ENABLING CLEAR PATHWAYS TO DEGREE COMPLETION

April 29, 2021

Academic Affairs
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Executive Summary

In Fall 2020, Tactical Team 5: Enabling Clear Pathways to Degree Completion was charged with performing an overarching evaluation of our curricular layout, philosophies, pathways, and processes to identify potential barriers to student success. A resultant of the Tactical Team's efforts are recommendations for areas of improvement. Five sub-teams produced reports that evaluated our degree mapping/sequencing, core curriculum, mix of programs, curriculum change processes, and technology.

Overarching Themes

Along with area specific recommendations offered by each work group, themes emerged across the sub-team reports. Three of the most important ones are:

- **Alignment:** There are very few cases of alignment with stated values. This makes it difficult to articulate a shared vision, develop cross-unit buy-in, and create a shared purpose.
- **Guidance:** There is little guidance easily available for faculty, the creators of curriculum. This is true both at the pragmatic level (no definitions, guidelines, or guidance easily available) and the philosophical level (few articulations of shared values, visions, and directives are available to guide creation and execution of curricular pathways).
- **Ownership:** There is very little ownership in the area of curriculum. This has led to poor exchange of information, non-standardized procedures, poor alignment of systems, and lack of curricular vision.

Implementation Structure for Adoption of Recommendations

Specific recommendations are available within the sub-team reports. This executive summary will make recommendations for the implementation of those recommendations and highlight emergent themes.

I. **Coordinate the Curricular Pathway through a Unified, Articulated Curricular Vision**

    Like enrollment management, which perceives the process as a voyage that begins long before the student even hears the name of the university and doesn't end with graduation, the university's curriculum can be conceived in the same way. Understanding and promoting the curricular process as a journey means there is a pathway for creation, promotion, and execution of curricula that have shared trail markers and guiding principles.

Currently, processes that range from information to advertising to curriculum creation to scripting are treated or considered as independent processes and in independent silos. This Tactical Team highly recommends a centralized structure coordinated within Undergraduate Studies to lead and manage processes to enable a clear pathway for degree completion. This could start as a project management team that executes the recommendations from sub-teams that deal explicitly with curricular gestation, nurturing, and maturation. It could also exist as (or grow into) a team from various offices, under the leadership of Undergraduate Studies, that joins members of the individual silos to create a shared pathway for curricular creation and execution. For example, having Undergraduate Studies working with department curriculum teams from the very beginning of the process would provide clear and uniform guidance across all departments regarding regulations, university vision, scripting and coding, catalog language/format, deadlines and the like. This would also work to create shared sets of definitions and a "culture of curriculum" that guide decisions and provides consistency along our trail systems and would treat in-house curriculum in a similar way to how Academic Innovations operates in relation to the online environment. We *highly* recommend something similar in intent to the *Editorial Style Guide* or *Visual Style Guide and Logos* be developed for curriculum. This would greatly facilitate alignment of units and could be an excellent resource for building a common vocabulary. This could serve as a central resource for procedures, definitions, guides, etc. and be managed by Undergraduate Studies.

II. **Set Up a Project Management Team to Reimagine the Particulars of the Core**

Restructuring general education is never easy, but our core curriculum sub-team developed solid recommendations ranging from articulating a vision for the Core that is derived from our Mission Statement to finding ways to articulate the *meaning* of the Core as an essential part of our identity.

Again, the problem of silos impacts our Core. The team found the Core had little ownership, vision, or guidance. High turnover in the faculty that teach in the core compounds the problem. The sub-team presented interesting ideas for packaging the Core (such as University of Chicago's model) and provided meaningful examples of places doing exciting work in the Core that could easily be molded to fit within the Texas Core Curriculum guidelines (providing themes across the curriculum, from Marquette, is one that stood out, as was Purdue's Cornerstone program). They also found that teaching in the Core is not fostered or openly valued, little training on the Core exists, and that a more data-driven approach was necessary.

The overall recommendation is to work with Faculty Senate to create a project management team, co-lead by Academic Affairs and representatives from the Dean's office in both COLFA and COS to develop a curriculum management process that is pathway driven and approaches the Core from a student life cycle

perspective, as noted above. They can immediately begin implementing short term recommendations from our sub-team, but in a holistic, systematic way. We recommend that they start with identifying the guiding intellectual questions of the Core distinct to UTSA by articulating them from our Mission Statement. Once we have a statement of guiding questions and principles for the Core, that group will work to ensure our current Core aligns with such principles, designs mechanisms for aligning the future of the Core with such principles and works with Colleges to redesign the Core in line with the findings of the sub-team. The goal is to treat every aspect of the Core – including proposing, designing, advertising, and delivering Core courses – as a holistic enterprise that reflects the intellectual brand of UTSA. In 2020, Ohio University published an excellent guide for their overhaul of general education. We feel a similar process would work nicely here. The process is also outlined on at https://www.ohio.edu/provost/reimagining-general-education

Additionally, our Core team will operationalize the data discovered by our sub-team to help Colleges use the Core more effectively. The sub-committee on the Core has done an excellent job of suggesting which of their recommendations should go to the team proposed here and which should be executed by other offices.

III. **Charge a Small Project Management Team with Dividing Recommendations from TT5 and Executing Recommendations that Do Not Fall to I. or II. Above.**

Here we imagine a small team who will divide our recommendations into three categories: Curricular Pathway, Core, and Other. The first two will go to the project management teams described above. All remaining (other) recommendations will be prioritized and managed by an Action Team. The charge for this group is to systematically work through the remaining recommendations and provide progress reports on actions taken. It is important that units across campus understand that the role of this team is important and its members are charged with high-priority work. We write this because many of the recommendations have been made for several years, but to no one who had the authority to make the changes happen or saw it as a priority in their home unit. As long as this team is running, it will also act as the barriers "help desk" and facilitate additional recommendations that need to be evaluated and, when appropriate, acted upon.

The goals of this group include standardization of processes and workflow; facilitation of inter-college and inter-departmental communication and common understanding of the platforms needed to support the curriculum pathways and the Core curriculum, as well as the data to inform the benchmarks; and the staging of efforts so that short term and middle term actions and activities are

assessed and implemented in appropriate order and lead to longer term structural workflows that support clear pathways for students.

IV. Revisit Major Requirements

As part of this Team's work, we asked associate deans to compare the number of credits required in their major against other UT System Schools, UNT, Texas Tech, and Texas State. We also informally compared several majors to our published peer and aspirant universities. Our finding is that, while many of our majors are in line with peers and Texas schools, many require students to complete significantly more credit hours and, when this is the case, those majors tend to be significantly higher than peers or aspirants. UTEP, UT Arlington, UT Dallas, and UTSA trended much higher than UT Austin, Texas Tech or U of Houston.

We also found that our students double-major at a lower rate than the estimated percentage of double majors nationally. In one example, we found that a major that traditionally survives as a double major, women's studies, requires 45 credit hours, compared to 36 at USF and UMBC and 30 at UT Austin. There are several such instances that we need to revisit. We highly recommend that:

1) Departments compare the number of credits required of students to our published peers and aspirants. When they trend higher, departments and colleges should work to streamline the curriculum to trend with national models.

2) Departments should be given clear guidance as to what "counts" as a major requirement. This should offer students full transparency regarding what they will be expecting to complete. This guidance is especially important regarding prerequisites and required courses in a discipline that do not "count" in the major (Texas History and Texas Politics are two examples.) We found it especially hard to evaluate B.S. degrees because of the ambiguity regarding prerequisites' relationship to the major. One member of the team described this as "smuggling in" more requirements.

3) Student agency should be maximized in the curriculum. Only courses that are absolutely necessary for success in the field should be required. Others should be offered as parts of distribution requirements or electives in the major.

4) Concentrations should be examined to ensure that they are not preventing or prolonging graduation, especially for students who opt to change concentrations or drop a concentration. It is important that departments proceed in good faith, as this is part of a university-wide initiative for increasing student progress to graduation.

The data is approximate and based on the best possible reading of course catalogs available to the Colleges' associate deans. Our inability to always be

able to clearly determine requirements led to the recommendation that clarity of our catalog should be a priority. Because this was a hand audit, there are likely some minor corrections that need to be made to that data given the challenge of not being intimately familiar with other universities.

Our hypothesis is that the large credit requirements can add credits to degree that are not required of like students at peer institutions, and that this could be discouraging many other students from pursuing additional credentials. We are currently awaiting a report on the credits completed by students successfully completing double-majors over the past six years. We did, however, run an Inspire report (2/24/2021) and found, of 32,120 students, only 653 (2%) were listed as pursuing a double-major or a major plus certificate. Another 2,968 (9%) had a declared minor. Because many students add their second major, certificate, or minor later in their studies, this likely underreports students intending to obtain one. While we could not find current data on double-major nationally, one report from 2012 listed 25%-40% of the students at the universities studied as pursuing one (Pitt, R. & Tepper, S. [2012]. *Double majors: influences, identities & impacts.* Nashville, TN: The Curb Center for Art, Enterprise, and Public Policy). We could find no reliable numbers on minors.

Conclusion

Creating a centralized structure within Undergraduate Studies, along with a Core Project Management Team and an Action Team, will remove technological, bureaucratic, curricular, territorial, and historical barriers to enrollment, belonging, and degree attainment. Taken together, these overarching recommendations can further implement the specific recommendations in each work group as outlined in the report and will help create the alignment, guidance and ownership that are foundational for creating and sustaining clear curricular pathways for students.

Tactical Team Charge

Institutes of higher education bear the responsibility to ensure that all students have access to systems that facilitate their access to, pathway through, and enjoyment of their chosen programs of study and subsequent use of their degrees. As institutions responsible for securing the promise of just social mobility, colleges and universities are accountable to ensuring *all students have the positive right to have systems in place designed to help them thrive and that facilitate their feeling of belonging in college and beyond.*

The events of the past year give UTSA the unprecedented opportunity to reevaluate how new modes of technology, increased familiarity with ways of connectivity, and

engaged and participatory problem solving can provide unique solutions for removing technological, bureaucratic, curricular, territorial, and historical barriers to enrollment, belonging, and degree attainment. They also allow us to affirm our commitment to helping all students thrive, especially those students most impacted by discriminatory and exclusionary educational practices, by visibly articulating this commitment in our practices and curricular offerings/pathways.

The Tactical Team for Enabling Clear Pathways to Degree Completion embraces this moment. We will utilize the wisdom gained during COVID to formulate recommendations for curricular, institutional, and technological practices that are inclusive. Their unwritten curriculum will articulate the message that UTSA welcomes, supports, and expects all of our students' success. Embracing our identity as an HSI and MSU, the major undertaking will be to articulate this message most evidently across all areas of our Core Curriculum and within our degree pathways. The primary message will be that a general education must celebrate the lived experience of the learner and assist them to flourish in their chosen future. The Core must express our identities as *Roadrunners*. We will also examine practices that, while perhaps conventional or convenient, compound the difficulty of learning with navigating uncertain pathways or unfamiliar systems. The goal is to make a series of recommendations that make degree progression as intuitive and systems as invisible as possible.

Work Groups

The Tactical Team was divided into five work groups as follows:

- Academic Curriculum Change Processes
- Academic Mix of Programs for the Future
- Core Curriculum
- Degree Mapping and Major Sequencing
- Technology Infrastructure to Support Workflow and Processes

Each work group was charged with understanding the challenges, obstacles or issues that can impede degree completion and making recommendations to enhance, remove or change those barriers. Each work group report is contained herein.

