

## Associates Degree in Specialized Technology in Glazing

CIP Code 47-2121.00

Beginning Academic Year 2016-2017, students accepted to the glaziers apprenticeship will automatically enrolled in the Glaziers Associate in Specialized Technology Degree Program. The requirements for that program are as follows:

### ALL CREDIT HOURS ARE SEMESTER CREDITS

Course Number	Course Name	Course Description	Class Hours	Intern Hours	Credit Hours
ARCH143	Architecture and Blueprints, I	This course will build upon the students' basic mathematics, trigonometry, measurement skills and knowledge by accurately using math when reading blueprints. Reading blueprints, measuring, layout, fabrication and other functions specific to the glazing trade require accurate calculations and measurements for the success of any glazing job. Reading blueprints and tape rules or taking other measurements accurately will lead to properly cut glass or aluminum and will contribute to a timely and successful job.	36	200	2
ARCH243	Architecture and Blueprints II	This class engages students in application of architectural drawings and blueprints as they work in teams to complete a steel structural glazing project.	36	200	2
COM112	Oral Communication	This course provides instruction and experience in preparation and delivery of presentations in public settings and group discussions. Emphasis is placed on research, preparation, delivery, and evaluation of informative, persuasive, and special occasion public speaking. Upon completion, students will be able to design and deliver well-organized presentations and participate in group discussions with appropriate audiovisual support.	45	40	3
CONT130	Internship Year One	This course consists of paid OJT, internship, or practicum performed in a business, industry, trade, or technical career setting within the student's occupational area. The contact hours experienced through on-the-job training will be verified by an employer or union official and will be placed on the college student's record. There are specific categories of work experience as noted in the internship column.	0	(1500)	3
CONT140	Internship Year Two	This course consists of paid OJT, internship, or practicum performed in a business, industry, trade, or technical career setting within the student's occupational area. The contact hours experienced through on-the-job training will be verified by an employer or union official and will be placed on the college student's record. There are specific categories of work experience as noted in the internship column.	0	(1500)	3
CONT150	Internship Year Three	This course consists of paid OJT, internship, or practicum performed in a business, industry, trade, or technical career setting within the student's occupational area. The contact hours experienced through on-the-job training will be verified by an employer or union official and will be placed on the college student's record. There are specific categories of work experience as noted in the internship column.	0	(1500)	3
CONT160	Internship Year	This course consists of paid OJT, internship, or practicum	0	(1500)	3

	Four	performed in a business, industry, trade, or technical career setting within the student's occupational area. The contact hours experienced through on-the-job training will be verified by an employer or union official and will be placed on the college student's record. There are specific categories of work experience as noted in the internship column.			
ENL111	Written Communication	This course provides instruction and experience in preparation and delivery of written communication in workplace and personal settings. Emphasis is placed on the writing process including production of unified, coherent, well-developed essays, letters and memos using standard written English.	48	40	3
ENVS113	Environmental Technologies	This environmental science course will enable students to develop practices that save energy; reduce the production of waste; use environmentally friendly products and materials; recycle materials; adopt sustainable strategies; work to protect employee health and safety; and adopt other practices, technologies and high-performance work processes that reduce carbon emissions while retaining good jobs at family-sustaining wages.	45	40	3
HUM210	History of Labor Through Film	This course will use feature-length films to take an in-depth look at key issues pertaining to working people in the United States, the role of organized labor and the challenges faced by unions and their members. Students will view fiction and non-fiction films that portray incidents in the history of American labor. We will study the work lives and labor unions of miners, dockworkers, packinghouse workers, textile workers and farm workers among others. We will also discuss the meaning of the events depicted in the films by situating them within a historical context.	45	40	3
IT101	Fundamentals of Computers	An introduction to computers and the fundamentals of operating systems and software programs. Provides hands-on experience with computer applications including word processing, spreadsheets, electronic mail, and the Internet.	45	40	3
MAT199	Math for Trade Unionists	This course begins with the basic facts of arithmetic and continues through some of the early stages of algebra. Reviewing and practicing these basic mathematical concepts are intended to help all tradesmen use math to his/her advantage and to avoid making costly mistakes on the job. Participants in this course will learn to competently add, subtract, multiply and divide decimal fractions, have a basic understanding of percentages and the Pythagorean Theorem, as well as the ability to describe and measure basic angles, polygons and triangles using a protractor.	46	200	3
MAT299	Applied Mathematics	Course content includes the fundamental processes of mathematics with emphasis on problem-solving techniques. Included is introductory algebra, rudiments of analytic geometry, and elementary trigonometry.	40	200	2
PAT140	Intro to Glazing	This course is designed to provide an introduction to glazing and the tools of the trade. Students will learn fundamentals of the glazing industry including the different purposes windows serve in a building's design, trade terminology, symbols, trade tools and materials. Students will learn the management of glass cutting projects.	50	500	2
PAT141	Sealant Theory and Application	This course is designed to provide an introduction to sealants used in the glazing trade. Students will learn sealant terminology, selection, forms, and their proper and most effective use for a given project. The basic principles	32	200	2

