

TABLE OF CONTENTS FOR ACADEMIC AFFAIRS COMMITTEE

Committee Meeting: 11/17/2021

Board Meeting: 11/18/2021 **Austin, Texas**

Rad Weaver, Chairman Christina Melton Crain R. Steven Hicks Janiece Longoria Nolan Perez Stuart W. Stedman

Stuart W. Stedman	Committee Meeting	Board Meeting	Page
Convene	4:00 p.m. Chairman Weaver		
U. T. System Board of Regents: Discussion and appropriate action regarding Consent Agenda items, if any, assigned for Committee consideration	Discussion	Action	73
2. Approval to establish the following degree programs	Action	Action	
U. T. Arlington: a. Bachelor of Science in Resource and Energy Engineering	Interim President Lin	n	74
U. T. El Paso: b. Doctor of Philosophy in Sociology	President Wilson		78
<u>U. T. Tyler</u>:c. Master of Science in Cyber Security and Data Analytics	President Calhoun		81
3. U. T. Permian Basin: Discussion and appropriate action regarding proposed changes to admission criteria for the Master of Business Administration and Master of Professional Accountancy degree programs	Action President Woodley	Action	84
4. U. T. Tyler: Discussion and appropriate action regarding approval for use and implementation of new institutional marks for use as an academic logo	Action President Calhoun Dr. Safady	Action	87
Adjourn	4:30 p.m.		

1. <u>U. T. System Board of Regents: Discussion and appropriate action regarding Consent Agenda items, if any, assigned for Committee consideration</u>

RECOMMENDATION

The proposed Consent Agenda items assigned to this Committee are Items 9 - 25.

2a. <u>U. T. Arlington: Approval to establish a Bachelor of Science in Resource and Energy Engineering degree program</u>

RECOMMENDATION

The Chancellor concurs in the recommendation of the Executive Vice Chancellor for Academic Affairs and the institutional president that authorization, pursuant to Regents' *Rules and Regulations*, Rule 40307, related to academic program approval standards, be granted to

- a. establish a Bachelor of Science in Resource and Energy Engineering degree program at U. T. Arlington; and
- b. submit the proposal to the Texas Higher Education Coordinating Board for review and appropriate action.

BACKGROUND INFORMATION

Program Description

U. T. Arlington proposes the establishment of a Bachelor of Science (B.S.) in Resource and Energy Engineering, which will be designed to prepare individuals to apply mathematical and scientific principles to the design, development, and operational evaluation of energy generation, storage, conversion, and distribution systems. This includes instruction in conventional and alternative/renewable energy systems, electrical power systems, and electrical system design.

The program takes a systems approach to build student understanding of both conventional and renewable energy. The 124 Semester Credit Hours (SCH) program is based on a strong core of engineering fundamentals, then provides education in conventional energy, such as coal, petroleum, and natural gas, as well as renewables such as solar, water, and wind. Educating new engineers using a systems approach is also reflected in courses that address energy generation/distribution/storage, planning, and smart grids.

Need and Student Demand

The need for the proposed B.S. in Resource and Energy Engineering program is driven by two trends. First is the continued growth in the energy industry for both conventional and renewable sources. This growth, in which Texas plays a critical role, has shown the need for conventional energy to continue as part of our critical resource base, as well as the increasingly important role of renewables. Second is the need for a much larger and well-trained workforce to support growth in the energy industry. Many in this new workforce will require a more comprehensive educational background to be able to address the challenges of developing and managing this more complex and diverse energy environment.

Texas is the largest energy-producing and energy consuming state in the nation. Our industry sector, including its refineries and petrochemical plants, accounts for half of the energy consumed in the state. Texas is also a leader in renewable energy starting with the Public Utility Commission of Texas adoption of the state's renewable energy mandate in 1999. Growth allowed the state to reach its goal of 500 megawatts from renewables in 2009, well ahead of the target date of 2025.

Texas has a high concentration of energy employment, with 583,404 traditional energy workers statewide: 333,297 of these workers are in the fuels sector; 201,313 work in transmission, wholesale distribution, and storage; and 48,794 workers are employed in electric power generation. Across the U.S., 17.9% of the traditional energy jobs are in Texas. The traditional energy sector in Texas is 5% of total state employment (compared to 2.4% of national employment). Texas has an additional 146,722 jobs in energy efficiency (6.7% of all energy efficiency jobs nationwide).

