



TRADES ACADEMY

Building Skills For A Lifetime

506 Mariner Avenue, Tiyan
 647-4842 / 3
 647-4843 (fax)
 gcatrades@guam.net
 www.gcatradesacademy.org

Course Schedule August 2022 – March 2023

CORE CURRICULUM

Build Your Future in Construction * Basic Safety * Introduction to Construction Math * Introduction to Hand Tools * Introduction to Power Tools * Introduction to Construction Drawings * Basic Rigging * Basic Communication Skills * Basic Employability Skills * Introduction to Materials Handling

22-173	Mondays & Wednesdays	01Aug22 – 07Dec22	6:00 pm – 8:30 pm	Tiyan Training Facility room A103
22-175	Tuesday & Thursdays	02Aug22 – 10Nov22	6:00 pm – 8:30 pm	Tiyan Training Facility room A103
22-159	Saturdays	13Aug22 – 17Dec22	8:00 am – 12:00 noon	Tiyan Training Facility room A103
22-229	Tuesday & Thursdays	15Nov22 – 21Mar22	6:00 pm – 8:30 pm	Tiyan Training Facility room A103
22-233	Mondays & Wednesdays	12Dec22 – 26Apr22	6:00 pm – 8:30 pm	Tiyan Training Facility room A103
23-002	Saturdays	07Jan23 – 03Jun23	8:00 am – 12:00 noon	Tiyan Training Facility room A103

EROSION AND SEDIMENT CONTROL

Erosion & Sediment Control

22-231	Saturdays	20Aug22 – 03Sep22	1:00 pm – 6:00 pm	Tiyan Training Facility room A101
22-226	Mondays & Wednesdays	28Sep22 – 24Oct22	6:00 pm – 8:30 pm	Tiyan Training Facility room B201
22-227	Tuesdays & Thursdays	01Nov22 – 22Nov22	6:00 pm – 8:30 pm	Tiyan Training Facility room A101

PROJECT SCHEDULING (Continued)

Safety * Construction Planning * Scheduling * Resource Control * Quality Control

22-249	Tuesdays & Thursdays	11Aug22 – 25Oct22	6:00 pm – 8:30 pm	Tiyan Training Facility room A101
---------------	----------------------	-------------------	-------------------	-----------------------------------

GCA Trades Academy – An NCCER Training Unit



The GCA Trades Academy, Inc. is committed to the principle of equal opportunity in education and employment. The GCA Trades Academy does not discriminate against individuals on the basis of race, color, sex, sexual orientation, gender identity, religion, disability, age, veteran status, ancestry, or national or ethnic origin in the administration of its educational policies, admissions policies, employment policies, scholarship and loan programs, and other programs and activities, except where sex or age is a bona fide occupational qualification. Discrimination based on disability in educational programs and activities and employment with the GCA Trades Academy is prohibited.

The GCA Trades Academy expects all of its students and employees to join together to ensure a climate of diversity where everyone values individual and group differences, respects the perspectives of others and communicates openly to attain the best education.

Class dates and course availability are subject to change. Please contact the GCA Trades Academy offices for latest schedule.



TRADES ACADEMY

Building Skills For A Lifetime

506 Mariner Avenue, Tiyan
 647-4842 / 3
 647-4843 (fax)
 gcatrades@guam.net
 www.gcatradesacademy.org

Course Schedule August 2022 – March 2023

SAFETY TECHNOLOGY

Introduction to Safety Technology * Positive Safety Communication * Hazard Recognition, Environmental Awareness, & Occupational Health * Job Safety Analysis & Pre-task Planning * Safety Data Tracking & Trending * Site Safety Plans * Safety Orientation & Safety Meetings * Permits & Policies * Incident Investigations, Policies & Analysis * OSHA Inspections & Recordkeeping

22-140 Saturdays 29Oct22 – 03Dec22 8:00 am – 5:00 pm Tiyan Training Facility room A205

CONSTRUCTION CRAFT LABORER (LEVEL 1)

CARPENTRY 1: Introduction to the Trade * CARPENTRY 1: Building Materials, Fasteners, & Adhesives * CARPENTRY 3: Properties of Concrete * CARPENTRY 4: Site Layout One – Differential Leveling * CARPENTRY 3: Handling & Placing Concrete * CARPENTRY 3: Foundations & Slab on Grade

