# 2017

## Year 2: Adult Learner Action Plan





#### Tennessee Tech University

#### Tennessee Higher Education Commission, Adult Learner Success Standard: Year 2 Action Plan

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#### Year 1 Self-Assessment

Tennessee Tech participated in a self-assessment process integrating the model for an Adult Learner Focused Institution (ALFI) in consultation with the Council for Adult and Experiential Learning (CAEL). The assessment process took place during the 2015-2016 academic year and data incorporated in the report for year one self-assessment of adult learning. The university conducted an Institutional Self-Assessment Survey (ISAS) and the <u>Adult Leaner Inventory (ALI)</u> in order to identify areas where opportunities are for improvements. In addition, the process explored where strategies are successful in support of adult learners and replicated across the university. CAEL consultants and a comprehensive university-wide represented assessment committee conducted the assessments and met numerous times to discuss findings during that academic year. The <u>ALFI results</u> began the work on the year two adult learner action plan present in the report.

CAEL observations and recommendations, based on results of ISAS and ALI (the ALFI assessment process), were provided in the following areas based on nine essential principles for serving adult learners (Table 1). For Tennessee Tech University, the principles Financing, Student Support Systems, and Strategic Partnerships exceeds that of the mean performance at similar institutions, and fell in the 70th, 59th, and 81st percentile respectively. Several principles were below the national mean and fell in lower percentiles, which indicates where improvements can be made to strengthen services in these areas (*Outreach, Assessment of Learning Outcomes, Teaching and Learning, Technology*). The principles at 58% Percentile or better in national comparison will be continued and enhanced for serving adult learners

Table 1

CAEL Principles of Effectiveness for Serving Adult Learners

EL Principle

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ALFI Principle	TTU Mean	National	Percentile in National
		Mean	Comparison
Strategic Partnership	43.9	32.3	81%
Financing	54.9	50.0	70%
Transitions	46.2	46.9	60%
Student Support Systems	43.5	42.4	59%
Life & Career Planning	41.3	43.6	58%
Outreach	36.8	41.3	45%
Teaching - Learning Process	34.1	40.3	40%
Assessment of Learning Outcomes	29.5	37.1	39%
Technology	32.9	57.2	23%

According to results, high importance with low satisfaction additionally indicated areas where improvements will influence the success of adult learners affiliated with TN Tech. The TN Tech adult learner planning team incorporating these results into our proposed plan. *Course availability and Value*: although students are somewhat satisfied, there was a large performance gap (1.16) between scores of importance and satisfaction, which placed the university significantly lower when comparing to other universities in these areas. Results show deficiencies in the diversity of the degrees/programs attainable with flexible offerings and format.

Campus Culture and Outreach: When investigating campus outreach to adult learners, it is evident that it happens in programs in the College of Interdisciplinary Studies. There is a need to educate other campus programs and services to better understand and serve adult learners in enrollment, retention, and graduation/degree attainment.

Institutional Support Services and Resources: Results show that student support services and resources at Tennessee Tech University are similar for all students no matter what the age. The committee identified that improvements are necessary in this area. The proposed plan is important to enhance services that are more appropriate for adult learners, and is a priority.

#### Additional Assessment and Research

In addition to the survey data from the Year 1 self-assessment, the TN Tech adult learning planning committee chose to continue to collect data in Year 2 from campus constituents on the needs and services of these non-traditional/ adult learner students. The committee conducted an inventory of current attainable degrees offered by TTU. The current TTU adult learner attainable bachelor's degree programs include Nursing (RN-BSN), Interdisciplinary Studies, Criminal Justice, and Professional Studies.

The Dean of the College of Interdisciplinary Studies conducted focus groups with the Non-Traditional Student Organization and the Student Military Organization to get feedback and suggestions for improvement to student services for adult learners. The Stakeholder Visits at extended campus locations that serve adult learners also gathered interesting results. Collectively, participants (administrators, advisors, instructors, business leaders and potential students) shared the following suggestions for improvement: More evening course offerings, Training for advisors, financial assistance, Website navigation, and promotional materials.

In addition to data collection, trends for employment were investigated. The <u>January 2017 Academic Supply and Occupational Demand Report</u> is available through THEC, and page 18 (Table 7) of the report is particularly helpful as it indicates programs of study with the largest projected

workforce deficit. The report considers which fields projected to be in high demand relative to the number of qualified workers. The consideration of projected workforce deficits, rather than past demand, is critical considering the rapid pace of economic change and the tendency of our competitors to follow a strategy of program development and delivery.

The <u>February 2017 Reconnect Survey</u>, summarizes the challenges and preferences of adult learners. Costs and affordability (81%), time constraints (73%), and family commitments (53%), each listed among the top barriers for all education levels. Respondents indicated that financial aid/tuition reimbursement, flexible work schedules, onsite (work) access to courses, and advice regarding work/life balance, best degrees/credentials, and transfer/work experience credit would be beneficial.

The <u>Tennessee Career Outlook: Careers to 2022</u>, provided industry needs based on demand, job growth and openings through 2022. TTU compared these needs for our immediate region, the Greater Nashville area, Memphis, Chattanooga, and Knoxville. This information was helpful as we propose a plan to focus on those degrees, certificates, and skill sets that best **meet the needs of Tennessee's workforce and provide career** pathways for adult learners.

#### Objectives

- 1. Market to and recruit adult learners/veterans
- 2. Develop an improved partnership with regional industry workforce needs and develop appropriate degree/certificate programs to align with education opportunities and professional needs
- 3. Improve the diversity of the degrees/programs attainable with flexible offerings and format
- 4. Develop a PLA Policy that aligns with State Standards
- 5. Develop Collaborated Effort to use articulation agreements and transfer pathways with regional Community Colleges
- 6. Implement an annual survey to collect feedback from adult learners and consistently review results for action
- 7. Improve the quality of outreach and services for adult leaners
- 8. Implement consistent training for onsite and offsite Coordinators to improve services to meet the needs of adult learners
- 9. Improve the number of graduates as per the TN Governor's Drive to 55

#### Success Indicators and Evidential Progress/Success

TTU developed a matrix to formulate and track objectives and strategies to improve learning for adults and affect the successful attainment of 4-year degrees. The <u>matrix</u> on pages 6-7 indicates success indicators and benchmarks for progress. TTU will utilize multiple assessments to gauge progress, and targets and aspirational benchmarks as presented.

#### Action Plans

#### Recruitment, Engagement, and Graduation

Tennessee Tech will extend its marketing and recruitment campaign to include representation at Quad A (Army Aviation Association of America) annual meeting. Quad A reaches over 8000 Army Aviators and military professionals throughout the United States. TTU will provide information, program representatives, advisors, and financial aid information to military personnel.

Through coordination with TN Reconnect, Chamber of Commerce, and community organizations, *TTU will identify labor force needs, tuition assistance programs, and degree programs* that will address the needs and expectations of adult learners.

TTU will enhance outreach and adult services to Extended Campuses (Crossville, Tullahoma, McMinnville, Oak Ridge, Lawrenceburg, Knoxville, and Pellissippi). TTU will provide advising professionals, Transfer Pathways seminars, and recruitment meetings at each of the campuses.

Additionally, TTU will energize its efforts in relation to "Reverse Transfer". TTU is establishing an implementation strategy to assist TTU students that have transferred from a community college before completing the Associate's Degree. The plan focuses on helping students complete the requirements for the Associate's degree while working on a Bachelor's degree.

TTU academic advisors will recruit adult learners through visits to the community college campuses to meet with advisors, counselors, and students to review the TTU Bachelor degree program requirements and what a student needs to qualify. TTU site coordinators will recruit students through classrooms visits, information sessions, career/college fairs, and attending community college campus events. While the focus of the advisement and recruitment is for the 2+2 programs, these site coordinators and academic advisors can also recruit for the entire university, offering information to the potential student on their program of interest, with a follow-up from the college academic advisor providing in-depth advisement for that program.

TTU will address the need for course offerings and attainable degrees that target and address the needs of adult learners and industry in the Upper Cumberland Region. According to a 2015 research report by the Society for Human Resource Management (SHRM), 56% (52%) of respondents indicated that their organizations provided undergraduate (graduate) educational assistance. A similar survey by the International Foundation of Employee Benefit Plans across 20 industries and organizations ranging in size from 50 to over 10,000 employees, found that 83% of respondents offered some type of educational assistance program with 55% offering general education tuition reimbursement. One in three

respondents noted that they provided similar benefits to part-time workers. Seventy-nine percent of the respondents required a minimum grade for reimbursement. The most common fixed annual dollar limits ranged between \$5,000 and \$6,999.

TTU will collaborate with Regional Industry career needs. Many corporate and government employers provide some form of educational assistance, supports Tennessee Tech's effort to market accessible and relevant undergraduate and graduate programs to adult learners. A 2002 Bureau of Labor Statics survey indicates that educational assistance is more prevalent for professional and technical workers and for employees of larger companies.

TTU will expand its 2+2 sites in order to recruit adult learners. TTU proposes to expand its 2+2 sites to reach students where the prospective adult student population exists.

Podcasts on Adult and Veteran Learning The Office of Marketing and Communications will conduct podcasts for airing on local Upper Cumberland radio stations as well as our campus station WTTU. This informational opportunity includes interviews with key staff in these areas.

#### Prior Learning Credit and Degree Plans

An inventory of past PLA Credit in Year 1 showed a need for clarifications in the TN Tech policy and practices for consistent and sustainable use of prior learning assessment. Changes to current TTU standards and policy are consistent with the state level in a PLA Taskforce

TTU has a representative on the THEC PLA Task Force, and the TBR PLA Advisory Committee, and will formulate a comprehensive PLA Policy. The THEC Task Force developed a set of PLA Standards, and those were adopted by the TBR in 2013. In Fall 2016, a request was made to the TTU University Provost to consider the development of a University PLA Policy. A committee was formed to begin the process, chaired by the Enrollment Management. During the Spring 2017 semester, a draft was developed of the policy based on the THEC Standards. The Director of Military Affairs and the AVP for Distance Education both reviewed the proposed policy. The TBR Advisory Committee in April, 2017, and that information was used to further inform the draft policy. The policy is prepared for submission for approval to the University Attorney and appropriate campus approval committees. TTU will continue to serve and work on this task force, until a consistent policy and practice is developed and adopted statewide.

Transfer pathways from Community Colleges and degree plans will be extended and enhanced, and training for staff will be implemented for improved transfer pathways and support services. TN Tech created partnerships with area community colleges (Chattanooga State, Columbia State, Motlow State, Pellissippi State, Roane State, and Volunteer State) to offer Bachelor degrees on their campuses (Chattanooga, Cookeville, Crossville, Harriman, Huntsville, Knoxville, Lynchburg, McMinnville, and Oak Ridge). The programs are titled 2+2; a student completes an Associate of Science degree in two years through the community college and then completes a Bachelor of Science degree provided by TTU instruction at the community college campus in the next two years.

TTU will extend its model to other disciplines as related to industry needs and education opportunities. Currently the program for Education is offered at eight community college locations and the Interdisciplinary Studies program is offered at seven community college locations. These programs provide students with in-class instruction coupled with online components to ensure the competent delivery of contact hours and learning objectives for each course offered.

#### Incorporation of Adult Learner Feedback into Policy and Practice

For consistency in tracking longitudinal results, *TTU will implement an adapted version of survey questions* in 2018 and 2019 to measure progress internally for adult learners. Results are disseminated to stakeholders, on and off campus, and for discussion in relevant committees and with the *TTU Governing Board of Trustees for continuing improvement*. TTU completed the <u>Adult Learner Inventory (ALI)</u>, which measured the perceptions of the university's adult learners, as part of the Adult Learner Focused Institution (ALFI) assessment process in 2016. The ALI was developed by Ruffalo Noel Levitz and CAEL, and is appropriate for students 25 years of age and older, primarily in undergraduate programs at adult focused institutions. Information will be collected on overall satisfaction with the university, and if students would recommend the university to other adult learners. Twenty-one items from the initial ALI were adapted for internal comparisons in Years 3 and 4. Baseline and target metrics are identified in the table for monitoring progress on each item.

#### Improvement of Quality of Adult Services and Experiences

Advisor Training/Calibration will be implemented for adult-learner specific personnel. TTU has identified key personnel from each college and student support office to aid adult learners in the process of attending college (Admissions, Financial Aid, Degree Planning, and Career Services). Every step to degree attainment will be provided by adult-learner focused professionals, to help guide the students to success. Each staff person will attend trainings to review the best practices for advising, teaching, and supporting adult learners. Training will focus on andragogy, characteristics, fears, family and work obligations, and career options.

Each community college location will have a trained TTU site coordinator whose duties include recruitment, advisement, and support for students and faculty. Each coordinator will be extensively and consistently trained in the program requirements, course curriculum, and advisement of adult learners. The TTU campus will also provide improved support to these students through academic advisors and student services. Any

student attending at these locations has the same privileges as an on-campus student. Requests and needs will be met through phone, email, or visits to the community college campus by academic advisors, without the need for the student to visit the TTU campus.

TTU Improved websites (<a href="https://www.tntech.edu/admissions/">https://www.tntech.edu/admissions/</a>; <a href="https://www.tntech.edu/admissions/">https://www.tntech.edu/

Pathways to 4 year Degrees will include specific transfer agreements for attainable degrees at TTU. The sample Volunteer State <u>Transfer Agreement</u> shows an alignment with TTU Bachelor's degree programs. This is consistent with all TTU community college partnerships.

TTU will create and develop community partnerships to help in services for adult learners Creating and developing community partnerships in services such as childcare, career development, and financial literacy will strengthen the success of these students.

TTU will establish a TTU Veteran Student Success Center on its main campus. TTU currently has an enrollment of approximately 300 veterans and dependents utilizing VA educational benefits. Enrollment of current and prior service members has increased annually for the past five years. The overarching goal of this project is to assist adult student veterans and dependents as they transition from a military to campus culture. The Center will provide one central location for veteran students to obtain resources to assist with their college and career planning. These resources will include: counseling, student-to- student mentoring, financial aid assistance, academic advisement, tutorial assistance, networking opportunities and employment connections.

The primary focus of the Center will be to provide an area for adult veteran students to receive individual support as they pursue their educational goals, as well as having a place they can utilize to study, relax, and network with other veterans. The project's objectives are to establish the Center and veteran student support team, create guidelines regarding the operation of the Center, and increase veteran-student enrollment, retention rates at least 10 percent over 3 years, and increase graduation rates at least 5 percent. Campus activities and initiatives will be implemented to increase the awareness of veteran-students' needs, and experiences.

#### Increase Quantity of Adult Learner Graduates

Digital and Distance Education In an effort to align course availability and offer more TTU online courses to increase the quantity of adult learner graduates, two broad goals are identified. (1) TTU should offer a complete general education core in an online format, and (2)TTU should offer fully online degree programs in distinctive, high demand disciplines where our faculty and resources are strong and could provide strategic advantage. In response to these short-term goals, we have developed four online, general education courses that are currently offered this summer 2017. In addition, four more courses scheduled for fall 2017. TTU will continue to identify where gaps exist and invite faculty to collaborate with resource personnel to develop online courses.

Course Availability and Value TTU has recently launched a Masters of Public Safety through the College of Interdisciplinary Studies as well as an online delivery of our undergraduate criminal justice degree through the College of Arts and Sciences. The School of Business has established a Masters of Accountancy that is delivered mostly online. The School of Engineering has determined that strong demand appears to exist among alums, employers, and the professional community for the establishment of an online Masters of Engineering Management degree. A curriculum proposal is in process for this degree. The School of Nursing continues to offer the fully online MSN through the eCampus collaborative and the DNP with ETSU has just officially launched. A formal strategic plan for Distance and Digital Education is expected by the end of the calendar year. In the meantime, faculty and staff continue to address the identified short-term goals.

TTU will Meet Workforce Needs that draw upon recent research into the supply of and demand for jobs commonly requiring a bachelor's degree or higher. Specific focus is on career paths that have high-expected job growth, wide demand-supply gaps, and align with the strengths and strategic direction of Tennessee Tech.

The January 2017 <u>Academic Supply and Occupational Demand (ASOD) Report</u> identifies careers with the highest projected workforce deficits. The report highlights those fields projected to be in high demand net of the supply of qualified workers and/or graduates. This determination of anticipated workforce deficits is critical considering the rapid pace of economic change and the lead time required develop programs and supply graduates. Fields requiring 4-year degrees (or higher) with the largest projected workforce deficits that fit within the strategic direction and/or current program offerings of Tennessee Tech are provided in bold are shown in bold:

- Selling and Sales Management
- Banking and Finance
- Business Analysis
- Elementary Teachers
- Human Resources
- Technical Design and Preconstruction\*
- Teacher Training Services

- Web/Multimedia Management and Programming
- Medical Imaging Radiography\*
- Industrial Engineering\*\*
- Accounting
- Veterinary Technology\*
- Physical Therapy

\*Programs of study consistent with 2 and/or 4-year pathways. \*\*\*Although Tech does not offer Industrial Engineering, programs in Manufacturing Engineering Technology, Automotive Engineering, and other fields can provide graduates to this market. While not currently offered, potential exists for Engineering Management (graduate) and Veterinary Technology (undergraduate) programs of study.

The Tennessee Department of Labor (TDOL) <u>Career Outlook</u> for Region LWIA 7 (including counties in the Upper Cumberland) summarizes demand, job growth and openings through 2020. The results of this analysis are consistent with the findings of the ASOD Report and the above list. The TDOL Career Outlook identifies Accountants/Auditors and Teachers as high demand in the region. Other TDOL career outlook studies focusing on Tennessee's metropolitan areas indicate the following 4-year (or higher) degree/pathway needs (Tech degrees/pathways in bold): Lawyers, Physicians, Pharmacists, Accountants/Auditors, Market Research Analysts, Teachers, Sales Representatives – Wholesale and Manufacturing, Network and Computer Systems Administrators, Computer Systems Analysts, Management Analysts, Financial Managers, Cost Estimators, Sales Managers, Computer Programmers, Software Developers, Construction Managers, Computer and Information Systems Managers, Human Resources – Training and Labor Relations Specialists, Industrial Engineers, Management Analysts, Nuclear Engineers, and Directors – Religious Activities. Note that while some specific degree programs, e.g. Nuclear Engineering, are not specifically offered by TTU – related degrees (e.g. Electrical and Mechanical Engineering) are provided.

On a regional level, the Cookeville-Putnam County Chamber of Commerce working in cooperation with the 4-county Highlands Economic Development Partnership has identified three primary pathways for workforce development and associated industry recruitment. These include: 1) healthcare, 2) advanced manufacturing and 3) information technology. Related to this, *Tennessee Tech is working with its private, community and government partners at the state and regional levels to strategically recruit industry, provide relevant education and training programs, and otherwise contribute to workforce development.* 

In summary and consistent with **TTU's** capabilities and concomitant with workforce needs and strategic alignments across Tennessee, the following career paths represent are high-potential target markets for adult learners and their employers to increase the number of graduates. These conclusions support Tech's efforts to provide degree and certificate programs that are flexible, affordable and accessible.

- Teacher Education and Training
- Financial Services (including accounting, finance, banking, and associated marketing and IT/analytics)
- Information Technology (including programming/software development, computer and decision sciences, IT security, IT management, and analytics)
- Project/Engineering Management/IE-related (including MET, (prospective) engineering management, engineering undergrad w/MBA)
- Human Resources
- Pre-professional Healthcare and Healthcare Industry-focused Programs

#### Other Notable Projects: Adult Learning at TTU

THEC Upper Cumberland Reconnect Network Grant (Awarded November 2016, TTU Participating) The Upper Cumberland TN Reconnect Network is a local community organization dedicated to supporting every adult in the region who aspires to earn a college degree. This organization works to ensure that each adult has access to the resources and supports they need to start and finish their college degree. This initiative is supported through TN Reconnect, the state's mission is to help adults enter higher education to gain new skills and advance in the workplace. The State's Reconnect Community Network links communities like this one throughout Tennessee who are all working towards helping their adult residents pursue and complete their college goals. Tennessee Tech University is an active participant in the Network focus.

THEC Veterans Reconnect Grant (Awarded July 10, 2017) Under the Veteran Reconnect Grant Request, Tennessee Tech University aims to establish, promote, and improve upon current Prior Learning Assessment (PLA) policies to align with the Tennessee Higher Education Commission and norms of experiential learning credit. The self-evaluation has identified areas of need in every standard included within the self-assessment. This proposal includes the hiring of a PLA coordinator responsible for assisting in the development, implementation, and promotion of college-wide PLA initiatives and communications, including the creation of a PLA repository in order to address these standards.