Core Curriculum

The Core Curriculum Work Group approached the assessment of structural core changes from two perspectives: First, the core must express our identities as

Roadrunners and, second, all core programing must enable clear pathways to degree completion. The work group divided into five working teams which began with a deep dive into the current student outcomes linked to the core, then transitioned to overall core philosophy. The five teams are noted below and what follows are the findings and issues identified:

- Philosophy of the Core Curriculum
- Process for Core Course Approval
- Course Substitutions and Approval Processes
- Training of Faculty and Staff
- Use of Field of Study in Core Curriculum

Philosophy of the Core Curriculum

In comparison to the UT system reported peer aspirants (University of California Riverside, George Mason University, University of Oregon, University of Maryland-Baltimore County, Georgia State University, Portland State University, University of California Santa Cruz), UTSA demonstrates an average core approach to meet state requirements and articulates a compliance driven methodology to the 42 hours of core broken into 10 subject areas. In contrast, several non-UT System peer reported aspirants including those who have been recognized for core excellence (University of California Irvine, Texas A&M, Arizona State University, Purdue University, University of Chicago, William & Mary, Ohio University) emphasize that their general studies have a **central overarching theme** uniting their subject areas and are often linked with the vision/mission of the university. Of particular note, the University of Chicago has one of the most recognized core-philosophy statements set in 1931 "*to teach students how, not what, to think*" which manifests in each of their subject area cores through a set of three questions in alignment with their University Mission statement:

- What defines the human experience?
- Are humans molded by genetics, culture, and history, or by an underlying human nature?
- How should we understand rational thought? Is it independent of context?

A similar framework is employed at ASU in their three "awareness areas" following a thematic approach in:

- Cultural Diversity in the United States
- Global Awareness
- Historical Awareness

And these foundations are used to build on four key competencies of: inquiry, collaboration, innovation and engagement.

A new UTSA core-mission could be built with similar principles and linked with the overall University mission statement to give a framework to address many of the findings this working group identified. Of particular note at UTSA - and a finding of multiple work groups - is the absence of alignment/communication between the core-areas as evidenced by little to no programming uniting the core subjects. From a detailed assessment of the core (six-year data set) with the assistance of OIR, the following issues were identified that need to be addressed in parallel with building a new core-mission framework:

- The vast majority of UTSA core classes are taught by Fixed-Term Faculty: **82.7%**
- A significant number of core classes are taught by Part-Time Faculty: **38.2%** (ranging from **19.5% to 74.3% in subject areas**)
- The core experiences significant turnover in several areas with **28.7% of sections** taught by the same instructor only 1 or 2 times in a six-year period.
- The core classes have an average student class evaluation of **3.1/5.0** well below the University and College comparative averages.
- There is a significant need with the above data to **identify a series of KPI's** related to core-teaching and its effects on College specific retention and graduation rates.

Process for Core Course Approval

The core approval process has a clear pathway through the originating department and college to the university level core curriculum review committee. There is a well-documented pathway and instructions for new submissions with examples provided and guidelines for well-written core course proposals. The process for approval incorporates several feedback opportunities for revision. The system itself utilizes an UTS network login for users to track the proposal and communicate with the reviewers. The work group found several issues for consideration:

- This system appears outdated and could likely be incorporated within the **COURSELEAF system** to better align with Catalog changes and minimize the number of independent systems used for login (this would be in keeping with program changes to launch in June 2021).
- The periodic review system is in need of a reporting function to communicate the findings back to the teachers of the core. Currently there is no pro-active **outreach from the core-review system** to the hundreds of instructors each term teaching a core class. With so many of these instructors only teaching once or twice there is a need for the standard report to reach them before the semester starts each term.
- There is a need to report core course approvals **automatically** to Advising with **estimates for enrollment growth** to optimize class enrollments particular as part of the student onboarding process and block schedules.

Course Substitutions and Approval Processes

There are limited to no current standards for core-course substitutions and limited tracking in place to evaluate the effect of a substitution on student performance. Most substitutions have unclear routing chains with some going to the home department for review, and others to the College Associate Dean or University Associate Vice Provost. Overall, the work group suggests:

- Inconsistent routing of the core-substitution form could be automated in BANNER with tracking for student outcomes.
- Core substitutions should be evaluated on a rolling basis similar to Transfer Articulation agreements.
- There should be a concentrated effort to replace the 18 paper-based advising and registrar forms and build electronic routing to quantify time and decision irregularities.

Educating Faculty, Staff and Students

As part of a successful core transition, a significant buy-in from all community members would be needed. The working group recommends that with the volume of ongoing initiatives already in development at UTSA, a core curriculum redesign needs to reflect the University's mission statement. The following items were identified as impacting a large-scale training program and re-visioning of the core:

- There appears to be a lack of ownership of the core. The University, Colleges, and some Departments have core curriculum committees, but there isn't significant coordination or interdependency among units.
- Core courses operate in isolation. Departments propose certain classes for inclusion, but they operate in isolation with little to no acknowledgment of they contribute to the core experience.
- The core has traditionally not been valued or viewed as much more than a requirement. It is heavy taught by fixed-term faculty as tenure-track/tenured faculty focus on the more "important" business of upper division major courses and research.
- The IRM has influenced how departments view the core.

Once the university has grappled with the above issues, there is a need to educate faculty, staff, and students about the core including:

- Educating the community about the content in core classes, including the topics that are covered, how they relate to UTSA identity, and how they support the core identity. This information could be added to the website, catalog, included in orientation, etc.

- Including statements on each syllabus that explain the core and how the current class fits into the core.
- Potentially have students create a core portfolio that would showcase skills tied to the classroom to career initiative.
- Identifying different techniques for educating that will work for each set of stakeholders. For example, developing specific methods for educating advisers, chairs, faculty, support staff, students, etc.

Use of Field of Study (FOS) in Core Curriculum

The programs knowledge (including UGAR, department program administrators, Associate Deans and Advising) of the Field of Study needs to be assessed with a measurement of alignment to core curriculum. The work group found that there is not a clear communication channel for updating changes from the field of study to department degree programs. In addition:

- There may be a missing connection with transfer institutions on articulation agreements, both locally and throughout Texas, regarding adherence to FOS.
- Core Curriculum course proposals may be lacking an alignment to Field of Study coursework. There is a need to add a FOS checkpoint/review criteria to the core-proposal process.

All of the above core-findings and recommendations have data sets (items a-d below) with two additional requests still processing with the Office for Institutional Research (e and f below):

a. A correlation between Core class grades/teaching modality (pre2020) and their effect on retention and graduation rates broken down by program. We were looking for which UG programs have student success outcomes highly linked to core-classes.
b. The relationship between faculty turnover rate/tenure status/faculty type (and de-identified salary information) on the core class student evaluations/grades, retention/graduation. Here we were looking for programs that use different models for how they teach their respective core classes.
c. The sequence of the core and its effect on retention graduation by program (i.e., is there a specific order of core classes that we can prove work effectively to improve student outcomes).
d. The effect of replacing the core curriculum with dual credit and early college HS programs on student retention and graduation rates. Looking at what happens in the student population that comes in mid-core or core complete.
e. Retake of core classes caused when a program of study has a higher-level grade requirement.
f. Grade distribution of program vs non-program students in each core area.

Recommendations: Philosophy of the Core Curriculum

- Create a University owned set of guiding questions to unite the 10 core areas to the mission of the university (CREATE a core-mission) The University of Chicago provides a good example.

- Build a regular communication practice for each core-curriculum subgroup lead to meet with all faculty teaching the core each semester.

- Create standard language/video to incorporate in every core class (syllabus and working BB module).

- Link the core-mission with Orientation/Onboarding.

- Link the core-mission outcomes with core-completion milestones (1/3, 2/3rds, complete) emphasizing skills acquired.

- Review and build a recommended core-sequence for each program and build communication materials centered around the value derived from core from a student perspective.

- Build a CORE Fellows program for faculty and pathways for NTT/PT faculty to transition (performance driven).

- Build a set of core KPI's linked to:
  1. %FTT usage in core
  2. %Part-time usage in core
  3. %GTA appointment to core classes
  4. Core course evaluations
  5. Correlation of Core to Retention rates
  6. Transition of FTT/PT to permanent Core Fellows

Recommendations: Process for Core Course Approval

- Incorporate core approval and review within the COURSELEAF system to better align with Catalog changes and minimize the number of independent systems used for login (this would be in keeping with program changes to launch in June 2021).

- Build a core-assessment reporting function to communicate the findings back to the new teachers of the core.

- Build an automated report of core course approvals to Advising with estimates for enrollment growth to optimize class enrollments particular as part of the student onboarding process and block schedules.

Recommendations: Course Substitutions and Approval Processes

- Build a working document of standards for core-course substitutions.

- Build a tracking system (BANNER) and routing infrastructure for core-course substitutions.

- Track and optimize inconsistent routing of existing core-substitutions.

- Build an annual review of core-substitution outcomes.

Recommendations: Educate Faculty, Staff and Students

- Build an education resource to engage the UTSA community about the content in core classes, including the topics that are covered, how they relate to UTSA identity, and how they support the core identity. This information could be added to the web site, catalog, included in orientation, etc.

- Build common language for syllabi that explain the core and how the current class fits into the core.

- Implement and track common-core language usage in syllabi.

- Link common outcomes to a student portfolio showcasing skills acquired.

Recommendations: Use of Field of Study [FOS] in Core

- Measure FOS alignment to program of study in each major.

- Create a target value for program alignment with FOS.

- Assess all Upper Division courses that could align to Core for blanket substitution to accelerate student time to degree.

- Review substitution or waiver process for automatic assessment in program of study.

- Conduct an audit for incoming and outgoing UTSA students with transferability of FOS coursework.

- Identify programs with overlapping gateway courses from FOS and assess time to degree differences between transfer and first-time students.

- FOS is missing from many UTSA degree programs, assess how articulation agreements are made without FOS and their effect on transfer success.

Degree Mapping and Major Sequencing

In order to offer innovative, meaningful, and modern academic programs at UTSA, the Degree Mapping and Major Sequencing Work Group examined the systems currently in place for program and curriculum design, integration of experiential learning and co-curricular opportunities, and coordination and administration of degree programs. At UTSA, units strive to design and open access to academic programs that meet the needs of the diverse student population with respect to their academic and professional needs while also meeting the current standards of the respective fields, accrediting bodies, and peer institutions. This may require degree programs to have flexibility in coursework, opportunities for experiential learning and additional areas of study, study abroad, and research. Since many of the degree programs embed opportunities for experiential learning that are important to the students' professional development outside of coursework, this needs to be more formally integrated into the degree plans.

In designing and implementing such programs, efforts in degree mapping and major sequencing and design require a streamlined and coordinated effort that involves multiple stakeholders, including students, advisors, faculty, and administrators as well as the systems that facilitate these activities. Successful degree mapping and major sequencing will enable students, and all other stakeholders, to navigate and clearly understand their degree programs and important co-curricular activities lead to their undergraduate degrees. This effort also requires a strong technological infrastructure to support these initiatives.

The content for degree mapping and major sequencing is organized into four main strands as noted below. Each strand area includes a description, the related challenges to successful degree mapping and major sequencing, and a set of short- and long-term recommendations.

- Degree Program Design
- Degree Mapping
- DegreeWorks
- University Infrastructure

In several cases, the challenges and recommendations will cut across our topic areas as well as topic areas of other work groups in our tactical team.

Degree Program Design

This strand identifies issues relating to the design of undergraduate degree programs in terms of coursework, the size of major and minor programs, and external factors that may influence degree program design. Though these topics are discussed within the context of traditional degree programs, these issues will also impact how UTSA accommodates double-majors, dual degrees, and post-baccalaureate programs. This strand also considers how state, national, and international standards play a role in

major and minor sizes. Major and minor size may be dictated by other specialized accreditation bodies which should be considered when it comes to the overall restriction of major and minor size. The work group did not investigate requirements from specialized accreditation bodies such as the Association to Advance Collegiate Schools of Business for the College of Business or the Accreditation Board for Engineering and Technology for the College of Engineering. These requirements may be based on outcomes of a particular major versus the number of credit hours attained and varies vastly within UTSA and, when compared to peer aspirants, we tend to be one or two standard deviations away from the norm. This underscores the need for careful consideration of clarity and definitions related to majors and minors.

