



# THE UNIVERSITY OF TEXAS RIO GRANDE VALLEY AND SOUTH TEXAS COLLEGE

# Articulation Agreement B.S. in Mechanical Engineering

This AGREEMENT, effective the 12<sup>th</sup> of December 2016, is between The University of Texas Rio Grande Valley ("UTRGV"), a component institution of The University of Texas System, and South Texas College ("STC"), a College having its principal office in McAllen, Texas.

WHEREAS, UTRGV and STC desire to implement an Articulation to provide students enrolled at STC with an opportunity to smoothly transition to and further their educational opportunity at UTRGV.

WHEREAS, successful completion of an academic associate degree at STC is an indicator to UTRGV that the student has completed the appropriate courses, received the necessary instructions and preparation, and that similar knowledge, skills, and student learning outcomes can be expected, enabling the student's progression to the upper division course sequence or requirement at UTRGV,

NOW, THEREFORE, in consideration of the mutual promises herein, the parties agree to the following:

#### 1.0 Term

This agreement shall be effective for two years from the date of its executive or upon revisions mandated by state requirements. The agreement may be renewed upon the mutual written approval of The University of Texas Rio Grande Valley and South Texas College.

#### 2.0 Courses of Study

UTRGV's Mechanical Engineering Department will accept the complete set of lower division courses from a student who receives an A.S. in Engineering from STC and is admitted to UTRGV.

- The total number of transfer hours will be capped at half the required credit hours needed to earn a B.S. in Mechanical Engineering unless otherwise approved by the receiving institution's department chair.
- All STC courses transferred to UTRGV shall be part of the *Lower Division Academic Course Guide Manual* issued by the Texas Higher Education Coordinating Board.
- For the UTRGV B.S. in Mechanical Engineering, the following STC A.S. in Engineering field of study electives will transfer as follows:

STC
ENGR 1201 Introduction to Engineering
ENGR 1304 Engineering Graphics
ENGR 2301 Statics
ENGR 2302 Dynamics
ENGR 2405 Electrical Circuits I

MATH 2414 Calculus II MATH 2415 Calculus III and MATH 2418 Linear Algebra

CHEM 1411 General Chemistry I

**UTRGV** 

MECE 1101 Introduction to Mechanical Engineering

MECE 1221 Engineering Graphics

MECE 2301 Statics MECE 2302 Dynamics

ELEE 2317 Electrical/Electronic Systems

CHEM 1311/1111 General Chemistry *or* CHEM 1307/1107 Chemistry for Engineers

MATH 2414 Calculus II

MECE 3449 Engineering Analysis I

- 2.1 In accordance with Sec 61.822 of the Texas Education Code, a student who successfully completes courses in the STC core curriculum will receive academic credit at UTRGV for each of the core courses transferred.
- 2.2 Transfer students must apply for admission and meet requirements to UTRGV and the B.S. in Mechanical Engineering. Transfer students are encouraged to complete their A.S. in Engineering at STC prior to completion of their first semester of study at UTRGV. STC and UTRGV faculty will work with students to help promote the completion of the Associates degree in a timely fashion.
- 2.3 This Articulation Agreement will be published and provided as a transfer guide during academic advisement at both institutions.

# 3.0 <u>Designated Liaison</u>

Each institution designates the following officials to serve as its liaison to coordinate and facilitate activities under this Articulation Agreement and to address any concerns or disputes that may arise relating to the terms and conditions of this Articulation Agreement.

## **South Texas College:**

Dr. Enriqueta Cortez

Chair, