



# Certify-ED

## COURSE DESCRIPTIONS

Certify-Ed, LLC is excited to offer a revolutionary curriculum for high school students and adult learners all over the world. Our curriculum focuses on authentic learning experiences that are designed to provide learners with courses that will lead to industry certifications and/or college credit.



**BIOTECHNOLOGY** This competency-based course provides the students with a solid foundation in biotechnology. Students will engage in interactive videos designed to teach students about career paths, research, data analysis, laboratory safety, and the use of laboratory equipment in the field of biotechnology. Additionally, students will examine topics that include Polymerase Chain Reaction (PCR), analysis of DNA structure, DNA replication, and the DNA purification process. Students will use virtual reality to demonstrate their knowledge of laboratory equipment by exploring the use of micropipettes, serological pipettes, and spectrophotometers. Students will also discover how to make a molar solution using virtual reality. Upon completion of this course, the students will be equipped with work-related knowledge and the skills necessary for careers in biotechnology. They will also earn a digital badge in biotechnology, and will be better prepared for the Biotechnology Certification Exam.



**CARPENTRY** This competency-based course provides the students with a solid foundation in carpentry. Students will engage in virtual reality and interactive videos designed to teach students how to use basic measuring tools, hand tools and machines commonly used in carpentry, to construct basic projects. Additionally, students will examine various wood construction materials and their properties. Throughout the course, students will learn components of site and personal safety, and how to interpret detailed drawings used for construction. Upon completion of this course, the students will be equipped with work-related knowledge and the skills necessary for careers in carpentry, a digital badge in Carpentry, and will be better prepared for the Carpentry Certification Exam.



**CODING** This competency-based course introduces computer programming concepts. In this course, students will learn basic programming concepts, terminology, and programming design. An emphasis will be placed on how to code programs, create testing plans, and write documentation. Using virtual reality, students will learn how to use variables, arrays, conditions and loops when programming. Upon completion of this course, students will be equipped with the knowledge and skills to earn a digital badge in Computer Programming, and will be better prepared for the certification exam.



**CRIMINAL JUSTICE** This competency-based course is designed to provide students with an overview of the criminal justice system. In the Criminal Justice course, students will engage in virtual reality and interactive videos designed to test their visual memory and ability to apply their skills to effectively manage a crime scene. Students will become immersed in topics that include criminal and constitutional law, security, and communications. Students will review basic law enforcement skills, which cover tactics, methods, and skills utilized by law enforcement. These concepts should be taken into consideration when taking this course and assessing implementation options. Upon completion of this course, students will be equipped with the knowledge and skills to earn a digital badge in Criminal Justice, and will be better prepared for the certification exam.



**CULINARY ARTS** This competency-based course provides an overview of the basic culinary fundamentals and standard practices leading into a career pathway to Culinary Arts. In this course, students will learn culinary techniques, such as knife handling skills and the recognition, selection and proper use of tools and equipment. An emphasis will be placed on identifying and preparing a variety of foods and recipes, as well as mastering conversions through the use of proper scaling and measurement techniques. Using virtual reality, students will prepare standard recipes while effectively managing time, accurately measuring ingredients, and appropriately using kitchen equipment. Food safety and sanitation techniques will align to industry-recognized certifications. Upon completion of this course, students will be equipped with the knowledge and skills to earn a digital badge in Culinary Arts, and will be better prepared for the certification exam.



**DRONES** This competency-based course is designed to prepare students with the knowledge and skills to obtain the Federal Aviation Administration Remote Pilot Certificate. In this course, students will engage in virtual reality and interactive videos designed to teach students the skills and qualities of a pilot. Students will learn how weather affects the drone and will develop an understanding of the physics involved with flying, and much more! Students are immersed in topics that include emergency procedures, preflight inspection, radio communication, VLOS operations, sectional charts, aerial photography and search and rescue operations. Upon completion of this course, the students will be equipped with the knowledge and skills necessary to earn a digital badge in Drones, and will be better prepared to obtain a Remote Pilot Certificate.