Recommendation: Develop general characteristics that describe majors, minors, and certificates.

The work group suggests a university-wide group be formed to further discuss majors, minors, concentrations, tracks, or emphases a student can earn. The group believes that these last three are synonymous with each other and a group should be formed to discuss the differences of each and/or designate one that should be used from a university perspective in order to keep a common understanding of these types of program adjustments. Some programs are using the term that is most common in their field.

The work group was unable to locate any detailed information relating to minor and concentration from THECB. However, in our search, we located some information from the Board of Regents for the State of Louisiana that could serve as a useful resource for standardizing these terms. The Board of Regents for the State of Louisiana adopted the following definition guidelines for minors and concentrations:

> Minors - "A Minor *is that part of a Degree Program which consists of a specified group of courses in a particular discipline(s) or field(s), consisting usually of 15% or more of total hours required in an undergraduate curriculum. Minors may be instituted by the affected system and campus without prior approval by the Board of Regents."*

> Concentrations - "A Concentration *is an alternative track of courses within a Major or Option, accounting for at least 30% of the Major requirements. Concentrations may be instituted by the affected system and campus without prior approval by the Board of Regents."*

The work group did discuss the issue of Major, Minor, and Certificate and came to this understanding:

- Major - Majors are the main part of a degree program a student will earn in their academic career. It is the underlying knowledge a student will engage in and obtain during their degree program.

- Minor - Minors require less time and are less focused than a major. A minor doesn't necessarily directly support the student's major, but can assist in their major knowledge.

- Certificate - Certificates often require less time than a minor but are more structured than a minor and are often connected to a particular field of study. These programs require 15 – 18 predetermined credit units a student must take. These programs are usually focused as a marketing tool for a student with specific skills a student will take to their career.

There needs to be more guidance on what constitutes a major, minor, certificate as well as concentrations, tracks, etc. from both the state and university.

Recommendation: Establish the required or minimum number of SCHs for each type of degree, certificate, and minor program.

In addition to standardizing the terms and characteristics of the different types of academic programs, the university needs to establish standards and minimums for how many SCHs are required. This is not meant to restrict how academic units structure their programs, but rather, it serves to guide them: for example, "a bachelor's degree can have a maximum of 80 units including 24 units in a major requirement."

Academic units currently follow different strategies for implementing requirements for their major and minor sizes. The <u>Texas Higher Education Coordinating Board (THECB) does provide standards for Bachelor's and Master's Programs</u> including requiring a minimum of 120 scheduled hours in a baccalaureate degree program. In addition, THECB outlines the minimum number of scheduled hours for a major as outlined below:

- Bachelor's program – 24 SCH (30 SCH for most majors).
- Master's program – 18 SCH in a 30 to 36 SCH program; more for programs with greater than 36 SCH.

The work group found some guidance from the State of Texas and SACS on degree programs, but only within the context of creating new degree programs.

Texas Administrative Code, Coordinating Board Rule, Chapter 5, Subchapter C, Section 5.45, "Criteria for New Baccalaureate and Master's Degree Programs," outlines standards institutions should adhere to when creating a new program. Although this only applies to new programs, the following guiding principles should be applied to current programs and reviewed at least every two years prior to the release of the new catalog:
- Role and Mission
- Unnecessary Duplication
- Faculty Resources
- Curriculum Design

- Workforce Need

In addition, all programs should adhere to Texas Education Code, Section 61.0515 stating:

SEMESTER CREDIT HOURS REQUIRED FOR BACCALAUREATE DEGREE

a) To earn a baccalaureate degree, a student may not be required by a general academic teaching institution to complete more than the minimum number of semester credit hours required for the degree by the Southern Association of Colleges and Schools or its successor unless the institution determines that there is a compelling academic reason for requiring completion of additional semester credit hours for the degree.
b) The board may review one or more of an institution's baccalaureate degree programs to ensure compliance with this section.
c) Subsection (a) does not apply to a baccalaureate degree awarded by an institution to a student enrolled in the institution before the 2008 fall semester. This subsection does not prohibit the institution from reducing the number of semester credit hours the student must complete to receive the degree.

SACSCOC's DEFINITION OF MINIMUM PROGRAM LENGTHS

According to the Southern Association of Colleges and Schools Commission on Colleges' (SACSCOC) The Principles of Accreditation, SACSCOC defines the following minimum credit hours for each degree issued by an institution:

Section 2.7.1 The Principles of Accreditation

- Associates Level – 60 Semester Credit Hours
- Bachelors Level – 120 Semester Credit Hours
- Post-Baccalaureate, Graduate, or Professional Level – 30 Semester Credit Hours

SACSCOC does not designate minimums for certificates or minors. These are degree level program length and not particular major requirements.

TEXAS HIGHER EDUCATION COORDINATING BOARD CERTIFICATES

The Texas Higher Education Coordinating Board does not prescribe a minimum or maximum number of credits needed for a certificate. However, a certificate program that exceeds certain credit hours is required to receive Coordinating Board approval.

"Certificate programs that require Coordinating Board approval, through a streamlined approval process include:

- Upper-level undergraduate certificates of 21 to 36 hours in disciplinary areas where the institution already offers an undergraduate degree program.
- Graduate-level and professional certificates of 16 to 29 hours in disciplinary areas where the institution already offers a graduate program at the same level as the certificate.

Institutions are not required to notify the Coordinating Board when establishing new certificate programs with fewer than 21 SCH for an upper-level undergraduate and fewer than 16 SCH for graduate level certificate programs."

Recommendation: Research the importance of minors vs certificates in each of the programs.

This recommendation investigates the importance of minors versus certificate programs. This would require additional research to understand the importance of minors to a program versus certificates. Programs may choose one versus another for various reasons including the marketability of the program to a given industry or profession. This investigation would need to involve various stakeholders, such as industry partners and prospective employers.

Recommendation: Establish regular review cycle for all degree programs.

The workgroup suggests that guidelines be created and implemented on how often majors, minors, and certificate programs are reviewed. The university already goes through an external review every six years, and this could be added to ensure all programs are meeting the needs of the students. Some of the work that may be included are surveys of recent graduates, employers, and asking students to reflect on how well the degree programs prepared them for their jobs. This effort could also be connected to the catalog revision cycle, which occurs every two years for both graduate and undergraduate programs.

This could be likened to the Texas Sunset Act of 1977 which requires all state agencies to have an expiration date of 12 years. Before the 12-year mark, the agency is reviewed to see if that agency should be renewed for 12 years based on the current conditions and the need of that agency. If the agency is not needed, it is automatically abolished on its Sunset date. If the agency is still needed, the State Legislature passes a bill to continue it.

Recommendation: Investigate the impact of IRM funding model on degree program design.

As the IRM model is still evolving, insufficient data is available at this time to understand the impact of changes in major size and the impact to financial resources to a particular college. The IRM model may restrict a college or department from broadening their requirements for degree competition if it means lost revenue for their unit. Additional

research will need to be accomplished to understand the impact of the IRM model to major and minor size.

One specific example of this applies to the COB Common Body of Knowledge (CBK) changes. For example, one change involves the removal of COM 1053 (CoLFA) from the COB CBK. This would be advantageous to CoLFA from the standpoint that the historical percentage of CoLFA students in the class is approximately 11%. Once COM 1053 is removed from the CBK, the revenue redirect from CoLFA to COB will be eliminated. However, the need for those classes will also be eliminated thus reducing the faculty resource for the CoLFA department.

The work group advises the formation of a group like the Dean's Academic Council in which different colleges come together and discuss and compare new degrees and how those changes may affect each college or unit.

Recommendation: Streamline all degree plan design and revision efforts. Benchmark major size against UTSA peers and aspirants, including state-funded AAU programs, and adjust accordingly. Clearly define what constitutes part of a major (e.g., prerequisites, required lower division, etc.) to provide clear information to students about the number of required credit hours in field of study.

Any efforts in designing and revising degree plans require a clear and effective communication plan in which all stakeholders understand the process and are given the platform for discussion. This may require a working group to create a system to streamline the communication of recommendations, approaches, processes, etc. Each stakeholder group's communication workflow will be similar and that we should be able to create one comprehensive process.

Communication should be from the Provost's office down to the Deans and then to the individual departments. Attention should be made to how it is presented, especially to those that have their academic identity tied to a particular major, minor, or certificate program. Faculty will be provided guidance on how to revise and propose new programs while also attending to the identity of the academic unit and faculty and the needs of the students and the market.

The University did go through an evaluation of major sizes (particularly with UTSA's bachelor's degree programs to meet the 120 credit requirement limits). Additional discussion should be made on whether all majors should go through a realignment against recommended major/minor size or only new programs.

Degree Program Design Summary

Decisions regarding major and minor requirements should be meaningful towards a student's career success and should not inhibit a student's ability to graduate in a timely manner. When adding minors and concentrations, departments should take into account the State of Texas' Section 54.014 of the Texas Education Code which puts a

cap on the number of units a student can take and qualify for in-state tuition, which is currently set at 150 units.

The work group does not believe the university should require a specific time period in which students should graduate, but rather, look to UTSA's Institutional Targets set by the President in his underline strategic plan. In the strategic plan, the goal in 2023 is to have a four-year graduation rate of 33.0% and a six-year graduation rate of 47.3%. We believe that these should be updated over time to current data that is available. This would mean that baccalaureate programs should be sized in a manner that students graduate within the timeline set by the President's strategic plan.

The work group is not recommending a specific time for graduation based on major size due to the unique student population at UTSA. Seventy percent of the student population are transfer students which come in at varying time under their belt. To recommend a time frame like five-years for baccalaureate majors may be misleading as students may come to UTSA with three or four years of academic work already completed, yet still need two to three more academic years at UTSA to graduate. This takes into account military personnel who may have faced numerous changes in their academic timeline due to their deployment timelines.

The increased popularity of dual credit enrollment will have an effect on time to degree as well. This should be considered from a time to degree standpoint as it will affect a student's time at UTSA. However, this is a great opportunity to create pipelines into UTSA.

Degree Mapping

To outline a clear path to graduation that ensures a successful journey, degree mapping is a critical element that should be developed by each major.

A degree map is not simply a list of courses and their descriptions; that is the purpose of the academic catalogue. A degree map is a comprehensive road map that not only includes the courses needed to complete a specific major, but also provides:

- Recommendation on the sequence in which courses should be taken.
- "Rerouting" when courses are taken out of sequence.
- Path options when a full course load is not/cannot be taken.
- Identification of prerequisites and when to take them in the sequence of courses.
- Identification of gateway courses
- Experiential learning components of the degree (either required or optional) and how they fit into the degree timing-wise such as:
  - Internship/externship
  - Service learning
  - Entrepreneurial activities

- o Research
- o Study abroad
- o Certificate paths that can be obtained within the degree.

A degree map can help a student see the destination as well as around corners in their degree path in order to best prepare for future semesters. This should be a user-friendly, dynamic document that visually shows the optimal path to graduation and related degree goals. For example, if a major requires an internship, the student should be able to see ahead and know that preparation for that internship should occur a semester in advance. Additionally, some courses are only offered once a year. By noting these in a sequence, students will be less likely to get out of course sequence and be delayed in their coursework while waiting for the course to be offered again. Degree mapping can help departments identify and prevent potential bottlenecks in course offerings. If students are on a more outlined and defined path, then predictive analytics can be used to determine course offering needs down the road.

Currently, the closest documents we have to a degree map are the degree requirements and recommended sequences in the catalog and DegreeWorks. This strand explores how to create degree maps that are clear, effective, and usable for all campus stakeholders. Everyone at UTSA (students, faculty, staff, academic advising) can all make use of a degree map when talking with students. Students get degree advice from many different areas of the university. Having degree maps in a virtual easy to locate space, can allow everyone to be on the same page when talking with students.