THEC Adult Learner Grant (Proposal Submitted July 7, 2017) The TTU Division of Digital and Distance Education submitted this proposal to improve education for the adult market. Tennessee Tech is in a unique position in middle TN to improve our performance in adult learning and is an excellent vehicle to influence higher education in the adult market utilizing a grant from THEC. As per university data and state reports, adult learners thrive in flexible online course formats, rely on using life and vocational experiences for Prior Learning Credit (PLA), and succeed in the attainment of post-secondary degrees when there are extended and flexible support services. If awarded, the proposed plan would allow the university to make tangible changes and improve services that would directly affect the number of adult learners enrolled in courses, retained, and graduate with 4-year post-secondary degrees. The proposed plan directly supports the Governor's Drive to 55, and the TN Reconnect program. Tennessee Tech shows commitment and dedicates its energy to adult learning efforts. If awarded, the university and its support areas will carry out the proposed plan with student success in mind. Numerous units on campus are in full support of this initiative and pledge to reinforce the success of this grant.

#### Appendices / Resource Links

- A. Academic Supply and Occupational Demand Report (January 2017)
- B. Adult Learners Best Practices (Upper Cumberland TN Reconnect Community, 2016)
- C. Adult Learner Inventory (ALI) TN Tech Results (2016)
- D. Adult Learner Self-Assessment Year 1 TN Tech Report (2016)
- E. Council for Adult and Experiential Learning (CAEL) TN Tech Recommendations (2016)
- F. Online and Distance Education Faculty Training Presentation and Short Term Goals
- G. Policy Number 258: Definitions and Accepted Forms of Prior Learning Assessment
- H. Stakeholder Meetings
- Success Indicators, Benchmarks, and Progress Matrix
- J. Survey of Adult Learners
- K. Tennessee Career Outlook: Careers to 2022
- L. Transfer Agreement Vol State and TTU (2016-2017)
- M. <u>Transfer Student Enrollment from Tennessee Community Colleges</u>
- N. Middle Tennessee Reconnect Regional Summary Report (February 2017)

Objective	Strategies	Assessment Metric	*Baseline (2015-16)	Target/Aspirational Benchmark	Responsible Area Notes
(1) Market to and recruit adult learners/veterans	a. Offer more flexible core courses online b. Utilize the STRONG Act and recruit and serve Veteran Adult Learners c. Podcasts for adult and veterans on local Upper Cumberland regional radio stations and WTTU	a. Enrollment (Adult Learners aged 25 or older) b. Enrollment (Veterans) c. Survey of Adult Learners	a. 11.61% (1,271 out of 10,952) b. 310 c. n/a	a. 17.00% (Overall Adult Leaners) b. Increase by 10% in 3 years (Veteran Adult Learners) c. High Satisfaction	a. Distance and Digital Education     b. Office of Veterans Affairs and     College of Interdisciplinary Studies     c. Marketing and Communications
(2) Develop an improved partnership with regional industry workforce needs and develop appropriate degree/certificate programs to align with education opportunities and professional needs	a. Utilize identified primary pathways for workforce development and associated industry recruitment 1) healthcare, 2) advanced manufacturing and 3) information technology. b. Diversify Degree completion per Industry Needs	a. Enrollment (Adult Learners aged 25 or older) b. Degree Completion by various programs (Adult Learners aged 25 or older)	a. 11.61% (1,271 out of 10,952) b. 440 (LIST, MDS, NURS, ME)	a. 17.00% (Overall Adult Leaners) b. Develop proposal of new degrees with approval through campus committee process	a. Campus College- wide Program/ Industry Reporting b. College of Business (Financial Services), College of Education (Teacher Education and Training), Computer Science (Informational Technology), College of Engineering (Project/Engineering Management), College of Interdisciplinary Studies (Human Resources, Workforce and Leadership Development), and Pre- professional Health Services
(3) Improve the diversity of the degrees/programs attainable with flexible offerings and format	a. Degrees and certificates converted to flexible format b. Expand online course offerings c. Expand 2+2 Sites	a. Bachelor's Degrees awarded (Adult Learners) b. Online course offerings c. Expanded Site Locations	a. 505 b. 469 (12.1%) c. 8	a. Match or exceed 3-year rolling average b. Increase the number of online courses c. Increase by 10% in 3 years	a. Colleges of Business, Education, Engineering, and Interdisciplinary Studies     b. Distance and Digital Education     c. College of Interdisciplinary Studies
(4) Develop a PLA Policy that aligns with State Standards	a. Participate in State Task Force, develop consistent policy b. Gain approval through appropriate approval processes	a. PLA Credit awarded b. Approval of Policy	a. 158 (Fall 2015) b. n/a	a. Match or exceed past awarding of credit b. Official Policy Completion	a. Enrollment Management with related colleges     b. Administration

Objective	Strategies	Assessment Metric	*Baseline (2015-16)	Target/Benchmark	Responsible Area Notes
(5) Develop Collaborated Effort to use articulation agreements and transfer pathways with regional Community Colleges	a. Connect TN Community College completers to TTU pathways to 4 year degrees b. Expand articulation agreements with other Community Colleges	a. Transfer Student Enrollment from TN Community Colleges b. Increased number of agreements	a. 470 b. 8	a. Increase by 10% in 3 years (Transfer Student Enrollment) b. Increase by 10% in 3 years (Articulation Agreements)	a. Campus College-wide b. College of Interdisciplinary Studies  Note: TTU has Transfer Equivalency Tables for all 13 TN Community Colleges; Articulation Agreements are in place for 8 of the TN Community Colleges. TTU plans to improve articulation agreements of more programs within the 8, and formalize articulation agreements with others.
(6) Implement an annual survey to collect feedback from adult learners and consistently review results for action	a. Develop internal TTU Adult Learner Perspective Survey b. Administer Year 3 and 4 c. Discuss results with campus constituents	Internal; TN Tech Adult Learner Survey (Adapted from the Adult Learner Inventory (ALI), Ruffalo Noel Levitz)	a. Mean per item from Year one assessment	High average satisfaction	Office of University Assessment  Note: Use consistent adapted items from the Year 1 assessment with ALI, Implement years 3 and 4 of satisfaction studies for internal study.
(7) Improve the quality of adult learner outreach and services	a. Center for Veteran Students b. Increase Flexibility of services c. Advisor and Site Coordinator Training d. Develop Community Partnerships to help with adult learner services	Internal; TN Tech Adult Learner Perspective Survey (Adapted from the Adult Learner Inventory (ALI), Ruffalo Noel Levitz)	a. Mean per item from Year one assessment	High Average Satisfaction	University-wide
(8) Implement consistent training for onsite and offsite Coordinators to improve services to meet the needs of adult learners	a. Implement consistent training for onsite and offsite Coordinators to improve services to meet the needs of adult learners	Retention	a. 74.6% (Fall to Fall 2014)	Match or exceed	Distance and Digital Education Office of Veterans Affairs College of Interdisciplinary Studies
(9) Improve the number of graduates as per the TN Governor's Drive to 55	a. Increase number of     Graduates: Adult Learner     Overall     b. Improve the Graduation Rate     for Veteran Adult Learners	a. Adult Learner number of Graduates b. Graduation Rate (Veteran Students)	a. 505 b. 44%	a. Match or exceed 3-year rolling average b. Increase by 5% in 3 yrs.	University-wide

#### **Survey of Adult Learners-Tennessee Tech University**

(Adapted from the Adult Learner Inventory- Ruffalo Noel-Levitz)

- 1. Not satisfied at all
- 2. Not very satisfied
- 3. Somewhat dissatisfied
- 4. Neutral
- 5. Somewhat satisfied
- 6. Satisfied
- 7. Very Satisfied

Respond with an indication of the level of satisfaction of each item:

#### 1. Education

- o This institution offers sufficient courses within my program of study each term.
- o This institution offers a great variety of programs for the adult learner.
- o I am able to choose a course delivery that fits my life circumstances.
- o I receive timely responses to my request for help and information.
- My studies are closely related to my life and work goals.

#### 2. Instruction/Advising

- o My advisor is available by either phone, fax, e-mail, or online when I need help.
- o Advisors/Site Coordinators are knowledgeable about requirements for courses and programs of interest to me.
- o Faculty members are sensitive to my needs as an adult learner.
- o Staff are available to help me to solve unique problems I encounter.

#### 3. Career Services and Advancement

- o This institution provides me with assistance in determining my career path and career opportunities.
- o The institution provides students with the help they need to develop an education plan.
- o I can receive credit for learning derived from my previous life and work experiences (Prior Learning Credit).

#### 4. Admissions/Financial Aid

- Transcripts from institutions that I previously attended are evaluated in a timely manner.
- o I receive adequate information about sources of financial assistance available to me.
- The school provides sufficient options for me to pay for my education.

#### 5. Student/Home Life

- o There are adequate numbers of student activities outside of the classroom for adult students.
- o I know whom to contact for information about services I need.
- o This institution offers strategies to help me cope with the multiple pressures of home, work, and my studies.
- o The institution makes many support services available at convenient times and places.

#### 6. How would you rate your overall satisfaction with you college experience?

#### 7. Would you recommend this program to other adult learners? (Agreement Scale)

- o 1 Definitely not
- o 2 Probably not
- o 3 Maybe not
- o 4 I don't know
- o 5 Maybe yes
- o 6 Probably yes
- o 7 Definitely yes

#### 8. Comments (Qualitative data)

o Please tell us what we did well, or how we can improve.

TTU Adult Learner Survey (Internal)	Baseline	2017-2018	2018-2019	Total	National 4-year Adult
Item	Means*			Improvement**	Learners***
				1	(2016, Noel-Levitz,
					· LLC)
This institution offers sufficient courses within my	4.75				5.28
program of study each term.					
This institution offers a great variety of programs	4.61				n/a
for the adult learner.					
I am able to choose a course delivery that fits my	4.75				5.48
life circumstances.					
I receive timely responses to my request for help	5.51				5.74
and information.					
My studies are closely related to my life and work	5.66				5.99
goals.					
My advisor is available by either phone, fax, e-mail,	6.0				n/a
or online when I need help.					
Advisors/Site Coordinators are knowledgeable	5.67				5.74
about requirements for courses and programs of					
interest to me.					
Faculty members are sensitive to my needs as an	4.65				n/a
adult learner.					
Staff are available to help me to solve unique	5.36				5.67
problems I encounter.					,
This institution provides me with assistance in	5.07				n/a
determining my career path and career					
opportunities.	F 0F				F / A
The institution provides students with the help they	5.25				5.64
need to develop an education plan.	2.02				4.00
I can receive credit for learning derived from my	3.83				4.98
previous life and work experiences (Prior Learning Credit).					
Transcripts from institutions that I previously	5.48				n/a
attended are evaluated in a timely manner.	3.40				I I/a
The school provides sufficient options for me to	5.17				n/a
pay for my education.	5.17				IIIa
I receive adequate information about sources of	4.63				5.17
financial assistance available to me.	7.03				J. 17
There are adequate numbers of student activities	4.52				n/a
outside of the classroom for adult students.	1.02				11/4
I know whom to contact for information about	4.96				n/a
services I need.	,0				
This institution offers strategies to help me cope	3.84				4.90
with the multiple pressures of home, work, and my	2.0,				,0
studies.					
The institution makes many support services	4.80				5.64
available at convenient times and places.					
Overall Satisfaction with Education Experience	5.54				5.86
Recommend to other Adult Learners	5.51				6.03

<sup>\*</sup>Baseline Data - Year 1 Assessment TTU Averages

\*\* Target - Match or Exceed Baseline Means

\*\*\* Benchmark - Average of National 4-year Institutions, n/a – Internal Data Only

#### Adult Learner Best Practices (Upper Cumberland TN Reconnect Community, 2016)

#### Adult Learner Best Practices

- Offer a variety of flexible programs that meet the needs of an adult learner. Time is not a commodity adult students feel they have.
  - o Hybrid programs
  - o Online programs
  - Accelerated programs Adults need to be able to complete more than one class a semester.
  - o Incremental credentialed programs that begin at TCAT, move to community college and then to university. Adults who successfully completed a program could stop out at any point to work but could also re-enter at the next point with no questions asked.
  - o Classes taught on location for large employers would save time for adult learners. (Volkswagen, Nissan, Blue Cross/Blue Shield, etc.) Taking a 90 minute class in a conference room at the end of their shift saves adults hours of time away from family and work responsibilities. There must be a minimum number of students required for the class to make. This would be great public relations for any
    - HEI. (Volkswagen, Nissan, Blue Cross/Blue Shield, etc.)
  - o Programs offered at a variety of time (evening, weekend, including Sunday)
    - Classes starting in afternoon and early evening so adults could attend after work. If one started at 4:30, and the next at 7:00, adults would be able to go 1 day a week and take 2 classes.
- Offer a variety of programs across disciplines
- Increase in PLA credits given for prior learning and military classes.
- Equivalent college credit awarded for industry training.
- Establish a mentor system at the university level. Adults need a large support system to help them power their load through to a degree.
- Tuition/Financial "Adjustments" for Adults
  - o Additional tuition help for vets. (U of L charges ½ of regular tuition for online courses for vets)
  - o Scholarships specifically for adult students that are not tied to particular deadlines or staggered deadlines across the year.
  - o Access to micro loans for emergencies. (Less than \$500, long term, low interest) This would be used for something like a blown tire or a broken pair of glasses.
  - o Freeze tuition for adults from the semester they enter for 5 years. This would allow them to make a workable long term plan.
  - o Accessible funds for entry exams into specific programs.

Low to no cost changes for colleges/universities that will help adult learners:

- Extended hours for admission and business offices:
  - o Have office open 1 day a week at 7 am (employee comes in 1 hour earlier and leaves 1 hour earlier.) No cost
  - o Have office open 2 hours later 1 day a week (employee comes in 2 hours later and leaves 2 hours later.) No cost
  - 5:00-8:00 PM advisement hours at least one day during advisement week for working students (B/M Gates Foundation's latest data says 62% of college students work full or part time.
- Early advisement and registration for working adult students.
- Students who only take classes after 4:30 could have parking tag requirement waived.
- Evening orientation for adult students. This adult orientation should not be a repeat of the regular orientation. Emphasis should be placed on tutoring and counseling supports available on campus. Of course these centers would need to have adult hours. Should also cover how the CLEP and PLA can be used to accelerate graduation rate and any policies that the HEI has in place to support adults should be highlighted.

<sup>&</sup>quot;When we grant them (adult learners) access to our institutions, we are welcoming the student in, qualifying them to be a college student. Simultaneously, we are accountable then to be prepared to serve them appropriately and give them what they need to attain those program outcomes. Otherwise, the access we just granted becomes institutionally attributable egress, leaving the student, the institution and our nation far worse off than before. If we say "yes" to them, we must be prepared to serve them."

\_ Creating Educational Heliotropism: Adult Learners, America Needs You Back! (Part 2) by <u>Cheryl Hayek | Interim President and Provost, Grantham University</u> from The Evolution, online newspaper <a href="https://evolllution.com/attracting-students/retention/creating-educational-heliotropism-adult-learners-america-needs-you-back-part-2/">https://evolllution.com/attracting-students/retention/creating-educational-heliotropism-adult-learners-america-needs-you-back-part-2/</a>

#### Adult Learner Success Standard

#### Year 1: Self-Assessment

Institutions will submit a self-assessment that includes the current state of adult learner access and success including baseline quantitative data and qualitative measures.

#### Comprehensive Introduction to the Campus Environment

#### Overview of how serving adult learners is incorporated into the institution's unique mission

Tennessee Tech University has a long standing history serving the adult learner population. The mission (Appendix A) of the university describes an emphasis on leadership and outstanding programs in engineering, sciences and related areas that benefit the people of Tennessee and the nation. Although Tennessee Tech is committed to students from the state, nation, and many other countries, the university has a special commitment to the lives and people in the Upper Cumberland region. With this in mind, the university has provided numerous courses in Extended Programs and Regional Development to fulfill the needs of the adult learner population in regards to workforce development and job skills.

As stated in our mission, Tennessee Tech is committed to the life-long success of all of our students. Specifically in the case of adult learners, the College of Interdisciplinary Studies provide programs that directly serve the adult learner population for the completion or advancement of their educational goals and career plans. The university provides education opportunities to all eligible persons regardless of age, gender, ethnicity, race, religion, national origin, disability, or sexual orientation. The university welcomes the adult learner population and strives to provide resources and opportunities for success.

The Tennessee Tech University vision states that the university will be nationally recognized for providing academic, economic, and cultural leadership in the region and producing practical, ready-to-work graduates. The vision emphasizes a commitment to improve workforce development and traditional/professional education of adult learners in the state.

Explanation of how serving adult learners aligns with the state high education master plan

Tennessee Tech University is currently participating in the "Drive to 55" state initiatives to increase the postsecondary education attainment. Following the September 2015 Reconnect and Complete launch meeting, the Tennessee Tech Reconnect team met two additional times to plan the outreach efforts. After receiving a targeted list of adult learners whom had not completed their degree and county-specific data, we focused on improving the list's accuracy. Enrollment Management's ("EMSS") System Support Analyst and the Office of Financial Aid reevaluated the list using university databases and resources. This reduced the contact list to 187, who were mailed push cards by EMSS on January 19, 2016. The Admissions Office at TTU also considered and completed secondary outreach efforts such as emails, direct calling, and participation in college fairs. The Admissions Office determined that these strategies are best utilized when adult students requested to speak with a counselor and/or requested additional information about Tennessee Tech and degree completion (Appendix B).

Tennessee Tech University also developed a campaign to reengage previously enrolled adult learners. The website <a href="https://www.tntech.edu/em/reconnect/">https://www.tntech.edu/em/reconnect/</a> was developed to highlight Governor Haslam's "Drive to 55" initiatives and Tennessee Tech's partnership in the Upper Cumberland Reconnect Community. Relevant information is highlighted for Adult/Non-traditional Learners and Veterans/Active Duty Military. Services are offered for these learners including Reconnect resources, degree offerings, financial aid, advising and counseling. Reconnect Coaches have been identified in each of Tennessee Tech's colleges, and have been specifically trained to assist returning adult students with reengaging with our university <a href="https://www.tntech.edu/em/reconnect/resources-for-advising-and-student-services">https://www.tntech.edu/em/reconnect/resources-for-advising-and-student-services</a>.

Promoting and building a relationship with the Council on Adult and Experiential Learning (CAEL) is a priority for the university. Participation in the Adult Learner Focused Institution (ALFI) survey tools allowed us to take a candid look at the campus culture for adult learners and survey a cohort of adult learners registered the 2015-2016 academic year. IN addition to data, the ALFI report covers internal comparisons, external comparisons, institutional strengths, and challenges. Using survey results and CAEL recommendations, a targeted plan based on best practices, the campus environment, and adult learner needs is progressing for submission to THEC next year.

Information on how data regarding adult learner experiences are currently collected and evaluated

Current data on the adult learner population is collected in various ways at the university. The Office of Institutional Research provides data on adult learners which can be tracked throughout all data points. The data shows that enrollment has gone down in the last five years, most of the degrees awarded to adult learners are in the Colleges of Education and Interdisciplinary Studies, and retention rates are lower than the traditional first-time full-time freshmen. The university sufficiently tracks credit awarded for prior learning in line with state recommendations. The National Survey of Student Engagement (NSSE) can also provide information about the undergraduate experience. The information collected is used to evaluate the success of these students as well as monitor adult learning programs and look for ways to improve their success.

The College of Interdisciplinary Studies continually interviews and tracks adult learners to support the success of each student. In a recent survey of a cohort of adult learners (n=19) in this program, 100% of students reported that they felt they were supported and advised appropriately, and had a good understanding of the program. The information collected is used to evaluate the success of these students as well as monitor adult learning programs and look for ways to improve their success.

#### Analysis of Baseline Quantitative Measures

Number of adult learners enrolled

The enrollment of adult learners at the institution for the last 5 years is presented in Table 1. Tennessee Tech University saw a decline of adult learners in 2013, similar to state findings. The number of those that enroll has increased in the last three years; however, Tennessee Tech University has prioritized this population of students for marketing, recruitment, enrollment, and competition.

Table 1
Undergraduate Enrollment Adult Learners

	graduate and an armitian and a second								
Age	2011-12	2012-13	2013-14	2014-15	2015-16				
25-29	659	661	607	628	634				
30-39	530	452	423	389	393				
40-49	268	204	159	181	165				
50-59	132	99	60	62	55				
60+	33	27	14	23	35				
Total	1622	1443	1263	1283	1282				
%>= 25	16.4%	14.5%	12.6%	12.4%	13.1%				

#### Adult learner completion rates

Completion rates for adult learners at Tennessee Tech University are indicated in Table 2. As related to enrollment above, approximately 1/3 of adult learners enrolled each year graduate (26%, 34%, 31%, 34%, and 34% respectively). The programs with the largest number of graduates are Multidisciplinary Studies, Interdisciplinary Studies, College of Business and Nursing which corresponds with enrollment in these areas.