**FUNDAMENTALS OF ROBOTICS** Robotics continues to grow, and so will the demand for people who work with them. This competency-based course is designed to provide students with the fundamentals of electronics, computer programming, and engineering design that will lay a foundation on which to build a solid knowledge base about robotics. Students will become immersed in topics that include Ohm's Law, series and parallel circuits, direct and alternating current, DC motors, robot sensor operation, and much more! The students will use interactive video and virtual reality to learn how to program a robot. Upon completion of this course, students will be equipped with the knowledge and skills to earn a digital badge in Fundamentals of Robotics, and will be better prepared for the certification exam.



**MEDICAL ASSISTANT** This competency-based course is designed to prepare students with the knowledge and clinical skills necessary to assess, plan, provide, and evaluate care to patients in varied healthcare settings. Students will engage with interactive videos learning first aid principles, diagnostic testing, and laboratory procedures. Emphasis will be placed on safety, medical law, and medical interventions. Upon completion of this course, students will be equipped with the knowledge and skills to earn a digital badge as a Medical Assistant, and will be better prepared for the certification exam. Ultimately, this course was designed to provide students with a competitive edge for entry into the healthcare global marketplace.



**NURSING ASSISTANT** This competency-based course is designed to prepare students with knowledge of the basic nursing assistant skills which are necessary to assess, plan, provide, and evaluate care to patients in various healthcare settings. Students will engage with interactive videos, while learning about infection control, personal care skills, mental health needs, and legal responsibilities. Using virtual reality, students will learn how to obtain and record standard vital signs, identify basic body parts, demonstrate wheelchair assistance and ambulation, and perform a modified bed bath. Upon completion of this course, students will be equipped with the knowledge and skills to earn a digital badge as a Nursing Assistant, and will be better prepared for the certification exam. Ultimately, this course is designed to provide students with a competitive edge for entry into the healthcare global marketplace.



**PROMOBOTICS** Promobot is an autonomous robot, designed for a variety of business applications. This competency-based course is designed to teach students how to program the Promobot. Students will apply the knowledge and skills necessary to program and operate the Promobot in virtual reality, or by using the Promobot itself. Through interactive videos, the students will learn robotic operations and system configurations. Students will code, compile, and debug programs using the robotic programming language. Upon completion of this course, students will be equipped with knowledge and skills to earn a digital badge in Promobotics, and will be better prepared for the certification exam.



**THE ART OF TAEKWON-DO: EARNING A YELLOW BELT** The Tenets of Taekwon-Do include: Courtesy, Integrity, Perseverance, Self Control, and Indomitable Spirit. In this competency based course, students will use these tenants as they learn the original Taekwon-Do from an 8th Degree Black Belt, Grand Master, who is a 9-time U.S. Open Grand Champion. An emphasis will be placed Taekwon-Do basic movements, patterns, blocking, and kicking techniques. Using virtual reality, students will practice these Taekwon-Do basic movements, which have been designed to perfect their skills and to prepare them to test for their yellow belt. Upon completion of this course, students will be equipped with the knowledge and skills to earn a digital badge in the Art of Taekwon-Do, and will be better prepared for their yellow belt test.



**WELDING** This competency-based course is designed to provide students with knowledge of the basic manufacturing processes, properties of metals, and safe operating skills needed to demonstrate use of equipment in oxyfuel, shielded metal arc welding (SMAW), and gas metal arc welding (GMAW). The students will use virtual reality to perform oxyfuel cuts, shielded metal arc welding (SMAW), gas metal arc welding (GMAW), and Gas Tungsten Arc Welding (GTAW). The students will perform welds using SMAW and GMAW to current industry standards. Welding symbols will be used to interpret detailed drawings used for fabrication. Upon completion of this course, the students will be equipped with work-related knowledge and the skills necessary for careers in welding, a digital badge in welding, and will be better prepared for the Welding Certification Exam.

• GET CERTIFIED • GET QUALIFIED • GET HIRED •

Feel free to reach out and **CONTACT US** if you have any questions or are interested in getting started with a course. Email [lynne.henderson@certify-ed.com](mailto:lynne.henderson@certify-ed.com) or give us a call at (404) 486-9244.