22-153 Saturdays 10Sep22 – 21Jan23 1:00 pm – 5:00 pm Tiyan Training Facility room B102

23-008 Mon-Wed-Fri 18Jan23 – 14Apr23 6:00 pm – 8:30 pm Tiyan Training Facility room B102

CONSTRUCTION CRAFT LABORER (LEVEL 2)

CARPENTRY 3: Reinforcing Concrete * CARPENTRY 3: Vertical Formwork * CARPENTRY 3: Horizontal Framework * FIELD SAFETY: Heavy Equipment, Forklift, & Crane Safety * FIELD SAFETY: Steel Erection * FIELD SAFETY: Electrical Safety * CARPENTRY 4: Introduction to Construction Equipment * HEAVY EQUIPMENT OPERATOR 2: Rough Terrain Forklifts

22-056 Mon-Wed-Fri 08Aug22 – 14Nov22 6:00 pm – 8:30 pm Tiyan Training Facility room B102

23-005 Saturdays 28Jan23 – 26Aug23 1:00 pm – 5:00 pm Tiyan Training Facility room B102

CONSTRUCTION CRAFT LABORER (LEVEL 2) Continued

WELDING 1: Oxyfuel Cutting * MASONRY 3: Elevated Masonry * FIELD SAFETY: Working from Elevations * Your Role in the Green Environment

22-230 Mon-Wed-Fri 16Nov22 – 06Jan23 6:00 pm – 8:30 pm Tiyan Training Facility room B102



Course Schedule August 2022 – March 2023

HEAVY EQUIPMENT OPERATOR (LEVEL 1)

Orientation to the Trade * Heavy Equipment Safety * Identification of Heavy Equipment * Basic Operations Techniques * Utility Tractors * Introduction to Earth Moving * Grades, Part One

22-223 Monday & Wednesdays 08Aug22 – 28Dec22 6:00 pm – 8:30 pm Tiyan Training Facility room A205

HEAVY EQUIPMENT OPERATOR (LEVEL 2) Continued

Excavation Math * Interpreting Civil Drawings * Site Work * Soils * Skid Steers * Loaders

22-147 Monday & Wednesdays 01Aug22 – 11Jan23 6:00 pm – 8:30 pm Tiyan Training Facility room A101

HEAVY EQUIPMENT OPERATOR (LEVEL 2)

Rough Terrain Forklifts * On-Road Dump Trucks * Excavation Math * Interpreting Civil Drawings * Site Work * Soils * Skid Steers * Loaders

23-001 Monday & Wednesdays 04Jan23 – 09Aug23 6:00 pm – 8:30 pm Tiyan Training Facility room A205

HEAVY EQUIPMENT OPERATOR (LEVEL 3)

Finishing & Grading * Compaction Equipment * Backhoes * Off-Road Dump Trucks * Dozers * Excavators * Motor Graders

23-003 Monday & Wednesdays 18Jan23 – 23Oct23 6:00 pm – 8:30 pm Tiyan Training Facility room A101

HEAVY EQUIPMENT BACKHOE OPERATOR (Continued)

Basic Operational Techniques * Grades * Excavation Math * Interpreting Civil Drawings * Site Work * Introduction to Earthmoving * Soils * Backhoes

22-154 Saturdays 10Sep22 – 29Apr23 1:00 pm – 6:00 pm Tiyan Training Facility room A101



TRADES ACADEMY

Building Skills For A Lifetime

506 Mariner Avenue, Tiyan
 647-4842 / 3
 647-4843 (fax)
 gcatrades@guam.net
 www.gcatradesacademy.org

Course Schedule August 2022 – March 2023

ELECTRICAL / ELECTRONIC SYSTEM TECHNICIAN (LEVEL 1)

Orientation to the Trade * Electrical Safety * Introduction to Electrical Circuits * Electrical Theory * Introduction to the National Electric Code * Device Boxes * Hand Bending * Raceways & Fittings * Conductors & Cables * Basic Electrical Construction Drawings * Residential Electrical Services * Electrical Test Equipment