Table 2
No. of Bachelor's Degrees Conferred to Adult Learners

	Academic	No. of Degrees	Program with Largest No. of			
	Year	Conferred	Adult Degrees	Second	Third	Fourth
ſ	11-12	415	MDS	LIST	BMGT	ACCT

12-13	493	MDS	LIST	BMGT	ACCT
13-14	388	MDS	LIST	ACCT	ME
14-15	440	MDS	LIST	BMGT	ME
15-16	440	LIST	MDS	NURS	ME

ACCT Accounting

BMGT Business Management
LIST Interdisciplinary Studies
MDS Multidisciplinary Studies
ME Mechanical Engineering

NURS Nursing

#### Adult Learner First Year Retention Rates

First Year retention rates for adult learners at Tennessee Tech University are presented in Table 3. In the last five years, first year retention rates varied by year, and were reported as low as 40% in 2013 to as high as 84% in Fall 2012. Tennessee Tech University as a whole for first year retention rates averaged at 74% over the last 5 years, whereas first year retention rates for adult learners averaged 68%. The renewed focus on strengthening programs and services for adult learners in our state and at our university is a priority and these rates are continuously monitored.

Table 3

First-Time Full-Time Freshmen Adult Learners Retention Rates

A

ΛH	TTII	Freshmen

	Cohort Size	Returned for Next Fall Term	Fall-to-Fall Retention	Fall-to-Fall Retention
Fall 2010	22	17	77.3%	72.8%
Fall 2011	13	6	46.2%	69.9%
Fall 2012	19	16	84.2%	74.6%
Fall 2013	10	4	40.0%	75.7%
Fall 2014	5	4	80.0%	74.6%
5-yr Avg	69	47	68.1%	73.5%

#### Prior Learning Assessment (PLA) utilization rates

Tennessee Tech has several academic programs that allow students to request academic credit for knowledge, experience and skills acquired through professional work experience. This evaluation process, called prior-learning assessment (PLA), is completed in close collaboration with the academic department of student's major and the Office of Academic Services. Table 4 presents data from the past six years (2011-2016) on categories are considered PLA and used for credit. Several categories have been developed to capture the experiences of students to award credit for prior learning. Categories include ACE Military Credit, ACT/SAT Achievement test scores, Advanced Placement, CLEP scores, Instructional Course Challenge Exam scores, Lifelong Learning, Other Credit Locally Assessed, Other Military Service Credit, and Other Credit by Assessment. At Tennessee Tech University, the majority of Prior Learning Credits are awarded for Lifelong Learning (51%), CLEP scores (21%), and Other Military Service Credit (13%). In this timeframe, the average age of adult learners utilizing PLA was 35 years. The majority of our adult learners utilizing PLA were between 25-40 years old. PLA is engaged in various departments and programs across campus. The departments of Interdisciplinary Studies, Nursing, Education, and English are crediting for Prior learning at a high rate as applicable. Credit hours awarded span from 1-8 credits hours, with 87% being a 3 credit award.

	Table 4													
Prior Learning Assessment (PLA) Utilization Rates														
	201	.1	20	12	20	13	20	14	20	15	201	.6 <b>*</b>	Total	
Code	Frequency	Percent	Frequency	Percent										
ACE Military Credit	12	6.5	1	0.5	2	1.5	1	0.5	2	1.3			16	1.7
ACT/SAT Achievement Test	6	3.2	16	17.7	3	2.2	2	1.0					29	3.0
Advanced Placement	7	3.8	14	6.8	1	0.7	2	1.0	1	0.7			25	2.6
CLEP Score	60	32.4	63	30.4	35	25.7	13	6.4	18	11.8	8	10.7	197	20.6
Dantes Subj Test Credit Exam	1	0.5											1	0.1
Inst Course Challenge Exam					1	0.7	4	2.0	29	19.1			34	3.5
Lifelong Learning	37	20.0	69	33.3	69	50.7	169	83.3	87	57.2	59	78.7	490	51.1
Oth Cred Locally Assessed Trng					1	0.7							1	0.1
Other Military Service Credit	51	27.6	37	17.9	16	11.8	8	3.9	8	5.3	2	2.7	122	12.7
Othr Crd By Assess	11	5.9	7	3.4	8	5.9	4	2.0	7	4.6	6	8.0	43	4.5
Total	185	100.0	207	100.0	136	100.0	203	100.0	152	100.0	75	100.0	958	100.0
* Does not include Fall 2016														

#### Analysis of Qualitative Measures

Evaluation of the inventory of academic and co-curricular programs and services provided specifically to adult learners

During the 2016 Academic Year, Tennessee Tech University completed the Adult Learner Inventory (ALI), to be addressed in the adult survey section below, which measured the perceptions of the university's adult learners. The institution also completed another survey, the Institutional Self-Assessment Survey (ISAS), to be addressed in this section, which measured the perceptions of the faculty, staff, and administrators on the campus. The combination of both constitutes the Adult Learner Focused Institution (ALFI) assessment process. A team of faculty, staff, and administrators completed the ISAS and the results are reported in the following subsections.

In the recruitment of adult learners, Tennessee Tech University utilizes our specialized webpage to serve adult learners, recruitment fair pamphlets for adult learners, and employment sites to reach these perspective students. Recruitment services include providing specific information pertaining to easy enrollment, financial aid, information on programs with degrees that complement the adult learner lifestyle, and one-on-one meetings are encouraged to better understand the specifics aspirations of each adult learner. In financial aid, options for funding adult learner student include but are not limited to federal aid, state aid, institutional scholarships and grants, deferred/flexible tuition payments are available, tuition reimbursement by employer is an option, and credit card payments are flexible. Designated specifically to adult learners, funding includes non-traditional student lottery funding, and Institutional scholarships.

Academic Services for adult learners at Tennessee Tech University mainly take place in the College of Interdisciplinary Studies, which offers numerous opportunities to support adult learning, and in the School of Nursing, which awards credit for prior nursing experience. The Interdisciplinary Studies B.S. program allows flexibility for anyone to complete a degree. The Interdisciplinary College and its departments offer resources in finishing a degree, credit for prior learning, flexible course delivery, and distance education.

Principles of effectiveness for serving adults learners were development by the Council for Adult and Experiential Learning (CAEL) through a national benchmarking study that identified best practices in recruiting, supporting, and providing effective instruction for adults. Table 5 presents the index score for Tennessee Tech University on the ISAS for each principle together with comparative benchmark statistics that include a national mean from all other institutions completing the ISAS survey. For Tennessee Tech University, the principles Financing, Student Support Systems, and Strategic Partnerships exceeds that of the mean performance at similar institutions, and fell in the 70th, 59th, and 81st percentile respectively. Several principles were below the national mean and fell in lower percentiles, which indicates where improvements can be made to strengthen services in these areas.

Tennessee Tech University utilizes Strategic Partnerships to engage in strategic relationships, partnerships, and collaborations with employers and other organizations in order to develop and improve educational opportunities for adult learners. Career Services has made concerted efforts in this area hosting career and recruitment fairs, scheduling interview opportunities, and offering TechWorks, a resume and job database. In Financing, Tennessee Tech University promotes choice using an array of payment options for adult learners in order to expand equity and financial flexibility. Tennessee Tech University Student Support Systems assist adult learners using comprehensive academic and student support in order to enhance students' capabilities to become self-directed, life-long learners, as also indicated as a focus in the Tennessee Tech University mission.

Table 5
Principles of Effectiveness for Serving Adult Learners

ALFI Principle	TTU Mean	National Mean	Percentile in National Comparison
Outreach	36.8	41.3	45%
Life & Career Planning	41.3	43.6	58%
Financing	54.9	50.0	70%
Assessment of Learning Outcomes	29.5	37.1	39%
Teaching - Learning Process	34.1	40.3	40%
Student Support Systems	43.5	42.4	59%
Technology	32.9	57.2	23%
Strategic Partnership	43.9	32.3	81%
Transitions	46.2	46.9	60%

Explanation of resources and professional development opportunities provided to staff and faculty to better serve adult learners

Presentations and training opportunities are offered to each College/School, Financial Aid, Admissions, Veterans Affairs, faculty and staff. This included resources for advising (<a href="https://www.tntech.edu/em/reconnect/resources-for-advising-and-student-services">https://www.tntech.edu/em/reconnect/resources-for-advising-and-student-services</a>) and for admission and financial aid (<a href="https://www.tntech.edu/em/reconnect/resources-for-admissions-and-financial-aid">https://www.tntech.edu/em/reconnect/resources-for-admissions-and-financial-aid</a>). Experts in adult learning from the College of Interdisciplinary students are currently collaborating with faculty members from each discipline to enhance adult learning support using "Ten Characteristics of Adults as Learners" (Appendix C). Collaboration on Adult Learner Best Practices occurs in department faculty meetings, Campus service units, Advising Centers, and at any individual's request for one-on- one discussions.

Status of institutional policy and practice alignment with the Recommended Standards in PLA Policy and Practice for Tennessee Public Colleges and Universities

Tennessee Tech University has aligned the use of Prior Learning Credit with the Recommended Standards in PLA Policy and Practice for Tennessee Public Colleges and Universities. The university awards credit for the prescribed common definitions/types of accepted prior learning experiences for credit. Tennessee Tech University policy number 261, Academic Credit from other Institutions, presents the guidelines for awarding credit for prior learning experience (Appendix D). A committee is currently working on a specific policy on Prior Learning Assessment (PLA) and adapting information from the Policy 261 Academic Credit from Other Institutions, to enhance the focus and process of PLA.

As indicated above in the PLA usage data presented in Table 4, credit awarded through prior learning experiences are coded and tracked by staff in Enrollment Management. Several categories have been developed to capture the experiences of students to award credit for prior learning in relation to state recommendations. Categories include ACE Military Credit, ACT/SAT Achievement test scores, Advanced Placement, CLEP scores, Instructional Course Challenge Exam scores, Lifelong Learning, Other Credit Locally Assessed, Other Military Service Credit, and Other Credit by Assessment. The University uses the

recommended state standards to guide our policy and practice for awarding credit for PLA. Therefore, the university is aligned with recommendations of standards for PLA practice in Tennessee institutions.

Institutions will conduct a survey among the adult learner population and utilize the results of the survey to assess student perceptions of the following qualitative measures.

#### Explanation of the Adult Learner Survey

Design

During the 2016 Academic Year, Tennessee Tech University completed the Adult Learner Inventory (ALI), which measured the perceptions of the university's adult learners, as part of the Adult Learner Focused Institution (ALFI) assessment process. The ALI was developed by Ruffalo Noel Levitz and CAEL, and is appropriate for students 25 years of age and older, primarily in undergraduate programs at adult focused institutions. CAEL's Principles of Effectiveness for Serving Adult Learners served as the basis for the inventory's construction.

The structure of the ALI included 47 standard items that students were asked to rate for importance and satisfaction, 10 items which were defined by our institution, and 20 items for students to indicate how important factors were in their decision to enroll in Tennessee Tech University programs. In addition, information was collected on overall satisfaction with the university, and if students would recommend the university to other adult learners. Demographic information was additionally collected.

#### Distribution and Methodology

Tennessee Tech University followed the ALFI assessment procedures and gave the Adult Learner Inventory (ALI) in the Spring 2016 semester, along with completing the ISAS survey. Working with Ruffalo Noel Levitz, the ALI was distributed to the university's 2015-16 undergraduate adult learner population directly from the assessment company using an online format. Tennessee Tech University, for the purpose of this study, defined adult learners as being 25 years of age or higher. The survey link was delivered electronically to the students' email address on file and received the invitation each week for a period of 4 weeks.

Tennessee Tech University adult learner students responded to each item in relation to importance and satisfaction using a 1-7 point Likert scale, with 1 being "not important at all/not satisfied at all" to 7 being "very important/very satisfied". The items were analyzed statistically and conceptually to produce scale scores (Outreach, Life and Career Planning, Teaching-Learning Process, Financing, Technology, Transitions, Student Support Systems, and Assessment of Learning Outcomes). The scales provided a big picture overview of what matters to students and a way to identify how satisfied students are when comparing to other 4-year universities.

Performance gaps were analyzed for discrepancies between what students expect and their level of satisfaction with the current situation at the university. Mean differences were analyzed to investigate the difference between Tennessee Tech University's satisfaction means and the national 4-year comparison group means. The university then drilled down to the actual items to determine specific initiatives to be put in place as a result of the data. Appendix E contains a full report of results to the ALI study.

#### Analysis of Adult Student Perceptions

#### Course availability and value

Adult student learners indicated that they are somewhat satisfied (5.2) with the flexibility to pace their studies to fit their life and work schedules, and choosing course delivery (4.75). Although students are somewhat satisfied, there was a large performance gap (1.16) between how important the item was and their satisfaction, which placed the university significantly lower when comparing to other universities in these areas. Sufficient course offerings within their program of study were also rated by students as somewhat satisfied but the performance gap indicates that there may be an opportunity to improve in this area. Course availability in small programs at the university tailored to adult learners tends to be concentrated in the College of Interdisciplinary Studies. Overall, Tennessee Tech University is seen as being affordable/a good value, and has specific degrees that are attainable by adult learners, but is lacking in the diversity of the degrees/programs attainable with flexible offerings and

format. Research on incorporating more "adult learner friendly" degrees/programs is sought to enable the university to devise a proposed plan that will meet the interests of these type students.

Campus culture and outreach to adult students

All indicated as important aspects of the university, helpful staff (5.36), accessible information by phone, fax, email, or online (5.69), and convenient processes for enrollment (5.25) were all rated with somewhat satisfaction and had a significant performance gap when compared to other institutions. Students receive the help they need to stay on track (5.20) and to make decisions about course and programs that interest them (5.42). When investigating campus outreach to adult learners, it is evident that it happens in programs in the college of interdisciplinary studies. Though we are improving in adult learner campus outreach, and outreach with the state campaign and initiatives to bring back adult learners, there is a need to educate campus programs and services to better understand and serve adult learners enrolled or planning to enroll.

Institutional support services and resources

Student support services and resources at Tennessee Tech University were found to be similar for all students no matter what the age. A drive to enhance service that are different and more appropriate for adult learners was recognized and is a priority. Specifically, offering strategies to help adult learners cope with the multiple pressures of home and work combined with studies (3.84) received a somewhat dissatisfied to neutral rating. In addition, receiving help needed to develop academic skills (5.28), initiating opportunities for interacting with other adult learners (4.70), and offering services at more convenient times and places (4.80), were also rated with somewhat satisfaction. As indicated in the data, adult students prefer a "one-stop shopping" for most student services, so this could indicate that we might improve in this area. Recent partnerships (Upper Cumberland TN Reconnect Community) and programs aid in the improvement of these items as we grow in adult learner enrollment, and again, there is a need to educate campus programs and services to better understand and serve adult learners enrolled or planning to enroll.

Policies and procedures concerning prior learning assessment

The policies and procedures at Tennessee Tech University concerning prior learning assessment (PLA) are aligned with the state recommendations. As a result of this process, the university recognizes the need to clarify these policies and procedures for a consistent and sustainable use of PLA. However, from the ALI survey results, adult students reported a somewhat dissatisfied to neutral rating to receiving credit for learning derived from their previous life and work experiences (3.83). PLA was indicated as an important by adult learners and the university had a performance gap significantly lower than other institutions. A committee is currently working on a specific policy named Prior Learning Assessment (PLA) and adapting information from the Policy 261 Academic Credit from Other Institutions along with the state recommendations, to clarify the focus and process of PLA.

#### Quality of coursework and faculty

The teaching and learning process and the assessment of learning outcomes were both highlighted by the ALFI process (both the ISAS and the ALI) as areas where the university could improve learning and success for adult students. Items that impacted these principles were found to be similar for all students no matter what the age. A drive to enhance teaching and learning and the assessment of student learning outcomes that are different and more appropriate for adult learners was recognized and is a priority. Overall, when combining all items for teaching and learning and then the same for items in the assessment of learning outcomes, students indicated that they were somewhat satisfied with both the teaching and learning process (5.20), and the assessment of learning outcomes (4.95).

#### **Examination of Survey Findings**

#### Response rates

A response rate of 12% was reported (120 out of 979 students). In addition to receiving the link to participate from the testing company Ruffalo Noel Levitz, the Office of Assessment asked department chairpersons to remind students to complete the survey. Also as an incentive to complete the survey, t-shirts were handed out. 58% of the respondents were between the

ages of 25-34, 20% were between the ages of 35-44, and 18% were between the ages of 45-54 years of age. Approximately one half of the respondents were married (55%) and had dependents (49%) which varied in age. 70 % of the respondents were attending the university full-time, and hours worked varied from 1-10 hours per week to more than 40 hours per week. 84% were attending the university with the goal of achieving a bachelor's degree, and 71% were preparing for a new or different career.

#### Institutional strengths

Results of the ALI data show there were numerous items and services the university had when serving adult learners that were rated as highly important and with high satisfaction. Strengths are specifically identified as part of the ALI assessment as items above the midpoint in importance (top half) and in the upper quartile (25 percent) of our satisfaction scores (Ruffalo Noel Levitz). Advisors were rated highly and were seen as being flexible in their availability by phone, email, or online when help was needed, and were reported as being knowledgeable about requirements for courses and programs. In fact, adult students felt that it was important and reported being satisfied with the university as a whole concerning the options to obtain information whether by phone, fax, email, and online.

Adult students also reported that overall the university explained what is needed to complete their respective programs, and received help needed to make decisions about courses and programs that interest the individual student, and received timely responses to requests for help and information. Students indicated a high importance and rated they were highly satisfied with university processes for evaluating transcripts in a timely manner.

Another strength that was reported for adult learning at the university was that learning experiences within their individual programs of study challenge adult learners to reach beyond what they already know, and their studies were closely related to their life and work goals. Interaction were faculty was rated as satisfactory. High importance and satisfaction with staff was reported as being available to solve the unique problems of each adult student.

#### Institutional Weaknesses (Challenges)

The implementation of the ALI enabled the university to identify areas where improvements can be made by examining items of high importance and low satisfaction, or with a large performance gap. Challenges are specifically identified as items above the mid-point in importance (top half) and in the lower quartile (25%) of our satisfaction scores or items above the mid-point in importance (top half) and in the top quartile (25%) of our performance gap scores (Ruffalo Noel Levitz). The following items were ranked as important but received a low satisfaction score.

Adult students reported that having a program that allows them to pace studies that fit life and work schedules was ranked highly important, however, rated it low in satisfaction. Another challenge concerns instructors providing timely feedback. Adult students deem this an important aspect to their success and need feedback quickly and accurately in order to fit requirements into their lifestyle. Offering sufficient courses within programs of study each term is an important item for adult learners, and low satisfaction in this area is an indication where the university can improve.

Receiving credit for learning derived from students' previous life and work experiences, PLA, is ranked important to adult learners in this study. This is a concern for the university as this item received a very low satisfaction score and is also significantly lower than other 4-year universities in the comparison group. In addition, offering sufficient courses within programs of study that are available each term, and the ability to choose course delivery to meet specific student needs was reported as important by student respondents, however was rated with low satisfaction as far as limited degree/program options available at the university suited for adult learners.

Concerning financing, billing for tuition and fees tailored to student needs, and receiving adequate information about sources of financial assistance, are all ranked important to students. The university received a lower satisfaction rating in this area when compared to other 4-year institutions.

Tennessee Tech University is continuing the ALFI process with a consultation meeting with CAEL staff, Reconnect Community Staff, and campus constituents that impact adult learning on campus. The TTU Reconnect Taskforce and the Adult Learner Planning Committee are continually meeting to analyze the results more and gain a better understanding of the data. Researching best practices along with the university's ALFI results impacts the formulation of the university's proposed plan to improve the success of adult learners and impact retention and completion.

