

Career & Technical Education...Academics in Action!

Career and Technical Education (CTE) provides a rigorous combination of academic and technical courses preparing students for college as well as successful careers in high-skill, high-wage occupations. CTE programs and academies in Palm Beach County provide Programs of Study that equip students to be fluent in the use of information technologies, apply knowledge to solve problems, and possess 21st century skills to become productive citizens.

CTE Programs of Study integrate academic concepts and applied/technical content with real-world examples:

CTE Program	Example
Accounting	CTE Accounting students use Math to solve problems involving percentages and its application in Accounting.
Automotive Technology	Measuring skills are used by Automotive students to determine when a vehicle may hydroplane.
Business	CTE Business students use Math and Technology skills to learn how to understand supply and demand, surplus and shortage, and create charts to show data.
Business	CTE Business students use Math and Technology skills to prepare payroll records including time cards and calculating employee hours worked.
Construction	Construction CTE students use Geometry skills when laying out, cutting, and assembling miter joints to create a picture frame by calculating interior regular polygons.
Construction	Construction CTE students use Algebra, Graphing, and Geometry skills to plan and construct pitch of the roof in building homes.
Criminal Justice	CTE Criminal Justice students use Math skills to determine the speed of a vehicle by taking into consideration measurements and observations made at the scene of an accident.
Criminal Justice	Math and Technology skills are used when Criminal Justice students learn how to calculate the velocity of blood splatter.
Criminal Justice	Students use Language Arts strategies when evaluating career opportunities and career paths in the Criminal Justice field.
Culinary Arts	CTE Culinary students learn how to apply principles of food science in cooking and baking techniques through fermentation and leavening agents, (yeast breads, quick breads), thickening agents (soups, sauces, gravies), permanent & temporary emulsions (salad dressings), use of cooking methods (dry, moist, combination). Ingredients + recipe → prepared product Δ
Early Childhood Education	CTE Early Childhood Education students analyze how nutrition, environment, heredity, and health status influence the development of the child.
Engineering	Engineering students learn how to use an architect's scale to perform and calculate measurements.
Engineering	Engineering students use Algebra to convert metric measurements to English measurements and vice-versa.

CTE Program	Example
Fashion Design	CTE Fashion Design students learn how to apply Math principles and create an original pattern for a garment using accurate body measurements, constructing individual muslin prototypes and evaluating for proper fit.
Hospitality & Tourism	CTE Hospitality & Tourism students learn how to plan a trip for a family of four with a given budget using the Internet for flight schedules, rental cars, and hotel rates using presentation software showing daily itineraries including local attractions and expenses.
Information Technology	Math, English, Science, and History used by IT students to create a travel brochure on a specific country to include costs and exciting facts about the country.
Interior Design	CTE Interior Design students, using Math principles, learn how to identify and describe characteristics of different types of wall treatments, compare durability and maintenance factors for wall treatment materials, develop criteria for the selection of wall treatments and plan purchases according to a budget plan.
Medical Sciences	CTE Medical Sciences students use Math and Science skills to provide initial emergency care to a teenager lying on the sand at the beach who is unconscious.
Medical Sciences	CTE Medical Sciences students use Communication, Math and Science skills to explain to patients the factors relating to the transmission of disease and prepare blood slides for differential blood count.
Medical Sciences	CTE Medical Sciences students use Math and Science skills to learn how to take and record a patient's vital signs, monitor diabetes and hypertension, and report urine specific gravity, color and characteristics.
Medical Sciences	CTE Medical Sciences students use ratio and proportion and percentages to compute daily dietary requirements using a food label for varying caloric intakes.

