



2023

**ADVANCED SOLUTIONS
TECHNICAL INSTITUTE
(ASTI)**

PRESENTED ON: 12-12-2023

**TECHNICAL AND
VOCATIONAL EDUCATION
AND TRAINING SYSTEMS**

**Advanced Solutions Technical
Institution
TVET System an Introduction**

This document provides a summary of ASTI’s technical and vocational education and training (TVET) systems for international partners.

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Introduction

To foster growth, and seize emerging opportunities in the Caribbean, a well-equipped and diverse workforce supported by robust business strategies and conducive policy frameworks is imperative. Within this context, Technical and Vocational Education and Training (TVET) assumes a paramount role as a catalyst, strategically shaping policy directives, both regionally and globally. It, serves as a cornerstone for imparting the necessary competencies, knowledge, and adaptive behaviors crucial for employability and upward social mobility.

Moreover, the significance of TVET extends beyond individual skill development, contributing substantially to fostering innovation and the sustainable expansion of businesses. Its impact resonates across various echelons, spanning national, regional, and local domains, entwined with broader objectives encompassing global and industrial strategies.

Recognizing the pivotal role of well-prepared human capital, ASTI stands as a facilitator of TVET programmes that elevate performance standards to meet international benchmarks. The evolution of TVET qualifications, aligned with programme development and stringent standards, serves as a response to the demand across diverse sectors of the labor landscape. ASTI's array of programmes, spans multiple industries, including Business, Telecommunications, ICT, Security, Electronics, Renewable Energy, Solar Technologies, Robotics, Mechanical, and Automotive Engineering, many of which hold international accreditation. These offerings range from **Introductory, to Certificates, to Diplomas and Degrees**, addressing the spectrum of vocational and technical education needs.

About Advanced Solutions Technical Institute (ASTI)

ASTI, formally known as Advanced Solutions Technical Institution, is firmly grounded in five fundamental values: Quality Education, Excellence, Respect, Integrity, and Diversity. Recognized as a leading Technical & Vocational Institute in Trinidad and Tobago and the wider Caribbean Region, ASTI is dedicated to providing an exceptional learning experience.

Our institution boasts state-of-the-art facilities featuring some of the most advanced technological laboratories in the region. Coupled with expert instruction, this ensures a comprehensive educational encounter across various course types and subject areas.

With an annual enrollment exceeding five thousand students, ASTI stands as the predominant provider of Technical & Vocational programmes catering to individuals aged 16 to 65 in the region. ASTI provides a comprehensive repertoire of over 200 programmes, 120 apprenticeships, and more than 150

vocational courses spanning diverse industries. All our offerings bear international recognition. Our curriculum encompasses entry-level courses up to Degrees, Masters, and professional certifications.

Notably, ASTI facilitates numerous apprenticeships, collaborating successfully with over 2,000 employers. This collaboration involves assisting employers in recruiting apprentices and providing tailored training for their workforce.

To remain attuned to industry dynamics, ASTI annually conducts a rigorous assessment of industry demands and trends. This approach functions as a framework for broadening and diversifying our range of programme offerings to address the evolving educational requirements.

Our Mission and Vision

Mission

ASTI delivers career success by producing competent, knowledgeable professionals in Telecommunications, IT and Business through a strategic blend of technical and theoretical learning

Vision

A highly adaptive, continually improving, quality driven and innovative technical institution recognized for competent graduates with global perspectives in the areas of Telecommunications, IT and Business.

Our Accreditation

Accreditation Council of Trinidad and Tobago (ACTT)

ASTI is a registered institution with the Accreditation Council of Trinidad and Tobago (ACTT) and holds programme accreditation with ACTT.





Accreditation Service for International Schools, Colleges & Universities (ASIC)

Advanced Solutions Technical Institute holds Institutional Accreditation with ASIC.

ASIC is an independent UK quality assurance body specializing in the institutional accreditation of education providers worldwide. ASIC operates in over 60 countries working with institutions, and governments, to improve the quality of their education. provision.

EduQual

Advanced Solutions Technical Institute is an Approved Center and holds Accreditation with EduQual

EduQual is a regulated awarding body, responding to a demand for innovative, relevant, yet affordable qualifications that do not compromise quality.

EduQual's accredited qualifications are delivered in partnership with a global network of EduQual-approved Centers (e.g., colleges and training providers).