This strand will also explore how extra or co-curricular experiences (e.g., internships, study abroad) can be integrated into these degree maps. UTSA needs to be forward thinking as we move to a more online environment. Given that needed skills and careers change over time, the question that should guide these discussions and decisions is: What type and format of degree map is needed for 2030? To answer this question, the following would need to be discussed: what is the experience outside the classroom and marketable skills that students will need to have to be competitive in the job market in 2030; mapping the courses in a sequence is one thing, but coupling them with classroom to career experience will help the student after graduation; analyze transfer patterns and projections to determine when most students enter a certain program; plan for any new certificates or increase in certificate participation; if possible predict the number of full time vs part time students in the program.

Recommendation: Create degree maps and degree map templates.

A degree map will help a student see the destination as well as around corners in their degree path in order to best prepare for future semesters. For example, if a major requires an internship, the student should be able to see ahead and know that preparation for that internship should occur a semester in advance. Additionally, some courses are only offered once a year. By noting these in a sequence, students will be less likely to get out of course sequence and be delayed in their coursework while

waiting for the course to be offered again. Degree mapping can help departments identify and prevent potential bottlenecks in course offerings. If students are on a more outlined and defined path, then predictive analytics can be used to determine course offering needs down the road. The Degree Map should be specific and detailed enough for a first-year student to understand. In order to accomplish this, degree maps will be needed for each concentration and specialization within a degree.

The work group recommends creating a college-level task force to lead the degree mapping effort within each college while also working across colleges to determine standard degree map templates since students may change majors. The task force will also elicit student feedback on format of degree map since they are the main users.

The work group recommends a multi-stage design and development of degree maps:

- Pilot stage: Start with one college creating what will become the template.
- Phase 1: Roll out degree maps to all colleges for all majors with concentrations.
- Phase 2: Include special programs (e.g., 3+2 Respiratory Degree or Accelerated MPH) and Certificates (Legal Studies, Community Engagement).
- Phase 3: Include minors if applicable.

It is recommended that each major use the same template for their degree map. This work group suggests that templates be created by pulling all courses required for a degree and providing a shell to begin work from. This template should be dynamic, like a GPS routing and should be able to 'reroute' as courses are changed or moved. Members of the taskforce can then alter the map as needed and add experiential learning suggestions.

Below are links to examples from Georgia State University:

- <u>Find Your Major Map</u>
- <u>BS in Public Health</u> example

Recommendation: Adoption of degree maps across the university.

As the college degree maps task forces work on creating their degree maps, the work group recommends that degree maps are adopted across the university as part of the advising workflow. This adoption process will be iterative as the taskforces will continue to seek user feedback from students, academic advising, faculty, and other staff.

Recommendation: Streamline degree map design and revision.

The work group recommends establishing a regular review process to maintain the standardization of the templates and revise degree maps along with the catalog updates and new degree programs, especially as new courses and co-curricular/extra-curricular opportunities become available.

After the task forces have completed their initial creation of the degree map templates, there needs to be established points of contact within the college and departments. For example, the Associate Dean for Undergraduate Studies could be the college-level contact while departmental curriculum committee chairs serve as the department-level contact.

Recommendation: Create degree maps for graduate programs.

This work group focused solely on undergraduate programs, but also recommends the creation of degree maps for graduate programs where experiential/co-curricular activities, such as research and internships, are also expected and need to be integrated into the degree programs.

Degree Mapping Summary

All recommendations made in this degree mapping strand require a commitment from all stakeholders with the academic departments and academic advising units to develop, review, and refine degree maps. The development of degree maps will take a substantial amount of time at the onset. Initial creation will require meetings and communication between departments and academic advising regarding intended plan and common pitfalls for students. The work group also recommends that these degree maps are eventually automatically generated in which information can be pulled from the catalog and the taskforces can just insert the specifics.

To ensure this is beneficial to students, feedback is needed at all steps of development from all stakeholders. The degree map system should be easily accessible on website/centralized location for students, academic advising, and faculty. There should also be workshops and/or videos that train people how to use and interpret their degree maps in this centralized location. Students should also receive training during summer orientation or first academic advising appointment.

DegreeWorks

DegreeWorks is a web-based planning tool that gives students a visual worksheet of their specific degree plan and catalog requirements. Students, faculty and staff can access DegreeWorks through ASAP or myUTSA. DegreeWorks allows students and advisors to plan for future coursework, run degree audits, identify courses that have been completed, and show outstanding degree requirements.

Examples of applications of DegreeWorks include:

- Create a personalized semester by semester course plan.
- Monitor a student's progress toward graduation.
- Create a "What-If" plan that details what happens if a student changes their major or degree plan.

- Look ahead to how progress will be affected by the courses a student plans to take in future semesters.
- Run GPA calculations based on current grades and future grades.

This strand focuses on DegreeWorks' usability, accessibility to our students and academic advisors, to display core curriculum requirements alongside major requirements, standard degree program templates, and how it deals with changes to the catalog. This strand also explores possible integration between DegreeWorks and other systems like CourseLeaf.

Below are seven main findings or issues identified by the DegreeWorks subgroup:

1. The standup of new responsive DegreeWorks with the sunset of Classic Degree Works is warranted. Creating a landing page for all users would be useful along with training for all users. Questions/Concerns: Is there a plan to keep both the responsive and classic? What does that look like?

2. Current DegreeWorks Assessments Findings

   - Functional Assessment- Training is need for a responsive dashboard and will be determined based on Technical Assessment which is set for January 2021.
   - Catalog Testing - DegreeWorks catalog testing is an ongoing initiative. UGAR and other stakeholders should be invited as Departmental Partners for help with testing.

3. Core Curriculum Scribing Findings

   - Map for the Core with major specific core recommendations – With the current "clean" core it is challenging to add in major specific core recommendations, and it is important to allow for the core to run clean to ensure completed core credit is reflected properly. For students who change their major how are required core courses reflected for those that have already completed that specific core area? For example, Business students are required to complete ECO 2023 as part of their Common Body of Knowledge, but it also counts as the Core Curriculum 080 requirement.

   - Ensure scribing for Core classes regardless of major - The majority of majors are running a clean core, meaning scribing is complete for core classes to properly filter in DegreeWorks regardless of major.

   - Update Banner Tables for Transfer Coursework and Pre-Requisites - One common issue in DegreeWorks occurs when transfer coursework is incorrectly core coded. Ensuring Banner tables are updated, and transfer work is transcribed correctly is key.   Pre-Requisites are not currently scribed in DegreeWorks for registration. Registration relies on Banner only. Students who have substitutions for pre-requisites can run into registration issues and will

need an override added to the system. Future use of DegreeWorks prerequisites for registration is still being investigated.

4.   Mapping of Certificates Findings

- Scribing into DegreeWorks - Currently scribed in DegreeWorks but students and academic advisors need to know how to "toggle"
between curriculums. Additional education pieces are needed for clarity among users. Certificates are scribed as a separate curriculum because not all students pursuing certificates are also pursuing degrees.

- Standardized Process for adding to curriculum - there is a need for consistency across the University with the addition of certificates to a student's curriculum.

5.   DegreeWorks Functionality Findings

- Duplicate Course Interactions in Degree Works - Prior credit for a course is applied toward a student's degree requirements even if they enroll in the course again. In-progress duplicate credit is placed in the insufficient area. Since credit is awarded for grades of D+/D/D-, a student that needs to repeat a course for a higher grade (or that is pursuing a grade replacement), will not have their in-progress course applied to their requirements until the course has actually been completed.

- Degree Works "What If" Concerns - There have been reports of "What If" worksheets not displaying correctly in DegreeWorks. All examples should be reported to degreeworks@utsa.edu for investigation.

- DegreeWorks (Banner Future Forecasting of) Class Availability - Students are able to view what appears to be future term class availability, but it is not always correct. The subgroup believes this information is coming from early classroom scheduling information. The recommendation would be to partner with Registrar and Classroom Scheduling to plan out dates for that information to be made available for a more accurate view.

- Cross-Listed Courses appearing in Catalog or DegreeWorks   - There are many majors who offer cross-listed courses with other departments. These courses need to be better reflected in DegreeWorks for students to understand the options they have for completing requirements.

- Templates and blocks for DegreeWorks uniform regardless of major -
The majority of majors currently follow a uniform DegreeWorks blocking system of
Core Curriculum/Major Requirements/Support Work/Electives/Minor Requiremen ts. Majors that do not follow the current templates need to be reported to degreeworks@utsa.edu with catalog year.

- Future term major changes will not read in DegreeWorks until the future term begins - Standardization of change of curriculum and education for DegreeWorks users is needed for clarification.

- Use of ABC123 in search for faculty/staff - Currently the Banner ID is required for the search function in DegreeWorks. UTSA focuses on the ABC123 for students and needs to add the ability to search by ABC123.

6. Access to DegreeWorks for Faculty Findings

- UGAR, Department Chairs, and Deans have access to DegreeWorks. Limited to those who need it. No additional findings for faculty use were determined.

7. CourseLeaf Findings

- Additional findings for implementing CourseLeaf and DegreeWorks functionality was determined. DegreeWorks Functional and Technical Assessment is already scheduled.

Recommendation: Timeline of Roll completion of DegreeWorks for graduate students.

DegreeWorks is optimized for undergraduate students, but not graduate students. The work group recommends updating the DegreeWorks systems to accommodate all graduate programs.

Recommendation: Finalize scribing of core courses**.**

In an effort to ensure to consistency of the layout of DegreeWorks a "clean" version of DegreeWorks has been implemented across all majors at UTSA. This "clean" version views the same way and lists degree requirements in the same order regardless of major. (See examples below). The 2020-2022 catalog years have been completed (scribed) in the new clean version. The majority of past catalog years have also been completed.

Here is a clean Core example:

Core Curriculum Requirements

Unmet conditions for this set of requirements: 42 Credits needed

Double-dipping occurs when a course that is required in the major is also listed and used as a core requirement. While this is a recommended practice, students who double dip may have to take additional hours, typically free electives, to satisfy the minimum hour requirement to earn an undergraduate degree.