The employment growth both nationwide and in Texas for engineers is strong. Nationwide employment for engineers was 1,681,000 in 2016, with a projected growth of an additional 139,300 jobs by 2026. The U.S. Bureau of Labor Statistics notes that, in 2017 and 2020, Texas was among the top five states with employment growth in engineering, with over 230,000 current positions averaging \$97,400 in annual median wages. A study by the Bureau in 2020 also noted that alternative energy engineers was the second fastest growing engineering field nationwide.

An evaluation of potential student demand was conducted by assessing regional employment opportunities that include key terms in position descriptions and job titles that map to the proposed B.S. in Resource and Energy Engineering program. The review showed a total of 14,217 positions that used position description terms related to energy and engineering in the job title. In addition, a total of 3,650 positions specifically used the words 'energy engineering' in the job title.

Student demand was also assessed by surveying existing students who have already selected engineering as a career field at U. T. Arlington. A survey was conducted with first-time, full-time freshman students in the College of Engineering during the Fall 2020 semester. The survey of 490 students found that 70.22% indicated they would be interested in an academic program that studied energy (strongly agree, agree, and somewhat agree). In addition, 46.33% were also interested in conventional energy, and 71.84% were interested in renewable energy. A total of 68.88% were also interested in the business and economics side of energy. The students surveyed covered all disciplines offered in the College of Engineering ranging from aerospace to computer, electrical, mechanical, and industrial.

Projected enrollment in the program in the first year is 55 students and 360 students in the fifth year. Enrollment projections are based on enrollment in similar programs across the country and engineering enrollment in U. T. Arlington programs.

Program Quality

The program will be supported by five current engineering faculty and two new faculty. The program will also be supported by local working professionals (employed by the university as adjuncts) to draw on industry expertise to support key application-oriented courses.

The program will also be supported by three additional key faculty from mechanical and aerospace engineering and one faculty from electrical engineering who will cover engineering core courses used in this as well as other baccalaureate programs in the College of Engineering.

The accreditation body for the B.S. in Resource and Energy Engineering program will be ABET, formerly the Accreditation Board for Engineering and Technology. ABET is a recognized accreditation body for college and university programs in applied science, computing, engineering, and technology, and is composed of a federation of 35 professional and technical societies representing these fields. ABET is a highly respected accreditation organization and has provided leadership and quality assurance in higher education for over 75 years. ABET currently accredits 4,307 programs in 846 colleges and universities in 41 countries. U. T. Arlington currently has nine engineering programs that have already received ABET accreditation.

Revenue and Expenses

Expenses	5-Year Total
Faculty	
Salaries	\$1,818,304
Benefits	\$207,750
Graduate Students	
GRA Salaries	\$228,000
GRA Benefits	\$26,050
Staff & Administration	
Graduate Coordinator Salary	\$263,989
Administrative Staff Salaries	\$477,000
Staff Benefits	\$125,740
Other Expenses	
Total Expenses	\$3,146,833

Revenue	5-Year Total
From Student Enrollment	
Formula Funding	\$620,002
Tuition and Fees	\$13,877,258
From Institutional Funds	
Reallocation of Existing	\$1,274,293
Resources	φ1,274,293
Total Revenue	\$15,771,553

Coordinating Board Criteria

The proposed program meets all applicable Coordinating Board criteria for new degree program.

2b. <u>U. T. El Paso: Approval to establish a Doctor of Philosophy in Sociology degree</u> program

RECOMMENDATION

The Chancellor concurs in the recommendation of the Executive Vice Chancellor for Academic Affairs and the institutional president that authorization, pursuant to Regents' *Rules and Regulations*, Rule 40307, related to academic program approval standards, be granted to

- establish a Doctor of Philosophy in Sociology degree program at U. T. El Paso;
 and
- b. submit the proposal to the Texas Higher Education Coordinating Board for review and appropriate action.