Electronics Technicians Association (ETA)

Advanced Solutions Technical Institute holds Program Recognition and holds authorized programs throughout the Caribbean

Founded in 1978, ETA[®] International (ETA) is a not-for-profit 501(c)(6) trade association that serves technology-related industries by providing accredited individual certifications per the ISO 17024 standard for certification bodies. ETA works closely with top industry professionals to provide industry-backed certifications that fill the needs of ETA's members, though membership is not required to take an ETA examination. ETA has issued over 180,000 technical certifications covering more than 90 certification programs in a variety of technology fields.



Ed2Go

We are the Authorized Provider Throughout the Caribbean,

Advanced Solutions has Authorized Centers Throughout the Caribbean that offer our programs, Jamaica (2 Centers), Cayman Islands (1 Center), St. Lucia (1 Center), Antigua (1 Center), Barbados (1 Center), Guyana (1 Center).



ed2go was founded in 1997 to provide quality education the fastest way possible — online. What began as an email correspondent program has grown into a leading online continuing education provider, reaching life - long learners in 50 states and more than 16 countries. We believe that anyone can learn, and we exist to empower lives through education.

Society of Cable Engineers

Advanced Solutions Technical Institute is the Caribbean Representative for Society of Cable Engineers



SCTE is envisioning the future of connectivity, today. Through technological leadership and innovation, SCTE has served as the applied science leader for the cable telecommunication industry for more than five decades. As a not for profit, member organization, SCTE moves member companies forward through continuous training for the workforce of tomorrow and by putting leaders into the conversations that matter.

PEDAGOG

Advanced Solutions Technical Institute is a **Global Partner with Pedagog.**

PEDAGOG is the world's first blockchain-powered online education platform. Our goal is to make learning fun and rewarding. That's why we're looking to provide our students with token-based scholarships and game-like experience while learning.





European International University

Advanced Solutions Technical Institute is a **Global Partner with European International University for the Caribbean.**

We are pleased to inform you that EIU-Paris is an institution authorized, regulated, and licensed by both the Ministry of National Education and the Ministry of Higher Education, Research, and Innovation. This authorization and licensing grant EIU the power to award certifications to its students.

Moreover, since EIU delivers all its programs in the English medium and exclusively enrolls international students outside of France, the institution has sought international accreditation and professional memberships from reputable bodies such as ASIC-UK, ACBSP, BGA, ECBE, and ATHEA.

Electronic Security Association

Advanced Solutions Technical Institute is a **Global Partner with European International University for the Caribbean.**

Established in 1948, the Electronic Security Association is the largest trade association in the United States representing the electronic security and life safety industry.

Member companies install, integrate and monitor intrusion and fire detection, video surveillance and electronic access control systems for commercial, residential, industrial and governmental clients. The association provides technical and management training, government advocacy and delivers information, advice, tools, and services that members use to grow their businesses and prosper.



Training Programmes Description

The Objective

Technical and Vocational Education and Training (TVET) programs are meticulously crafted to facilitate candidates in acquiring hands-on skills within diverse technical and vocational domains. Students benefit from an expansive array of departmental choices and varied training durations, with options ranging from one to multiple years. Successful completion of a TVET program culminates in the attainment of a TVET Certificate, enabling graduates to pursue career opportunities across a spectrum of industries, including but not limited to banks, insurance companies, factories, non-governmental organizations, and governmental entities.

ASTI aims to deliver training programmes to institutions, categorized into fields that align with the industry's required expertise and demand. Our programme coordinators meticulously strategize and implement these programmes with the overarching goals of ensuring alignment with industry needs and generating measurable outcomes. The training will be conducted through a blended platform, encompassing various modalities, including but not limited to:

- **Lectures** – offered both virtually and in-house, these sessions incorporate a range of training materials such as handouts, video links, books, journals, etc. A conventional and widely adopted educational method, lectures are instructional sessions led by an expert, typically a professor or instructor, aimed at conveying information, elucidating concepts, and providing insights on specific topics.
- **Labs/Practical Sessions** – Students are required to physically attend our well-equipped labs, featuring some of the most modern technology in the Caribbean. These sessions enhance the educational experience by fostering a dynamic and interactive environment, enabling active student participation in the learning process.
- **Group Assignments** – Within lectures, students are organized into groups and assigned topics for discussion and presentation to lecturers. Group assignments offer students opportunities for active learning, facilitating the exchange of diverse perspectives and the development of crucial interpersonal skills. Despite their challenges, group assignments can be a gratifying method for students to apply knowledge collaboratively toward shared objectives.
- **Coursework/Case Studies** – Students engage with case studies involving reading, research, and responding to questions on the designated training topic area. Case studies are valuable for their capacity to provide depth and context, enabling researchers to explore intricate phenomena and contributing to a more nuanced understanding of specific issues.