☐ Communications - Freshman Composition I	Still Needed: 3 Credits in **WRC** 1013
☐ Communications - Freshman Composition II	Still Needed: 3 Credits in **WRC** 1023
☐ Mathematics	Still Needed: 3 Credits in **CS** 1173 or **MAT** 1133 or 1214 or 1193 or 1093 or 1053 or 1073 or 1023 or 1043 or **STA** 1053
☐ Life and Physical Sciences	Still Needed: 6 Credits in **ANT** 2033 or **AST** 1013 or 1033 or **BIO** 1233 or 1243 or 1404 or 1414 or **CHE** 1083 or 1093 or **ES** 1113 or 1123 or 1213 or 2013 or 2023 or **GEO** 1013 or 1123 or **GES** 2613 or **PHY** 1943 or 1963
☐ Language, Philosophy, and Culture	Still Needed: 3 Credits in **AAS** 2013 or 2113 or **ANT** 2063 or **ARC** 1113 or **CHN** 1014 or **CLA** 2013 or 2023 or 2323 or **CSH** 1103 or 1113 or 1213 or 2113 or **ENG** 2013 or 2023 or 2213 or 2383 or 2423 or 2443 or **FRN** 1014 or 2333 or **GER** 1014 or 2333 or **GES** 1023 or **GLA** 1013 or **GRK** 1114 or **HIS** 2123 or 2133 or 2533 or 2543 or 2553 or 2573 or 2583 or **HUM** 2093 or **ITL** 1014 or 2333 or **JPN** 1014 or **LAT** 1114 or **MAS** 2013 or **PHI** 1043 or 2013 or 2023 or 2033 or 2123 or **RUS** 1014 or 2333 or **SPN** 1014 or 2333 or **WGSS** 2013 or 2023
☐ Creative Arts	Still Needed: 3 Credits in **AHC** 1113 or 1123 or 1133 or **ARC** 1513 or 2413 or **ART** 1103 or **BBL** 2023 or **CLA** 2033 or **DAN** 2003 or **HUM** 2023 or 2033 or 2053 or **MAS** 2023 or **MUS** 2243 or 2633 or 2653 or 2663 or 2673 or 2683 or 2713 or 2743 or **PHI** 2073
☐ American History	Still Needed: 6 Credits in **HIS** 1043 or 1053 or 2053
☐ Introduction to American Politics	Still Needed: 3 Credits in **POL** 1013
☐ Texas Politics & Society	Still Needed: 3 Credits in **POL** 1133 or 1213
☐ Social and Behavioral Science	Still Needed: 3 Credits in **AMS** 2043 or **ANT** 1013 or 2043 or 2053 or **BBL** 2003 or 2243 or **BIO** 1033 or **CRJ** 1113 or **ECO** 2003 or 2023 or **EGR** 1343 or **GES** 1013 or 2623 or **HTH** 2413 or 2513 or **IDS** 2113 or **PSY** 1013 or **SOC** 1013 or 2013 or 2023
☐ Academic Inquiry	Still Needed: 3 Credits in **AIS** 1203 or 1213 or 1223 or 1233 or 1243 or 1253 or 1263 or 1273
☐ Component Area Option	Still Needed: 3 Credits in **AAS** 2013 or 2113 or **AHC** 1113 or 1123 or 1133 or **AMS** 2043 or **ANT** 1013 or 2033 or 2043 or 2053 or 2063 or **ARC** 1113 or 1513 or 2413 or **ART** 1103 or **AST** 1013 or 1033 or **BBL** 2003 or 2023 or 2243 or **BIO** 1033 or 1233 or 1243 or 1404 or 1414 or **CHE** 1083 or 1093 or **CHN** 1014 or **CLA** 2013 or 2023 or 2033 or 2323 or **COM** 2113 or **CRJ** 1113 or **CS** 1173 or **CSH** 1103 or 1113 or 1213 or 2113 or **DAN** 2003 or **ECO** 2003 or 2023 or **EGR** 1343 or 1403 or **ENG** 2013 or 2023 or 2213 or 2383 or 2413 or 2423 or 2443 or **ES** 1113 or 1123 or 1213 or 2013 or 2023 or **FRN** 1014 or 2333 or **GEO** 1013 or 1123 or **GER** 1014 or 2333 or **GES** 1013 or 1023 or 2613 or 2623 or **GLA** 1013 or **GRK** 1114 or **HIS** 1043 or 1053 or 2053 or 2123 or 2133 or 2533 or 2543 or 2553 or 2573 or 2583 or **HTH** 2413 or 2513 or **HUM** 2023 or 2033 or 2053 or 2093 or **IDS** 2113 or **ITL** 1014 or 2333 or **JPN** 1014 or **LAT** 1114 or **MAS** 2013 or 2023 or **MAT** 1023 or 1033 or 1043 or 1073 or 1093 or 1133 or 1053 or 1193 or 1214 or **MUS** 2243 or 2633 or 2653 or 2663 or 2673 or 2683 or 2713 or 2743 or **PAD** 1113 or **PHI** 1043 or 2013 or 2023 or 2033 or 2043 or 2073 or 2123 or **PHY** 1943 or 1963 or **POL** 1013 or 1133 or 1213 or **PSY** 1013 or **RUS** 1014 or 2333 or **SOC** 1013 or 2013 or 2023 or **SPN** 1014 or 2333 or **STA** 1053 or **WGSS** 2013 or 2023

Recommendation: Survey and investigate DegreeWorks "What If" concerns**.**

The "What If" tool within DegreeWorks provides students and advisors the opportunity to future forecast degree requirements when changing majors or programs. The work group recommends during the testing phase of DegreeWorks that the "What If" programming for each major and catalog year is also tested to ensure they are viewing correctly. We also recommend the addition of a running banner at the top of a "What If" query stating "This is an unofficial forecasting view of degree requirements based on the catalog year selected and will not include any exemptions or substitutions. For official degree requirements please contact your assigned academic advisor."

Recommendation: Partner with Classroom Scheduling and Registrar's Office to determine the best timing of class availability for viewing in DegreeWorks.

Recommendation: Update all regular and cross-listed courses.

The work group determined that often there are courses listed as options in DegreeWorks that are either not offered or new courses that departments develop that can be options for students are not listed in DegreeWorks. The work group recommends that academic departments be regularly involved with keeping a list of their regular and cross-listed courses updated in DegreeWorks. Cross listed courses are not programmed in Degree Works. For example, a Management student can complete MGT 3253 as an upper division MGT elective, however MGT 3253 is the same as COM 3383. If a student registers for COM 3383 it will not populate in the correct area of DegreeWorks. Departments and degree program coordinators should send their updated courses to the DegreeWorks team so they can be scribed and displayed appropriately for all uses. Courses that are no longer offered should be

removed from the DegreeWorks listing and new courses that can be utilized by students should be updated yearly.

In particular, there is a need for:

- Departmental lists of all newly created courses and how they are to be applied to DegreeWorks plans sent to the DegreeWorks team for scribing.
- Scribing of DegreeWorks to correctly identify cross listed courses to apply correctly in the DegreeWorks worksheet.
- Finalizing duplicate course interactions in DegreeWorks. Will there be an updated rule for how duplicate courses appear in DegreeWorks or will we be keeping the current process?

Recommendation: Develop training materials for all types of users (students, advisors, faculty).

Standardized training materials are not currently available for faculty and staff. UTSA Academic Advising has created training materials for students that are available through the UTSA Advising webpage. The DegreeWorks work group recommends the following:

- The centralization of training materials onto the Student Success Gateway.
- Continuation of and updating of training materials for student users by UTSA Academic Advising.
- Adding a small FAQ or quick video training for students earning certificates. It is a recommended teaching tool as they often do not understand how to view the information within DegreeWorks. It requires a student to toggle through curriculum.
- Easily accessible Landing Page for staff and faculty DegreeWorks users with training and common FAQ. Recommendation is to update the "teaching resources" on the Academic Innovation website to include DegreeWorks.
- Partnering with Departments in the testing phase of DegreeWorks by adding additional partners (UGAR, etc.) to the testing groups with the goal of ensuring courses are filtering into the DegreeWorks as intended by the Departments. Oftentimes when departments create the catalog curriculum and it is scribed into DegreeWorks there are interpretations to the catalog which result in courses not populating in their intended area. This is common in POL/GLA and their elective courses.
- DegreeWorks training for users begins Fall 2021.

Recommendation: Add functionality to DegreeWorks.

The work group recommends forming a university wide task force on users of DegreeWorks, including academic advisors, faculty, and student to discuss needed

additional functionality that will enable all stakeholders to use the system more effectively.

Our work group already recommends the added functionality that will help allow academic advisors and faculty to be more effective in finding current information within DegreeWorks. This includes adding a link to a student's assigned catalog and allowing for abc123 search in DegreeWorks rather than BANNER ID or name. The work group also recommends that that the degree plan view on DegreeWork matches with what and how degree plans are shown in the catalog.

Recommendation: Integrate DegreeWorks into registration and graduation approval systems.

A common practice among academic advisors is to substitute approved courses for students within DegreeWorks. Oftentimes students transfer in coursework that is deemed as an appropriate substitution but not a direct equivalent of the course. When a student goes to register for a subsequent course that requires the substitution as a pre-requisite, the Banner registration system does not recognize the successful completion of the pre-requisite course and an academic advisor has to manually add a pre-requisite override into the system. The DegreeWorks work group recommends utilizing scribing for prerequisite checking through DegreeWorks for registration. From Ellucian "Using the power of the Scribe, missing prerequisite requirements in the Degree Works Student Educational Planner and in Banner registration can be identified, and useful advice to the student for resolving the errors can be provided."

The recommendation is to adapt the system to provide more detailed error for the students and other users. Currently academic advising spends a large portion of time at the beginning and end of the terms on graduation audit approvals. DegreeWorks can be utilized by the Registrar's Office for final degree audit approval. The DegreeWorks work group recommends that we shift towards a model where the Registrar's Office has final audit responsibilities while the academic advisors are responsible for thorough preliminary audits performed at the beginning of the semester of graduation.

DegreeWorks Summary

DegreeWorks is a tool that involves several stakeholders. All current and future decision-making should be done with key representatives of the stakeholders, including but not limited to, Academic Advising, Registrar's Office, and Departmental and College Advisors/Deans. Open communication about degree requirement changes, updating of course information, etc. is key to ensure DegreeWorks is scribed correctly. Creating a landing page for users that is kept up to date with system changes and training would be a huge benefit to all users. This landing page is critical in the education of its users to be able to utilize DegreeWorks to its full potential.

University Processes and Forms

This strand explores the issues relating to the processes and forms that the university currently has in place for dealing with approvals needed with degree programs. The work group found over 30 university-level forms that deal with various types of petitions and approvals, which also come with their own routing process. This does not include college or department specific forms and processes. This strand looks at how these university processes and forms impact students, coordinate multiple advisors and career counselors the approval and petitioning process and routing, other advising-related challenges, and data management. The work group is comprised of faculty and staff serving in advising and administrative roles and were able to offer a broad range of perspectives within this strand.

The work group did an evaluation of 31 university forms that impact undergraduate students via course registration and progress to degree. The work group utilized the following four principles in creating our recommendations to address the above issues:

1. Ease of navigation for students, faculty, and staff.
2. Simplification of process for all users including students, faculty, and staff.
3. Reduction of the number of petitions and forms.
4. Streamlining the workflow.

Recommendation: House all forms related to undergraduate registration and progress to degree in one centralized repository.

Recommendation: Evaluate and standardize the proper workflow for form routing.

UTSA still depends largely on paper-based or PDF-based forms, which are ultimately submitted to the Registrar. Currently, each form has its own specific routing requirements for various levels of approval (i.e., advisor > instructor > department chair > college dean). The workflow for processing and routing these forms differ in each unit as well as depending on the form. In some cases, the advisor handles the approvals of a form whereas in other cases, the department administrative staff handles the paperwork. There are also instances in which students find all the approvals themselves. And these scenarios can all happen with the same document.

The work group recommends an audit of all forms and routing processes to see if the current forms serve all the possible needs and, if new forms are required, how we can standardize the approval routing process. Our work group's ultimate recommendation in this strand is to create an online system, similar to the Prerequisite Override form for all forms which will know which approvals are required and do the final submission to the Registrar.

Recommendation: Standardize the branding and format of all forms.

The team did an evaluation of 31 university forms that impact undergraduate students via course registration and progress to degree. In this evaluation the team identified five areas main issues: **(1) Technology** being used for processing of petitions and forms is not consistent across the board. Depending on the form, it could be a PDF, a web-based form, it could be submitted via document uploader or emailed. **(2) Format and Branding** were inconsistent across the board. Some forms followed specific header and footer guidelines, others did not. Some forms identified ownership and last updated and others did not. These inconsistencies existed in forms within single departments and across departments. **(3) Process Flow** was either including unnecessary parties or not easily identifiable on a majority of forms. **(4) Data storage** for the forms was housed in different places or was not readily available for all interested parties. Some information from the forms was being housed in INB SPACMNT, CIVITAS Inspire, BDMS, etc., and not all parties that need access to the information and results have access. **(5) Training** is needed to help all interested parties understand and correctly apply policy and procedure related to forms.

The work group also reported issues with the PDFs in which entries cannot always be seen on other computers. For example, a user can fill out the form with Adobe Acrobat, but all the entries cannot be seen when someone else opens it on their own computer. This causes a lot of repeated work for all parties.

Until UTSA moves all forms to an online form system, the work group recommends that the university recreate all forms to standardize the look-and-feel of each form and thoroughly test the PDF forms so that they can be completed and viewable cross computers.

Recommendation: Develop a centralized system for storage of completed forms with access for individuals on a need-to-know basis.