BACKGROUND INFORMATION

Program Description

The Department of Sociology and Anthropology in the College of Liberal Arts at U.T. El Paso proposes a Doctor of Philosophy (Ph.D.) in Sociology. The degree program will be an innovative 61 semester credit hour (SCH) program focused on the department's expertise in mobility, environment, and health that draws on U. T. El Paso's unique location along the U.S.-Mexico Border. Increasingly, social processes related to immigration, crime, environment, and health cut across borders; this Ph.D. program will specialize in the comparative sociological study of national and social processes that connect and transcend the boundaries of the United States and Mexico, as well as other divided global societies.

Students in this program will engage in empirical research to produce new understandings of social processes impacting the world in a unique and highly dynamic context. Research will be conducted via one of the three tracks that comprise the program: (1) Borders and Mobility; (2) Culture and Health; and (3) Environment and Society, reflecting the concentrated expertise of the faculty in these three areas. This interdisciplinary approach integrates, links, and unifies a wide range of academic fields across campus and nationally.

The curriculum will begin with graduate-level course work and finish with independent research. The curricular sequence and educational objectives will provide rigorous social science training and real-world applications concerned with culture, borders, transnational migration, and their social, environmental and health manifestations. Combining disciplinary training in sociological methods and theory with specialized course work will deepen student education in politics, society, and culture.

Need and Student Demand

According to the National Science Foundation's (NSF) earned doctorate survey in 2017, 72.2% of Ph.D. graduates in the social sciences had a firm job commitment upon graduation. This is only slightly behind mathematics and computer science's 72.6% firm commitment. Within sociology, 72.5% of students indicate definite plans of employment or study upon graduation; among these, 76.6% will be employed within academia, 7.7% in government, and 7.1% in industry and the non-profit sector. The percentage in academia is the highest of the fields measured by NSF, followed by political science with 74.1%, anthropology with 68.2%, economics with 53%, and psychology with 48.7%. This suggests that the academic job market is strong within sociology. According to the U.S. Bureau of Labor Statistics, sociologists held about 3,000 jobs in the U.S. in 2018 and the employment of sociologists is projected to grow 9% from 2018 to 2028, faster than the average for all occupations (5%).

The field of sociology has been growing rapidly, but there is a shortage of qualified Ph.D. graduates to fill available positions. In 2018, 745 sociology positions were advertised in the American Sociological Association Job Bank. However, in the same year, only 687 Ph.D. degrees in sociology were awarded nationally.

U. T. El Paso is extremely well placed to receive students with a B.A. or M.A. in sociology and cognate disciplines. The University projects eight students in Year 1 and 26 students by Year 5. The concentrations and interdisciplinary nature of the proposed program (mix of sociology and anthropology) should be attractive to a wide audience, and faculty will engage in a national recruiting effort by reaching out to peers, former students, and presenting at conferences. The University also believes that it can effectively attract students from the region not currently served by a university. The closest Ph.D. programs in sociology are at the University of New Mexico in Albuquerque and the University of Arizona in Tucson. Major feeder universities in the U. T. El Paso catchment area include New Mexico State University (Las Cruces), New Mexico School of Mines (Socorro), Western New Mexico University (Silver City), Eastern New Mexico University (Portales), Texas Tech (Lubbock), U. T. Permian Basin (Odessa), Sul Ross University (Alpine), and several universities in Ciudad Juárez.

Program Quality

There are 16 tenured/tenure-track core faculty within the Department of Sociology and Anthropology and seven support faculty for this program who are either qualified contingent faculty or tenured faculty from cognate departments (e.g., Criminal Justice). Core faculty research focuses on multiple subjects, including borders, spatial analysis, political economy, culture, health, environment, society, and immigration. In the last five years, collectively the faculty have published 150 peer-reviewed papers, 55 book chapters, and 9 books.

U. T. El Paso's Sociology and Anthropology Department has a strong publication record and is a global center in the increasingly important international field of Border Studies. The department is interdisciplinary (containing sociologists, anthropologists, and geographers), offering a comparative advantage to more narrowly focused sociology departments. Additionally, U. T. El Paso, with a majority Latinx student body, is on the cutting edge of filling the clear need for more Latinx scholars with Ph.D. degrees.