- **Final Exams** – Concluding the training period, students are obligated to undergo assessments structured around the covered training topics. Various modalities employed in these exams include:
 - **Practical Assessments:** Evaluating hands-on skills and knowledge application in real-time or simulated work environments, involving tasks like technical repairs, machinery operation, or procedure demonstrations.
 - **Skills Demonstrations:** Students are required to demonstrate specific skills relevant to their field, such as tool usage, adherence to safety protocols, or task execution within designated timeframes.
 - **Workplace Simulations:** Realistic scenarios recreated to assess students' ability to apply knowledge and skills in practical situations, utilizing simulated workstations, computer-based simulations, or virtual reality scenarios.
 - **Oral Examinations:** Verbal responses to questions, either one-on-one or in group settings. This modality allows for a more dynamic assessment of a student's understanding and communication skills.
 - **Written Examinations:** Traditional written exams assess theoretical knowledge and understanding of concepts, through multiple-choice questions, short-answer questions, essays, or technical reports. Written exams are often used to evaluate the theoretical underpinnings of the practical skills taught in TVET programs.
 - **Project-Based Assessments:** Completion of projects demonstrating their ability to plan, execute, and complete a task or solve a problem relevant to their field of study. Project-based assessments emphasize real-world application and problem-solving skills.
 - **Portfolio Assessment:** Compilation of a student's work, which may include projects, reports, and other evidence of learning and achievement, offering a comprehensive view of the student's progress over time.
 - **Internship or Work Placement Assessments:** Evaluation of a student's performance and skill application within a workplace setting during internships or work placements.
 - **Peer Assessments:** Involvement in assessing peers' work to encourage collaboration, teamwork, and interpersonal skill development, which are often essential in many vocational fields.
 - **Continuous Assessment:** Ongoing evaluation throughout the course, considering factors like class participation, assignments, quizzes, and practical exercises, rather than relying solely on final exams.

Benefits of our Training Programmes

At ASTI you can expect ongoing support and customer service, with regular performance reviews to allow you to see the impact of our service. Here's how the unique programmes offered by us will support your country's/company's growth:

- Lower unemployment rates
- Higher production rates
- Lower employee turnover rate
- Motivated employees/population
- Increased GDP
- Reduced dependence on public assistance programs
- Greater tax revenues
- Reduction of crime
- Improved public health
- Greater political and civic engagement
- Education contributes to the stability of the community members
- It promotes equality within the community
- It makes members of the community get a sense of self dependence and confidence
- It promotes peace and security
- Creates a modern society