22-224 Tuesdays & Thursdays 25Aug22 – 14Feb23 6:00 pm – 8:30 pm Tiyan Training Facility room A205

ELECTRICAL / ELECTRONIC SYSTEM TECHNICIAN (LEVEL 2)

Alternating Current * Motors: Theory & Application * Electrical Lighting * Conduit Bending * Pull & Junction Boxes * Conductor Installations * Cable Tray * Conductor Terminations & Splices * Grounding & Bonding * Circuit Breakers & Fuses * Control Systems & Fundamental Concepts

22-198 Saturdays 02Jul22 – 28Jan23 8:00 am – 12:00 noon Tiyan Training Facility room A203

22-201 Saturdays 10Sep22 – 15Apr23 1:00 pm – 6:00 pm Tiyan Training Facility room B201

23-011 Tuesdays & Thursdays 16Feb23 – 07Sep23 6:00 pm – 8:30 pm Tiyan Training Facility room A205

ELECTRICAL (LEVEL 3)

Load Calculations – Branch & Feeder Circuits * Conductor Selection & Calculations * Practical Applications of Lighting * Hazardous Locations * Overcurrent Protection * Distribution Equipment * Transformers * Commercial Electrical Systems * Motor Calculations * Voice, Data, & Video * Motor Controls

22-205 Tuesdays & Thursdays 18Aug22 – 09Mar23 6:00 pm – 8:30 pm Tiyan Training Facility room B201

23-006 Saturdays 04Feb23 – 09Sep23 8:00 am – 12:00 noon Tiyan Training Facility room A203

ELECTRICAL (LEVEL 4)

Load Calculations – Branch & Feeder Circuits * Conductor Selection & Calculations * Practical Applications of Lighting * Hazardous Locations * Overcurrent Protection * Distribution Equipment * Transformers * Commercial Electrical Systems * Motor Calculations * Voice, Data, & Video * Motor Controls

23-012 Tuesdays & Thursdays 14Mar23 – 28Nov23 8:00 am – 12:00 noon Tiyan Training Facility room A203



TRADES ACADEMY

Building Skills For A Lifetime

506 Mariner Avenue, Tiyan
 647-4842 / 3
 647-4843 (fax)
 gcatrades@guam.net
 www.gcatradesacademy.org

Course Schedule August 2022 – March 2023

ELECTRONIC SYSTEM TECHNICIAN (LEVEL 2) Continued

Switching Devices and Timers * Semiconductors and Integrated Circuits * Test Equipment * Introduction to Electrical Drawings *
 Introduction to Codes and Standards * Cable Selection * Wire and Cable Terminations * Power Quality & Grounding
22-176 Tuesdays & Thursdays 04Aug22 – 29Dec22 6:00 pm – 8:30 pm Tiyan Training Facility room A203

ELECTRONIC SYSTEM TECHNICIAN (LEVEL 3)

Buses & Networks * Fiber Optics * Wireless Communications * Site Survey, Project Planning & Documentation *
 Fundamentals of Crew Leadership * Rack Assembly * System Commissioning & User Training * Maintenance &
 Repair

Buses &
 Networks * Fiber
 Optics *
 Wireless
 Communications
 * Site Survey,
 Project Planning
 &
 Documentation
 * Fundamentals
 of Crew
 Leadership *
 Rack Assembly *
 System
 Commissioning
 & User Training
 * Maintenance
 & Repair

23-009 Tuesdays & Thursdays 03Jan23 – 03Aug23 6:00 pm – 8:30 pm Tiyan Training Facility room A203

ELECTRONIC SYSTEM TECHNICIAN (LEVEL 4) Continued



Course Schedule August 2022 – March 2023

Broadband Systems * Media Management Systems * Telecommunications Systems

22-200 Mondays & Wednesdays 10Aug22 – 05Dec22 6:00 pm – 8:30 pm Tiyan Training Facility room A203

ELECTRONIC SYSTEM TECHNICIAN (LEVEL 4) Continued

Residential & Commercial Systems * Intrusion Detection Systems * Fire Alarm Systems * Overview of Nurse Call & Signaling Systems * CCTV Systems * Access Control Systems * EST and Internet of Things (IoT)

