2 in this program of study.				
Level 3	Principles of Engineering (PLTW) 1836CT / 11-12 Prerequisite: Intro to Engineering AND Algebra I AND Biology AND Chemistry OR IPC OR Physics Weighted Credit, Science Credit	Computer Integrated Manufacturing (PLTW) 1838CT / 10-12 Prerequisite: Introduction to Engineering Weighted Credit + Autodesk Certified User in Inventor Certification Possible	Aerospace Engineering (PLTW) 1834CT / 11-12 Prerequisite: Principles of Engineering Weighted Credit	Civil Engineering & Architecture (PLTW) 1861CT / 11-12 Prerequisite: Principles of Engineering Weighted Credit	Environmental Sustainability (PLTW) 1125CT / 9-12 Prerequisite: Intro of Engineering AND Biology, can take concurrently Weighted Credit
Level 4	Edu-Drone I 1860CT / 11-12 Prerequisite: Algebra I AND must have driver's license by the end of the semester + FAA Part 107 Remote Drone Pilot Cert Possible	Engineering Design & Development (PLTW) 1845CT / 11-12 Prerequisite: CIM OR AE OR CE Weighted Credit		Practicum in STEM 1857CA-CB / 12 Prerequisite: A Level 3 STEM or IT course AND Selection Process	

1 Semester Home Campus	2 Semester Home Campus	1 Semester Ben Barber	2 Semester Ben Barber
OCCUPATION	MEDIAN WAGE	ANNUAL OPENINGS	% GROWTH
Aerospace Engineer	\$110,843	481	9%
Industrial Engineer	\$97,074	1,263	10%
Mechanical Engineer	\$91,707	1,535	11%
Chemical Engineer	\$112,819	474	9%
Electrical Engineer	\$98,405	1,137	10%

## INDUSTRY BASED CERTIFICATIONS

+ Autodesk Certified User in Inventor - Introduction to Engineering Design

This certification exam demonstrates entry-level knowledge that includes creating, modifying, formatting & sharing 2D sketches, creating parts, viewing & animating assemblies & creating presentations & drawings.

+ FAA Part 107 Remote Drone Pilot - Edu-Drone I

This certification exam assesses knowledge & skills related to: applicable regulations related to small unmanned aircraft system rating privileges, limitations & flight operations, airspace classifications, operating requirements, etc.

The district will pay 100% of the cost of the certification test if students can show mastery by passing a certification practice test AND maintain an 80+ overall course grade at the time of the certification test. If students don't meet the requirements above, they must pay 100% of the cost of the certification test.

Students must have successfully completed a level 1 or 2 course AND a level 3 or 4 to take a practicum course.

To earn a CTE endorsement, an MISD student must take 4 or more credits in the same endorsement area, with at least 2 of 4 credits within the same program of study and must include at least one Level 3 or Level 4 CTE course.



## PROGRAMMING & SOFTWARE DEVELOPMENT

The Programming & Software Development program of study explores the occupations & education opportunities associated with researching, designing, developing and testing operating system-level software, compilers and network distribution software for medical, industrial, military, communications, aerospace, business, scientific and general computer applications.

LEVELS	COURSES		
Level 1	No courses offered at Level 1 in this program of study		
Level 2	<b>AP Computer Science Principles</b> 1266CT / 9-12 <b>Weighted &amp; LOTE Credit</b>	<b>Computer Science I (PLTW)</b> 1050CT / 9-12 <i>Prerequisite: Algebra I</i> <b>LOTE Credit</b>	
Level 3	<b>AP Computer Science A – Math/LOTE</b> 1055CA – CB / 10-12 <i>Prerequisite: AP Computer Science Principles</i> <b>Weighted Credit</b> <b>1 Credit in Math</b> <b>1 Credit in LOTE</b>	<b>Computer Science II</b> 1051CT / 9-12 <i>Prerequisite: Computer Science I</i> <b>LOTE Credit</b>	<b>Mobile Applications Development</b> 1052CT / 9-12 <i>Prerequisite: Algebra I AND Computer Science I</i>
Level 4	<b>Practicum in Information Technology</b> 1851CA-CB / 11-12 <i>Prerequisite: 2 courses in Information Technology OR STEM AND Selection Process</i> <b>+ Oracle Certified Database Associate Certification Possible</b>		

1 Semester Home Campus	2 Semester Home Campus	1 Semester Ben Barber	2 Semester Ben Barber
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OCCUPATION	MEDIAN WAGE	ANNUAL OPENINGS	% GROWTH
Computer Network Architect	\$111,633	1,454	9%
Industrial Engineer	\$103,334	2,985	25%

### INDUSTRY BASED CERTIFICATIONS

**+ Oracle Certified Database Associate Certification** - Practicum in Information Technology

This certification exam measures the following objectives: using basic select statements, definite table joins, defining select statements, using single-row function to customize output, using conversion function & conditional expressions, etc.

