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Integrating professional certificates in TVET provision

Professional certificates for Abu Dhabi's Applied Technology School students

Promising Practice

Implemented by: Abu Dhabi Centre for Technical and Vocational Education and Training (ACTVET) at the Applied Technology School (ATS)

Where: Abu Dhabi, United Arab Emirates

Status: Ongoing – started at ACT in September 2023

Summary: The professional certification initiative provides secondary level students with industry and higher education recognized courses within their qualifications. The initiative ensures graduates have recognized credentials relevant to the labour market and can progress to higher education if they so choose.

Education 2030

Overview

The Applied Technology School (ATS) is regulated by the Abu Dhabi Centre for Technical and Vocational Education and Training (ACTVET). ACTVET is the government agency dedicated to creating training and educational opportunities for young people throughout the Emirate, enabling graduates to pursue a career path and lifelong learning opportunities which meet their personal aspirations. ATS is the secondary level TVET institute with more than 20,000 alumni, spanning 20 schools across 13 campuses. ATS's vision is to build a world class TVET system with opportunities for all to enter the labour market with the knowledge, skills and attitudes to access gainful employment or to continue into the higher education system. One approach to achieving these aims has been the integration of professional certifications into ATS curriculum and qualifications, thereby aligning curricula with industry standards and providing students with credits recognized by higher education institutions.

Fig 1.1. Vision, Mission and Values of ATS[1]

Description

By integrating professionally recognized certificates into ATS curricula and qualifications, graduates have a greater access into work or post-secondary education opportunities. Such courses and certificates allow students to show their theoretical and practical skills and knowledge. Certifications from organizations such as Cisco, Python Institute, Autodesk, the American Heart Organization, QuickBooks National Association and Adobe showcase not only student competence but are recognized by higher education institutions in the UAE as access level qualifications.

Fig 1.2. Logos of the organizations which have professional certification courses integrated into ATS courses

The integration of professional certification has been undertaken with the work and cooperation between ATS educators, industry partners and students.

Within the broader ATS qualification, certificates serve as:

- Summative assessments for specific skill-based units which are also externally valid.
- A recognized component of the student's official academic record and portfolio.
- A contributor to credit transfer in HE articulation agreements (up to nine credit hours).
- Evidence that students have met international industry standards, enhancing employability and progression opportunities.

ATS ensures that trainers are prepared before teaching any professional certificate. Training is conducted directly by the certificate providers (Cisco, Autodesk, etc.) to guarantee instructors fully understand the content, delivery requirements, assessment processes and vendor standards.

For new staff, ATS implements a train-the-trainer model, allowing certified senior teachers to mentor incoming teachers and ensure consistent delivery across campuses. No teacher is allowed to teach or assess a certificate unless they hold the same certification and are formally approved and authorised by ATS and the awarding body. Continuous professional development is provided whenever the certificate providers update their curriculum or exam systems.

Within ATS vocational programmes, some professional certificates are now embedded as compulsory components of the specialization (e.g., Cybersecurity Essentials in Computing, AutoCAD in Engineering, HeartSaver in Health Science). Additional certificates may be offered as optional enrichment opportunities for high-performing or motivated students.

Objectives

The integration of professional certification courses into ATS qualifications aligns the curriculum with industry standards. Students develop practical, evidenced and industry-aligned skills. Earning these certificates also enables students to obtain credits recognised by higher education institutions, facilitating access to post-secondary programmes. Moreover, professional certification courses allow students to demonstrate how they apply

1 Image taken from website: *https://www.ats.sch.ae*

theoretical knowledge in practical, real-world contexts, thereby showcasing a broader range of work-relevant competencies that are both valuable for employment and transferable to higher education.

Outcomes and impact

Across ATS's twenty schools, all Grade 10–12 students are required or encouraged to gain professional certification. This totals several thousand learners annually across Computing & AI, Engineering, Health Sciences, Business and Creative Media programmes. Many students successfully complete one or more certifications each year, although requirements differ. For example, in Engineering, only students who achieve high course grades are eligible to sit the Autodesk exams, whereas in Computing, all students are required to complete the Cybersecurity certification. Overall, more than 500 students graduate each year with at least one professional certificate.