#### Tennessee Tech Adult Learner Inventory (ALI) 2016 Results

Gender	N	%	Dependents	N	%
Female	52	48.60%	Yes	49	47.12%
Male	55	51.40%	No	55	52.88%
Total	107	100.00%	Total	104	100.00%
No Response	13		No Response	16	
Age	N	%	Dependents Age	N	%
24 or younger	0	0.00%	Pre-school age	13	10.83%
25 to 34	62	57.94%	Elementary school age	14	11.67%
35 to 44	21	19.63%	Middle school/high school age	14	11.67%
45 to 54	19	17.76%	College student	19	15.83%
55 to 64	3	2.80%	Elderly or disabled adult	5	4.17%
65 or over	2	1.87%	Does not apply	43	35.83%
Total No Response	107 13	100.00%	Respondents may select more than option; Percentages may total greater than		
Ethnicity/Race	N	%	Current Class Load	N	%
Alaskan Native	0	0.00%	Full-time (12 hours or more)	72	69.90%
American Indian	0	0.00%	Half time (6-11 hours)	23	22.33%
Asian	1	0.94%	Part-time (less than 6 hours)	8	7.77%
Black/African-American	5	4.72%	Total	103	100.00%
Hispanic or Latino	3	2.83%	No Response	17	100.0070
Native Hawaiian or Pacific Islander	0	0.00%	Tto Response		
White/Caucasian	91	85.85%			
Multi-racial	3	2.83%	Employment	N	%
Other	3	2.83%	0 hours per week	29	28.43%
Total	106	100.00%	1-10 hours per week	5	4.90%
No Response	14		11-20 hours per week	18	17.65%
			21-30 hours per week	10	9.80%
Marital Status	N	0/	31-40 hours per week	22	21.57%
Marital Status	N	<b>%</b>	More than 40 hours per week	18	17.65%
Single	48	44.86%	Total	102	100.00%
Married/domestic partner	59	55.14%	No Response	18	
Total	107	100.00%	NAME OF THE PROPERTY OF THE PR		
No Response	13				

Educational Goal	N	%	Prior Education
Associate degree	0	0.00%	Grade school
Bachelor's degree	87	84.47%	Some high school
Master's degree	9	8.74%	High school or GED
Doctorate or professional degree	6	5.83%	Some college classes
Certification (initial / renewal)	0	0.00%	Associate's degree
Self-improvement/pleasure	1	0.97%	Bachelor's degree or hi
Job-related training	0	0.00%	Total
Other educational goal	0	0.00%	No Response
Total	103	100.00%	500
No Response	17		2000 200 20 HOURS OF \$100
			English Primary Lang
			Yes, English is primary
College Objective	N	%	No, English is not prim
Improve occupational skills	23	22.55%	Total
Prepare for new/different career	72	70.59%	No Response
Improve basic academic skills	0	0.00%	
Self-improvement/personal interest	7	6.86%	
Total	102	100.00%	First In Family for Co
No Response	18		Yes, first in family for
			No, not first in family f
	•	0.4	Total
Program Completed to Date	N	%	No Response
Less than 1/4 of my program	4	3.96%	
1/4 to $1/2$ of my program	25	24.75%	Tuition Source
1/2 to 3/4 of my program	23	22.77%	#0.050.040.500 #46.040.400.0000 #46.0600 #4 0.060.5
More than 3/4 of my program	49	48.51%	Myself
Not applicable	0	0.00%	Grants or scholarships Loans
Total	101	100.00%	Tuition reimbursement
No Response	19		Veterans' benefits
Credit Received From	Ν	%	Other tuition source
Previous college credits earned	78	65.00%	Respondents may option;
Learning from military training	4	3.33%	Percentages may
Learning from prior job/life experience Credit through testing	10 14	8.33% 11.67%	
Other sources	2	1.67%	
		1.67%	
Not applicable	13	10.65%	
Respondents may select more than or option; Percentages may total greater than 10			

Prior Education	N	%
Grade school	0	0.00%
Some high school	0	0.00%
High school or GED	18	18.95%
Some college classes	27	28.42%
Associate's degree	38	40.00%
Bachelor's degree or higher	12	12.63%
Total	95	100.00%
No Response	25	
E l'I D'	N.T.	07
English Primary Language	N	%
Yes, English is primary language	84	92.31%
No, English is not primary language	7	7.69%
Total	91	100.00%
No Response	29	
First In Family for College	$\mathbf{N}$	%
Yes, first in family for college	38	40.00%
No, not first in family for college	57	60.00%
Total	95	100.00%
No Response	25	
<b>Tuition Source</b>	N	%
Myself	58	48.33%
Grants or scholarships	57	47.50%
Loans	61	50.83%
Tuition reimbursement from employer	14	11.67%
Veterans' benefits	6	5.00%
Other tuition source	3	2.50%
Respondents may select more than or option;	ne	
Percentages may total greater than 10	)0%	

Began Enrollment at College	N	%
In my current program	68	73.1 <b>2</b> %
Another program for credential/degree	23	24.73%
Workforce training program	0	0.00%
GED program	0	0.00%
ESL program	0	0.00%
ABE program	0	0.00%
Courses I like	2	2.15%
Total	93	100.0 <b>%</b>
No Response	27	
Volunteer Activities	N	%
No volunteer activities	47	52.2 <b>2</b> %
1-5 volunteer hours	27	30.0%
6-10volunteer hours	10	11.11%
More than 10 volunteer hours	6	6.67%
Total	90	100.0 <b>%</b>
No Response	30	
My veteran status is:	N	%
My veteran status is: I am a veteran.	<b>N</b> 6	<b>%</b> 6.5 <b>2</b> %
•	- '	, 0
I am a veteran.	6 84	6.52%
l am a veteran. I am not a veteran.	6 84	6.5 <b>2</b> % 91.3 <b>0</b> %
I am a veteran. I am not a veteran. I am still member of the armed services	6 84 . 2	6.52% 91.30% 2.17%
I am a veteran. I am not a veteran. I am still member of the armed services Campus item - Answer 4	6 84 . 2 0	6.52% 91.30% 2.17% 0.00%
I am a veteran. I am not a veteran. I am still member of the armed services Campus item - Answer 4 Campus item - Answer 5	6 84 . 2 0	6.52% 91.30% 2.17% 0.00% 0.00%
I am a veteran. I am not a veteran. I am still member of the armed services Campus item - Answer 4 Campus item - Answer 5 Campus item - Answer 6	6 84 . 2 0 0	6.52% 91.30% 2.17% 0.00% 0.00%
I am a veteran. I am not a veteran. I am still member of the armed services Campus item - Answer 4 Campus item - Answer 5 Campus item - Answer 6 Total	6 84 . 2 0 0 0 92 28	6.52% 91.30% 2.17% 0.00% 0.00% 0.00% 100.00%
I am a veteran. I am not a veteran. I am still member of the armed services Campus item - Answer 4 Campus item - Answer 5 Campus item - Answer 6 Total No Response	6 84 . 2 0 0 0 92 28	6.52% 91.30% 2.17% 0.00% 0.00% 0.00% 100.00%
I am a veteran. I am not a veteran. I am still member of the armed services Campus item - Answer 4 Campus item - Answer 5 Campus item - Answer 6 Total No Response  For most of my studies, my classes	6 84 . 2 0 0 0 92 28	6.52% 91.30% 2.17% 0.00% 0.00% 100.00%
I am a veteran. I am not a veteran. I am still member of the armed services Campus item - Answer 4 Campus item - Answer 5 Campus item - Answer 6 Total No Response  For most of my studies, my classes Online	6 84 2 0 0 0 92 28 aNe	6.52% 91.30% 2.17% 0.00% 0.00% 100.00% 100.00%
I am a veteran. I am not a veteran. I am still member of the armed services Campus item - Answer 4 Campus item - Answer 5 Campus item - Answer 6 Total No Response  For most of my studies, my classes Online Face-to-face classes	6 84 2 0 0 0 92 28	6.52% 91.30% 2.17% 0.00% 0.00% 100.00%
I am a veteran. I am not a veteran. I am still member of the armed services Campus item - Answer 4 Campus item - Answer 5 Campus item - Answer 6 Total No Response  For most of my studies, my classes Online Face-to-face classes Hybrid (both online and face-to-face)	6 84 2 0 0 0 92 28	6.52% 91.30% 2.17% 0.00% 0.00% 100.00% 100.00%
I am a veteran. I am not a veteran. I am still member of the armed services Campus item - Answer 4 Campus item - Answer 5 Campus item - Answer 6 Total No Response  For most of my studies, my classes Online Face-to-face classes Hybrid (both online and face-to-face) Campus item 2 - Answer 4	6 84 . 2 0 0 0 92 28 10 65 18 0	6.52% 91.30% 2.17% 0.00% 0.00% 100.00% 100.75% 69.89% 19.35% 0.00%
I am a veteran. I am not a veteran. I am still member of the armed services Campus item - Answer 4 Campus item - Answer 5 Campus item - Answer 6 Total No Response  For most of my studies, my classes Online Face-to-face classes Hybrid (both online and face-to-face) Campus item 2 - Answer 4 Campus item 2 - Answer 5	6 84 . 2 0 0 0 92 28 10 65 18 0	6.52% 91.30% 2.17% 0.00% 0.00% 100.00% 100.75% 69.89% 19.35% 0.00% 0.00%

### Strategic Planning Overview Strengths and Challenges

#### Strengths

- 50. Campus item: My advisor is available either by phone, fax, e-mail, or online when I need help.
- 33. This institution explains what is needed for me to complete my program here.
- 40. I receive the help I need to make decisions about courses and programs that interest me.
- 46. The learning experiences within my program of study challenge me to reach beyond what I know already.
- 19. I receive timely responses to my requests for help and information.
- 15. Advisors are knowledgeable about requirements for courses and programs of interest to me.
- 21. My studies are closely related to my life and work goals.
- 30. I am able to obtain information I need by phone, fax, e-mail, or online.
- 54. Campus item: Transcripts from institutions that I previously attended are evaluated in a timely manner.
- 39. Information is available online to help me understand what I need to do next in my program of study.
- 7. Staff are available to help me solve unique problems I encounter.
- 27. I am encouraged to apply the classes I've taken towards a degree or certificate.
- 43. The frequency of interactions with my instructors is satisfactory.

#### Challenges

- 1. My program allows me to pace my studies to fit my life and work schedules.
- 17. My instructors provide timely feedback about my academic progress.
- 48. Campus item: This institution offers sufficient courses within my program of study each term.
- 44. I can receive credit for learning derived from my previous life and work experiences.
- 2. Sufficient course offerings within my program of study are available each term.
- 16. Billing for tuition and fees is tailored to meet my specific needs.
- 26. I am able to choose course delivery that fits my life circumstances.
- 55. Campus item: I know whom to contact for information about services I need.
- 9. I receive adequate information about sources of financial assistance available to me.

#### Lower Satisfaction vs. National Four-Year Adult Learners

- 10. I have a clear understanding of what I'm expected to learn in my classes.
- 1. My program allows me to pace my studies to fit my life and work schedules.
- 17. My instructors provide timely feedback about my academic progress.
- 46. The learning experiences within my program of study challenge me to reach beyond what I know already.
- 44. I can receive credit for learning derived from my previous life and work experiences.

- 2. Sufficient course offerings within my program of study are available each term.
- 21. My studies are closely related to my life and work goals.
- 30. I am able to obtain information I need by phone, fax, e-mail, or online.
- 8. This institution provides students with the help they need to develop an education plan.
- 24. I receive the help I need to stay on track with my program of study.
- 7. Staff are available to help me solve unique problems I encounter.
- 16. Billing for tuition and fees is tailored to meet my specific needs.
- 26. I am able to choose course delivery that fits my life circumstances.
- 43. The frequency of interactions with my instructors is satisfactory.
- 32. Technology enables me to get the services I need when I need them.

#### TENNESSEE TECHNOLOGICAL UNIVERSITY

Internal Comparisons: ALFI Data 2016

#### Executive Summary:

During the 2016 academic year, the Tennessee Technological University (Tennessee Tech) completed the *Adult Learning Inventory* (*ALI*), which measures the perceptions of the University's adult students. The institution also completed the other survey, the *Institutional Self-Assessment Survey* (*ISAS*), which measures the perceptions of the faculty, staff, and administrators on the campus. The combination of these two constitutes the *Adult Learning Focused Institution* (*ALFI*) Toolkit.

The surveys are based on the Nine Essential Principles for Serving Adult Learners that the Council for Adult and Experiential Learning (CAEL) has identified. These Principles, defined in Attachment A, are:

- 1. Outreach
- 2. Life and Career Planning
- 3. Financing
- 4. Assessment of Learning Outcomes
- 5. The Teaching-Learning Process
- 6. Student Support Systems
- 7. Technology
- 8. Transitions
- 9. Strategic Partnerships (*ISAS* only)

A team of faculty, staff, and administrators at Tennessee Tech completed the *ISAS*. Adult students at the institution completed the *ALI*. Following the administration of the *ALI* survey, Tennessee Tech received a summary of the data, as well as various reports from Ruffalo Noel-Levitz, the *ALI* survey provider.

This addendum further analyzes that data, as well as the data and reports provided by the completion of the *ISAS* portion of the Toolkit. This report also offers recommendations for next steps for strategic planning purposes.

**Overall, Tennessee Tech's results reflect a slightly better than average performance** when compared to the national institutional dataset (National Dataset) included in the summary graphs on four Principles from the institutional perspective (*ISAS*). When viewed against the same data set, the results of the *ALI* (adult students) indicates a lower than average ranking on the eight Principles that both surveys offer in common. Despite the relatively low rankings, 61% of Tennessee Tech students responded that they were satisfied or very satisfied with their program and the same percentage (61%) indicated they probably or definitely would recommend the program to other students.

Tennessee Tech has experienced a decrease in undergraduate enrollment between 2014 and 2015, after having seen increases from 2011 through 2014. There appears to be a very slight decline in undergraduate students age 25 years and older (including transfer students) from the 2011 school year through 2015. The information offered in this report may provide some actionable ideas on how to address this gradual erosion in the adult undergraduate population at Tennessee Tech.

In an effort to prioritize, CAEL suggests a sequence of specific activities that are related to the most significant strengths and challenges identified by the surveys:

- 1) Market the institution's strength in Strategic Partnerships. Tennessee Tech can use these partnerships to recruit adult students and to meet the growing needs of employers. (Ranked first on the *ISAS*, students are not surveyed on this Principle as they are not directly aware of the benchmarks used to score this it.)
- 2) Continue to provide the benchmark services related to the Principle of Life & Career Planning.
- 3) Take specific steps to improve performance in the Assessment of Learning Outcomes.
- 4) Take specific steps to improve performance in Student Support Systems.
- 5) Convene focus groups to discuss differing perceptions between the internal institutional team and adult students about the TeachingLearning Process and Financing Principles.

#### Internal Comparisons

This report includes summaries that compare the *ISAS* and *ALI* perceptions with more than 100 four-year institutions that have also completed the *ALFI* surveys. Measured against the other institutions, comparisons show the rankings of Tennessee Tech faculty, staff, administrators, and those of the adult students on each Principle. These data sets provide valuable information about how perceptions compare and are consistent with the underlying concept of the *ALFI* Toolkit: perceptions = reality. It is important to remember, however, that no campus is "the best performer" on every Principle and that, in most of the summaries, *ISAS* data are compared to *ISAS* data, while *ALI* data are compared to *ALI* data.

This addendum focuses on the data from an internal perspective, specifically on how the perceptions of faculty, staff, and administrators at Tennessee Tech compare to the perceptions of adult students at the institution. By comparing these viewpoints, CAEL believes that Tennessee Tech can identify points of agreement and divergence and, in turn, identify and implement specific strategies to capitalize on strengths and to address challenges.

The following table compares the rankings of Tennessee Tech faculty, staff, and administrators with those of adult students:

Ranking	ISAS Rank (Faculty, Staff, Admin)	ALI Rank (Students)
1	Financing	Outreach
2	Transitions	Teaching-Learning Process
3	Strategic Partnerships*	Technology
4	Student Support Systems	Life & Career Planning
5	Life & Career Planning	Transitions
6	Outreach	Financing
7	Teaching-Learning Process	Assessment of Learning Outcomes
8	Technology	Student Support Systems

9	Assessment of Learning Outcomes	

\*Note: This Principle is only included on the *ISAS* and is not included in the *ALI* results

Strengths

It is clear from these tables that faculty, staff, and administrators agree that Strategic Partnerships is a strength at Tennessee Tech. Adult learners are not asked about this Principle so the results come only from the institutional perspective. The internal team ranked institutional performance on this Principle in the top three. This means Tennessee Tech "engages in strategic relationships, partnerships, and collaborations with employers and other organizations in order to develop and improve educational opportunities for adult learners." Your score on the Principle of Strategic Partnerships exceeds that of the mean performance at other similar institutions. It is clear that the Career Services area at Tennessee Tech has made concerted efforts in this area, hosting career and recruitment fairs, scheduling interview opportunities, and offering TechWorks, a resume and job database. The website offers resources expressly geared to each segment at the University, including faculty, students, and employers. To build on this work (*ISAS* Q52c, 55b, 56c), Tennessee Tech should consider proactively contacting employers to determine the effectiveness of program offerings and classroom learning outcomes or competencies.

While students do not directly rank this Principle, they did identify program accreditation by a professional organization or trade group (ALIQ 73) as one of the top ten reasons for their choice of enrolling at Tennessee Tech.

Strategic Partnerships can be an important marketing tool for Tennessee Tech to attract additional adult learners to the institution. The University's successful engagement with community organizations and employers should be leveraged in all external marketing and communications activities, differentiating the University from other colleges and universities in the area. Showcasing adult students who have successfully transitioned into successful careers and "telling their stories" often resonates with potential enrollees, allowing them to see opportunities to achieve their own success.

Another area where the Tennessee Tech *ALI* and *ISAS* surveys both report positive results is the Life & Career Planning Principle. In the upper half of the institutional rankings, the performance on this Principle indicates that Tennessee Tech "addresses adult learners' life and career goals before or at the onset of enrollment in order to assess and align its capacities to help learners reach their goals." The *ALI* results ranked Life & Career Planning as the second most important Principle, and was among the top three for overall satisfaction. Students indicated that the institution provided them with the necessary assistance to determine their career opportunities and pathways (*ALI* Q53); that the advisors' knowledge of course and program requirements was a strength at Tennessee Tech (*ALI* Q15); and that they had a high level of satisfaction on the availability of their advisor through multiple means (phone, email or online) whenever the students needed help (*ALI* Q50).

Responding to additional ALI campus related questions included by Tennessee
Tech, students ranked two benchmarks in the top ten reasons for enrolling at the University. These were: a requirement for their current or future job (*ALI* Q64), and the institution's high rate of job placement (*ALI* Q76), underscoring the significance that Life & Career Planning plays in student satisfaction.

Within this same Principle, students did report one benchmark as a challenge —that of receiving credit for prior learning derived from previous life and work experience (ALI Q44). Students ranked this benchmark as fairly important but reported a lower level of satisfaction than other four-year adult learners. This perception is underscored by only 8% of students reporting receiving credit for prior learning, with an additional 12% reporting having received credit from tests such as CLEP, and a meager 3% having received recognition and credit for their military learning. The latter seemed particularly noteworthy as almost 9% of students reported having served, or as currently serving in the military. From an institutional perspective, Tennessee Tech may want to consider providing students with assessments of prior learning, other than through exam based methods (ISAS Q19i). Research shows that Prior Learning Assessment (PLA) is an important strategy in increasing adult student enrollment and completion rates. PLA can reduce time-to-degree and redundancy for adult students who often can only attend part-time.

Another benchmark for Life and Career Planning that was also a challenge for students was the availability of sufficient course offerings each term (*ALI* Q2 and 54). This is often a common issue for adult students as they want a clear pathway, delineating the various milestones and the time it will take to achieve them. This can also be an issue because of work schedules and employer requirements for tuition reimbursement.

#### Challenges

Agreement between internal rankings on the *ISAS* and the *ALI* can also help to identify specific challenges for the institution. One challenging area is the ranking for the Principle of Assessment of Learning Outcomes. Faculty, staff, and administration ranked performance low on this Principle as last, while students did as well, ranking it seven out of eight. This Principle defines how well Tennessee Tech "defines and assesses the knowledge, skills, and competencies acquired by adult learners—both from the curriculum and from life and work experience—in order to assign credit and confer degrees with rigor."

Students identified this Principle as the least important of the eight. Several benchmarks were ranked slightly lower in terms of general student satisfaction. These included how aware faculty members were of the unique needs of adult students (*ALI* Q52), and the lack of periodic assessments to guide students' overall learning experiences (*ALI* Q20). When viewed individually, each benchmark may only represent a small issue, however, when viewed together, these student perceptions may indicate an area of concern.

Students ranked Student Support Systems eight out of all of the Principles, while the institutional respondents ranked it slightly higher at four. This Principle speaks to how Tennessee Tech "assists adult learners using comprehensive academic and student support systems in order to enhance students' capacities to become self-directed, lifelong learners."

In addition, students ranked the importance of this Principle as second to last, and were unsatisfied with this Principle when compared to other four-year institutions. Students were not satisfied with the strategies offered by Tennessee Tech to help them cope with the multiple pressures of home, work, and education (*ALI* Q 11). This benchmark may be addressed through better utilization of the partnerships that are already in place with community-based organizations which link students to resources such as child care, financial advice, and other counseling services that support their life and work. The institution reported that only some students receive individual assessments to overcome barriers to learning (*ISAS* Q19e), or have individualized learning plans (*ISAS* Q 28b).

#### External Comparison

In reviewing the ISAS results, Tennessee Tech scored better than, or even with, the mean performance of other four-year institutions on several Principles including Financing, Student Support Systems, Strategic Partnerships, and Transitions. The high ISAS ranking on several of these Principles were also reported when compared to the National Dataset, scoring above the 50th percentile in Life & Career Planning, Financing, Student Support Systems, and Transitions.

