

Memorandum of Understanding

Between

Motlow State Community College,

Tennessee State University

and

University of Tennessee

This Memorandum of Understanding (MOU) sets forth the terms and understanding between Motlow State Community College (MSCC), Tennessee State University (TSU) and the University of Tennessee (UT) to enter into an partnership expanding educational initiatives in the southern middle Tennessee region. Students participating in this partnership program will complete the applied associate (AAS) degree at MSCC, the Bachelor of Science (BS) degree in Applied Industrial Technologies at TSU, and a research-based curriculum leading to the Master of Science in Industrial Engineering with an Engineering Management concentration from the University of Tennessee.

Background

Motlow State Community College is a public, multi-campus college offering certificates and associate degrees in southern Middle Tennessee. Tennessee State University has a history of strong instruction and solid research to prepare students for leadership, professional success, personal achievement, and service to local, national, and international communities in a global society. The University of Tennessee, Space Institute (UTSI) is an internationally recognized institution for graduate study and research in engineering, physics, mathematics, and aviation systems. This agreement provides a structure for talented students to access and pursue high quality engineering degrees with industry driven curricula within their home communities.

Purpose

Over a decade ago, Tennessee adopted an initiative to get 55 percent of Tennesseans equipped with a college degree or certificate by the year 2025. This initiative was perceived as a push primarily for increased higher education attainment; however, it was also focused on Tennessee's future workforce and economic development. This agreement builds on this historic initiative with the establishment of a pipeline from high school to a baccalaureate degree to a graduate degree in a STEM field. By beginning with high school recruitment, the initiative will increase educational awareness among students at earlier ages and offer mentoring, internships, apprenticeships focused on STEM occupations. According to a 2019 report from the TN Department of Labor, STEM occupations are projected to grow nearly twice as rapidly as all occupations in Tennessee. These are high wage occupations for which significant shortages of job candidates exist and which are vital to the state's economy. This partnership will also offer students the opportunity to stay at home and finish all three degrees while simultaneously gaining valuable on the job training in the various STEM industries in middle Tennessee.

Program Requirements

The program of study for course work at MSCC to earn an A.A.S. in Mechatronics and a listing of the TSU upper division courses that students shall be required to complete in order to earn a B.S. in Applied and Industrial Technologies with a concentration in Mechatronics through TSU was outlined in an articulation agreement signed January 1, 2018. The coursework and GPA required for students to be admitted to the Master of Science in Industrial Engineering with an Engineering Management at UTSI is delineated in the Appendix.

Term – This Agreement will be effective from the date of final signature below, the Effective Date, until terminated in writing by either party. It is agreed that if terminated, both institutions will honor the terms of the Agreement until the end of the next admissions applications and review period of TSU.

Post-Termination- Upon expiration or termination of this Agreement for any reason, Motlow State students previously accepted by or admitted to TSU and TSU students previously accepted by or admitted to UT shall continue to receive the benefits contemplated by this Agreement.

Non-discrimination

The parties agree to comply with Titles VI and VII of the Civil Rights Act of 1964, Title IX of the Education Amendments of 1972, Section 504 of the Rehabilitation Act of 1973, Executive Order 11,246, the Americans with Disabilities Act of 1990 and the related regulations to each. Each party assures that it will not discriminate against any individual including, but not limited to, employees or applicants for employment and/or students because of race, religion, creed, color, sex, sexual orientation, gender identity/expression, age, disability, veteran status, genetic information, national origin, or any other legally protected class with respect to all employment, programs and activities.

The parties also agree to take affirmative action to ensure that applicants are employed and that employees are treated during their employment without regard to their race, religion, creed, color, sex, sexual orientation, gender identity/ expression, age, disability, veteran status, genetic information, national origin, or any other legally protected class. . Such action shall include, but not be limited to, the following: employment, upgrading, demotion or transfer, recruitment or recruitment advertising, layoff or termination, rates of pay or other forms of compensation, and selection available to employees and applicants for employment to the extent that such laws are applicable to each party individually.

Binding agreement. This Agreement shall not be binding upon the parties until it is approved by the president or designee.

Governing Law. This Agreement shall be governed by and construed in accordance with the laws of the State of Tennessee without regard to its conflict of law provisions.