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Students must have successfully completed a level 1 or 2 course AND a level 3 or 4 to take a practicum course.

To earn a CTE endorsement, an MISD student must take 4 or more credits in the same endorsement area, with at least 2 of 4 credits within the same program of study and must include at least one Level 3 or Level 4 CTE course.



## RENEWABLE ENERGY

The Renewable Energy program of study helps CTE students to assemble, inspect, maintain and repair different equipment required for renewable energy.

LEVELS	COURSES	
Level 1	No courses offered at Level 1 in this program of study	
Level 2	<b>AC/DC Electronics</b> 1841CT / 10-12 <i>+ OSHA 30 Hours Certification Possible</i>	
Level 3	<b>Solid State Electronics</b> 1843CT / 10-12 <i>Prerequisite: AC/DC Electronics</i>	<b>Environmental Sustainability (PLTW)</b> 1125CT / 9-12 <i>Prerequisite: Prerequisite: Intro of Engineering            AND Biology, can take concurrently</i> <b>Weighted Credit</b>
Level 4	<b>Practicum in STEM</b> 1857CA-CB / 12 <i>Prerequisite: A Level 3 STEM or IT course AND Selection Process</i>	

1 Semester Home Campus	2 Semester Home Campus	1 Semester Ben Barber	2 Semester Ben Barber
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OCCUPATION	MEDIAN WAGE	ANNUAL OPENINGS	% GROWTH
Wind Turbine Services Technician	\$51,334	387	108%
Solar Photovoltaic Installer	\$43,957	47	47%

### INDUSTRY BASED CERTIFICATIONS

#### + OSHA 30 Hours Certification - AC/DC Electronics

The OSHA Outreach Training Program provides workers with basic and more advanced training about common safety and health hazards on the job.

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Students must have successfully completed a level 1 or 2 course AND a level 3 or 4 to take a practicum course.

**To earn a CTE endorsement, an MISD student must take 4 or more credits in the same endorsement area, with at least 2 of 4 credits within the same program of study and must include at least one Level 3 or Level 4 CTE course.**



## BUSINESS & INDUSTRY ENDORSEMENT Transportation, Distribution & Logistics

# DRONE (UNMANNED FLIGHT) REGIONAL

The Drone-Unmanned Flight regional program of study introduces CTE learners to the occupations and education opportunities related to operating or designing an unmanned aircraft using a ground-based controller and the systems of communications between the controller and the aircraft.

LEVELS	COURSES	
Level 1	No courses offered at Level 1 in this program of study	
Level 2	<b>Robotics I</b> 1856CT / 9-12	
Level 3	<b>Robotics II</b> 1858CT / 10-12 <i>Prerequisite: Robotics I</i> <b>Math Credit</b>	
Level 4	<b>Edu-Drone I</b> 1860CT / 11-12 <i>Prerequisite: Algebra I AND must have driver's license by the end of the semester</i> <b>+ FAA Part 107 Remote Drone Pilot</b> <i>Certification Possible</i>	<b>Practicum in Manufacturing</b> 1822CA-CB / 12 (E) <i>Prerequisite: Robotics II AND Selection Process</i>

1 Semester Home Campus	2 Semester Home Campus	1 Semester Ben Barber	2 Semester Ben Barber
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OCCUPATION	MEDIAN WAGE	ANNUAL OPENINGS	% GROWTH
Aerospace Engineering & Operations Technicians	\$60,757	114	9%
Avionics Technicians	\$59,114	170	9%
Airline Pilots, Copilots & Flight Engineers	\$165,130	1,150	9%
Commercial Pilots	\$86,310	548	9%

### INDUSTRY BASED CERTIFICATIONS

#### + FAA Part 107 Remote Drone Pilot - Edu-Drone I

This certification exam assesses knowledge & skills related to: applicable regulations related to small unmanned aircraft system rating privileges, limitations & flight operations, airspace classifications, operating requirements, etc.