A review of the *ALI* reveals that students ranked the importance of most of the Principles slightly lower than the mean performance of other four-year institutions. Students ranked their satisfaction with all eight Principles three to five points lower than students at other four-year institutions. When compared to the National Dataset, the rankings for student satisfaction were significantly below the 50<sup>th</sup> percentile, indicating that Tennessee Tech should examine the results in conjunction with the current **position revealed in Tennessee Tech's** *Flight Plan; Focused on the Future.* One example is the Technology Principle. While students ranked this Principle in the top three, the institutional team ranked it eight out of nine. The *Flight Plan* highlighted the increased use of technology by students and the desire on the part of the University to expand its technology infrastructure as one of its focus areas.

#### Additional Examination

Several disconnects were identified within the *ALFI* results. A disconnect or discrepancy is indicated when one set of respondents ranks a Principle much higher or lower than the other set of respondents. Students ranked the Principles of

Outreach and the Teaching-Learning Process as first and second respectively, while the *ISAS* respondents ranked these same Principles as sixth and seventh.

With regards to the Teaching-Learning Process, students recognized the frequency of interactions with their instructors (*ALI* Q43) and the positive challenges presented by the learning experiences (*ALI* Q46) as two of the institution's strengths. ISAS respondents identified several problematic areas that contributed to the low ranking. Improvement for this Principle might be realized if the faculty members were provided training to understand the unique and complex needs of adult students (*ALI* Q52). The institutional team identified several benchmarks that could also be improved including increasing the use of competency-based curriculum (*ISAS* Q26c), individualized or self-paced instructional formats (*ISAS* Q26d), and the use of students' own life and work experiences within the learning environment (*ISAS* Q27e). Tennessee Tech's *Flight Plan; Focused on the Future* also recognizes a similar area for improvement with students, faculty and staff wanting to "expand emphasis on real-world problem solving into undergraduate curriculum by concentrating on co-curricular activities." For one benchmark, *ALI* and *ISAS* respondents were in agreement, with both groups agreeing that there was room for improvement in proving timely feedback on student performance (*ISAS* Q27n and *ALI* Q17).

Students identified multiple strengths with regards to the Principle of Outreach. Outreach **indicates how an institution "condu**cts its outreach to adult learners by overcoming barriers in time, place, and tradition in order to create lifelong access to educational **opportunities."** *ALI* respondents identified the availability of staff to assist them in solving the unique issues they encounter (*ALI* Q7), the opportunity to obtain the necessary information needed through multiple means (phone, on-line, email) (*ALI* Q30), and the ability to receive the help needed to make advantageous decisions about course and programs (*ALI* Q40) as areas of institutional strength.

The disconnection between the overall students satisfaction indicated on the

ALI and that of ISAS respondents is revealed by the internal team indicating that Tennessee Tech could provide more incoming students with individualized learning plans (ISAS Q28b). The team also recognized that improvements could be made by providing more proactive monitoring by the faculty of student needs (ISAS Q49a), as well as flexible delivery of student support services (ISAS Q49b). While students are satisfied with the current provision of services, the institution should address the potential issues revealed in the ISAS.

Another disconnect that was reported was linked to the Principle of Financing. ISAS respondents ranked this Principle as first, while students ranked it near the bottom. Students reported that they did not feel as though they had received adequate information about the various sources of financial assistance (*ALI* Q9), and did not feel as though the billing processes were tailored towards adult students (*ALI* Q16). Students did, however, rank the cost of attending Tennessee Tech in the top four reasons for choosing to enroll at the University (*ALI* Q61). While Tennessee Tech appears to be offering financial assistance and support, the perception of adult students should be explored to determine why they gave this Principle a low ranking.

#### Summary

This ALFI effort has yielded important information for Tennessee Tech about its services to adult learners. Perceptions in many of these Principle areas can be weighted by many factors, and Tennessee Tech would be well-served to engage the participants in considering the responses on the *ALI* and *ISAS* in order to continue to attract, retain and graduate adult students. We hope that Tennessee Tech will use these results to identify points of agreement and divergence and then create specific strategies to capitalize on its strengths and to address the challenges in working with adult students.

Based upon the results, CAEL offers the following information as a basis for reflection, discussion, and consideration at Tennessee Tech:

- 1. CAEL encourages Tennessee Tech to continue its apparently strong work relative to the Principle of Strategic Partnerships including:
  - a. Assuring that learning outcomes align with current and future employer needs
  - b. Continuing in its efforts to provide services that support students in reaching their objectives of preparing for a new career and/or improving their employment skills
  - C. Involving employers in providing information about tuition assistance and other types of financial support such as scholarships
  - d. Marketing student success stories as a part of its recruitment efforts
- 2. CAEL encourages Tennessee Tech to continue its work relative to the Principle of Life & Career Planning including:
  - a. Continuing to support its advising staff as they work to assist and mentor the adult student population
  - b. Extending its use of prior learning assessments to reach more adult students, increasing their persistence and decreasing their time to degree attainment
  - C. Assessing course offerings in program areas with a high number of adult enrollees to ensure that there are sufficient offerings each term
- 3. CAEL encourages Tennessee Tech to investigate the underlying reasons for the discrepant perspectives by ALI and ISAS respondents associated with the institution's practices relative to the Principles of Teaching-Learning Process and Outreach. Consider engaging in focused follow-up research, perhaps by using a combination of interviews, surveys, focus groups, etc. to better understand where efforts can be made to address the perceived barriers to learning.
- 4. CAEL encourages Tennessee Tech to endeavor to improve its practices in the area of Student Support Systems by exploring activities such as:
  - a. Providing training to advisors and staff on how to work with students in order to help them to balance their competing obligations and successfully complete their programs
  - b. Ensure that students know who to contact in order to access the services they need
  - C. Ensuring that all adult students have an individualized learning plan that accommodates their life & work commitments

Tennessee Tech's strategy for online education is in the process of being formulated. On April 22, 2017, Provost Ghorashi and Associate VP Wilson hosted a faculty retreat designed to present a view of the adult and online education market as well as some long-term possibilities. The goal was to inspire a conversation about how TTU might move from the current state of affairs towards our best future.

Dr. Chad Luke, Dr. Patrick Wilson, and Dr. Bahman Ghorashi all offered brief presentations to begin the day. Most of the session was spent in smaller working groups focused on specific topics. These topics were:

#### Visions of the Possible Affinity Groups

Program Pipeline – Jane Sipes

Faculty Motivation – Laura Cruz

**Quality Assurance** – Dean Mike Gotcher

Support Structures – Provost Bahman Ghorashi

Marketing & Branding - AVP Patrick Wilson

Student Support - Tara Perrin

Faculty Workload - Dean Paul Semmes

Open Topic- Karin Kopinski-Gilbert

Each affinity group shared a summary of their conversations at the conclusion of the session. Overall, the event demonstrated interest, desire, and willingness to serve the online and adult education market.

Affinity groups will continue their conversations in the fall with a goal of producing a document to inform a formal strategic plan. In addition to these groups, a broad Educational Technology Committee has been identified and will meet early in the fall semester. This group is comprised of faculty from each College as well as relevant administration and will be charged with informing formulation of policy and overall strategic direction.

In the short term, two broad goals have been identified:

- 1) TTU should offer a complete general education core in an online format
- 2) TTU should offer fully online degree programs in distinctive, high demand disciplines where our faculty and resources are strong and could provide strategic advantage.

In response to these short term goals, we have developed 4 online, general education courses that are being offered this summer. In addition, 4 more courses are slated for fall. We will continue to identify where gaps exist and invite faculty to partner with resource personnel to develop online courses.

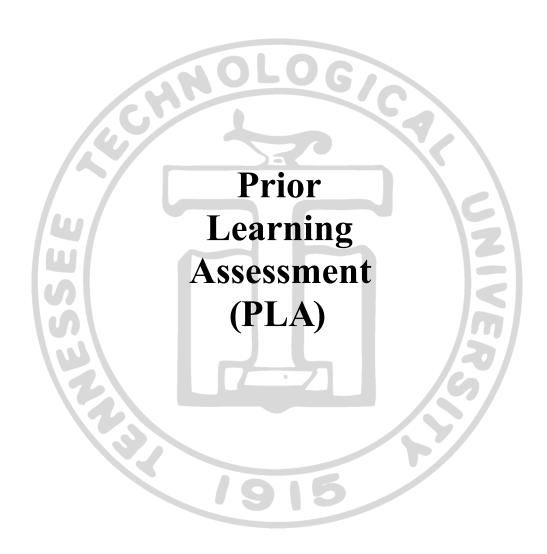
We have recently launched a Masters of Public Safety through the College of Interdisciplinary

Studies as well as an online delivery of our undergraduate criminal justice degree through the College of Arts and Sciences. The School of Business has established a Masters of Accountancy that is delivered mostly online. The School of Engineering has determined that strong demand appears to exist among alums, employers, and the professional community for the establishment of an online Masters of Engineering Management degree. A curriculum proposal is in the process of being formulated for this degree. The School of Nursing continues to offer the fully online MSN through the eCampus collaborative and the DNP with ETSU has just officially launched.

As indicated previously, a formal strategic plan is expected by the end of the calendar year. In the meantime, faculty and staff continue to address the identified short term goals.

Tennessee Technological University

Policy No. 258



Policy No: 258 Policy Name: Prior Learning Assessment Policy Subject: Definitions and Accepted Forms of Prior Learning Assessment)

# I. Purpose

Prior Learning Assessment (PLA) is a term used to describe college-level learning gained outside a traditional academic environment. It is learning and knowledge students acquire while living their lives, such as by working, participating in employer training programs, serving in the military, studying independently, volunteering or doing community service, and studying open source courseware. PLA is *not* confined to **portfolio assessment**, which is simply one type of PLA (as are CLEP tests, ACE evaluations, challenge exams, etc).

### II. Review

This policy will be reviewed every [insert appropriate cycle of review, not to exceed four years] or whenever circumstances require review, whichever is earlier, by the School of

Interdisciplinary Studies Department Chair with recommendations for revision presented to the [list university standing committee(s) that reviews the policy] and University Assembly.

# III. Scope

### Parameters for awarding PLA:

- A. *External* Any credits awarded for PLA, must be in accordance with the Standards of The Commission on Colleges of the Southern Association of Colleges and Schools (SACS Standard 3.4.4) and policies and guidelines of the Tennessee Higher Education Commission.
- B. *Internal* The maximum number of credits that can be earned through PLA (any combination) is 60 credit hours. In all cases, a student must earn 25% of hours required for graduation through Tennessee Tech credit. PLA credit will not count toward this 25% minimum.

No other limitations are to be placed in student eligibility for PLA credit, such as minimum age or work experience.

# IV. Definition(s)

Prior Learning Credit – University academic credit awarded as a result of PLA.

# V. Policy/Procedure

Requirements for PLA credit to be awarded: Academic credit will be awarded only:

- A. For students who have been admitted to the institution.
- B. After the student has consulted with an advisor about the possibility and advisability of seeking credit for PLA.
- C. For students who have declared an academic program.
- D. For credit directly applicable to curriculum requirements of the declared program. Changing majors will result in a reassessment of the applicability of the PLA credit.

### The following credit can be awarded for PLA:

- A. Advanced Placement (AP) Exams
- B. American Council on Education (ACE) Guides- Published credit recommendations for formal instructional programs and examinations offered by non-collegiate agencies (including civilian employers, the military, professional associations, and other workplace related-training).
- C. College Level Examination Program (CLEP) Exams
- D. Defense Activity for Non-Traditional Education Support (DANTES) Subject Standardized Tests (DSSTs).
- E. Evaluation of Local Training Program evaluations of non-collegiate instructional programs approved by individual colleges.
- F. Excelsior College Examination Program (ECE) G. Institutional Course Challenge Examination Credit
- H. International Baccalaureate Programs (IB).
- I. Portfolio Review Credit (or portfolio assessment credit) A portfolio is prepared by the student to demonstrate and validate credit for learning acquired outside of the classroom. University faculty will use rubrics to evaluate the student portfolio and make credit recommendations. Portfolios will include documentation such as certificates of training, work samples, awards and honors, job descriptions, performance evaluations, samples of artwork, evidence of selfdirected learning, and resumes.
- J. Prior Military Training Credit
- K. Thomas Edison State College Examination Program (TECEP).
- L. Dual credit program.
- M. Dual enrollment program.

How PLA credits may be used in a student's academic program: PLA credits apply toward majors, minors, concentrations, general education requirements, and electives that count toward the degree or certificate being sought in the same manner as traditional courses. PLA credits shall not be treated differently in their application and use than their course equivalencies or appropriate block credit. PLA credits also satisfy prerequisite requirements in the same manner as their course equivalencies.

### **Transferability of PLA Credits**

- A. Students who transfer to Tennessee Tech University may have their PLA credits transferred to the institution as long as the credits are applicable to the degree or certificate the student has declared. However, item B (below) still applies in the event that the receiving institution does not grant credit to its native students for that type of PLA credit.
- B. PLA credit awarded at one institution, which meets Common General Education Core Requirements, and/or Tennessee Transfer Pathway (TTP) requirements must be accepted as transfer credit toward the

degree, in accordance with Transfer Guarantee policies related to the General Education Core or the Tennessee Transfer Pathways.

## **Transcription of PLA Credits**

- A. Transcription Standards: PLA credits shall appear on student transcripts in the following ways:
  - a. Prior Learning Portfolio- Students may demonstrate college-level knowledge of a subject that they have acquired outside of a traditional college classroom (work, community service, or other experiences) through the development of a portfolio. Two types of PLA credit may be awarded through the portfolio assessments:
    - Course Equivalency Credit: Prior learning which is assessed based on the
      documented achievement of course specific learning outcomes will be transcripted as
      that course. Prior learning will be assessed based on a pass/fail evaluation and will be
      assigned a "P". Because no grade is assigned other than "P", no Quality Points will be
      awarded to count toward GPA.
    - ii. **Block Credit:** In instances where prior learning is assessed as block credit, that assessed credit will be identified by subject (ex. elective, accounting, health, etc.); by course as lower division (LD) or upper division (UD); with a grade of "P". Because no grade is assigned other than "P", no Quality Points will be awarded to count toward GPA.
  - b. College Level Exam Program (CLEP) Students may earn college credit for certain examinations administrated by the College Level Exam Program. To receive credit for a CLEP test, a minimum score must be earned (see Catalog for details ADD LINK HERE). CLEP credit will be transcripted as course specific credit with a grade of "P". Because no grade is assigned other than "P", no Quality Points will be awarded to count toward GPA. CLEP credit will be identified as transfer credit from the College Level Exam Program.
  - c. College Entrance Examination Board (CEEB) Students may earn college credit by earning a minimum grade or above an appropriate College Entrance Examination Board exams. A letter of "P" will be assigned for credit granted. Because no grade is assigned other than "P", no Quality Points will be awarded to count toward GPA.
  - d. Advanced Placement Course credit for successful completion of Advanced Placement examinations administered by the College Entrance Examination
    - Board to high school students will be granted to students presenting Advanced Placement examination grades of three or higher. A letter grade of "P" will be assigned for credit granted. Because no grade is assigned other than "P," no Quality Points will be awarded to count toward GPA.
  - e. **DANTES Subject Standardized Test (DSST)** Students may earn college credit for acceptable scores on the DANTES Subject Standardized Test; based on institutional or system policy. If not

such policy exists and an institution accepts DSST credit, then college credit shall by awarded based upon the credit recommendations and minimum scores recommended by the American Council on Education by default. A letter grade of "P" will be assigned for credit granted. Because no grade is assigned other than "P", no Quality Points will be awarded to count toward GPA.

- f. Military Credit Credit awarded for completion of services schools will be governed by recommendations at the baccalaureate or associate level from the current Guide to the Evaluation of Educational Experience in the Armed Services. Military transcripts, for example SMART or AARTS, must be presented to the Office of Admissions, and students will work directly with the Office of Military Affairs to determine what potential credit is appropriate for the particular program of study. Upon presentation of a copy of the veteran's report of separation (DD Form 214), the following credit may be awarded:
  - 1. Eight hours of military science credit will be awarded for the completion of Basic Training and AIT school. A letter grade of "P" will be assigned for credit granted. Because no grade is assigned other than "P," no Quality Points will be awarded to count toward GPA.
  - 2. Credit will be awarded for formal service schools based on recommendation from the Office of Educational Credit of the American Council on Education after consultation with an academic advisor. All documentation supporting servicerelated educational experiences should be filed with the Admissions Office. A letter grade of "P" will be assigned for credit granted. Because no grade is assigned other than "P," no Quality Points will be awarded to count toward GPA.
  - 3. Veterans with less than one year of continuous full-time service who have completed basic training while on active duty will be awarded credit as recommended in the Guide to Evaluation of Educational Experiences in the Armed Services. A letter grade of "P" will be assigned for credit granted. Because no grade is assigned other than "P," no Quality Points will be awarded to count toward GPA.
  - 4. Eight hours of military science credit will be awarded for the completion of Basic Training and AIT school.

(Possible option from THEC Standards): Six semester hours credit in health and physical education or physical education and military science is granted for a minimum of three years, eleven months, and twenty days of reserve or National Guard service in the armed forces of the United States. Veterans who have fewer than three years, eleven months, and twenty days will be awarded one semester hour credit for each year of reserve or National Guard duty. A letter grade of "P" will be assigned for credit granted. Because no grade is assigned other than "P," no Quality Points will be awarded to count toward GPA.

g. **Occupational and Workplace Training** – Credit awarded for completion of workplace (corporate, volunteer, government, etc.) training may be awarded based on recommendations by nationally recognized college credit recommendation services or the individual evaluation and

determination by the appropriate university department/school. A letter grade of "P" will be assigned for credit granted. Because no grade is assigned other than "P", no Quality Points will be awarded to count toward GPA.

- h. **Institutional Course Challenge Examinations** An institutional course challenge examination may be available to students who have knowledge of a subject area not covered by standardized exams (e.g., CLEP). Challenge exams are coordinated through the appropriate academic unit.
- B. **Transparency of the award/denial of PLA credit:** When a student has applied for PLA credit, the following procedures must be followed:
  - a. Portfolio: Assessor must provide reasoning for amount of credit hours awarded or a written explanation provided for evaluation of portfolio regardless of outcome.
  - b. ACE, CLEP, and other forms of non-portfolio PLA credit: If credit is denied for a course equivalency, an explanation or justification must be made available to the student.

### C. Appeals

- a. Students may appeal decisions made regarding PLA credit. The appeals process will follow the Tennessee Tech policy on grade appeals.
- b. Recommendations and scoring by ACE, CLEP, and other external bodies are under the auspices of the evaluation body and cannot be appealed at the college/university level. Student appeals of these decisions should be directed to the appeals procedures for each testing agency or credit recommendation service.
- c. Revision of portfolio Students may submit revised portfolios upon recommendation of the assessor after receiving recommendations for improvement or reasons for credit denial.

# VI. Interpretation

[Indicate who will have final say on the meaning of the policy. Example: The President or his/her designee has the final authority to interpret the terms of this policy.]

# VII. Citation of Authority for Policy

[e.g.,THEC Policy, Federal or State law, etc.]

### VIII. Approved by:

[List university standing committee(s) that reviews the policy]: [List date approved]

# Appendix A - The 10 CAEL Standards for Assessing Learning

As the nationally recognized body on prior learning assessment and the only body recognized by all regional accreditors for PLA, the Council for Adult and Experiential Learning's (CAEL) Standards for Assessing Learning have become the foundation for most PLA programs. Therefore, all PLA programs at TBR or UT colleges and universities in Tennessee should conform to these standards.

- 1. Credit or its equivalent should be awarded only for learning, and not for experience.
- 2. Assessment should be based on standards and criteria for the level of acceptable learning that are both agreed upon and made public.
- 3. Assessment should be treated as an integral part of learning, not separate from it, and should be based on an understanding of learning processes.
- 4. The determination of credit awards and competence levels must be made by appropriate subject matter and academic or credentialing experts.
- 5. Credit or other credentialing should be appropriate to the context in which it is awarded and accepted.
- 6. If awards are for credit, transcript entries should clearly describe what learning is being recognized and should be monitored to avoid giving credit twice for the same learning.
- 7. Policies, procedures, and criteria applied to assessment, including provision for appeal, should be fully disclosed and prominently available to all parties involved in the assessment process.
- 8. Fees charged for assessment should be based on the services performed in the process and not determined by the amount of credit awarded.
- 9. All personnel involved in the assessment of learning should pursue and receive adequate training and continuing professional development for the functions they perform.
- 10. Assessment programs should be regularly monitored, reviewed, evaluated, and revised as needed to reflect changes in the needs being served, the purposes being met, and the state of the assessment arts.

# TRANSFER AGREEMENT

2016-17

Volunteer State Community College Tennessee Technological University Use this as a guide to make your way through Volunteer State Community College and plan your future at Tennessee Technological University.