The work group's ultimate recommendation is to create an online system, similar to the Prerequisite Override form for all forms which will know which approvals are required and send the final submission to the Registrar. The routing of the forms depends on the unit as described above. The final submission could be done directly to the registrar from the Dean's office, advisor, or the department administrative staff. Or, it could also be submitted to OneStop by the student.

There needs to be a single platform that manages all of these forms and the electronic workflow, which will notify all required parties who need to be involved in this workflow. Further, the work group recommends that the system also interface with the SIS to ensure that all these forms are archived within the students' records as well as interface with DegreeWorks to avoid manual entries and changes to the system by our IT and advising staff.

Recommendation: Train all individuals involved in the form and approval processes.

Once the centralized platform is completed, the work group recommends that all individuals involved in the form and approval process are trained on how to use the system, understand the nature of the requests, and know the rules and regulations that enable one to approve. People in the approval chain may not always have the full information or resources on when approval is appropriate or when disapproval is warranted.

Recommendation: Apply standardized and centralized forms at both undergraduate and graduate levels.

Though graduate students have their own forms (e.g., dissertation committee and qualifying exam forms), the recommended platform should be extended to include graduate forms and approvals.

Recommendation: Integrate processes with data mining to be able make strategic decisions that impact course registration and time to degree completion.

The work group recommends mining the data from these forms to see what decisions need to be made about program design, course registration, and graduation requirements. For example, if several petitions are granted to override the same requirement or several independent studies are used to make up credit for the same missing course, academic units should use that information in revising their degree programs. Retention staff may also use these data to see what are programmatic barriers to degree completion.

University Forms and Processes Summary

The university is too dependent on paper-based and PDF forms. There is no consistency in terms of form branding and styling or usability. UTSA already has online systems for managing this type of form and approval workflow, such as the grant routing proposal system, prerequisite override form, and PeopleSoft. UTSA should acquire or develop a single platform that streamlines and manages the workflow.

Overarching Recommendation for Degree Mapping and Major Sequencing: The final recommendation from this work group is for UTSA to implement a centralized structure that provides governance, oversees standardization and be the main knowledge point for all things related to the design and administration of degree programs. This would:

- Be the hub where advisors, academic units, and other stakeholders can come together to work on degree program activities.
- Serve to implement and supervise all the recommendations made by this working group.
- Help in guiding colleges and departments with their curriculum structure and using the best practices to ensure students are graduating in a timely manner.

- Be able to provide structure and transparency to all stakeholders involved in any curricular activities.
- Be the central repository for all degree program information, such as curricula, program approval forms, sample degree programs, degree maps, etc.
- Serve also as the interface for advisors and academic units to the IT team in charge of DegreeWorks and the online form platform and vice versa.

Academic Curriculum and Change Processes

The scope of the Academic Curriculum and Change Processes work group was to:

- Make recommendations regarding policies, procedures, training, and timelines related to these areas: academic policy changes, academic program changes, and catalog changes.
- Provide the pre-work to address these issues and recommend committees, systems, etc. needed on an ongoing basis.
- Using a lens of equity and inclusivity, focus on the audiences and languages of these processes and garner student input as appropriate.
- In reviewing these processes, identify relevant topics that could be considered "low hanging fruit" to be addressed sooner rather than later.

The work group identified the following topics areas on which to focus and make recommendations:

- Academic Policies
- Academic Program and Curriculum Change Process
- Catalog and Student Policies Documents - Process and Timelines

The sections below describe each issue area and provides recommendations for consideration.

Academic Policies

There is a need to clarify and document the process to vet and approve academic policies. Currently, there is not a clearly publicized process/system to route and document proposed changes. Advisors, Associate Deans, and others who work directly with students (i.e., faculty advisors) should be in the loop regarding proposed changes. A flow chart was created but a place repository needs to be identified so it can be posted.

There are specific policies that we know are tripping up students, and recommendations will be made for possible changes. Policies that need to be addressed include Gateway, Residency requirements for graduation, Community College credit hour limitation.

Recommendations: Academic Policy Changes

- Over the next year, have the Undergraduate Associate Deans Council review the academic policies outlined below and if necessary, make revisions and recommendations to leadership.

    - Consider whether the residency requirement (last 24 of 30 hours an Undergraduate student takes must be at UTSA) is required and/or needs to be modified. In particular, consider military exceptions and provisions for study abroad during the student's last term.
    - Transfer Credit limit from Community College (66 hours). Review why this limit is in place and explore opportunity to accept more credit hours as an institution from the community college. If it remains, Degree Works needs to be better aligned so that that the credit is assigned appropriately to the degree program. Otherwise, once the 66 hours are reached, other transfer credits will be rejected. Institutional Research is collecting additional data around how many students this affects and how they are affected. SB25 requires that UTSA report to THECB why community college hours weren't applicable to degree.
    - Gateway courses change with catalog changes. This can trip up students and lengthen their time to completion.
    - Catalog expiration - If a student changes catalogs, then they only have four years to complete under that catalog as opposed to six years for those students who don't change catalogs. Is this necessary?
    - Clarify the guidance on acceptance of AP/CLEP and other HS credit for community college transfer students. Consider coding as transfer credit, not community college transfer credit. Would dual credit need to be handled the same way if transferred?

- Do an overall review of the academic policies to identify what the policy relates to: SACSCOC, State (THECB), UT System which can then be a mapped/searchable repository. This can begin now but would be an ongoing project.

- Recommend a process for tracking petitions and approval/disapproval rate at undergraduate and graduate levels. DocuSign or another electronic routing system should be used to route and track petitions. Then, this information can be utilized to identify patterns that may warrant program of study or policy revisions. There is a need to track number and types of petitions and issues that colleges, advisors, etc. are addressing. For example, the Graduate School receives

approximately 400 petitions per year – most are approved as they are more related to exceptions. If the language regarding programs of study was less restrictive there would be fewer petitions, such as by adding language regarding as approved by graduate advisor or program committee. The process for tracking and reviewing petitions should begin now with a goal to implement changes over the next year.

- Consider student-facing documents (more customer-focused) in addition to the official catalogs, etc. Think about the language and the audience that these documents are targeting. Ensure our publications are inclusive in their language and mindful of our particular audiences, families, etc. This is a project that could span quite a bit of time if new documents are created. If language is revised in the existing documents, then the timeline could be shortened.

- Address the use of paper forms. Strive to have ALL forms in digital/online formats. It impacts students (and faculty) to have to get signatures from faculty on paper. Consider DocuSign or another electronic routing system to route and track student forms. Although this may take some time, we recommend forms be transitioned beginning now.

- A draft of the existing Academic Policy Change process has been developed and needs to be made available in the shared TEAMs and website repository so that faculty and staff are aware of the process. This is something that can be vetted and shared now.

Academic Program and Curriculum Change Process

This dovetails with a project currently underway to implement a new module in CourseLeaf to route and approve curriculum changes electronically.

The components to be addressed include course changes, program changes, new program proposals, proposed academic agreements, program closures, etc. There is a process in place to make these changes currently, but this system will include workflow, a repository, and then route changes back into the catalog.

In addition, it is clear that more communication and understanding about the process is needed. Information and training will also be needed for the new module when live (June 2021).

In late Fall 2020, the Associate Deans of Undergraduate Studies Council approved the off-Catalog Cycle for New Undergraduate Certificate Proposals, which will need to be included in the process workflow:

- October 15th proposals are due to Academic Council for consideration to be implemented the next academic year. The proposal should be approved by both the department and college curriculum committees.
- December 1st – March 1st all proposal supported at Academic Council to Senate for review.
- April 30th approval through Senate complete.
- August 15th New Certificate implemented.

Recommendations: Academic Program and Curriculum Changes

As mentioned, the components to be addressed in CourseLeaf include course changes, program changes, new program proposals, proposed academic agreements, program closures, etc. There is a process in place to make these changes currently, but this system will include workflow, a repository, and then route changes back into the catalog. To ensure clear information flow, the following is noted:

- Recommend a transparent way for everyone to know where a proposal is in the process utilizing CourseLeaf. Ensure "FYI only" steps are used to notify others of proposed course or program changes. Groups to be notified could include advisors, faculty advisors, associate deans, etc. within or outside of a department/college.
- Provide training to all involved to ensure everyone is comfortable with the system and clear on how to initiate changes.
- The system is set to go-live in June 2021. For all of these steps, we are planning to have the system and process in place for use beginning Fall 2021.

Catalog and Student Policies Documents - Process and Timelines

We need to align all of the processes mentioned above with the catalog process and timelines. We also need to review the process and timeline for making changes to the Student Policies (former Information Bulletin) document.

Timelines have been adjusted to publish catalogs earlier. This has helped to address concerns about the timing of publishing the catalog in relation to admitting and advising students. Estimated timeframes for different types of changes in order to meet catalog deadlines should be provided, including when each process needs to be started and who initiates what for each step, as well. Terminology used such as concentrations, specializations, and tracks needs to be reviewed.

Recommendations: Catalog and Student Policies Documents

- To better support the entire UTSA community understanding of the processes and deadlines surrounding new programs, curriculum/catalog changes, policy changes, Degree Works building, recruitment and marketing, a rolling master 3-year academic planning calendar needs to be established. This would provide a more cohesive and transparent understanding eliminating unnecessary frustration and misunderstandings. This would ensure program admissions changes made in the catalog can be implemented so that admissions scripts align with admission processing for terms [by May for summer scripting to be implemented for next academic year, i.e., May 2021 for Fall 2022 admission]. This would include timelines for program approvals obtained in order to meet catalog timelines. It would also include when program can be advertised and when admissions criteria need to be set. Building on the changes that have already been made to the current catalog publication timeline, this could probably be assembled soon to be ready for the 2021-2022 academic year.

- Option 3 programs should not compete with Option 1 programs – ensure approval process is followed. Increase awareness of statute and understanding of approval process to prevent the possible competing of Option 1 programs with Option 3 programs. Review Texas Administrative Code guidelines. This awareness can be communicated now and in an ongoing way as we continue to expand the number of offerings.

- Need to formally clarify when/if new minors and degree programs can be inserted off-cycle for the catalog. Based on this decision, then it is recommended this be added to the 3-year academic planning calendar as recommended above.

- We found some Colleges have a catalog cycle mapped back to the college level steps. It was recommended that Colleges need reminders earlier in the process to begin making decisions before changes are due in CourseLeaf. The work group found that the college level steps would ensure colleges have internal deadlines and not just making last-minute decisions. An example has been provided that could be replicated. This is a curriculum development support piece that would be ongoing and possibly involve training for the colleges on how to best manage curricular changes.

- It is recommended that tracks, concentrations, and specializations all be clearly defined in terms of the curricular constructs that are required for the credential to appear on the student's transcript. How is this communicated to and declared by students, what is required or not required, and ensure accurate tracking. Should clearly reflect in catalog if track, concentration, specialization will appear on student's academic transcript. This work can begin now but may be a time-consuming project.

- Need to analyze if a minor, track, concentration and specialization are adding time to degree. Need to support student understanding to ensure advising on what is really needed (i.e., fluent in Spanish vs. needing a minor in Spanish). This is an ongoing training topic, especially for advising and faculty advising, that may also require some investigation to determine which credentials are adding time to degree overall.

- Standardize and streamline the format and language of degree programs in the catalog.

    o For every degree program the format would be A. Major, B. Support Work and C. Free Electives. Each section should be clearly labeled and include the number of semester credit hours for each block.

        ▪ A. Major - would consist of only the courses used to calculate the major GPA.   For this section it would be important to ensure there is some flexibility with regard to the courses in the section from a student success perspective. For example, if all the major courses are prescribed and a student earns all "C" and one "C-"they will not meet the required 2.0 major GPA for graduation. They would not be able to repeat the course to replace the grade; however, if there was an unprescribed course(s) this would provide that necessary flexibility so a 2.0 major GPA could be reached.