Students who obtain professional certifications are better equipped to transition smoothly into the labour market or continue into higher education. Industry-recognised credentials are often internationally applicable, enabling graduates to demonstrate their competence when applying for work or study opportunities both locally and abroad.

ATS educators receive continuous support and professional development to support their delivery of these courses to the required standards. At the institutional level, the introduction of internationally recognised professional certification pathways strengthens alignment with global qualification and recognition frameworks, further enhancing the credibility and value of ATS programmes.

Insights and challenges faced

Integrating professional courses and certificates into TVET curriculum and qualifications has required extensive negotiation between ATS, industry partners and higher education institutions. Several key negotiation features contributed to the success of integrating professional certificates into ATS programmes:

- Aligning curriculum to meet ATS learning outcomes and vendor certification standards.
- Negotiating articulation agreements with higher education institutions to recognise certificates for academic credit.
- Meeting quality assurance requirements in teacher certification, lab specifications, and exam integrity.
- Agreeing operational responsibilities, such as exam administration, registration processes and technical support between ATS, industry and higher education institutions.
- Honouring a shared commitment to equity-making sure programmes are accessible across all ATS campuses without regard to student backgrounds.

Negotiations built a foundation of trust between ATS, industry partners and higher education institutions. ATS staff maintain continuous coordination and communication activities with all partners that included:

- Holding regular meetings (virtual and onsite) with vendors, higher education partners, and school academic teams.
- Assigning ATS focal points for each certification provider to manage communication and workflow.
- Joint planning for exam schedules, certificate registration and curriculum changes.
- Sharing performance dashboards and data reviews, ensuring transparency and continuous quality improvement.
- Adhering to annual review cycles, where ATS and partners evaluate success rates and implement programme updates.

A comprehensive educator programme was introduced, helping ATS teachers and trainers train students in professional courses. Educators are regularly updated on any new professional course or certification requirements. Key adjustments required for implementation included:

- Timetable modifications to create extended practical sessions for preparation and assessments.
- Upgrading labs and equipment to match vendor technical requirements, including licensed software and high-speed connectivity.
- Pedagogical shifts toward hands-on learning, simulations, practice exams and scenario-based tasks.
- Teacher qualification upgrades, ensuring every instructor is certified before teaching.

Guaranteeing all students, regardless of background, can access professional certification courses required several adjustments as students enter programmes with varying levels of academic readiness, digital skills, and financial resources. ATS implemented a series of targeted measures:

- Delivering all training and examinations on ATS campuses, eliminating the need for students to travel or pay for external testing centres.
- Covering all certification fees, ensuring financial limitations did not prevent participation.
- Providing bridging courses and academic support in areas such as Technical English, Digital Literacy and foundational Computing or Engineering skills as well as offering additional tutoring and mentoring for students who require extra support.
- Conducting awareness sessions for students and parents to explain the value and career relevance of professional certifications.

Conclusions and next steps

ATS will expand the integration of professional courses and certificates into other training programmes. As technology continues to evolve rapidly, professional certifications allow students to graduate with the most current theoretical knowledge and practical skills demanded by industry, both locally and globally. To support this growth, ATS is strengthening partnerships with an expanding network of industry organizations. Future expansion will focus on emerging and strategically important sectors, including:

- Cybersecurity, artificial intelligence, and cloud computing
- Industry 4.0, automation, and robotics
- Renewable energy systems and sustainability technologies
- Aviation, logistics, and transport technologies
- Advanced health, safety and emergency services training

These priorities match the UAE's national workforce needs and the evolving demands of high-growth economic sectors. ACTVET will invest in cutting-edge technologies and ensure industry-recognized standards are embedded within ATS programmes, enhancing the learning experience and future readiness of all students.

Learn more

To learn more about Abu Dhabi's Applied Technology Schools (ATS), see: *https://www.ats.sch.ae/*

Discover other practices

The UNESCO-UNEVOC innovative and promising practices database presents successful projects tackling key themes in TVET, such as entrepreneurship, youth employment, the green transition, digitalization, private sector engagement and more.

Learn more on our website at:

http://www.unevoc.unesco.org/promisingpractices

Questions or comments? Contact our team at:

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