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### **Transfer Agreement Policies**

- This publication is a transfer agreement between Volunteer State Community College and Tennessee Technological University.
- The current edition of this publication will be in effect for six years from the time a student becomes regularly admitted to Volunteer State.
- Students entering Volunteer State must meet all the standards and follow the procedures of the current Volunteer State catalog.
- Students entering Tennessee Technological University must meet the standards and follow the procedures of the current Tennessee Tech undergraduate catalog.
- This agreement assumes that student will complete an associate degree at Volunteer State before entering Tennessee Tech. Students not completing an associate degree will have their applications evaluated as any other transfer student.
- In some cases, individual programs at Tennessee Tech have specific requirements for admissions which supersede all others.

### Admissions Standards

Under this agreement, in order to be eligible for admission to Tennessee Tech, you must have an associate degree from Volunteer State and a minimum 2.0 grade point average.

Students not completing an associate degree will have their applications evaluated as any other transfer student. In selected majors, a higher grade point average is required for admission. Check the curricular requirements for the major of your choice for additional information.

### Application

- Apply online atwww.tntech.edu/transfer. Application priority deadlines for desired terms: [Fall = Aug. 1, Spring = Dec. 1, Summer = May 1]
- Pay the \$25 application fee (if you've never paid it before). You can pay at the end of the application or online at www.tntech.edu/payapplicationfee.
- Request ALL official transcripts be sent to TTU Admissions as soon as possible (including terms in progress). Make sure that you have final grades sent, as well, once they are posted. Please send to the mailing address listed below.
- The grade point average (GPA) used for Admissions purposes will include grades earned at all previous institutions.
- Students who have NOT earned 24 hours of transferrable work should also submit a high school transcript or GED scores (along with ACT and/or SAT scores). Students who have not successfully completed college-level Math or English courses must follow COMPASS testing guidelines.

- 6. Applicants will be notified of their admissions status after all credentials have been received and evaluated. Tentative admission may be granted on the basis of partial transcripts if the quality of work is clearly acceptable. Final admission is granted only after all official transcripts and credentials are received. Admission decisions will be mailed to the address provided by the student. You may also check your application status by logging back into your application.
- Once accepted, your transcript evaluation will be able to be viewed. Only the credit, and not the grade, will transfer for academic and graduation purposes. Check out www.tntech.edu/transfer for your next steps (setting up student email, applying for housing, proper health forms, advisement, orientation, etc.)
- All non-commuting, single freshmen must live in university housing. Please visit www.tntech.edu/ reslife (or call 931-372-3414) for more information.

Mailing Address: TTU Admissions Office P.O. Box 5006 Cookeville, TN 38505

Physical Address: Admissions Office Derryberry Hall (Room 209) 1 William L. Jones Dr. Cookeville, TN 38505

Contact Information: Phone: (931) 372-3888 Toll Free: (800) 255-8881 admissions@tntech.edu M-F 8:00am-4:30pm (CT)

\*\*\*To schedule a date to visit TTU, please sign up at www.tntech.edu/visit.\*\*\*

### Expenses

For the current list of current fees, check the Bursar's web site at www.tntech.edu/bursar/

# Scholarship Information

Scholarship opportunities are available for transfer students. For scholarship information, check the scholarship web site at www.tntech.edu/scholarships/ The scholarship deadline date is December for the next academic year.

i

# **Undergraduate Colleges and Departments**

# College of Agriculture and Human Ecology

School of Agriculture School of Human Ecology

College of Arts and Sciences Biology Chemistry Communication Earth Sciences English Foreign Languages History Mathematics **Physics** Sociology and Political Science

College of Business Accounting Decision Sciences and Management Economics, Finance and Marketing

# College of Education

Art, Craft, and Design Counseling and Psychology Curriculum and Instruction

Exercise Science, Physical Education & Wellness Music

College of Engineering Chemical Engineering

Civil and Environmental Engineering Computer Science Electrical and Computer Engineering Mechanical Engineering

Manufacturing and Engineering Technology

### **College of Interdisciplinary Studies**

### School of Nursing

# **Questions? Contact**

Academic Records	Registrar, Derryberry Hall 102	372-3317
Admissions	Admissions Office, Derryberry Hall 209	372-3888
Athletics	Athletics, Hooper Eblen 300	372-3940
Auto Registration	Safety & Security	372-3234
Bills	Business Office, Derryberry Hall 100	372-3311
Books and Supplies	University Store, University Center G-7	372-3131
College of		
Agriculture and Human Ecology	Dean's Office, Foundation Hall	372-3149
Arts and Sciences	Dean's Office, Henderson Hall 202	372-3118
Student Success Center	Henderson Hall 202	372-3610
Business	Dean's Office, Johnson Hall 101	372-3372
Student Success Center	Johnson Hall 107	372-3371
Education	Dean's Office, T. J. Farr 100	372-3124
Student Success Center	T.J. Farr Builing 202	372-6036
Engineering	Dean's Office, Clement Hall 201	372-3172
		372-3172
Interdisciplinary Studies	Dean's Office, Southwest Hall 146	
School of Nursing	Academic Advisors, Nursing and Health Services	372-3229
Counseling	Counseling Center, University Center 307	372-3331
Financial Aid	Financial Aid Office, University Center 214	372-3073
Fraternities	Student Organizations Office, University Center 234	372-3236
Housing	Office of Residential Life, MS Cooper 217	372-3414
Religious Opportunity	Student Organizations Office, University Center 234	372-3236
Student Government	Student Organizations Office, University Center 234	372-3236
Student Organizations	Student Organizations Office, University Center 234	372-3236
Office of Teacher Education	College of Education, TJ Farr 103	372-3170
Veteran Certification	Registrar, Derryberry Hall 102	372-3317
TOTOTOTT OUTTINGUIOTT	riogiotiai, Doiry Doiry riail 102	0. 2 0011

# (Alphabetized by Major)

Banking (VSCC), Finance (TTU)	12
Business and Information Technology	8
Chemical Engineering	15
Child Development and Family Relations (Non-Licensure)	3
Computer Engineering	16
Environmental and Sustainability Studies	16-19
Finance	11
Food Systems Administration (Human EcologyFood, Nutrition and Die	tetics Option) 4
General Management	7
Housing and Design (Human Ecology Concentration)	5
Human Resource Management	g
Interdisciplinary Studies	20-21
Marketing	12
Merchandising and Design (Human Ecology Concentration)	6
Production/Operations Management	10
ROTC	22

# 7/12/16

# (Alphabetized by College)

College of Agriculture and Human Ecology	
School of Human Ecology	
Child and Family Studies (Non-Licensure)	3
Food Systems Administration Option	4
Housing and Design Concentration	5
Merchandising and Design Concentration	6
College of Business	
Department of Decision Sciences and Management	
Business and Information Technology	8
General Management	7
Human Resource Management	9
Production/Operations Management	10
Department of Economics, Finance, and Marketing	
Finance	
Marketing	12
College of Education	
Admission to Teacher Education	13
College of Engineering	
Department of Chemical Engineering	15
Department of Electrical and Computer Engineering	16
College of Interdisciplinary Studies	16
School of Environmental Studies	
School of Interdisciplinary Studies	
ROTC	22

# SCHOOL OF HUMAN ECOLOGY CHILD DEVELOPMENT AND FAMILY RELATIONS

(Leading to the Bachelor of Science Degree, Non-Licensure)

# **VOLUNTEER STATE COMMUNITY COLLEGE**

Freshman Year			Sophomore Ye	ar	
ENGL 1010, 1020	English Composition I, II	6	ECED 2320	Infant, Toddler,	
ECED 1310	Introduction to Early Childhood E	d3		Child Development	3
ECED 2315	Early Childhood Curriculum	3	ECED 2340	Family Dynamics & Comm.	
ECED 2310	Safe, Healthy, Learning			Involvement	3
	Environments	3	ECED 2360	Developmental of Exceptional	
ART or MUS 1030	Art or Music Appreciation	3		Children	3
BIOL 1030	Essentials of Biology	4	ECED 2070	Development Assessment	3
MATH		3	<b>ECED 2080</b>	Language & Literacy in ECED	3
ECED 2330, 2390,	2312, 2386 or HIST 2010	2-3	ECED 2085	Math & Science in ECED	3
SOCI 1010 In	troduction to Sociology	3	ECED 2130	Initial Practicum	3
			ECED 2160	Final Practicum	3
			INFS 1010	Computer Applications	3
			SPCH 1010	Fund of Speech Communication	3
	Total	31		Total	30

# TENNESSEE TECHNOLOGICAL UNIVERSITY

Advisor: Dr. Melinda Anderson, Human Ecology Oakley Hall Room 102 - Phone: (931) 372-3157

Transition Ser	mester-TTU
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HIST 2010 or 2	020American History I or II	3
Humanities/Fin	e Arts Elective	3
HEC 1005	Intro to Human Ecology	1
PSY 2010	General Psychology	3
	Total	10

		Senior Year		
		HEC 3011	Consumer Economics	3
or 2330	3	HEC 3066	Family Violence across the Lifespan	3
) American History I or II	3	HEC 3290	Nutrition through the Life Cycle	3
	4	HEC 3520	Parent Ed & Child Guidance	2
Practicum: Young Children with		HEC 3565	End of Life Application for Children	
Special Needs	1		and Families	3
Curriculum for Infants, Toddlers &		HEC 3660	Interpersonal Relationships	3
Preschoolers	3	HEC 3700	Development:	
Practicum: Procedures for Infants			Young Adulthood/Aging	3
Toddlers and Preschoolers	1	HEC 4005	Senior Seminar in HEC	2
Social and Professional Etiquette	1	HEC 4065	Social Policy for Children and	
Intro to Nutrition	2		Families	3
Families in Society	3	HEC 4600	Theories in Family Development and	
Creative Play	3		Relationships	3
Development: Middle Childhood/		HEC 4610	Families: Normative/Catastrophic	
Adolescence	3		Issues	3
	3	HEC 4630	Family Life Education	3
	3	HEC 4990	Internship	6
First-Year Connections	1	ECSP 4300	Assessment of Young Children	3
Total	34		Total	33
	Practicum: Young Children with Special Needs Curriculum for Infants, Toddlers & Preschoolers Practicum: Procedures for Infants Toddlers and Preschoolers Social and Professional Etiquette Intro to Nutrition Families in Society Creative Play Development: Middle Childhood/Adolescence  First-Year Connections	American History I or II 3 4 Practicum: Young Children with Special Needs 1 Curriculum for Infants, Toddlers & Preschoolers 3 Practicum: Procedures for Infants, Toddlers and Preschoolers 1 Social and Professional Etiquette 1 Intro to Nutrition 2 Families in Society 3 Creative Play 3 Development: Middle Childhood/ Adolescence 3 First-Year Connections 1	or 2330	or 2330 3 HEC 3011 Consumer Economics Family Violence across the Lifespan Nutrition through the Life Cycle Practicum: Young Children with Special Needs 1 Curriculum for Infants, Toddlers & Preschoolers 3 HEC 3700 Practicum: Procedures for Infants, Toddlers and Preschoolers 1 Toddlers and Preschoolers 1 Intro to Nutrition 2 Families in Society 3 HEC 4600 Theories in Family Development and Relationships Development: Middle Childhood/ Adolescence 3 HEC 4990 First-Year Connections 1 HEC 3066 Family Violence across the Lifespan Nutrition through the Life Cycle Parent Ed & Child Guidance HEC 3565 End of Life Application for Children and Families Interpersonal Relationships Development: Young Adulthood/Aging Senior Seminar in HEC Social Policy for Children and Families Normative/Catastrophic Issues Family Life Education Internship First-Year Connections 1 ECSP 4300 Assessment of Young Children

# Students must complete 60 hours at senior institution with 36 hours of upper-division credit at the 3000-4000 level.

4000	ievei.
HEC (	Core

HEC 1010	Life Span Development	3
HEC 2031	Aspects of Dress	3
HEC 2041	Aspects of Housing and Furnishings	3

3

# FOOD, NUTRITION AND DIETETICS

(Food Systems Administration Option)

# **VOLUNTEER STATE COMMUNITY COLLEGE**

Freshman Year			Sophomore Ye	ear	
BIOL 1010	Intro to Biology I	4	ACCT 1010	Principles of Accounting I	3
CHEM 1110, 1120	General Chemistry I, II	8	BIOL 2230	Microbiology	4
ENGL 1010, 1020	English Composition I, II	6	ECON 2020	Microeconomics	3
MATH 1130, 1530		6	SPCH 103 or 1	010	3
SOCI 1010	Intro to Sociology	3	ENGL Literature		3
Electives		2	HIST 2010, 202	20Survey of American History	6
			PSYC 1030		3
			Humanities/Fin	e Arts Electives	6
	Total	29		Total	31

# TENNESSEE TECHNOLOGICAL UNIVERSITY

Advisor: Dr. Melinda Anderson, Human Ecology Oakley Hall Room 102 - Phone: (931) 372-3157

Junior Year HEC 1005 HEC 1010 HEC 1020 HEC 2020 HEC 2065 HEC 2240 HEC 3011 HEC 3240 HEC 3270 HEC 3290	Intro to Human Ecology Life Span Development Social and Professional Etiquette Nutrition Families in Society Food Preparation & Management Consumer Economics Quantity Food Production Nutrition in Disease Nutrition through the Life Cycle	3	BMGT 3630 HEC 2031 or 20 HEC 4005 HEC 4242 HEC 4254 or 45 HEC 4940 MKT 3310 or 34 Electives (Uppe	Senior Seminar in HEC Food Systems Administration 995 Nutrition, Fitness and Wellness	3 3 3 2 3 6 2 3 3
HEC 3290 UNIV 1020 Electives	Nutrition through the Life Cycle First-Year Connections	3	Electives (Uppe	er-Division 3 hours)	3
	Total	32		Total	28

# HOUSING AND DESIGN

# **VOLUNTEER STATE COMMUNITY COLLEGE**

	20 General Chemistry I, II 20 English Composition I, II 21 College Algebra 230 20 Intro to Sociology 21 Introduction to Art  Total	8 6 3 3 3 4	ENGL Literatur HED 220	Computer Applications 010 020Macroeconomics, Microeconomics e Principles of Nutrtion 20Survey of American History General Psychology	3 3 6 3 3 6 3 3 3 3
	<u>TENNESSEE TECI</u> Advisor: Dr. Melind Oakley Hall Room	da An	derson, Human E	Ecology	
Junior Year ART 1010 HEC 1005 HEC 2041 HEC 2411 HEC 2421 HEC 2440 HEC 2460 HEC 3011 HEC 3310 HEC 3320 HEC 3350	Two-Dimensional Design Intro to Human Ecology Aspects of Housing and Furnishings Families in Society Practicum: Housing & Design Architectural Graphics & Presentation Techniques Residential Design I Computer Aided Design of Residence Interior Architecture Codes and Standards Consumer Economics Textiles I Textiles II Merchandising I	31 33 3 23333	Senior Year HEC 3431 HEC 4005 HEC 4450 HEC 4460 FIN 3410 MKT 3400 HEC Upper-Div	Residential Design II Senior Seminar in HEC Commercial Design Historical and Contemporary Architecture and Furnishings Principles of Real Estate Principles of Marketing vision Elective	3 2 3 3 3 3 6 3
UNIV 1020	First-Year Connections Total	1 35		Total	26
HEC Core HEC 1010	complete 60 hours at senior inst	3	on with 36 nour	s or upper-alvision crealt at th	e 3000-
	Social and Professional Etiquette Aspects of Dress	1			

# MERCHANDISING AND DESIGN

# **VOLUNTEER STATE COMMUNITY COLLEGE**

Freshman Year			Sophomore Year	r	
CHEM 1110, 1120	General Chemistry I, II	8	SPCH 103 or 101		3
ENGL 1010, 1020	English Composition I, II	6	ECON 2010, 202	OMacroeconomics,	
MATH 1010	Math for Liberal Arts	3		Microeconomics	6
MATH 1530	Elementary Statistics	3	<b>ENGL Literature</b>		3
SOCI 1010	Intro to Sociology	3	HED 220	Principles of Nutrtion	3
Humanities/Fine A	rts Electives	6	HIST 2010, 2020	Survey of American History	6
Elective <sup>1</sup>		1	PSYC 1030	General Psychology	3
	Total	30	1	Total	24

TENNESSEE TECHNOLOGICAL UNIVERSITY
Advisor: Dr. Melinda Anderson, Human Ecology
Oakley Hall Room 102 - Phone: (931) 372-3157

Junior Year ACCT 3720 HEC 1005 HEC 1300 HEC 2031 HEC 2300, 3300, 4 HEC 2311 HEC 2320 HEC 3305 HEC 3350 HEC 3350 HEC Core MKT 3400 UNIV 1020	Survey of Accounting Intro to Human Ecology Clothing Construction Aspects of Dress Families in Society 4300 or 4301 Practicum: Merchandising & Design Analysis of Apparel and Furnishings Fashion Forecasting Merchandising I  Principles of Marketing First-Year Connections	313336 1 323331	Senior Year HEC 3011 HEC 3310 HEC 3320 HEC 4005 HEC 4320 HEC 4340 HEC 4360 HEC 4990 HEC Elective Upper Division	Consumer Economics Textiles I Textiles II Senior Seminar in HEC Merchandise Promotion & Advertising History of Dress Merchandising II Internship Business Elective	3 3 3 2 g3 3 6 3 3
	Total	35		Total	32

Students must complete 60 hours at senior institution with 36 hours of upper-division credit at the 3000-4000 level.

 $^1 Courses must be selected from the VSCC/TTUT ransfer Equivalency table www.tntech.edu/admissions/transfer/apply/credits/1000 from the VSCC/TTUT ransfer/apply/credits/1000 from the VSCC/$ 

**HEC Core** 

Life Span Development HEC 1010 HEC 1020 Social and Professional Etiquette 1

# **COLLEGE OF BUSINESS**

# DEPARTMENT OF DECISION SCIENCES AND MANAGEMENT

# **BUSINESS MANAGEMENT - GENERAL MANAGEMENT**

# **VOLUNTEER STATE COMMUNITY COLLEGE**

Freshman Year	F	SP	Sophomore Year	F	SP
INFS 1010 Computer Applications	0	3	ACCT 1010, 1020Principles of Accounting I, II	3	3
SPCH 1010 or 103Fund. of Speech Commun	nication	i	ECON 2010, 2020Macroeconomics,		
Public Speaking	3	0	Microeconomics	3	3
ENGL 1010, 1020English Composition I, II	3	3	ENGL Literature	3	0
MATH 1130, 1830College Algebra;			HIST 2010, 2020Survey of American		
Intuitive Calc.	3	3	History I, II	3	3
Natural Science <sup>1</sup>	4	4	Elective <sup>2</sup>	0	3
Electives <sup>2</sup>	1	3	Humanities/Fine Arts Electives <sup>3</sup>	3	3
Total	14	16	Total	15	15

<u>TENNESSEE TECHNOLOGICAL UNIVERSITY</u>
Advisor: Dr. Curtis Armstrong, Department Chairperson - Johnson Hall 306, Phone: (931) 372-3160

<b>Junior Year</b>			Senior Year		
<b>BMGT 3510</b>	Mgt. & Organization Behavior	3	BMGT 3720	Business Communication I	3
<b>BMGT 3600</b>	International Management	3	BMGT 4520	Organizational Leadership	3
BMGT 3630	Human Resource Management	3	BMGT 4930	Business Strategy	3
DS 3620	Business Analytics: Data Driven		DS 3520	Operations Management	3
	Decision Making	3	ECON 3320, 38	310 or 3820	3
DS 3841	Mgt. Information Systems	3	LAW 3810	Business Legal Environment and	
ECON 3610	Business Statistics I	3		Ethics	3
FIN 3210	Principles of Managerial Finance	3	BMGT Electives	S	6
MKT 3400	Principles of Marketing	3	Elective <sup>4</sup>		6
<b>Business Elect</b>	ives <sup>4</sup>	3			
DS Elective		3			
	Total	30		Total	30

<sup>&</sup>lt;sup>1</sup> Natural science, choose from: BIOL 1010-1020, BIOL 1110-1120, CHEM 1110-1120, PHYS 2010-2020, or GEOL 1040-1050.

<sup>&</sup>lt;sup>3</sup> Fine arts electives, choose one from: ART 1030, MUS 1030, PHIL 1030 or THEA 1030.

<sup>&</sup>lt;sup>4</sup> Elective courses must be selected in consultation with the advisor.