Revenue and Expenses

Expenses	5-Year Total
Faculty	
Salaries	\$1,165,777
Benefits (included in above)	
Graduate Students	
TA Salaries	\$1,455,500
TA Benefits (included in above)	
GRA Salaries (included in above)	
GRA Benefits (included in above)	
Other Expenses	
Supplies & Materials	\$439,050
Facilities	\$8,000
Total Expenses	\$3,068,327

Revenue	5-Year Total
From Student Enrollment	
Formula Funding	\$460,752
Tuition and Fees	\$461,049
From Institutional Funds	
Reallocation of Existing Resources	\$1,665,827
From Other Revenue Sources	
Expected grant funding Diana Natalicio Graduate Fellows Program in Liberal Arts endowment	\$292,500
Total Revenue	\$2,880,128

Coordinating Board Criteria

The proposed program meets all applicable Coordinating Board criteria for new doctoral degree programs.

2c. <u>U. T. Tyler: Approval to establish a Master of Science in Cyber Security and Data</u> Analytics degree program

RECOMMENDATION

The Chancellor concurs in the recommendation of the Executive Vice Chancellor for Academic Affairs and the institutional president that authorization, pursuant to Regents' *Rules and Regulations*, Rule 40307, related to academic program approval standards, be granted to

- establish a Master of Science in Cyber Security and Data Analytics degree program at U. T. Tyler; and
- b. submit the proposal to the Texas Higher Education Coordinating Board for review and appropriate action.

BACKGROUND INFORMATION

Program Description

U. T. Tyler proposes to establish a Master of Science (M.S.) degree program in Cyber Security and Data Analytics. The degree program is designed to prepare graduates for careers in cyber security and/or data analytics. The program will consist of 36 semester credit hours (SCH) to include foundational courses and coursework specific to critical issues in cyber security and data analysis. The program will be delivered fully online.

Need and Student Demand

Cyber security and data analytics are among the top five jobs for growth in the United States. In Texas, cyber security jobs are projected to increase 41.6% over the next six years. Cyber security has a near-zero unemployment rate and an average annual salary of \$110,000. Every cyber security job generates \$224,000 in economic output and \$124,000 in compensation within the industry (Texas Comptroller of Public Accounts, 2018). Nationally, information security analyst jobs are projected to increase 31% from 2019 to 2029. The 2020 median salary for an information security manager was \$103,590 (U.S. Department of Labor, 2020).

The data analytics field is projected to have strong growth with the number of jobs increasing by 28% or roughly 11.5 million through 2026 (U.S Department of Labor, 2020). According to Analytics Insight, the global market for big data is forecast to grow at a compounded annual growth rate (CAGR) of 10.9% from \$179.6 billion in 2019 to \$301.5 billion in 2023. Simultaneously, big data market funding will rise to \$4.5 billion from \$2.7 billion in 2019 with a CAGR of 13.5% in the same period (Analytic Insight, December 2020). In Texas, the May 2020 Occupational Employment and Wage Estimates for data scientists was \$104,170 (Texas Comptroller of Public Accounts, 2020).

Enrollment in existing master's-level cyber security programs in Texas has increased 151% from 102 students to 256 students in 2015. During the same period, enrollment in master's-level business analytics programs has increased from 206 to 1,074 students and peaked at 1,340 students in 2019 before the pandemic. The growth percentage increase equates to 650% during the four years preceding the pandemic and 521% if 2019-2020 is included. The projected number of students begins with 18 in Year 1 and will increase to 124 by Year 5.

Program Quality

The proposed program will have seven core faculty, which is consistent with similar programs in the state and the nation. One new full-time position for a faculty member holding a terminal degree with a focus in cyber security and one new full-time position for a faculty member with a terminal degree with a focus in data analytics are included in the proposal. Two support faculty, one from management and one from marketing will provide support for the program.

Cyber security and data analytics are strategic initiatives of the Soules College of Business. The Computer Science Department has led the effort with the development of cyber security and data analytics curricular content within four existing undergraduate and graduate degree programs.

The goal for the program is to become a National Center of Academic Excellence, which is operated by the National Security Agency and the Central Security Services. More specifically, the program faculty plan for the program is to become a National Center of Excellence in Cyber Defense Education (NCAE-CD). This will be followed by efforts to become a National Center of Excellence in Cyber Defense Research and in Cyber Operations. The expectation is to move towards NCAE-CD within two years of the start of the program and to complete all three designations with five years.

Recruitment strategies include partnerships with businesses, education, healthcare, and local governments throughout East Texas and Texas. Outreach efforts with regional partners such as East Texas Historically Black Colleges and Universities, the Texas Hispanic Business Organization, and the Texas Association of African American Chambers of Commerce are planned to ensure equity, diversity, and inclusive representation in the program.