*The district will pay 100% of the cost of the certification test if students can show mastery by passing a certification practice test AND maintain an 80+ overall course grade at the time of the certification test. If students don't meet the requirements above, they must pay 100% of the cost of the certification test.*

Students must have successfully completed a level 1 or 2 course AND a level 3 or 4 to take a practicum course.

To earn a CTE endorsement, an MISD student must take 4 or more credits in the same endorsement area, with at least 2 of 4 credits within the same program of study and must include at least one Level 3 or Level 4 CTE course.



## BUSINESS & INDUSTRY ENDORSEMENT Transportation, Distribution & Logistics

# AUTOMOTIVE

The Automotive program of study teaches students how to repair & refinish automobiles & service various types of vehicles.

LEVELS	COURSES	
Level 1	No courses offered at Level 1 in this program of study	
Level 2	<b>Automotive Basics</b> 1800CT / 9-12 <i>SP2 Ethics &amp; You in the Automotive Industry, Valvoline Oil &amp; SP2 Land That Job Certification Possible</i>	
Level 3	<b>Energy, Power &amp; Transportation Systems</b> 1810CT / 9-12 <i>Prerequisite: Automotive Basics</i> <i>SP2 Bullying in the Workplace,</i> <i>SP2 Substance Abuse Awareness &amp; Management</i> <i>Certification Possible</i>	<b>Automotive Technology I</b> 1811CA-CB / 10-12 <i>Prerequisite: Energy, Power &amp; Transportation Systems</i> <i>+ ASE Maintenance &amp; Light Repair,</i> <i>SP2 Mechanical Safety Certification Possible</i>
Level 4	<b>Automotive Technology II</b> 1815CA-CB / 11-12 <i>Prerequisite: Automotive Technology I AND</i> <i>Selection Process</i> <i>+ ASE Brakes AND ASE Suspension &amp; Steering</i> <i>Certifications Possible</i>	<b>Practicum in Transportation, Distribution &amp; Logistics</b> 1821CA-CB / 11-12 (E) <i>Prerequisite: Automotive Technology I AND</i> <i>Selection Process</i>

1 Semester Home Campus	2 Semester Home Campus	1 Semester Ben Barber	2 Semester Ben Barber
OCCUPATION	MEDIAN WAGE	ANNUAL OPENINGS	% GROWTH
Automotive Body & Related Repairers	\$40,144	1,456	25%
Automotive Service Technicians & Mechanics	\$38,459	208	25%

### INDUSTRY BASED CERTIFICATIONS

#### **+ ASE Maintenance & Light Repair Certification - Automotive Technology I**

This exam assesses knowledge & skills related to: engine repair, automatic transmission & trans-axle, manual drivetrain & axles, suspension & steering, brakes, electrical/electronic devices, HVAC, tools, etc.

#### **+ ASE Brakes Certification - Automotive Technology II**

This exam assesses knowledge & skills related to general brake system diagnosis, hydraulic system diagnosis & repair, drum brake diagnosis & repair, disc brake diagnosis & repair, wheel bearings, parking brakes & electrical/electronics.

#### **+ ASE Suspension & Steering Certification - Automotive Technology II**

This exams assesses knowledge & skills related to general suspension & steering systems, steering systems diagnosis & repair, suspension systems diagnosis & repair, wheel alignment diagnosis & repair, wheels & tires diagnosis & repair.

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Students must have successfully completed a level 1 or 2 course AND a level 3 or 4 to take a practicum course.

**To earn a CTE endorsement, an MISD student must take 4 or more credits in the same endorsement area, with at least 2 of 4 credits within the same program of study and must include at least one Level 3 or Level 4 CTE course.**

# GLOSSARY OF TERMS

TERM	DEFINITION
<b>Career Cluster</b>	Federally identified, career clusters organize occupations and careers with common features.
<b>CCMR</b>	College, Career and Military Readiness data used for state accountability.
<b>CTE Completer</b>	As outlined in Perkins V, it is the completion of three or more courses for four or more credits including one level three or level four course within a program of study by a student.
<b>CTE Concentrator</b>	As outlined in Perkins V, it is the completion of two courses (for two or more credits) within a program of study by a student.
<b>Endorsement</b>	The Texas State Board of Education has identified five endorsements for students to choose from in order to meet high school graduation requirements. Career and Technical Education programs are in three of the endorsement areas: Business and Industry, Public Service and STEM. In order to earn a CTE endorsement, students must take four or more credits in the same endorsement area with two of those courses being from the same program of study with one being an advanced course.
<b>Industry-Based Certifications</b>	Certifications recognized and valued by industry and approved by the state to be used for public school accountability under CCMR.
<b>Practicums</b>	Courses that allow students to apply classroom knowledge in relevant work situations, encouraging the development of job-specific skills including job interview techniques, human relations skills, portfolio development and communications skills. This on-the-job experience is frequently referred to as an "internship" and helps prepare students for college and career success.
<b>Program of Study</b>	Course sequences that prepare students with the knowledge and skills necessary for success in their chosen career. The Texas Education Agency identified programs of study to align industry and education with high wage and high demand occupations in Texas.
<b>Supporting Certifications</b>	Supporting certifications provide valuable opportunities for students to prove their skill set but do not count towards public school accountability under CCMR; however, many are still highly recognized by industry and local employers.
<b>Supporting Courses</b>	Supporting courses are not identified by the state for the program of study, but are highly recommended as they do increase student success in their chosen program of study.