Confidentiality of Records. All educational records created, disclosed, or maintained pursuant to the terms of this Agreement are confidential and shall be created, disclosed, and maintained

pursuant to the provisions of Family Educational Right to Privacy Act, also known as FERPA (20 U.S.C.A. s1232g) and its regulations.

Notices. All notices or other written communications relating to termination, expiration, or any other legal matter relating to this Agreement will be effective when received and must be given in writing by courier or reputable overnight delivery service, or by certified mail, return receipt requested, to either party at the following address (or to such other address as such party may substitute, by providing a written notice.)

In witness whereof, the parties have by their duly authorized representatives set their signatures

Motlow State Community College

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HT

DocuSigned by:
By: Michael Torrence
CF16EC71E891469...
Michael Torrence

President

2020-12-26 | 6:28 AM PST

Date

University of Tennessee

By: Donde Plowman
Donde Plowman

Chancellor

10/22/2020

Date

Tennessee State University

DS
GG

DocuSigned by:
By: Glenda Glover
D4F1070AF4A947C...
Glenda Baskin Glover

DS
GG

President

2020-12-22 | 2:11 PM CST

Date

DS
DLG

DocuSigned by:
Flora W. Tydings
DAC9BC19C440409...

Chancellor

2020-12-28 | 9:51 AM CST

Engineering Management Master's Program

The Master of Science program in Industrial Engineering with Engineering Management (EM) concentration is designed for the working engineers to be better prepared for today's dynamic workplace. Engineers and scientists must be able to make sound management decisions while working in fast-paced technical environments. Our EM program provides practicing engineers with an experience balancing technical depth with leadership, project management, financial management, technology transfer, ethical and legal perspectives, team relations, organizational behavior and continuous quality improvement. It empowers you with the knowledge and skills needed to lead technical organizations or processes to success.

Admission Requirements

- Students completing the 2+2 program with Motlow State and Tennessee State University who receive a Bachelor of Science (B.S.) degree in Applied and Industrial Technologies will be admitted to the Master's of Science in Industrial Engineering with Engineering Management concentration program if they meet the following requirements.
 - Overall GPA of at least 2.7 of a possible 4.0 or 3.0 of 4.0 during the senior year of undergraduate program.
 - Completion of Calculus II and a calculus-based physics course with grades of C or better.

Master's in Industrial Engineering with Engineering Management Concentration
(32 hours required for both thesis & non-thesis option)

EM Core Courses (required) 9 hours

- IE 516 Statistical Methods in Industrial Engineering
- IE 518 Advanced Engineering Economic Analysis
- IE 537 Analytical Methods for Engineering Managers

IE Seminar (required) 2 hours

- IE 550 Graduate Seminars (1 hour course)

IE Concentration Courses (required) 9 hours

- IE 533 Theory and Practice of Engineering Management
- IE 534 Financial Management for Engineering Managers
- IE 536 Project Management

IE Technical Electives – Select (3 hours thesis) or (6 hours non-thesis) with major professor

- IE 514 Advanced Information Systems
- IE 515 Production and Inventory Systems
- IE 517 Reliability of Lean Systems
- IE 519 Human Factors Engineering and Ergonomics
- IE 522 Optimization Methods in Industrial Engineering
- IE 526 Advanced Application of Systems Modeling & Simulation
- IE 527 Lean Production Systems

NON-THESIS OPTION ONLY Students with an undergraduate industrial engineering degree may substitute 3 hours of graduate coursework in another engineering discipline, if approved by the major professor.

Engineering Management Electives – Select (3 hours thesis or non-thesis) with major professor

- IE 532 Productivity and Quality Engineering
- IE 538 New Venture Formation
- IE 539 Strategic Management in Technical Organizations
- IE 541 Managing Change and Improvement in Technical Organizations
- IE 542 Design of Experiments for Engineering Managers
- IE 543 Legal and Ethical Aspects of Engineering Management

Thesis Option – IE 500 (6 hours)

Capstone Project – IE 501 (3 hours)

Six (6) hours of graduate course work in another engineering discipline may be taken; however, all courses must be in one discipline organized in a logical sequence. The student may transfer up to 12 hours of courses from other institutions provided they are approved by the program chairman and the Graduate School.