# DEPARTMENT OF DECISION SCIENCES AND MANAGEMENT BUSINESS MANAGEMENT - BUSINESS AND INFORMATION TECHNOLOGY

### **VOLUNTEER STATE COMMUNITY COLLEGE**

			Sophomore Year	F	SP
Freshman Year	F	SP	ACCT 1010, 1020Principles of Accounting I, II	3	3
INFS 1010 Computer Applications	0	3	ECON 2010, 2020Macroeconomics,		
SPCH 1010 or 103Fund. of Speech Commun	icatio	n	Microeconomics	3	3
Public Speaking	3	0	ENGL Literature	3	0
ENGL 1010, 1020English Composition I, II	3	3	HIST 2010, 2020Survey of American		
MATH 1130, 1830College Algebra;			History I, II	3	3
Intuitive Calc.	3	3	Elective <sup>2</sup>	0	3
Natural Science	4	4	Humanities/Fine Arts Electives <sup>3</sup>	3	3
Electives <sup>2</sup>	1	3			
Total	14	16	Total	15	15

# TENNESSEE TECHNOLOGICAL UNIVERSITY

Advisor: Dr. Curtis Armstrong, Department Chairperson - Johnson Hall 306, Phone: (931) 372-3160

Junior Year			Senior Year		
<b>BMGT 3510</b>	Mgmt. and Organization Behavior	3	BMGT 4930	Business Strategy	3
DS 3620	Business Analytics: Data Driven		DS 3520	Operations Management	3
	Decision Making	3	DS 3870	Business Apps Development II	3
DS 3841	Mgt. Information Systems	3	DS 4250	Business Data Communications	3
DS 3850	Business Applications Development	3	DS 4330	Management Systems Analysis	3
DS 3860	Business Database Management	3	DS 4550	Information Systems Dev Practicum	1 3
ECON 3610	Business Statistics I	3	ECON 3320, 38	10 or 3820	3
FIN 3210	Principles of Managerial Finance	3	LAW 3810	Business Legal Environment and	
MKT 3400	Principles of Marketing	3		Ethics	3
DS Elective		3	<b>Business Electiv</b>	re <sup>4</sup>	3
Elective <sup>4</sup>		3	Elective <sup>4</sup>		3
				Total	30
	Total	30			

<sup>&</sup>lt;sup>1</sup> Natural science, choose from: BIOL 1010-1020 or BIOL 1110-1120; CHEM 1110-1120; PHYS 2010-2020; or GEOL 1040-1050.

<sup>&</sup>lt;sup>2</sup>Courses must be selected from the VSCC/TTU Transfer Equivalency table www.tntech.edu/admissions/transfer/apply/credits/

<sup>&</sup>lt;sup>3</sup> Fine arts electives, choose one from: ART 1030, MUS 1030, PHIL 1030 or THEA 1030.

<sup>&</sup>lt;sup>4</sup> Elective courses must be selected in consultation with the advisor.

# DEPARTMENT OF DECISION SCIENCES AND MANAGEMENT BUSINESS MANAGEMENT - HUMAN RESOURCE MANAGEMENT

# **VOLUNTEER STATE COMMUNITY COLLEGE**

Freshman Year	F	SP	Sophomore Year	F	SP
INFS 1010 Computer Applications	0	3	ACCT 1010, 1020Principles of Accounting I, II	3	3
SPCH 1010 or 103Fund. of Speech Commun	nication	1	ECON 2010, 2020Macroeconomics,		
Public Speaking	3	0	Microeconomics	3	3
ENGL 1010, 1020English Composition I, II	3	3	ENGL Literature	3	0
MATH 1130, 1830College Algebra;			HIST 2010, 2020Survey of American		
Intuitive Calc.	3	3	History I, II	3	3
Natural Science <sup>1</sup>	4	4	Elective <sup>2</sup>	0	3
Electives <sup>2</sup> 1	3		Humanities/Fine Arts Electives <sup>3</sup>	3	3
Total	14	16	Total	15	15

# TENNESSEE TECHNOLOGICAL UNIVERSITY

Advisor: Dr. Curtis Armstrong, Department Chairperson - Johnson Hall 306, Phone: (931) 372-3160

Junior Year			Senior Year		
BMGT 3510	Mgmt. & Organization Behavior	3	BMGT 4100	Staffing	3
BMGT 3630	Human Resource Management	3	BMGT 4120	Compensation Administration	3
DS 3620	Business Analytics: Data Driven		BMGT 4150	Employment and Labor Law	3
	Decision Making	3	BMGT 4610	Training and Development	3
DS 3841	Mgmt. Information Systems	3	BMGT 4930	Business Strategy	3
ECON 3610	Business Statistics I	3	DS 3520	Operations Management	3
FIN 3210	Principles of Managerial Finance	3	ECON 3320, 3	810 or 3820	3
LAW 3810	Business Legal Environment and		Business Elect	tive <sup>4</sup>	3
	Ethics	3	Electives <sup>4</sup>		6
MKT 3400	Principles of Marketing	3			
BMGT Electives	5	6			
	Total	30		Total	30

<sup>&</sup>lt;sup>1</sup> Natural science, choose from: BIOL 1010-1020 or BIOL 1110-1120, CHEM 1110-1120, PHYS 2010-2020, or GEOL 1040-1050

<sup>&</sup>lt;sup>2</sup>Courses must be selected from the VSCC/TTU Transfer Equivalency table www.tntech.edu/admissions/transfer/apply/credits/

³ Fine arts electives, choose one from: ART 1030, MUS 1030, PHIL 1030 or THEA 1030.

<sup>&</sup>lt;sup>4</sup> Elective courses must be selected in consultation with the advisor.

# DEPARTMENT OF DECISION SCIENCES AND MANAGEMENT

# **BUSINESS MANAGEMENT - PRODUCTION/OPERATIONS MANAGEMENT**

# **VOLUNTEER STATE COMMUNITY COLLEGE**

Freshman Year	F	SP	Sophomore Year	F	SP
INFS 1010 Computer Applications	0	3	ACCT 1010, 1020Principles of Accounting I, II	3	3
SPCH 1010 or 103Fund. of Speech Commun	ication	1	ECON 2010, 2020Macroeconomics,		
Public Speaking	3	0	Microeconomics	3	3
ENGL 1010, 1020English Composition I, II	3	3	ENGL Literature	3	0
MATH 1130, 1830College Alg.;			HIST 2010, 2020Survey of American		
Intuitive Calculus	3	3	History I, II	3	3
Natural Science <sup>1</sup>	4	4	Elective <sup>2</sup>	0	3
Electives <sup>2</sup>	1	3	Humanities/Fine Arts Electives <sup>3</sup>	3	3
Total	14	16	Total	15	15

<u>TENNESSEE TECHNOLOGICAL UNIVERSITY</u>
Advisor: Dr. Curtis Armstrong, Department Chairperson - Johnson Hall 306, Phone: (931) 372-3160

Junior Year ACCT 3210 BMGT 3510 BMGT 3630 DS 3520 DS 3540 DS 3620 DS 3841 ECON 3610 FIN 3210 MKT 3400	Cost Accounting Mgmt. & Organization Behavior Human Resource Management Operations Management Quality and Productivity Systems Business Analytics: Data Driven Decision Making Mgmt. Information Systems Business Statistics I Principles of Managerial Finance Principles of Marketing	3 3 3 3 3 3 3 3 3 3	Senior Year BMGT 4410 Conflict Management & Negotiation BMGT 4930 Business Strategy ECON 3320, 3810 or 3820 LAW 3810 Business Legal Environment and Ethics Business Electives <sup>4</sup> DS/BMGT Electives <sup>4</sup> MET Electives <sup>4</sup>	333 3666
	Total	30	Total	30

Natural science, choose from: BIOL 1010-1020 or BIOL 1110-1120; CHEM 1110-1120; PHYS 2010-2020; or GEOL

<sup>&</sup>lt;sup>2</sup>Courses must be selected from the VSCC/TTUTransfer Equivalency table www.tntech.edu/admissions/transfer/apply/credits/ <sup>3</sup> Fine arts electives, choose one from: ART 1030, MUS 1030, PHIL 1030 or THEA 1030.

<sup>&</sup>lt;sup>4</sup> Elective courses must be selected in consultation with the advisor.

# **FINANCE**

### **VOLUNTEER STATE COMMUNITY COLLEGE**

Freshman Year	F	SP	Sophomore Year	F	SP
INFS 1010 Computer Applications	0	3	ACCT 1010, 1020Principles of Accounting I, II	3	3
SPCH 1010 or 103Fund. of Speech Commun	nication	1	ECON 2010, 2020Macroeconomics,		
Public Speaking	3	0	Microeconomics	3	3
ENGL 1010, 1020English Composition I, II	3	3	ENGL Literature	3	0
MATH 1130, 1830College Algebra; Intuitive C	Calc. 3	3	HIST 2010, 2020Survey of American		
Natural Science <sup>1</sup>	4	4	History I, II	3	3
Electives <sup>2</sup>	1	3	Elective <sup>2</sup>	0	3
			Humanities/Fine Arts Electives <sup>3</sup>	3	3
Total	14	16	Total	15	15

TENNESSEE TECHNOLOGICAL UNIVERSITY

Advisor: Dr. Steve Isbell, Department Chairperson - Johnson Hall 216, Phone: (931) 372-3745

Junior Year BMGT 3510 DS 3520 DS 3620 DS 3841 ECON 3320 ECON 3610 FIN 3210 FIN 3220 FIN 3830 LAW 3810	Mgmt. and Organization Behavior Operations Management Business Analytics: Data Driven Decision Making Mgmt. Information Systems 3810 or 3820 Business Statistics I Principles of Managerial Finance Intermediate Financial Mgt. Fundamentals of Investment Business Legal Environment & Ethics	333333333333333333333333333333333333333	Senior Year BMGT 4930 FIN 4230 ECON 4510 or FIN 4910 MKT 3400 Business Elective Finance Electives		3 3 3 3 9 6
	Total	30		Total	30

<sup>&</sup>lt;sup>1</sup> Natural science, choose from: BIOL 1010-1020 or BIOL 1110-1120; CHEM 1110-1120; PHYS 2010-2020: or GEOL 1040-1050.

<sup>&</sup>lt;sup>2</sup>Courses must be selected from the VSCC/TTU Transfer Equivalency table www.tntech.edu/admissions/transfer/apply/credits/

<sup>&</sup>lt;sup>3</sup> Fine arts electives, choose one from: ART 1030, MUS 1030, PHIL 1030 or THEA 1030.

<sup>&</sup>lt;sup>4</sup> Elective courses must be selected in consultation with the advisor.

# **MARKETING**

### **VOLUNTEER STATE COMMUNITY COLLEGE**

Freshman Year	F	SP	Sophomore Year	F	SP
INFS 1010 Computer Applications	0	3	ACCT 1010, 1020Principles of Accounting I, II	3	3
SPCH 1010 or 103Fund. of Speech Commun	nication	1	ECON 2010, 2020Macroeconomics,		
Public Speaking	3	0	Microeconomics	3	3
ENGL 1010, 1020English Composition I, II	3	3	ENGL Literature	3	0
MATH 1130, 1830College Algebra;			HIST 2010, 2020Survey of American		
Intuitive Calc.	3	3	History I, II	3	3
Natural Science <sup>1</sup>	4	4	Elective <sup>2</sup>	0	3
Electives <sup>2</sup>	1	3	Humanities/Fine Arts Electives <sup>3</sup>	3	3
Total	14	16	Total	15	15

TENNESSEE TECHNOLOGICAL UNIVERSITY

Advisor: Dr. Steve Isbell, Department Chairperson - Johnson Hall 216, Phone: (931) 372-3745

BMGT 351 DS 3520 DS 3620 DS 3841 ECON 361 FIN 3210 MKT 3400 Marketing I Elective <sup>4</sup>	Mgmt. & Organization Behavior Operations Management Business Analytics: Data Driven Decision Making Management Information Systems 3810 or 3820 Business Statistics I Principles of Managerial Finance Principles of Marketing	3333333333	Senior Year BMGT 4930 Business Strategy MKT 4620 Marketing Research MKT 4730 Marketing Strategy Marketing Electives <sup>4</sup> Business Electives <sup>4</sup> Elective <sup>4</sup> LAW 3810 Business Legal Environment & Ethics	3 3 3 12 3 3
	Total	30	Total	30

 $<sup>^{\</sup>rm 1}$  Science sequence, choose from: BIOL 1010-1020 or BIOL 1110-1120; CHEM 1110-1120; PHYS 2010-2020; or GEOL 1040-1050.

<sup>&</sup>lt;sup>2</sup>Courses must be selected from the VSCC/TTUTransfer Equivalency table www.tntech.edu/admissions/transfer/apply/credits/ <sup>3</sup> Fine arts electives, choose one from: ART 1030, MUS 1030, PHIL 1030 or THEA 1030.

<sup>&</sup>lt;sup>4</sup> Elective courses must be selected in consultation with the advisor.

# COLLEGE OF EDUCATION

# Admission to the Teacher Education Program for Undergraduate Students

The undergraduate admission process applies to students pursuing a bachelor's degree and transfer students that received the AS (Associate of Science) or AAS (Associate of Applied Science) Degree from a community college. Students fitting this category receive full admission to the Teacher Education Program upon meeting the following requirements at the link below:

https://www.tntech.edu/education/teachered/admission-to-tep/undergraduate-requirements-for-admission-to-the-teacher-education-program

All requirements for admission to the Teacher Education Program must be completed by the designated deadline. Students will not be allowed to enroll in any upper division professional education courses without obtaining full admission to the program. A detailed list of requirements, deadlines, and links to all required forms can be found at the above link. Forms cannot be submitted online without a TNumber.

Upon admission to the Teacher Education Program, students will then begin to prepare and submit requirements for their Field and Clinical Practice (Residency or Student Teaching experience). More detailed information on Field and Clinical Practice requirements and deadlines can be found here: https://www.tntech.edu/education/teachered/field-and-clinical-practice/

### Admission to the Teacher Education Program for Students with an AST Degree

Students who completed the AST (Associate of Science in Teaching) Degree through a community college will have completed some requirements previously in order to obtain their AST degree. In order to complete full admission to the Teacher Education Program at Tennessee Tech University students must show proof of having been awarded the AST Degree (this will be listed on official transcripts) and meet the requirements listed at the link below:

https://www.tntech.edu/education/teachered/admission-to-tep/ast-degree-requirements-for-admission-to-the-teachereducation-program

All requirements for admission to the Teacher Education Program must be completed by the designated deadline. Students will not be allowed to enroll in any upper division professional education courses without obtaining full admission to the program. A detailed list of requirements, deadlines, and links to all required forms can be found at the above link. Forms cannot be submitted online without a TNumber.

Upon admission to the Teacher Education Program, students will then begin to prepare and submit requirements for their Field and Clinical Practice (Residency or Student Teaching experience). More detailed information on Field and Clinical Practice requirements and deadlines can be found here: https://www.tntech.edu/education/teachered/field-and-clinical-practice/

Teacher Education candidates may be required to meet revisions in various curricula necessitated by changing standards of the Council for Accreditation of Educator Preparation (CAEP) or by requirements of the Tennessee State Board of Education and teacher licensure.

All forms and detailed information regarding progression through the Teacher Education Program at Tennessee Tech University can be found at: www.tntech.edu/education/teachered/

# COLLEGE OF ENGINEERING

# DEPARTMENT OF CHEMICAL ENGINEERING

## **CHEMICAL ENGINEERING**

### **VOLUNTEER STATE COMMUNITY COLLEGE**

Freshman Year	F	SP	Sophomore Year	F	SP
CHEM 1110, 1120General Chemistry I, II	4	4	CHEM 2010, 2020Organic Chemistry I, II	4	4
SPCH 1010 or 103Fund, of Speech Commun	nication	n or	ENGL Literature	3	0
Public Speaking	3	0	HIST 2010, 2020Survey of American		
ENGR 210 C++ for Engineers	0	3	History I, II1	3	3
ENGL 1010, 1020English Composition I, II	3	3	MATH 2110 Calculus & Analytic		
MATH 1910, 1920Calculus & Analytic			Geometry III	3	0
Geometry I, II	4	4	MATH 2120 Differential Equations	0	4
Humanities/Fine Arts Elective	3	0	PHYS 2110, 2120Calculus-Based Physics I, II	4	4
Social/Behavioral Science Elective	0	3	Humanities/Fine Arts Elective	3	0
			Social/Behavioral Science Elective	0	3
Total	17	17	Total	20	18

### TENNESSEE TECHNOLOGICAL UNIVERSITY

Advisor: Dr. Pedro Arce, Department Chairperson - Prescott Hall 214, Phone: (931) 372-3297 (Recommend the advisor be contacted prior to transfer.)

Junior Year <sup>2</sup> CHE 1520	Intro to Chemical and Biological		Senior Year CHE 4131	Transfer Science III: Diffusion and	
CHE 2020	Process Analysis and Scaling I Intro to Chemical and Biological Process Analysis and Scaling II	3	CHE 4210 CHE 4240	Diffusive-Convective Mass Transfe Chemical Reaction Engineering CHE Capstone Project	r 4
CHE 3010	Thermodynamics of Chemical Processes	3		Process Design I, II Process Dynamics & Control	6
CHE 3111	Transfer Science I: Conduction, Radiation, and Diffusion	4	ChE Technical E CHE 4910		6
CHE 3021	Separations and Solution Thermodymanics	4	CHEM 3510, 35	20Physical Chemistry	8
CHE 3121	Transfer Science II: Fluid Mechan	ics4			
CHE 3730	CHE Operations	3			
	E 3810 or BIOL 3200	3			
Technical Elect	ive <sup>3</sup>	3			
	Total	29		Total	33

<sup>&</sup>lt;sup>1</sup>American History 2010, 2020 are not required for B.S. degree in Chemical Engineering.

- a. Any College of Engineering course at the 3000 or 4000 level.
   b. Any BIOL/CHEM/MATH/PHYS at the 3000 or 4000 level.

- d. Any course with the prior approval of the ChE Undergraduate Program Coordinator.
  e. Note that CEE 2100, BIOL 3200 and ECE 3810 cannot count both as a Technical Elective and as part of the CEE 2100/ECE 3810/BIOL 3200 option.
- <sup>4</sup>Three hours of ChE Technical Electives must come from one of the following courses.
- a. ChE 4330--Polymer Engineering
  b. ChE 4661--Transport in Biochemical & Biological Processes
- c. ChE 4990--Undergraduate to Research

<sup>&</sup>lt;sup>2</sup>Students must apply to the CHE Fast-Track MS program by the end of their second junior term.

<sup>&</sup>lt;sup>3</sup>Three hours of Technical Electives can be from any of the following courses:

# DEPARTMENT OF ELECTRICAL AND COMPUTER ENGINEERING

### **COMPUTER ENGINEERING**

# **VOLUNTEER STATE COMMUNITY COLLEGE**

Freshman Year	F	SP	Sophomore Year	F	SP
ENGL 1010, 1020English Compos	sition I, II 3	3	ENGL Literature	0	3
MATH 1910, 1920Calculus and Ar	nalytic		SPCH 1010 or 103Fund. of Speech Commun	nicatio	n or
Geometry I, II	4	4	Public Speaking	0	3
CHEM 1110 General Chemist	try I 4	0	PHYS 2110, 2120Calculus-Based Physics I,	II 4	4
Humanities/Fine Arts Elective	0	3	MATH 2010 Linear Algebra	3	0
Social/Behavioral Science Elective	e 0	3	MATH 2120 Differential Equations	0	4
HIST 2010, 2020			Humanities/Fine Arts Elective	3	0
Survey of Americ	can History I, II13	3	Social/Behavioral Science Elective	3	0
Tatal	4.4	40	Total	10	14
Total	14	16	Total	12	14

TENNESSEE TECHNOLOGICAL UNIVERSITY

Advisor: Dr. Charles Carnal, Faculty Advisor - Brown Hall 217, CharlesLC@tntech.edu
(Recommend the advisor be contacted prior to transfer.)

Third Year			Fourth Year		
CSC 2100, 2101	Intro to Problem Solving and Compu	ter	ECE 3010	Signals & Systems	3
	Programming, Lab	4	ECE 3020	Discrete-Time Signals and Systems	3
CSC 2110, 2111	Data Structures and Algorithms, Lab	4	ECE 3060	EE Lab II	1
ECE 2001	Computer Aided Engineering in ECE	1	ECE 3300	Electronics I	3
ECE 2010	Electric Circuits I	3	ECE 3160	Digital Systems Laboratory	1
ECE 2011	EE Lab I	1	ECE 3130	Microcomputer Systems	4
ECE 2020	Electric Circuits II	3	ECE 3920	Professional Issues in ECE	1
ECE 2110	Intro to Digital Systems	3	CSC 2400	Design of Algorithms	3
MATH 2110	Calculus III	4	CSC 2500	Unix Lab	1
MATH 3470	Introductory Probability and Statistics	3	CSC 4200	Computer Networks	3
	Total	26		Total	23

Fifth Year	
	Capstone Design I, II
ECE 4110	Digital System Design
ECE 4120	Fundamentals of Computer Design
ECE 4140	Embedded System Design
EE Laboratory E	lective <sup>2</sup>
EE Elective <sup>2</sup>	
0	

633323333 CmpE Elective<sup>2</sup> CSC 4100 Operating Systems CS Elective<sup>2</sup> Total 28

<sup>&</sup>lt;sup>1</sup>American History 2010, 2020 are not required for B.S. degree in Computer Engineering.

