CAREER AND TECHNICAL EDUCATION ELECTIVES AVAILABLE IN MIDDLE SCHOOL*

**Content pulled from 22-23 NISD Middle School Course Selection Guide*

68360 | Grade 6 Technology Apps

Students in this course will learn about technology systems, use digital tools, solve problems using creative thinking and become responsible digital citizens. Course studies will include digital citizenship, understanding Canvas, scratch coding with Google, using Google Suite tools, Typing.com and career research. This course will help students gain professional skills like communication, collaboration, decision making, research, and portfolio building.

Credits: 1.0 **Grade Placement:** 6
Semesters: 2 **Required Prerequisite:** None

78360 | Grade 7 Technology Apps
88360 | Grade 8 Technology Apps

Students in this course will learn about technology systems, TechSmart curriculum with google tools, typing.com and career building activities. This course will help students gain professional skills like communication, collaboration, decision making, research, and portfolio building.

Credits: 1.0 **Grade Placement:** 7 or 8
Semesters: 2 **Required Prerequisite:** None

CT.0749M | Fundamentals of Computer Science Course overview video

Students in this course will design, implement and present solutions to real-world problems using computer science concepts. Coursework will include creating interactive games, animations, stories, debugging and designing algorithms using the programming language Python. Skills such as problem solving, communication, portfolio building and digital citizenship will be part of each student activity/project. This course will utilize *TechSmart and PLTW Computer Science for Innovators and Makers* as a curriculum framework. *This course may have limited availability.*

Credits: 1.0 **Grade Placement:** 7 and/or 8
Semesters: 2 **Required Prerequisite:** None

CT.0851M | Digital Art and Animation Course overview video

In this course, students learn the elements and principles of design, as well as concepts of visual communication. Students will survey a variety of media and art, students use image editing, animation, and digital drawing to put into practice the art principles they've learned. They will explore career opportunities in the design, production, and presentation of digital artwork. They will respond to the artwork of others and learn how to combine artistic elements to create finished pieces that effectively communicate their ideas. **This course satisfies the Fine Art requirement for graduation.**

Credits: 1.0 Fine Art Credit **Grade Placement:** 8
Semesters: 2 **Prerequisite:** None

CT.0891M | Medical Terminology Course overview video

This course is designed to introduce students to the structure of medical terms, including prefixes, suffixes, word roots, singular and plural forms, and medical abbreviations. The course allows students to achieve comprehension of medical vocabulary appropriate to medical procedures, human anatomy and physiology, and pathophysiology. This course will utilize the PLTW Medical Detectives curriculum. *This course may have limited availability.*

Credits: 1.0 **Grade Placement:** 7 and/or 8
Semesters: 2 **Required Prerequisite:** None

CT.4101M | Principles of Applied Engineering Course overview video

Students in this course will develop engineering skills using computer graphics, hand-sketching, 3D modeling, design and presentations. Teams will design solutions to problems using innovative thinking and creativity, including the 3D puzzle cube, foot orthosis, and therapeutic toy. Coursework will include employability skills like time-management, collaboration, portfolio building and career research. This course will utilize *PLTW Design & Modeling* as a curriculum framework. *This course may have limited availability.*

Credits: 1.0 **Grade Placement:** 7 and/or 8
Semesters: 2 **Required Prerequisite:** None

CT.4106M | Robotics I Course overview video

Students in this course will design, build and test robots to solve a problem. Coursework will include professional standards for employment, safety, equipment/tools and skills necessary for success in a technical career. Students will work in teams to manage a project through planning, scheduling and meeting criteria in order to develop a product. Course studies in robotics will include torque and gear ratio, robotic arm construction, testing and using knowledge of simple machines. This course will utilize *PLTW Automation & Robotics* as a curriculum framework. *This course may have limited availability.*

Credits: 1.0 **Grade Placement:** 7 and/or 8
Semesters: 2 **Required Prerequisite:** None

00465M| Professional Communications within Career and College Readiness
(2 semester course with .5 High School elective credit that satisfies Speech for graduation)
Course overview video

This year-long course blends written, oral, and graphic communication in a career-based environment. Careers in the global economy require individuals to be creative and have a strong background in computer and technology applications, a strong and solid academic foundation, and a proficiency in professional oral and written communication. Within this context, students will be expected to develop and expand the ability to write, read, edit, speak, listen, apply software applications, manipulate computer graphics, and conduct Internet research. This course satisfies a speech credit graduation requirement. There is not a prerequisite for this course. Students will have the opportunity to explore NISD Career Academies, Advanced Academics and prepare their Personal Graduation Plan. **Required elective for all 8th graders unless enrolled in AVID 8.**

Credits: .5 **Grade Placement:** 8
Semesters: 1 **Required Prerequisite:** None

0801M | Principles of Human Services Course Overview Video
This course is a laboratory course that will enable students to investigate careers in the Human Services Career Cluster, including counseling and mental health, early childhood development, family and community, personal care, and consumer services.
Credits: 1.0 **Grade Placement:** 7-12
Semesters: 2 **Required Prerequisite:** None

CT.05205M |Personal Development and Relationships
Personal Development and Relationships is a semester course that examines how the relationships between individuals and among family members significantly affect the quality of life. Students use knowledge and skills in family studies and human development to enhance personal development, foster quality relationships, promote wellness of family members, manage multiple adult roles, and pursue careers related to counseling and mental health services.
Credits: .5 **Grade Placement:** 7 and/or 8
Semesters: 1 **Required Prerequisite: None**

CT.08035M | Lifetime Nutrition & Wellness Course Overview Video
Lifetime Nutrition and Wellness is a semester laboratory course that allows students to use principles of nutrition to make informed decisions that promote lifelong wellness. Instruction will focus on the role that nutrients have on our body, digestion and metabolism, understanding the importance of a balanced diet, safety and sanitation in the lab, healthy food preparation, and careers in nutrition.
Credits: .5 **Grade Placement:** 7 and/or 8
Semesters: 1 **Required Prerequisite:** None

COURSES FOR HIGH SCHOOL CREDIT
The following high school courses will be included in a student's weighted GPA: Algebra I Honors, Geometry Honors, and Spanish I Honors. Please review the NISD High School Academic Planning Guide for additional details.

The full listing of high school credit classes include:
Algebra I Honors (High School Credit)
Art I (High School Fine Art Credit)
Digital Art and Animation (High School Fine Art Credit)
Fundamentals of Computer Science (High School CTE Credit)
Geometry Honors (High School Credit)
Personal Development and Relationships (High School CTE Credit)
Lifetime Nutrition & Wellness (High School CTE Credit)
Medical Terminology (High School CTE Credit)
Principles of Applied Engineering (High School CTE Credit)
Principles of Human Services (High School CTE Credit)
Professional Communications (High School Speech Credit)
Robotics I (High School CTE Credit)
Spanish I Honors (High School Foreign Language Credit)