22-232 Mondays & Wednesdays 07Dec22 – 23Aug23 6:00 pm – 8:30 pm Tiyan Training Facility room A203

HEATING VENTILATION AIR CONDITIONING (LEVEL 1)

Introduction to HVAC * Trade Mathematics * Basic Electricity * Introduction to Heating * Introduction to Cooling * Introduction to Air Distribution Systems * Basic Copper & Plastic Piping Practices * Soldering & Brazing * Basic Carbon Steel Piping Practices

22-222 Tuesdays & Thursdays 04Aug22 – 19Jan23 6:00 pm – 8:30 pm Tiyan Training Facility room B102

HEATING VENTILATION AIR CONDITIONING (LEVEL 2) Continued

Leak Detection, Evacuation, Recovery, & Charging * Metering Devices * Heat Pumps * Basic Maintenance * Chimneys, Vents, & Flues * Sheet Metal Duct Systems * Fiberglass & Flexible Duct Systems * Commercial Airside Systems * Air Quality Equipment * Introduction to Hydronic Systems

22-079 Mondays & Wednesdays 08Aug22 – 06Mar23 6:00 pm – 8:30 pm Tiyan Training Facility room A105



Course Schedule August 2022 – March 2023

HEATING VENTILATION AIR CONDITIONING (LEVEL 2)

Alternating Current * Compressors * Refrigerant & Oils * Leak Detection, Evacuation, Recovery, & Charging * Metering Devices * Heat Pumps * Basic Maintenance * Chimneys, Vents, & Flues * Sheet Metal Duct Systems * Fiberglass & Flexible Duct Systems * Commercial Airside Systems * Air Quality Equipment * Introduction to Hydronic Systems

22-202	Saturdays	13Aug22 – 29Apr23	1:00 pm – 5:00 pm	Tiyán Training Facility room A105
23-004	Tuesdays & Thursdays	24Jan23 – 26Sep23	6:00 pm – 8:30 pm	Tiyán Training Facility room B102

HEATING VENTILATION AIR CONDITIONING (LEVEL 3)

Fasteners, Hardware, & Wiring Terminations * Control Circuit & Motor Troubleshooting * Troubleshooting Cooling * Troubleshooting Heat Pumps * Troubleshooting Gas Heating * Troubleshooting Oil Heating * Troubleshooting Accessories * Zoning, Ductless, & Variable Refrigerant Flow Systems * Commercial Hydronic Systems * Steam Systems * Retail Refrigerant Systems * Customer Relations

23-010	Mondays & Wednesdays	08Mar23 – 06Nov23	6:00 pm – 8:30 pm	Tiyán Training Facility room A105
---------------	----------------------	-------------------	-------------------	-----------------------------------

HEATING VENTILATION AIR CONDITIONING (LEVEL 3) Continued

Control Circuit & Motor Troubleshooting * Troubleshooting Cooling * Troubleshooting Heat Pumps * Troubleshooting Gas Heating * Troubleshooting Oil Heating * Troubleshooting Accessories * Zoning, Ductless, & Variable Refrigerant Flow Systems * Commercial Hydronic Systems * Steam Systems * Retail Refrigerant Systems * Customer Relations

22-070	Saturdays	02Jul22 – 18Feb23	12:00 pm – 5:00 pm	Tiyán Training Facility room B101
22-163	Mondays & Wednesdays	08Aug22 – 05Oct22	6:00 pm – 8:30 pm	Tiyán Training Facility room B101

HEATING VENTILATION AIR CONDITIONING (LEVEL 4)

Water Treatment * Indoor Air Quality * Energy Conservation Equipment * Building Management Systems * System Air Balancing * System Startup & Shutdown * Construction Drawings & Specification * Heating & Cooling System Design * Commercial & Industrial Refrigeration Systems * Alternative & Specialized Heating & Cooling Systems * Fundamentals of Crew Leadership

22-212	Mondays & Wednesdays	12Oct22 – 07Jun23	6:00 pm – 8:30 pm	Tiyán Training Facility room B101
23-007	Saturdays	25Feb23 – 07Oct23	12:00 pm – 5:00 pm	Tiyán Training Facility room B101