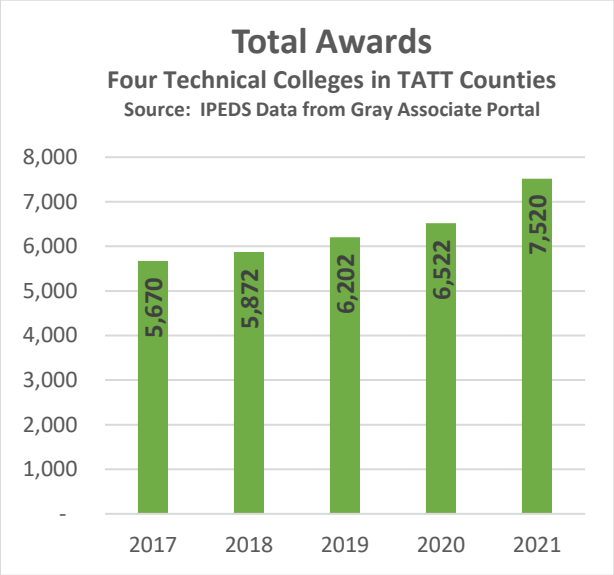
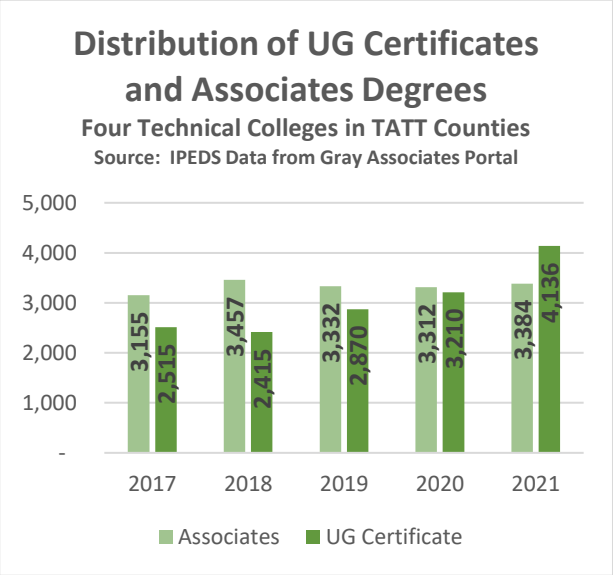
July 2023 TATT Newsletter

Talent Preparation: An Analysis of Technical College UG Certificate Completions

There are many routes to the development of skills, knowledge, and expertise. One of the primary pathways is through formal education. This month we want to examine the completion rates for students enrolled in either Associate's degrees or UG (undergraduate) certificate programs at the four campuses of the South Carolina Technical College System that are located in TATT counties. The four campuses include Greenville Technical College, Piedmont Technical College, Spartanburg Community College, and Tri-County Technical College.

The data for this analysis is from the Integrated Postsecondary Education Data System (IPEDS) and is extracted from Gray Associate's data portal. The most recent year with complete data is 2021.





An interesting phenomenon is occurring regarding the growth rates for the Associate's degree compared to the UG certificates over the five-year period from 2017 – 2021. The number of degree completions increased by 7 percent, while the number of certificate completions grew by 64 percent. So, why the substantial difference in growth rates between the two credentials? There are numerous non-mutually exclusive explanations for the increasing popularity of certificates including:

1. **The trend towards skill-based hiring** – "A skills-based approach emphasizes a person's skills rather than degrees…[and] enables employers to equitably assess diverse experiences and hire qualified candidates from historically overlooked sources and backgrounds." (Forbes.com)
2. **Upskilling** – Certificate programs provide a practical pathway for individuals of all ages to refine existing skills or add new skills to their professional tool kit. Typically, UG certificates can be earned in one year or less.
3. **Career and professional exploration** – We do not always know what we want to be when we grow up. As a result, many individuals find themselves transitioning to completely different

work/life activities multiple times during their working life. This is in part due to changes in corporate structures where "…today only 19 percent of companies still have traditional functional career models," (Deloitte) and in part due to changing attitudes towards work, especially among younger workers (see the Deloitte 2023 Gen Z and Millennial Survey for an overview).

4. **Expertise has shorter shelf life** – The rapid pace of technological development is prompting many individuals to explore a variety of microlearning credentials, including certificates. "According to IBM, more technical skills have … a 2.5-year half-life. This means that up-skilling efforts should not be taking place once every now and then, but to become an ongoing process." (LinkedIn)
5. **Costs** – Most certificate programs are less expensive in both time and dollars than many other skills development programs. In a rapidly changing and resource constrained environment, the lower costs often result in a big bang for the buck.

The top certificate programs at the four technical colleges in the Upstate are shown in the table below:

Top 25 Certificate Programs for the Four Technical Colleges in the Upstate
Source: IPEDS Data Extracted from Gray Associates Data Portal

6-Digit CIP Code	Certificate Title	2021 Completions
24.0101	Liberal Arts/Sciences/ Studies	1,402
48.0508	Welding Tech	286
15.0499	Electromechanical/ Maintenance Tech, Other	180
51.0904	EMT Paramedic	129
51.2602	Home Health Aide/ Home Attendant	124
47.0303	Industrial Mechanics/Maintenance Tech	111
47.0201	HVAC Maintenance Tech	105
47.0105	Industrial Electronics Tech	100
51.3901	Licensed Practical/ Voc. Nurse	95
47.0604	Auto Mechanics Tech	90
11.9999	Computer/Info Science and Services, Other	88
51.0801	Medical/Clinical Assistant	75
19.0709	Child Care Provider/ Assistant	69
52.0302	Bookkeeping and Accounting Tech	67
47.9999	Mechanic and Repair Tech, Other	65
51.0909	Surgical Tech	60
15.0406	Automation Engineer Tech	59
47.0101	Electrical/Electronic. Equip. Install/ Repair, General	59
51.0601	Dental Assisting	55
52.0701	Entrepreneurship/ Entrepreneurial Studies	55
52.1001	Human Resources Management, General	53
47.0402	Gunsmithing	48
48.0501	Machine Tool Technology/ Machinist	47
52.0201	Business Admin. and Management, General	47
51.0805	Pharmacy Technician/ Assistant	40

Definitions for CIP Codes