# NON-DISCRIMINATION DISCLOSURE

## TEXAS EDUCATION AGENCY DIVISION OF CAREER & TECHNICAL EDUCATION

Mansfield Independent School District offers career and technical education programs in agriculture, architecture & construction, a/v technology and communications, business, finance, health science, culinary arts, information technology, law and public safety, marketing, engineering and transportation. Admission to these programs is based on interest, aptitude, age appropriateness and class space availability. It is the policy of Mansfield Independent School District not to discriminate on the basis of race, color, national origin, sex or handicap in its career and technical programs, services or activities as required by Title VI of the Civil Rights Act of 1964, as amended; Title IX of the Education Amendments of 1972; and Section 504 of the Rehabilitation Act of 1973, as amended. It is the policy of Mansfield Independent School District not to discriminate on the basis of race, color, national origin, sex, handicap, or age in its employment practices as required by Title VI of the Civil Rights Act of 1964, as amended; Title IX of the Education Amendments of 1972; the Age Discrimination Act of 1975, as amended; and Section 504 of the Rehabilitation Act of 1973, as amended. Mansfield Independent School District will take steps to assure that lack of English language skills will not be a barrier to admission and participation in all educational and career and technical programs. For information about your rights or grievance procedures, contact 605 E. Broad Street, Mansfield, TX 76063, 817-299-6320.

Agencia de Educación de Texas División de Carrera y Educación Técnica El Distrito Independiente Escolar de Mansfield ofrece programas educativos de carrera y educación técnica en agricultura, arquitectura y construcción, tecnología y comunicaciones, negocios, finanzas, ciencia de la salud, artes culinarias, información de a/v tecnología, ley y seguridad pública, marketing, ingeniería y transporte. Admisión a estos programas es basada en interés, aptitud, conveniencia base a la edad y disponibilidad de espacio de la clase. Es la política del Distrito Independiente Escolar de Mansfield a no discriminar en base de la raza, color, origen nacional, sexo o discapacidad en sus programas de carrera y educación técnica, los servicios o las actividades de acuerdo con el Título VI del Acto de los Derechos Civiles de 1964, según la enmienda prevista; Título IX de las Enmiendas de la Educación de 1972; y Sección 504 del Acto de la Rehabilitación de 1973, según la enmienda prevista. Es la política del Distrito Escolar Independiente de Mansfield a no discriminar en base a la raza, color, origen nacional, sexo, discapacidad, o edad en sus prácticas de empleo de acuerdo con el Título VI del Acto de los Derechos Civiles de 1964, según la enmienda prevista; Título IX de las Enmiendas de la Educación de 1972; el Acto de la Discriminación Por Razón De Edad de 1975, según la enmienda prevista; y Sección 504 del Acto de la Rehabilitación de 1973, según la enmienda prevista. El Distrito Independiente Escolar de Mansfield tomará medidas para asegurar que la falta de conocimientos lingüísticos de Ingleses no será una barrera a la admisión y participación en todos los programas educativos de carrera y programas técnicos. Para información sobre sus derechos o procedimientos de agravio, entre en contacto 605 E. Broad Street, Mansfield, TX 76063, 817-299-6320.