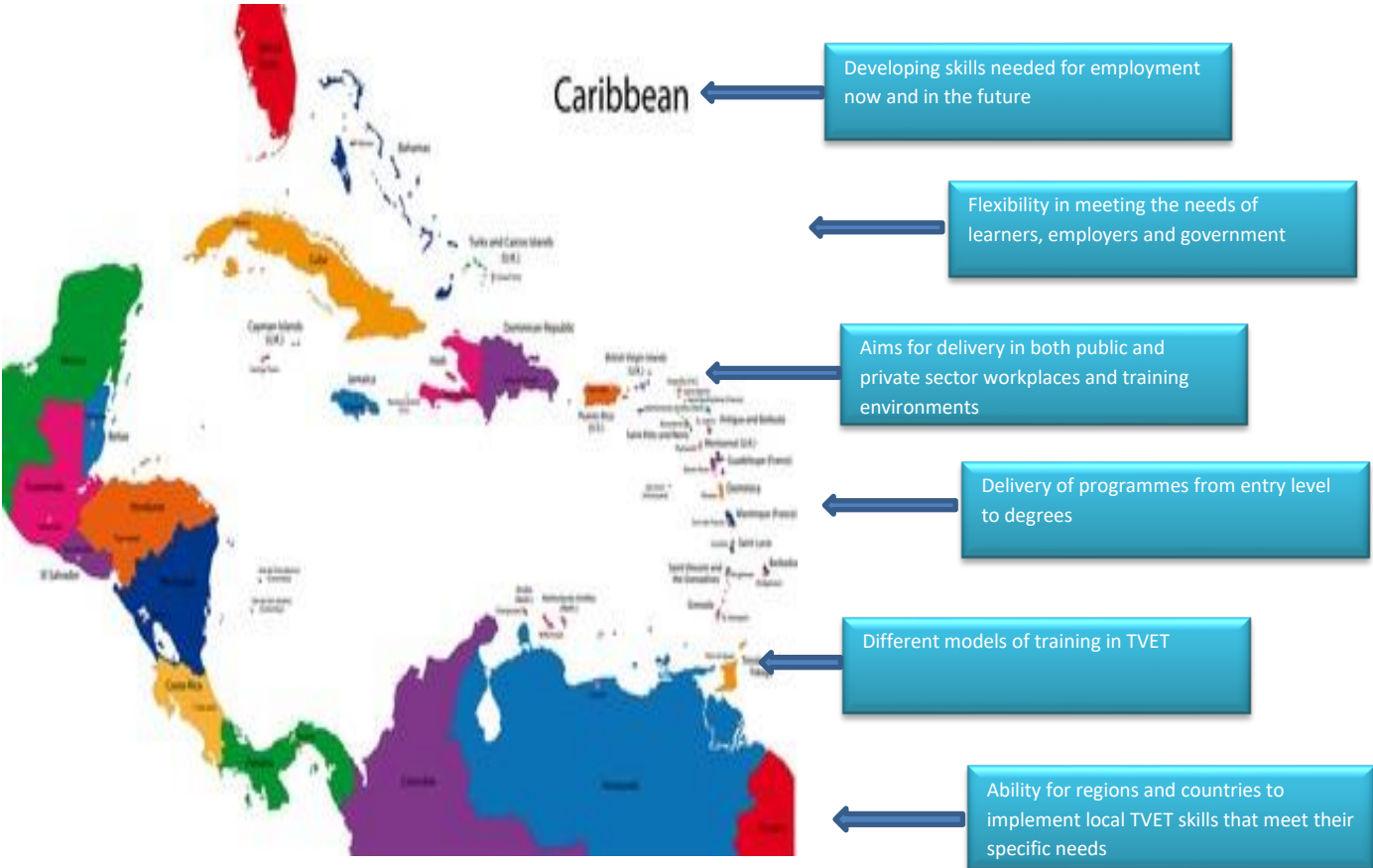
Objectives of this Proposal

ASTI is committed to establishing enduring client collaborations conducive to mutual advancement. Our primary objectives encompass the following:

- Formulating innovative structures to facilitate collaboration between employers and educators.
- Ensuring flexible pathways to training and employment, catering to the diverse needs of learners and enhancing their prospects.
- Supporting lifelong training and retraining initiatives to address the evolving demands of employees and employers in the future.
- Investing in professional development programmes and recruitment campaigns to bolster a nation's sectoral training capacity.

- Providing educational functions in higher education, vocational and professional education, with provisions for research, innovation advancement, and knowledge dissemination that align with current and emerging industry skill requirements.
- Offering consultancy services to industries and public organizations, aligning with the promotion of higher levels of technical qualifications and training.
- Devising and implementing educational programs in Engineering Technology, fiber optics engineering, Telecommunications, and automotive technology, tailored to the current societal needs and responsive to anticipated changes and developments in terms of diversity and specialization.
- Granting degrees, diplomas, certificates, and academic distinctions based on examinations or alternative evaluation methods for TVET programmes.
- Serving as a center for fostering cooperation and idea exchange between the academic and research community, and the industrial and governmental sectors, with a focus on promoting TVET training within communities.

Overview of TVET in the Caribbean Regions



Six key features to define the ASTI system for TVET

Industry Centered

- Industry needs plays a key role in the design, delivery and assessment of TVET.
- Apprenticeship designed for employers to contribute equipment, training venues.
- Training outcomes are measured against employment-based requirements.

Global

- International standards are implemented for delivering training and qualifications.
- Research on international changes in TVET initiatives are conducted.

Flexible

- Training in TVET is delivered within a regulated framework.
- This sector is responsive to change and is able to be designed to stakeholder needs.

Access and Inclusion

- Learners of all ages and skills have access to training that is tailored to their level of competency.
- ASTI provides comprehensive student support, community engagement, staff development and utilization of the most advanced technology in the region.