Revenue and Expenses

Expenses	5-Year Total
Faculty	
Salaries	\$2,135,738
Benefits	\$533,935
Graduate Students	
GRA Salaries	\$322,000
GRA Benefits	-
Other Expenses	
Online Proctoring Services	\$105,000
Total Expenses	\$3,096,673

Revenue	5-Year Total
From Student Enrollment	
Formula Funding	\$2,909,025
Tuition and Fees	\$4,604,210
From Institutional Funds	
First Year Faculty & Student Support	\$302,324
Total Revenue	\$7,815,559

Coordinating Board Criteria

The proposed program meets all applicable Coordinating Board criteria for new doctoral degree programs.

3. <u>U. T. Permian Basin: Discussion and appropriate action regarding proposed changes to admission criteria for the Master of Business Administration and Master of Professional Accountancy degree programs</u>

RECOMMENDATION

The Chancellor concurs in the recommendation of the Executive Vice Chancellor for Academic Affairs and the institutional president that the U. T. System Board of Regents approve changes to the criteria for admission to the Master of Business Administration and Master of Professional Accountancy degree programs at U. T. Permian Basin as described below.

BACKGROUND INFORMATION

U. T. Permian Basin proposes new changes to both the Master of Business Administration and Master of Professional Accountancy degree programs. The changes are in line with current trends, which are supported by research. The changes are summarized as follows:

For regular admission, rather than requiring a minimum Grade Point Average (GPA) of 3.25, consideration will be given to applicants with a GPA of 3.0 and above or equivalent on a 4.0 scale in the undergraduate degree from an accredited university.

In addition, U. T. Permian Basin requests approval to modify the Graduate Management Admission Test (GMAT) requirement for conditional admission of applicants with a GPA between 2.5 and 2.99. The current conditional admission criteria for such applicants require an undergraduate GPA between 2.5 and 2.99, an additional 12 hours of specified coursework with a grade of B or better, and GMAT scores, depending on grades in the 12 hours of coursework. Under the proposed new criteria, applicants must take 12 hours of specified coursework, provide two letters of recommendation, and submit GMAT scores if a grade lower than B is earned in any of the 12 hours of coursework. If the conditionally admitted students earns a grade lower than a B in any of the four courses, they will have to submit GMAT scores.

Finally, rather than denying admission to all applicants with a GPA below 2.5, applicants with a GPA between 2.25 and 2.49 will be able to apply for conditional admission by submitting GMAT scores, a personal essay, two letters of recommendations and by taking four courses as advised and earning a grade of B or better.

Current Regular Admission Criteria

 Undergraduate Grade Point Average (GPA) of 3.25 and above or equivalent on a 4.0 scale.

Upon admission, students will be evaluated for statistical literacy. Students who need additional skills in this area are referred to BUSI 2342 Statistical Literacy until literacy requirement is fulfilled. Statistical Literacy BUSI 2342 must be remedied in the first semester in which the student is accepted into the MBA program and must be taken before the student enrolls in FINA 6320, FINA 6321, BUSI 6302, MRKT 6302, MNGT 6366 or electives in accounting, finance, management, or marketing.

Proposed Regular Admission Criteria

 Undergraduate Grade Point Average (GPA) of 3.25 3.00 and above or equivalent on a 4.0 scale in the undergraduate degree, from an accredited university.

Upon admission, students will be evaluated for statistical literacy. Students who need additional skills in this area are referred to BUSI 2342 Statistical Literacy or equivalent until literacy requirement is fulfilled. Statistical Literacy BUSI 2342 must be remedied in the first semester in which the student is accepted into the MBA program and must be taken before the student enrolls in FINA 6320, FINA 6321, ACCT 6301, BUSI 6302, MRKT 6310, MNGT 6320, MNGT 6366 or electives in accounting, finance, management, or marketing business electives.

Current Conditional Admission

 Conditional admission with dean's approval: UG GPA between 2.99 and 2.5 or equivalent on a 4.0 scale.

Condition/s

- 1. To take 12 hours as advised and make a "B" or better to achieve regular admission status.
- 2. GMAT requirement to be determined based on the grades from the 12 hours/4 courses as advised.