        ▪ B. Support Work - would include courses that would align or support the major but not apply toward the major GPA.

        ▪ C. Free Electives - is any course not applying in the A. Major or B. Support Work. There could be suggested course options listed in this section, but they would not be required for the degree program. This will provide a uniform layout and ensure a clear understanding of what constitutes a major GPA. This degree program format could be adopted as the UTSA universal degree program format for the undergraduate catalog. It should be shared as quickly as possible with the academic departments. Short term goal would be that all new degree programs and as many existing degree programs be in this format for 2022-2024 catalog. All degree programs would be required to be in this format for the 2024-2026 catalog and forward.

- The following steps may take a year or more and should be considered together as changes are made overall to the catalogs:

- o Ensure that the semester-by-semester plan is correctly sequenced.
- o For some degree programs and minors it may state that courses in specific category(ies) or "approved" courses are required, but the course options are not listed in the catalog.   It is recommended that options for specific major/minor requirements be listed in the catalog, so all constituents know the course options.
- o For the core courses that have a TCCN include that number next to it. This enables students who transfer from a Texas Public Institution or desire to take a course at another institution, typically a community college, to know the equivalency quickly.
- o Currently there is a statement above each degree program that identifies required or recommended core curriculum courses, however not all are required which is not consistently distinguished. In some cases, it has been noted that the recommended course is meant to provide more background or in some cases address hidden prerequisites. It is suggested that courses identified as required should only reflect those core courses that are required in the major or support work area for the degree and courses recommended clearly reflect that it is only recommended and not required.
- o Eliminate hidden prerequisites, especially in support work, so students do not have to obtain prerequisite overrides which could delay their registration, put them at a disadvantage in the course or delay their degree competition.
- o Identify and articulate those marketable skills in each degree program and eventually each course in the catalog.
- o Review courses that are currently offered in different disciplines but have the same TCCN to determine if they could be consolidated or cross-listed so students don't take courses that have similar or equivalent content.

- It is recommended that all degree programs on departments' websites link directly to the catalog rather than building out information separately. This ensures consistency and eliminates the possibility of inaccuracy or misinterpretation. This can begin now but should also be a part of the overall process to revise the catalog format, as mentioned above.

- There needs to be a section in the catalog that clearly references UTSA Online and the degree programs and requirements. This provides a consistent location for all individuals to know where to go for academic information. This would be a more long-term project. May need student input to determine exactly what would be useful.

General Recommendations: Academic Curriculum and Change Processes

- Training - The workgroup strongly recommends that with any new software or electronic routing implemented that there are resources allocated to support the initial and on-going training necessary to support the individuals involved in the workflow.

- Communication - There has to be continuous and on-going campus-wide communication from a central source with opportunities for constituents across the university to be informed rather than having to decipher from emails from different sources. Consider creating and maintaining a repository and website where all workflow processes and calendars are housed that faculty and staff can access.

- Resource allocation - The workgroup was extremely concerned with regard to how financial resources are allocated for the maintenance and implementation of new products and the human capital to support the users.

Technology Infrastructure to Support Workflow and Processes

The work group focused it effort on the improvement of Banner, as it is the primary student information system. Banner is the centralized location for all data information related to academic records, student financial accounts, financial aid awarding, registration, faculty grading, etc.

In August 2019, UTSA received a report of findings from Ellucian regarding their recent review of gaps and use of Banner. The report identified areas related to the lack of workflows for manual processes. The report summary provides ways to consider streamlined processes across the campus and the work group supports using this report as a roadmap for improvement.

The work group gathered student and faculty/staff input related to technology infrastructure specifically as it relates to their experience. Overall, the following themes emerged:

- Accessibility
    - There is a general sense that there are many systems that must be accessed and navigating to those systems or platforms can be confusing.
    - Professors use different platforms for their courses, which can complicate accessibility issues for students especially if the software is through a third party; there is student worry that this may impact their grade.

- o Because many students access UTSA platforms via their smartphones the need to ensure that systems can be accessed this way is paramount. It was also mentioned that use of proctoring software may cause issues.
  - o There is a growing demand for digital learning.

- Reliability and Connectivity
  - o For some, the lack of reliable internet access or computer hardware/software makes accessing UTSA platforms challenging.
  - o When there is a technical issue that needs resolution, the ticketing system can be inefficient and unreliable.

- Communication
  - o Introduction and continued communication, especially when onboarding new students, was seen as a needed component to help everyone better understand what technology is available, for what use, and when changes are happening.
  - o Professors using different methods of communication with their students creates a challenge for students to know where to best receive information and how best to communicate with faculty. Students revealed some professors use email, Blackboard Collaborate, Teams, or other platforms.
  - o Students don't know what they don't know. Meaning some of them do not realize and are not familiar with UTSA technology needed to complete their degree (i.e., ASAP, Degree Works).

Recommendations: Technology Infrastructure to Support Workflow and Processes

- Use the Ellucian report as a roadmap for process improvements.

- Communication plans related to technology should be enhanced and include timely notices to stakeholders within the academic, administrative, and student service areas.

- There is a lack of consistent onboarding and on-demand training materials for stakeholders for current systems. As future technologies or processes are implemented, training plans need to be included. We recommend increasing the availability of training and creating a centralized location of resources to be established.

- The ownership of each system should be established to support the onboarding, training, and efficient use of each system.

- Within the next year, evaluate and determine financial and functional resources to invest in Banner Workflow to eliminate paper-related processes and enhance registration, graduation, and advising efficiency.

- Integrate all technology systems, so students only need to access one location.

- Student feedback sessions suggested having welcome kits for new students to become familiar with campus technology.

- Develop a consistent new student onboarding experience that includes modules for "just-in-time" technology. Also, introducing Tech Café early in a student's onboarding experience will be helpful so they know where to get assistance/help with UTSA technology.

- Promote and use UTSA App more. Students have expressed how helpful it has been, primarily as the message board for the students.

- Implement a timely and consistent communication plan of technology changes to the campus community.

- Create an on-demand technology site that is promoted for students, faculty, and staff so they can learn about any UTSA technology at any time by watching brief and informative videos.

- Establish a list of the technology that all students need to be familiar with (no matter their level and degree).

- Create a roadmap of how each technology is introduced and how and when it is used. Include roadmaps for program-specific technologies as well.

- Establish a University Technology Committee of key stakeholders, including students, faculty, and staff representatives from each college.

- Administer an annual technology assessment to stakeholders, including recent graduates to get their feedback.

Academic Mix of Programs for the Future

This work group divided into three subcommittees focused on academic program offerings from three distinct perspectives: students, faculty, and employers.

There are some common themes throughout the work of the subgroups, but the need for UTSA to be diligent and action-oriented in understanding and meeting the needs of the marketplace cannot be overstated. Quickly responding to the dynamic environment we find ourselves in will enable us to prepare our students to be the most competitive and effective in their future endeavors.

Students Perspective

The **Student Subgroup**, using the Ruffalo Noel Levitz [RNL] Report, Burning Glass Reports, and UTSA Institutional Research, made the following conclusions:

- Developing Clear Pathways for students that depict certain milestones, achievements and requirements for students to view is valuable. These efforts also explore the neighboring community colleges and UT Health for possible partnerships.
- Exploring digital badges (certificates) to keep pace with current market needs. This includes working across discipline areas and working with FYE, such as the AIS teams. Also working with the Career Office to develop certain opportunities for students to attain marketable skill sets.
- From students' perspectives, the top five academic interest within UTSA are in areas of: Cyber Security, Health, Biology, Business, and Online Multidisciplinary Studies.

Student Subgroup Recommendations

- Recommend adding Social Work and Health, Aging & Society programs at undergraduate level.
- Gather student input to understand their perspective on getting career ready. Therefore, two questions, listed below, have been added to the survey going out to students concerning what careers they are interested in. The focus when engaging with students and gaining their perspective is to leverage the strengths of UTSA on the current gaps. For example, a focus on programs that have market demand and the infrastructure at UTSA to sustain such programs.

  - *Q8. UTSA is committed to help you prepare for the best career possible. Regardless of your classification (i.e., freshman or senior), what career(s) are you interested in pursuing after college?*
  - *Q9. What kind of learning experience do you think could better prepare you for this career?*

- There is an opportunity to "refresh" the Academic Program Demand study that RNL prepared for the Strategic Enrollment Plan and the committee recommends moving forward with this. The strategy and approach that RNL uses for this type of study has improved and now incorporates enhanced and richer data related to job postings and skill needs. This will allow UTSA to better determine gaps in current program offerings and adjust accordingly to meet future demands and needs within our region and beyond.

Faculty Perspective

The **Faculty Subgroup** considered the question: What is the correct mix of academic programs from a faculty perspective? We chose to interpret this question in the context of a 10-year view and taking from the UTSA and UTS mission/vision statements that we should plan to serve San Antonio, Texas, and the World.

In the sections below, we discuss our view of future prospects, compare ourselves to aspirant universities and the national scene, and finally draw some conclusions and specific recommendations.

Future Prospects

The work group considers the approach followed by UTSA in the setting up of both the School of Data Science and the College for Health, Community & Policy to be exemplars for forward thinking approaches to this issue. We also note the rapid growth of the cybersecurity program and see emulation of these successes important. Key to those successes are faculty input and a view to the future, not just serving the expressed current needs.

We identified the following as areas of likely high growth in demand degrees in this physical location over the coming 10 years. In all areas, we feel we must harness our HSI status as an exemplar of the future USA demographics:

Cybersecurity	Data science	Digital communication
Energy	Entrepreneurship	Health
Hospitality	Psychology	Social justice
Space	Technology	

Whilst not explicitly called out, we feel that trans-disciplinary studies are extremely important and that UTSA should continue to develop and optimize for our student body. In discussions with the San Antonio Chamber of Commerce, they said the current and future thinking for future San Antonio careers include (military careers are threaded through those below):

Aerospace	Biosciences	Cybersecurity
Financial Services	Manufacturing	Technology

We note that there is a very strong digital fluency requirement to many (all?) of the areas noted above. We believe that a digital fluency certificate should be mandated for all graduating UTSA students in the near-term future. This must cover, at least, MS Word, Excel, PowerPoint, and could be expanded to including basic computer programming, data visualization, data competency, python, etc.

Speaking with TechBloc representatives highlighted the need for 'hard' skills, such as explicit training in industry-standard tools. Whilst a balance between teaching the fundamentals (i.e., soft skills), it is crucial to have some experience of currently deployed tools ready for work on day one after graduation. A list of example skill sets sorted by job position are illustrative. Some could be obtained through micro-accreditation in these areas, leading to industry recognized certificates. It is essential that UTSA faculty maintain links with industry to maintain knowledge of the currently and future most desirable skill sets to ensure optimal alignment between our degree programs and the state of the art.

Reports about the San Antonio job market were reviewed, and highlights from the data are summarized below:

San Antonio Jobs Environment

SA Works Jobs Report (2019) indicates a 183% increase in job postings for social and human service assistants, a roughly 80% increase for financial managers and pos-secondary teachers and a 65% increase in software developers. Two niche reports have since been published, one on COVID and one on bioscience. The 2020 COVID update to this report shows highest growth of posting for management, health care and computer/math related positions; obviously, there was tremendous demand growth in front line health care workers. Clearly COVID has shown the need for digital skills necessary for remote working as well. A third report from the San Antonio Economic Development Foundation focuses on bioscience demand. This report notes two key outcomes: (1) There is a need to collectively define bioscience as an industry in San Antonio and (2) The community should invest in the innovation and workforce needs of large organizations within the growing bioscience ecosystem. Related to the micro-accreditation, continuing education is a key aspect of 21st century careers. UTSA could be well positioned to serve the San Antonio, Texas, and national communities through providing targeted re-tooling skills, leveraging from our degree programs.