Quality

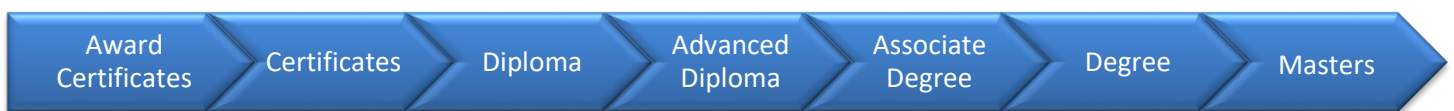
- ASTI gives full commitment to the delivery of high-quality programmes underpinned by robust quality assurance systems and practices.
- Quality assurance agencies such as Accreditation Council of Trinidad and Tobago (ACTT) and Accreditation Services for International Schools conduct routine quality checks on the organization.

Economic Development

- Our TVET Programmes designed to contributing to growth and innovation within a country.
- ASTI delivers upskilling and reskilling programmes for employers to enhance their productivity.
- ASTI works with multiple bodies in TVET to enhance approaches for employers growth and competitiveness

How does ASTI's Qualification Work?

Learners evaluated through technical qualifications often exhibit greater practicality and readiness for employment compared to those with academic qualifications. Technical qualifications, acknowledged by employers, facilitate a seamless transition for learners from training to employment or advanced studies. At ASTI, TVET qualifications serve as endorsements of a learner's proficiency in knowledge, skills, and behaviors. These qualifications are subject to regulation, ensuring they maintain a balance between industry specificity and broader applicability, equipping learners with skills pertinent to both professional and personal aspects of life.



How is ASTI ensuring TVET is fit for the future?

Digital Adaptation

- ASTI has implemented a system of using technology to promote effective digital and blended learning that enhances teaching, learning and assessment.
- ASTI also uses technology with augmented and virtual reality such as Electude, ESA, Ed2Go that supports engaging and impactful online learning that isn't simply a case of transferring traditional courses online.

ASTI Programme Offerings

ASTI carries over Two hundred (200) programmes. Below is a sample of some of our programmes. Upon request a full catalog would be provided.

Diplomas	Associate Degree	Degree
CCTV Design and Application	CCTV Engineering	Physical Security Management (BSc)
Fiber Optics Network Technology	Electronics	Fiber Optics Engineering (BSc)

Hybrid Electric Vehicle Diagnostic Technology	Data Cabling and Networking	Computer Science & Information Technology (BSc)
Network Security Implementation and Management	Telecommunications Networks	Industrial Electronics (BSc)
Telecommunications and Electronics	Information Technology	Data Cabling and Networks (BSc)
Electrical & Electronics Engineering	Cyber Security	Renewable Energy (BSc)
AI and Machine Learning	AI and Machine Learning Engineering	Photovoltaics and Solar Energy (BSc)
Cell Phone Repairs & Software Program	Solar Energy	Networking (BSc)
Electric & Hybrid Maintenance Engineering	Smart Home Integrations Technology	Optical Engineering & Communications (BSc)
Wireless Communication Networking	Fiber Optics Design	Automobile & Mechanical Engineering (BSc)
Solar Energy	Fiber Optics Quality Manager	Telecommunications Networks (Postgrad Cert)
Renewable Energy	Broadband Networks	Computer Science & Information Technology (Postgrad Cert)
Air Conditioning and Refrigeration	Broadband Engineering	Telecommunications Systems & Networks (MSc)
Welding and Fabrication		
Welding Technology		
Welder in Repair & Maintenance		
Photovoltaic Installer		
Smart Home Integrations		
Audio Video Forensic		

Commercial Audio Technician		
Digital Video Editor		
Radio Frequency Technician		
Satellite Installer		
Mobile Communications & Electronics Installer		
Drone Operations & Maintenance		
Broadband Business & Management		
Broadband Maintenance		
Fiber to the Home		
Data Analytics		
Cybersecurity Network		
Network & Programming		
Fiber Optic Management		
Automobile Engineering		
Mechanical Engineering		
Electric & Hybrid Maintenance Engineering		
Hybrid Electric Vehicle Technician		

Hybrid Electric Vehicle Diagnostic		
Digital Marketing		
CompTIA Certification Training: A+, Network+, Security+		

Awarding Bodies



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