Proposed Conditional Admission

 Conditional admission with dean's approval: UG GPA between 2.99 and 2.5 or equivalent on a 4.0 scale.

Condition/s The following conditions will apply:

- To take 12 hours / 4 courses as advised and make a "B" or better to achieve regular admission status.
- GMAT requirement to be determined based on the grades from the 12 hours/4 courses as advised.
- 2. <u>Two letters of recommendation</u> and/or references with professional email addresses.
- 3. If the conditionally admitted students receive below "B" in any of the 4 courses, (12 hours) then GMAT is required for readmission.

•	Denied: UG GPA less than 2.5 or
	equivalent on a 4.0 scale.

 Denied: Conditional admission with dean's approval: UG GPA less than 2.5 between 2.49 and 2.25 or equivalent on a 4.0 scale.

The following conditions will apply:

- 1. GMAT with minimum score of 500 but determined based on the GPA.
- 2. <u>Personal essay reflecting interest in graduate studies may be requested.</u>
- 2 letters of recommendation and/or references with professional email addresses.
- 4. 12 hours/4 courses as advised and make a "B" or better to achieve regular admission status.

4. <u>U. T. Tyler: Discussion and appropriate action regarding approval for use and implementation of new institutional marks for use as an academic logo</u>

RECOMMENDATION

The Chancellor, the Interim Vice Chancellor for Business Affairs, the Executive Vice Chancellor for Academic Affairs, the Executive Vice Chancellor for Health Affairs concur in the recommendation of the Vice Chancellor for External Relations, Communications and Advancement Services and the institutional president that the Board of Regents approve the proposed new institutional marks for use as an academic logo as set forth on the following pages.

BACKGROUND INFORMATION

U. T. Tyler and U. T. Health Science Center - Tyler officially merged on January 1, 2021, to comprehensively serve the educational, health, and economic needs of East Texas. Following that merger, U. T. Health Science Center - Tyler retained its status as a health-related institution and administratively became an instructional site of U. T. Tyler. Several complex administrative, operational, and strategic activities are underway to ensure a full and seamless integration of the two institutions. One important element of those activities has been to address the need for one cohesive brand to better establish an identity for students, faculty, staff, and patients, to create an organized brand standard for official use, and to promote outreach efforts with external constituents.

To that end, U. T. Tyler enlisted external agency expertise to lead a review of its current visual identity and conduct a design audit of current marks in use and to make recommendations related to a new mark. In addition, approximately 40 members of the U. T. Tyler community were consulted about logo color, symbolism, iconography, and typography to best represent Texas, Tyler, and the East Texas region.

Ultimately, the group determined that the strongest connections for the U. T. Tyler and U. T. Health East Texas brand were the star (already shared by both identities); a strong use of the color orange to heavily integrate the U. T. Tyler mark with the U. T. System mark; the shield (very distinctive to branding at other U. T. health institutions); and lastly, the laurels and the book (taken from the U. T. System seal). The group also recommended use of the typeface of the U. T. Health East Texas brand to further strengthen the association between the U. T. Tyler and health system's hospitals. The blue color was retained to respect the U. T. Tyler's existing color scheme, but also distinguish it from the health system without weakening the connection.

The proposed institutional marks will be used in all print and digital communications to provide an official academic logo for the university and each of its schools, departments, and offices. A tag line such as *Education*. *Research*. *Clinical Care*. will appear under the mark for marketing purposes to represent the three pillars of the U. T. Tyler mission.

A separate review of the current U. T. Tyler Patriots athletic logo has recently launched. The review will include participation from students, current and former athletes, alumni, and athletics staff. U. T. Tyler will bring a recommendation regarding any changes to the athletic logo to the Board of Regents in Spring 2022.





Color Palette

To ensure that the UT Tyler and UT Health East Texas brands feel cohesive and strong as a branded house, they will share the orange PMS 159 and gray PMS 432 colors of UT Health East Texas.

To retain UT Tyler's brand equity, we will keep a blue as a color in the primary logo.

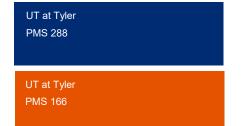








The University of Texas at TYLER





UT Tyler Academic Logo: Reversed











UT Tyler Academic Logo with UT Health East Texas