		regarding joint design and measurements as well as the proper substrate preparation techniques will be discussed. Additionally, students will learn the basics of structural glazing including its methods, applications and safety factors.			
PAT142	Glass Fabrication	This course is designed to build basic skills and knowledge necessary for fabricating glass including mirrors, spandrel glass, architectural panels and Ribbon Window Systems. Students will also learn the purpose and techniques for anodizing aluminum surfaces that often surround glass installations.	40	800	2
PAT241	Installation, Layout and Building Controls	This course is designed to introduce the glazier to curtain wall installation methods, practices and testing standards. Students will also learn the basics of aluminum entrances, storefront installations, Ribbon window installations and the use of transits, levers and lasers. All aspects of installation and layout will be discussed as well as building control basics.	48	2500	3
PAT243	Specialties in the Glazing Trade	This course is designed to enhance the basic skills of a glazier in performing specialty work. Specialized glazing work may include aquarium and shower door installation, auto glass work, glass shelving, Herculites, stained glass and clear story. Glaziers will learn techniques and procedures as well as safety regulations and safe handling of all materials and installations.	40	400	2
PAT249	Welding Certification	This course prepares students for 3G and 4G certifications in welding. Students must pass these certifications through the American Welding Society (AWS) certification program in order to complete the course. Students will learn how to prepare all related applications and paperwork as well as the requisite welding samples. Students will have the opportunity to practice their techniques on simulators as well as actual welding equipment.	80	100	4
SFT110	Safety in the Construction Trades	This course provides entry level construction workers with a general awareness on how to recognize and prevent hazards on a construction site. The training covers a variety of construction safety and health hazards that a worker may encounter at a construction site. Students earn both OSHA10 and basic First Aid/CPR certifications.	40	100	2
SFT112	Elevated Platforms	The main objective of this course is to prevent workplace injuries and fatalities related to falls. This course covers the potential hazards related to working on raised or unstable platforms. The types of tools and equipment for elevating oneself and one's work materials are identified. Selection, inspection, setup, safe techniques and proper maintenance of equipment are discussed.	40	100	2
SFT210	Advanced Safety Techniques	This course is designed to provide safety awareness and practices for workers within all trade areas. Students will gain useful exposure and knowledge to basic safety practices including but not limited to First Aid/CPR, First Aid/AED (Automatic External Defibrillator), respiratory protection, fall protection and safety protocol when using power tools. Students will earn their OSHA 30 certification.	40	100	2
SOSC131	Leadership and Organizational Development	This course prepares students to take an active role in the construction industry by learning how to use effective communication and planning to make better use of human and physical resources in the work place to effectively form and lead highly motivated teams and to foster a safe and productive work environment.	48	200	3
	<b>TOTALS</b>		<b>844</b>	<b>6000</b>	<b>60</b>

Students receive 12 credits for their internship.