# INDUSTRY BASED CERTIFICATIONS

## COUNTS FOR CCMR

CERTIFICATION	RELATED COURSE	PROGRAM OF STUDY
Certified Veterinary Assistant, Level 1	Veterinary Medical Applications	Animal Science
Texas State Floral Association Floral Skills Knowledge Based	Floral Design I	Plant Science
Autodesk Certified User in Revit Architecture	Architectural Design II	Architectural Design
NCCER Core	Principles of Construction	Construction Technology
Adobe Photoshop	Graphic Design I, Animation I, Commercial Photography I	Design & Multimedia Arts
Adobe Illustrator	Graphic Design II	Design & Multimedia Arts
Adobe Animate	3D Modeling & Animation	Design & Multimedia Arts
Unity Certified Programmer	Video Game Programming II	Design & Multimedia Arts
Adobe InDesign	Practicum in Graphic Design	Design & Multimedia Arts
Adobe Premier	Audio/Video Production II	Digital Communications
Microsoft Office Specialist	Accounting I	Accounting & Financial Services
Microsoft Office Expert	Accounting II	Accounting & Financial Services
Entrepreneurship & Small Business	Entrepreneurship I	Entrepreneurship
Google Analytics Individual Qualification	Social Media Marketing, Advertising	Marketing & Sales
Educational Aide	Instructional Practices, Practicum in Education & Training	Teaching & Training
Medical Coding & Billing Specialist	Medical Billing & Coding	Healthcare Infomatics
Phlebotomy Technician	Phlebotomy	Healthcare Therapeutic
Certified EKG/ECG	EKG/ECG	Healthcare Therapeutic
Certified Nurse Aide/Assistant	Certified Nurses Aide/Assistant	Healthcare Therapeutic
Certified Pharmacy Technician	Pharmacy Technician	Healthcare Therapeutic
Emergency Medical Technician	Emergency Medical Technician	Healthcare Therapeutic
Medical Assistant	Medical Assistant	Healthcare Therapeutic
ServSafe Manager	Culinary Arts	Culinary Arts
Certified Fundamental Cook	Practicum in Culinary Arts I	Culinary Arts
Community Health Worker	Family & Community Services	Family & Community Services
CompTIA A+	Computer Maintenance	Networking Systems
Oracle Certified Database Associate	Practicum in Information Technology	Networking Systems
WD Certified Web Design	Web Design	Web Development
Non-Commissioned Security Officer Level II	Law Enforcement II	Law Enforcement
NIMS Level I CNC Milling	Precision Metal Manufacturing II	Manufacturing Technology
AWS D1.1 Structural Steel Tack Welder	Welding I	Manufacturing Technology
AWS D1.1 Structural Steel Welder	Welding II	Manufacturing Technology
Autodesk Certified User in Inventor	Computer Integrated Manufacturing	Engineering
FAA Part 107 Remote Drone Pilot	Edu-Drone I	Engineering
ASE Maintenance & Light Repair	Automotive Technology I	Automotive
ASE Brakes	Automotive Technology II	Automotive
ASE Suspension & Steering	Automotive Technology II	Automotive

# SUPPORTING CERTIFICATIONS

CERTIFICATION	RELATED COURSE	PROGRAM OF STUDY
TPW Hunter Safety	Wildlife, Fisheries & Ecology Management	Environmental & Natural Resources
OSHA 10 Hour	Construction Technology I, Precision Metal Manufacturing I, Welding	Construction Technology
Stop the Bleed	Medical Billing & Coding	Healthcare Infomatics
CPR Certification	Health Science Theory	Healthcare Diagnostics
FEMA - Intro to Incident Command	Law Enforcement I	Law Enforcement
FEMA - Community Emergency Response Team	Federal Protective Services	Law Enforcement
What Every Officer should know about DNA Evidence	Criminal Investigation	Law Enforcement
Law 101: Legal Guide for Forensic Expert	Forensic Psychology	Law Enforcement
Crime Scene & DNA Basics	Forensic Science	Law Enforcement
SP2 Ethics & You in the Automotive Industry	Automotive Basics	Automotive
Valvoline Oil	Automotive Basics	Automotive
SP2 Land That Job	Automotive Basics	Automotive
SP2 Bullying in the Workplace	Energy, Power & Transportation Systems	Automotive
SP2 Substance Abuse Awareness & Management	Energy, Power & Transportation Systems	Automotive
SP2 Mechanical Safety	Automotive Technology I	Automotive



# How do I free up my schedule to take Ben Barber Courses?

- Take high school courses in the 8th grade. Currently, you can take Algebra I, Spanish I, Professional Communications, Gateway to Technology, Principles of Arts & A/V, Dollars & Sense, Web Communications, Lifetime Nutrition, and Health.
- Pass all of your high school classes!
- Take dual credit TCC courses during the summer.

For questions or more information, please visit our website at  
**[bbcta.mansfieldisd.org](http://bbcta.mansfieldisd.org)**