<sup>&</sup>lt;sup>2</sup>Select from the ECE Department approved list.

# 7/12/16 COLLEGE OF INTERDISCIPLINARY STUDIES

# **ENVIRONMENTAL AND SUSTAINABILITY STUDIES**

# Environmental Science Biology option

# **VOLUNTEER STATE COMMUNITY COLLEGE**

Freshman Year	F	SP	Sophomore Year		F	SP
CHEM 1110 General Chemistry I	4	0	BIOL 1050 Int	troduction to Environmental		
BIOL 1110, 1120 General Biology I, II	4	4	St	tudies	4	0
GEOL 1060 Earth's Environments	0	4	BIOL 1060 Er	nvironmental Science	0	4
SPCH 1010 or 103Fund. of Speech Commu	nication	n or	<b>ENGL Literature</b>		3	0
Public Speaking	0	3	HIST 2010, 2020St	urvey of American		
ENGL 1010, 1020English Composition I, II	3	3	Hi	istory I, II	3	3
Humanities/Fine Arts Elective	3	0	ECON 2020 Mi	icroeconomics	0	3
MATH 1130 College Algebra	3	0	PHIL 1030 Inf	troduction to Philosophy	0	3
			SOCI 1010 Inf	troduction to Sociology	0	3
			ISCI 1030 Sc	cience, Society and		
			Su	ustainability	4	0
Total	17	14	To	otal	14	16

### TENNESSEE TECHNOLOGICAL UNIVERSITY

Advisor: Dr. Hayden Mattingly, Southwest Hall 179, Phone (931) 372-3698

Junior Year		F	SP	Senior Year	F	SP
BIOL 2110	General Botany	4	0	AGBE 4120 Natural Resource Economics	3	0
CHEM 1020	Intro to Chemistry II	0	4	BIOL 3140, 3200 or 3810	0	4
ESS 3000	Intro to EnvironmentalLaw	3	0	ESS 4001, 4002 Society and the Environment:		
ESS 3710 or Cl	HEM 4710	0	3	Capstone Experience Part 1, 2	3	3
<b>GEOG 3200</b>	Water Resources	0	3	Biology Option Elective	4	4
HIST 3900	Environmental History	0	3	Electives	3	1
MATH 3070	Statistical Methods I	3	0	Electives	9	
PHYS 2010	Algebra-based Physics I	4	0			
SOC 3600	Environmental Sociology	0	3	Total	12	10
	Total	14	16	Iotai	13	12

### **Biology Option Elective**

One of the following: AGHT 3450 Denrology BIOL 3240 Field Botany BIOL 4330 Plant Ecology

One of the following: GEOL 2000 Earth Evolution and Life History WFS 4500 National Wildlife Policy WFS 4730 Conservation Biology

One of the following: BIOL 4650 Marine Biology BIOL 4840 Limnology BIOL 4130 Environmetal Microbiology

One of the following: BIOL 3330 Entomology BIOL 4230 Animal Behavior

BIOL 4610 Invertebrate Zoology BIOL 4630 Ornithology BIOL 4810 Ichthyology BIOL 4820 Mammalogy

BIOL 4830 Herpetology
Students must complete 60 hours at senior institution with 36 hours of upper-division credit at the 3000-4000 level.

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# **ENVIRONMENTAL AND SUSTAINABILITY STUDIES**

# Environmental Science Chemistry option

# **VOLUNTEER STATE COMMUNITY COLLEGE**

Freshman Year		F	SP	Sophomore Y	ear	F	SP
CHEM 1110, 1	120			BIOL 1050	Introduction to Environmental		
	General Chemistry I, II	4	4		Studies	4	0
BIOL 1120	General Biology II	0	4	BIOL 1060	Environmental Science	0	4
SPCH 1010 or	103Fund. of Speech Comm	unication	n or	<b>ENGL Literatur</b>	e	3	0
	Public Speaking	0	3	HIST 2010, 201	20Survey of American		
ENGL 1010, 10	020English Composition I, II	3	3	,	History I, II	3	3
	ne Arts Elective	3	0	ECON 2020	Microeconomics	0	3
MATH 1830 or	1910	3-4	0	SOCI 1010	Introduction to Sociology	3	0
PHIL 1030	Introduction to Philosophy	3	0	CHEM 2010, 2			
					Organic Chemistry I, II	4	4
	Total	16-17	14		Total	17	14

TENNESSEE TECHNOLOGICAL UNIVERSITY

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Junior Year		F	SP	Senior Year	F	SP
CHEM 3410	Quantitative Analysis	4	0	AGBE 4120 Natural Resource Economics	3	0
CHEM 3500	Elements of Physical			CHEM 4710, 4720		
	Chemistry	0	3	Environmental, Advanced Chem	13	3
ESS 3000	Intro to Environmental Law	3	0	ESS 4001, 4002 Society and the Environment	3	3
GEOL 1045	Earth Environment, Resource	es		Chemistry Option (Elective)	4	4
	and Society	4	0	Elective	0	3
<b>GEOL 3200</b>	Water Resources	0	3	21004170		
HIST 3900	Environmental History	0	3	Total	13	13
MATH 3070	Statistical Methods I	3	0	Iotal	10	10
PHYS 2010	Algebra-based Physics I	4	0			
SOC 3600	Environmental Sociology	0	3			
	Total	18	12			

### **Chemistry Option Elective**

Chemistry Option Elective
Two of the following:
GEOL 4100 Environmental Sedimentology
GEOL 4650 Applied Geochemistry
GEOL 4711 Hydrogeology
GEOG 4510 Theory of GIS I
GEOG 4650 Environmental Applications of GIS
ARGN 3230 Environmental Soil Science
AGRN 4220 Environmental Soil Chemistry
BIOL 4130 Enironmental Microbiology
BIOL 4840 Limpology

BIOL 4840 Liminology BIOL 4850 Applied Microbiology WFS 4500 National Wildlife Policy WFS 4730 Conservation Biology

CHEM 4992 Undergraduate Research

# **ENVIRONMENTAL AND SUSTAINABILITY STUDIES**

# Environmental Science Natural Resources

# **VOLUNTEER STATE COMMUNITY COLLEGE**

Freshman Yea	ır	F	SP	Sophomore Y	ear	F	SP
<b>CHEM 1110</b>	General Chemistry I	4	0	BIOL 1050	Introduction to Environmenta		
<b>BIOL 1120</b>	General Biology II	0	4		Studies	4	0
<b>GEOL 1060</b>	Earth's Environments	0	4	BIOL 1060	Environmental Science	0	4
SPCH 1010 or	103Fund. of Speech Commun	nication	n or	<b>ENGL Literatur</b>	e	3	0
	Public Speaking	0	3	HIST 2010, 20	20Survey of American		
ENGL 1010, 10	020English Composition I, II	3	3		History I, II	3	3
Humanities/Fin	e Arts Elective	3	0	ECON 2020	Microeconomics	0	3
MATH 1130	College Algebra	3	0	PHIL 1030	Introduction to Philosophy	3	0
Electives <sup>2</sup>		3	0	SOCI 1010	Introduction to Sociology	3	0
	Total	16	14	Electives <sup>2</sup>		0	4
					Total	16	14

# TENNESSEE TECHNOLOGICAL UNIVERSITY

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<b>Junior Year</b>		F	SP	Senior Year	F	SP
AGBE 2010	World Food and Society	0	3	ESS 4001, 4002 Society and the Environment	3	3
AGBE 4120	Natural Resource Economics	3	0	Electives	8	0
AGRN 3230	Environmental Soil Science	0	3	Directed Electives	3	3
ESS 3710 or Ch	HEM 4710	3	0	AGRN 4210, AGRN 4220, BIOL 4840 or		
ESS 3000	Intro to Environmental Law	3	0	GEOL 4150	0	3-4
GEOG 3200	Water Resources	0	3	AGBE 4130, AGET 4720, or AGET 3110 and		
HIST 3900	Environmental History	0	3	AGET 3115	0	6
MATH 3070	Statistical Methods I	3	0			
PHYS 2010	Algebra-based Physics I	4	0			
SOC 3600	Environmental Sociology	0	3			
	Total	16	15	Total	14	15

## **Directed Electives**

BIOL 4330 Plant Ecology BIOL 4840 Limnology GEOL 2000 Earth Evolution and Life History GEOG 1010 Weather and Climate GEOG 4510 Theory of GIS I GEOG 4650 Environmental Applications of GIS WFS 4730 Conservation Biology

### 7/12/16

# **ENVIRONMENTAL AND SUSTAINABILITY STUDIES Environmental Technology**

# **VOLUNTEER STATE COMMUNITY COLLEGE**

Freshman Year CHEM 1110, 1120	F	SP	Sophomore Year BIOL 1050 Introduction to Environmental	F	SP
General Chemistry I, II BIOL 1120 General Biology II	4	4	Studies BIOL 1060 Environmental Science	4	0
SPCH 1010 or 103Fund. of Speech Commun	nication	n or	ENGL Literature	3	0
Public Speaking ENGL 1010, 1020English Composition I, II	3	3	GEOL 1060 Earth's Environments HIST 2010, 2020Survey of American	U	4
Humanities/Fine Arts Elective MATH 1910, 1920	3	0	History I, II ECON 2020 Microeconomics	3	3
Calculus I, II	4	4	PHIL 1030 Introduction to Philosophy SOCI 1010 Introduction to Sociology	3	0
Total	14	18	Total	16	14

# TENNESSEE TECHNOLOGICAL UNIVERSITY

AAdvisor: Dr. Hayden Mattingly, Southwest Hall 179, Phone (931) 372-3698

Junior Year		F	SP	Senior Year		F	SP
CEE 3413	Environmental Engineerin	g 3	0	AGBE 4120	Natural Resource Economics	3	0
ESS 3710 or Ch	HEM 4710	0	3	ESS 4001, 4002	2 Society and the Environment	3	3
ESS 3000	Intro to Environmental Lav	v 3	0	<b>GEOG 4510</b>	Theory of GIS I	3	0
HIST 3900	Environmental History	0	3	GEOG 4650	Environmental Applications		
MATH 3070	Statistical Methods I	3	0		of GIS	0	3
PHYS 2010	Algebra-based Physics I	4	0	ET Tech Elective	е	3	3
SOC 3600	Environmental Sociology	0	3	Electives		4	5
Electives	-	0	6				
					Total	16	14
	Total	13-14	15				

## **Environmental Technology Electives**

AGET 3510 Agricultural Surveying AGET 3620 Computer-Aided Design in Agriculture

AGET 2110 Agricultural Engineering Technology BIOL 4130 Environmental Microbiology

BIOL 4840 Limnology CEE 4410 Solid and Hazardous Waste Management

CEE 4430 Water and Wasterwater Engineering

CEE 4450 Water Quality Modeling
ESS 4300 Environmental Management System
GEOG 1130 Geography of Natural Hazards

GEOG 4511 Theory of GIS II

GEOL 4711 Hydrogeology

PHYS 2010 Algebra-based Physics I or PHYS 2110 Calculus-based Physics I WFS 4500 National Wildlife Policy

WFS 4730 Conservation Biology

# INTERDISCIPLINARY STUDIES (B.S.) (LIST) Workplace Leadership and Human Behavior

### **VOLUNTEER STATE COMMUNITY COLLEGE**

Freshman Yea		F	SP	Sophomore Year	F	SP
Natural Science	es	4	4	ENGL Literature	3	0
SPCH 1010 or	103Fund. of Speech Commur	nication	n or	HIST 2010, 2020Survey of American		
	Public Speaking	3	0	History I, II	3	3
ENGL 1010, 1	020English Composition I, II	3	3	Humanities/Fine Arts Electives	3	3
MATH1		0	3	ECON 2020 Microeconomics	0	3
<b>PSYC 1030</b>	General Psychology	3	0	SOCI 1010 Introduction to Sociology	3	0
Electives <sup>2</sup>		2	5	Electives <sup>2</sup>	3	6
	Total	15	15	Total	15	15

# TENNESSEE TECHNOLOGICAL UNIVERSITY

Advisor: Jeannie Smith, Southwest Hall, Phone (931) 372-3394

<b>Junior Year</b>			Senior Year		
BMGT 3510	Management & Org. Behavior	3	<b>BMGT 3630</b>	Human Resource Management	3
LIST 4093	Special Topics	3	FOED 3010	Integrated Instruction Tech	3
SOC 3300	Occupational Sociology	3	FOED 4340	Technology for Presentations	3
SOC 4430	People in Organizations	3	LAW 3810	Business Legal Environment	
PC 3250	Professional Communications	3		and Ethics	3
LIST 4100	Adult Learning	3	LIST 4850	Topics in Org Development	3
Social Science I	Jpper Division	6	SPAN 3550	Latin America: Country/People	3
Directed Elective	e Upper Division	6	SPCH 3000	Comp Mediated Comm	3
			<b>UNIV 4116</b>	Internship	6
			LIST 4995	Capstone Project	3
	Total	30		Total	30

Select from the General Education Core.

The BS/LIST degree requires a minimum of 120 hours. Students without an Associate's degree may need to take electives or prerequisite credits.

### **DEGREE REQUIREMENTS**

**Students holding an A.S., A.A. and A.A.S. degrees:** The B.S. degree requires a minimum of 120 hours, 60 hours must transfer as an A.S., A.A. or A.A. S. degree, and **60 hours minimum must be taken at a four-year institution.** Students must have a minimum of 45 hours at the 3000 or 4000 level with at least 12 of these hours at the 4000 level. To meet residence requirements, a student must complete 30 hours, including 24 of the last 30 hours of 3000 and 4000 level courses, at TTU.

### PREREQUISITE REQUIREMENTS

**Students holding A.A.S. degrees:** The general education requirements for TTU must be met, some of which are included in the degree plan above. In addition, if these requirements were not included in the A.A.S. degree, they must be taken: English Composition, 3 hours; Oral Communication (speech-based), 3 hours; Math, 3 hours (requiring 2 years of Algebra and 1 year of Geometry in high school); Humanities/Fine Arts, 3 hours; Social/Behavioral Sciences, 6 hours; and Natural Sciences, 8 hours.

Students holding A.S. or A.A. degrees: The general education requirements for TTU must be met.

<sup>&</sup>lt;sup>2</sup>Courses must be selected from the VSCC/TTU Transfer Equivalency tablewww.tntech.edu/admissions/transfer/apply/credits/

# INTERDISCIPLINARY STUDIES (B.S.) (LIST)

### **VOLUNTEER STATE COMMUNITY COLLEGE**

Freshman Yea	ar	F	SP	Sophomore Y	ear	F	SP
Natural Science	es	4	4	<b>ENGL Literatu</b>	re	3	0
SPCH 1010 or	103Fund. of Speech Commun	nication	n or	HIST 2010, 20	20Survey of American		
	Public Speaking	3	0		History I, II	3	3
ENGL 1010, 1	020English Composition I, II	3	3	Humanities/Fir	ne Arts Electives	3	3
MATH		0	3	ECON 2020	Microeconomics	0	3
PSYC 1030	General Psychology	3	0	SOCI 1010	Introduction to Sociology	3	0
Electives <sup>2</sup>	, 0,	2	5	Electives <sup>2</sup>		3	6
	Total	15	15		Total	15	15

### TENNESSEE TECHNOLOGICAL UNIVERSITY

Advisor: Jeannie Smith, Southwest Hall, Phone (931) 372-3394

Junior Year		Senior Year	
Concentration Area (3000-4000 level courses)	12	Concentration Area (3000-4000 level courses)	12
Electives (3000-4000 level)	18	Electives (any level) LIST 4995 Capstone Project (last semester, all	15
		concentration requirements must be completed prior)	3
Total	30	Total	30

Select from the General Education Core.

The BS/LIST degree requires a minimum of 120 hours. Students without an Associate's degree may need to take electives or prerequisite credits.

## DEGREE REQUIREMENTS

**Students holding an A.S., A.A. and A.A.S. degrees:** The B.S. degree requires a minimum of 120 hours, 60 hours must transfer as an A.S., A.A. or A.A. S. degree, and **60 hours minimum must be taken at a four-year institution.** Students must have a minimum of 45 hours at the 3000 or 4000 level with at least 12 of these hours at the 4000 level. To meet residence requirements, a student must complete 30 hours, including 24 of the last 30 hours of 3000 and 4000 level courses, at TTU.

### PREREQUISITE REQUIREMENTS

**Students holding A.A.S. degrees:** The general education requirements for TTU must be met, some of which are included in the degree plan above. In addition, if these requirements were not included in the A.A.S. degree, they must be taken: English Composition, 3 hours; Oral Communication (speech-based), 3 hours; Math, 3 hours (requiring 2 years of Algebra and 1 year of Geometry in high school); Humanities/Fine Arts, 3 hours; Social/Behavioral Sciences, 6 hours; and Natural Sciences, 8 hours.

Students holding A.S. or A.A. degrees: The general education requirements for TTU must be met.

<sup>&</sup>lt;sup>2</sup>Courses must be selected from the VSCC/TTU Transfer Equivalency table www.tntech.edu/admissions/transfer/apply/credits/

# 2016-2017

# **ARMY ROTC**

# RESERVE OFFICERS TRAINING CORPS

### **OBJECTIVE**

The objective of the Reserve Officers' Training Corps (ROTC) is to prepare selected students to serve as officers in the Army Reserve, Army National Guard, and Active Army.

## **ENROLLMENT REQUIREMENTS**

The general requirements for enrollment in ROTC are:

- 1. Be a citizen of the United States,
- 2. Physically and mentally qualified,
- 3. Accepted by the university as a full-time student,
- 4. Morally qualified,
- 5. For non-ROTC scholarship students, complete graduation requirements prior to reaching age 28, and
- 6. For ROTC scholarship students, complete graduation requirements prior to reaching age 25.

### TWO-YEAR ROTC PROGRAMS

There are two options available to students who transfer from institutions without ROTC programs:

Option 1: Students will attend the ROTC Leaders Training Course (LTC) at Fort Knox, Kentucky. (In order to attend LTC, students need the permission of the Professor of Military Science at the school they will attend.) After LTC, students enroll in the ROTC Advanced Course as Military Science (MS) III's and take the MS III courses for two semesters. The following summer, students attend Leader Development and Assessment Course (LDAC). The next school year, they enroll as MS IV's for two semesters and receive a commission as a Second Lieutenant upon graduation.

Option 2: Students who have completed basic training with any military service of the United States, or have attended one of the United States Service Academies for at least one year, will receive credit for the ROTC Basic Course and will not have to attend LTC. These students will begin ROTC as MS III's. They will attend LDAC the following year, enroll as MS IVs and be commissioned upon graduation. Students who have had four years of ROTC in high school can, at the discretion of the Professor of Military Science, be given placement credit for the basic course and will enter as MS III's without attending LTC.

# **FINANCIAL AID**

Students who attend institutions that do not have ROTC are eligible to apply for the ROTC two-year scholarships before attending LTC. The scholarship will pay Fall & Spring Semester tuition, selected fees, and a book allowance. All students enrolled in the ROTC Advance Course and all scholarship students receive a monthly subsistence allowance during the school year. Students are also paid for the period of their attendance at the Leader's Training Course (LTC) and the Leader Development Assessment Course (LDAC).

### COMMISSIONING REQUIREMENTS

In order to receive commissions, students must meet Tennessee Tech graduation requirements, complete required ROTC courses, meet the Army height/weight requirements, and pass the Army Physical Fitness Test.

# **Stakeholder Visits**

Location	Participants	Themes
Crossville	Administrators, business leaders, advisors,	More evening offerings
	potential students, and instructors	Training for advisors
		Financial assistance
		Website navigation
		Promotional materials
		Consistent scheduling
		Assistance in recruiting faculty
Livingston	Administrators, advisors	Training for advisors
		Website navigation
		Promotional materials
CHEC	Administrators, advisors, and instructors	Consistent scheduling
		Training for advisors
		Website navigation
		Promotional materials
Oak Ridge	Administrators, advisors, and instructors	More evening offerings
		Expand offerings
		Training for advisors
		Financial assistance
		Website navigation
		Promotional materials
		Consistent scheduling
Lawrenceburg	Administrators, business leaders, advisors,	More evening offerings
	potential students, and instructors	Training for advisors
		Financial assistance
		Promotional materials
		Website navigation
		Consistent scheduling
McMinnville	Administrators, advisors, and instructors	More evening offerings
		Training for advisors
		Website navigation
		Promotional materials
		Consistent scheduling
Tullahoma	Administrators, advisors, and instructors	More evening offerings
		Training for advisors
		Website navigation
		Promotional materials
		Consistent scheduling
Hardin Valley	Administrators, advisors	Support for staff
		Website navigation
		Promotional materials
		Training for advisors