Aspirant Peers Comparison

We reviewed the strategic plans of our peer institutions, as identified by UTSA's Peer Selection Task Force. We identified key investment areas of each peer institution if presented in their strategic plan. Alternatively, other indicators of potential investment areas were considered if investment areas were not explicitly stated in the strategic plan.

- Key investment areas were clearly presented by Arizona State University (ASU), Florida International University (FIU), University of California-Irvine (UC Irvine) and University of California-Santa Cruz.(UC Santa Cruz0

- Investment areas were inferred based on the subject emphasis of recently established institutions/centers at George Mason University (GMU), Georgia State University (GSU), University of Central Florida (UCF), University of California-Irvine, and University of California-Santa Cruz.

- Key investment areas at Portland State University (PSU) could not be identified.

- Investment areas appeared to be somewhat tied to local needs and focused on growing/supporting local economies. For example, UC Irvine and FIU emphasized strategic growth in the arts, given the regional importance of this sector, while ASU emphasized 'Future Communications Technologies' and 'Advanced Manufacturing' with a specific aim to attract new industry (especially related to technology) to Arizona. Likewise, University of Central Florida focused photonic science, hospitality and entertainment management, while University of California-Riverside emphasized agricultural sciences.

Commonalities in emphasis areas among peer institutions centered on:

1. Energy: 'Energy and Materials' was identified by UC Santa Cruz and ASU as a key investment area in their strategic plan, while recent institutes/centers at GMU include the 'Quantum Materials Center.'
2. Health: 'Human Performance' and 'Health' were identified as emphasis areas by University of Maryland (UMD) Baltimore, ASU and FIU, respectively, while UC Riverside and GSU have recently established numerous centers focused on health and medicine The Environment: 'Extreme Environments' and 'The Environment' were identified by UCF, ASU and FIU as key emphasis areas, respectively, while GMU has recently established an 'Institute for a Sustainable Earth.'
3. Social Justice, inclusion, and improved human condition were identified as emphasis areas by UC Irvine, Santa Cruz, UCF and UMD Baltimore.
4. Arts and digital communication were identified as emphasis areas by UCF, UC Irvine, Santa Cruz.

Further information and links regarding Peer Institution data can be found <u>here.</u> Current cluster hiring at UTSA (bold was accepted):

Virtual & Augmented Reality*
Human Performance*
Quantum Computing*
Latin American Initiatives*
Quantitative Neuro Science
Exoplanet
Earth Systems Science
Education and Inequality
Advanced Additive & Manufacturing
Smart and Intelligent Cities
Remote Sensing

The National Scene

We characterize the national scene based on guiding principles proposed by these institutions: The <u>National Science Foundation</u> (NSF), and the <u>National Academy of Engineering</u> (NAE).

The NAE lays out fourteen grand challenges for the 21st Century, which fall into four cross-cutting themes:

1. **SUSTAINABILITY** *(Make Solar Energy Economical, Restore and Improve Urban Infrastructure, Provide Access to Clean Water, Provide Energy from Fusion, Manage the Nitrogen Cycle, Develop Carbon Sequestration Methods)*
2. **HEALTH** (*Reverse-Engineer the Brain, Engineering Better Medicines, Advance Health Informatics)*
3. **SECURITY** (*Secure Cyberspace, Prevent Nuclear Terror)*
4. **JOY OF LIVING** (*Advance Personalized Learning, Enhance Virtual Reality,* and *Engineer the Tools of Scientific Discovery)*.

The National Science Foundation 10 Big Ideas are:

1. Future of Work at the Human-Technology Frontier,
2. Growing Convergence Research,
3. Harnessing the Data Revolution,
4. Mid-scale Research Infrastructure,
5. Navigating the Arctic,
6. NSF 2026,
7. NSF INCLUDES,
8. Quantum Leap,
9. New Understanding the Rules of Life, and
10. Windows on the Universe.

There are significant intersections between the issues posed by NAE and the proposed ways to address these questions which are laid out by NSF. The proper mix of academic programs at UTSA should reflect these national themes and priorities.

Recommendations: Faculty Subgroup
We have listed the areas that we feel are important, and the exciting role that UTSA can play in serving the community and State. We feel that multi-disciplinary and digital fluency help to underpin those courses and should become part of the 'lifeblood' of UTSA.

Employer Perspective

The **Employer Subgroup** discussed the various approaches that we could use to inform our recommendations. We determined that we would use the top demand areas as identified by Ruffalo Noel Levitz (RNL) to run a Burning Glass reports. We developed a Market Demand spreadsheet listing all top demand areas and identified the General CIP codes in order to determine market/corporate demand.

We also contacted the San Antonio and Hispanic Chambers of Commerce requesting any reports that identified market demand. We met with Lisa Marie Gomez from the chamber on Monday, November 5th, 2020, and she provided us some additional resources.

Using the top demand areas as identified by Rufallo Noel Levitz, we used the Burning Glass Reports to examine trends and to respond to the following prompts on the Market Demand spreadsheet:

1. Examining trends in assigned areas in which there is a high demand.
2. Are we meeting the demand?
3. Do we have that academic program?
4. Should we invest in developing these programs?
5. At what level-Certificate, BA degree, MA degree, & Phd?
6. What is the competition? Low to High? Potential Partners?
7. With whom should we partner?
8. What are other sources (chamber/SA works) verifying need?

The following resources were used to explore the viability of the top demand areas:

Burning Glass Reports

- o Industry Report – Analyzed the viability of specific degrees based on the number of active job postings that required a specific degree level and degree type, employment trends, top industries that required a specific

degree level and degree type as well as salary based on degree level attainment.

- o Competition Report - Analyzed the viability of a degree based on the amount of competition in a specific geographic area, trends of degrees conferred yearly and by institution name, number of institutions who offered the same degree, market share by type of institution, and changes in market share and conferrals. Criteria utilized included:
  - Specific geographic area – most instances were within Bexar County.
  - Last 12 months of data
  - Associate or bachelor's degree attainment
  - Degree Type

- Chamber/San Antonio Works Sources for Employer/Corporate Demand reports were used to cross reference to see if the top demand areas were also identified in the reports list below or to determine if there are other areas that need to be identified:
-
  - o San Antonio Chamber Economic Impact of Health Science Industry

  - o San Antonio Economic Development Foundation

  - o Tri-Agency Report from the Tri-Agency Workforce Initiative - Texas Education Agency.

The Employer Subgroup triangulated the multiple resources to determine findings and recommendations. Specifically, the group used the Burning Glass generated reports, the RNL report, as well as internal UTSA information to complete the spreadsheet and respond to the identified prompting questions.

Based on that analysis, the following are findings by area:

- **Social Work**
  - o The need for social work is a demand area in the field and, to some extent, in other related fields.
  - o Top job postings include individual and family services, health practitioners' offices, insurance offices, and hospitals.
  - o In the immediate area, the only social work program is at OLLU; however, their production level does not meet the demand as determined by job postings.
  - o Median Salary $41,995.
  - o BA Mean Salary $44, 829; MA Mean Salary $55,113.

- **Secondary Education**
  - There is a continued demand for teachers in critical shortage areas across grade levels. These areas include bilingual education, English as a second Language, Special Education, mathematics, science, and computer science.
  - Specifically, in Secondary Education the Burning Glass Report, UTSystem report confirm the need for secondary teachers in mathematics, science, computer science, Career Technology Education; districts also specify that teachers have a supplemental certification in either Bilingual Education, English as a Second Language, Special Education. There is also high interest in having secondary teachers who can deliver dual credit courses and teachers who can teach ethnic studies.
  - While secondary certification programs exist across the state, there is a downward trend of secondary teachers produced to meet the demand.
  - Median Salary $80,748.
  - BA and MA Mean Salary not available.

- **Computer Science**
  - The demand for computer science continues to grow in San Antonio, Texas, and nationwide. According to the Dice Tech job report published in Nov 2020, "Texas' growth continues to position the state as a rival to California …... Austin, Dallas, Houston and San Antonio all ranked within the top 20 cities in the third quarter, with San Antonio and Austin also making 21 percent and 5 percent gains between August and September, respectively."
  - In the past 12 months, Burning Glass reported 6,369 postings in Computer Science industry. Software developer/engineer (1,301), cyber security engineer (398), and computer system engineer (271) were among the top three. Data science and business analytics related postings altogether accounted for about 8% of the postings (522).
  - There is a room for growth and would be an area to expand.
  - Median Salary: $86,022.

- **Industrial Design**
  - The demand for industrial design is low, only six postings available in the past 12 months in Bexar County.
  - Median Salary: $86,0222.

- **Industrial Engineering**
  - The demand for industrial engineering is low, 25 postings available in the past 12 months in Bexar County.
  - Median Salary: $67,812.

- **Construction Management**
  - There were 688 postings in construction management in the past 12 months in Bexar County.
  - There is a room for growth and would be an area to expand.
  - Median Salary: $78,292.

- **Business** (attributes: Bexar County, Assoc or BA degree required)
  - From November 2019 to October 2020, there were 9,973 postings.
    - 3,371 were in management.
    - 2,484 were in Business and Financial Services.
    - 1,118 were in Computer and Mathematical fields.
  - Median Salary is healthy at $64,434/year.
  - 456 conferred degrees since 2014 (9% increase - all growth attributed to private institution growth).
  - UTSA owns 63.4% of market share (decrease of 12.7% since 2014).

Suggests that there *is* a market for this locally, there is room for growth, and would be a good degree to expand reach. Online options in a BBA and a Business Financial degree would help to expand UTSA's reach.

- **Graphic Design** (attributes: Bexar County, Assoc or BA degree required)
  - From November 2019 to October 2020, there were 89 postings.
    - 30 in graphic design/desktop publisher.
    - 8 Software developer/ engineer.
    - 8 marketing specialists.
  - Median Salary is healthy at $51,644/year.
  - 11 conferred degrees since 2014 (84% decrease since 2014).
  - UTSA currently does not play in this space.

Suggests that this would *not* be a viable degree to invest in based on the number of degrees conferred in past 5 years as well as availability of jobs locally.

- **Facilities Management** (attributes: Bexar County, H.S., vocational, Assoc or BA degree required)
  - Bexar County – 261 job postings for post-secondary diploma or certificate in FM in past 12 months but with a heavy emphasis in vocational and associate degree-based jobs.
  - Median salary was $63,002/year for a High School or vocational training level and $53,130 for a post-secondary diploma or certificate.
  - There is zero competition within the state of Texas.
  - 23% decline in degree conferrals since 2014.

Suggests that this would not be a viable degree to invest in based on the number of degrees conferred and the number of jobs that are required here locally that would need this type of skill set.

- **Public/Community Health**
  - Public and Community Health does not really have competition in San Antonio, mostly with The University of Texas MD Anderson Cancer Center.
  - The next nearest place that offers the program is Texas A&M University-College Station.
  - Salary range $45,915 and $80,433.

- **Nursing**
  - The need for Nursing is not strong. With four other institution that are established in San Antonio already offering it.
    - The University of Texas Health Science Center at San Antonio (Public).
    - University of Incarnate Word (Private).
    - Baptist Health System School of Health Professions (For Profit).
    - Our Lady of the Lake University (Private).
  - If we decided to partner it should be with The University of Texas Health Science Center at San Antonio since we already have a relationship with them for other programs.

Preliminary Recommendations

In the following top demand areas, there should be continued support (additional faculty hires, other resources) for the following existing programs:
- Secondary Education
- Social Work
- Business Administration
- Computer Science
- Cyber Security
- Data Science and business analytics

We recommend that degree/certificate pathways be developed in the following areas *or with modality changes to help saturate the local market*:
- Online Business Administration Degree

Summary Recommendations:
- Focus on the areas identified by RNL group (some areas may need to be offered in another modality to be competitive, e.g., Business Administration).
- Increase our university community awareness of market demand and compare with our graduate production.
- Provide departments/colleges additional resources to hire faculty to ensure these programs can expand or convert to online/hybrid modalities.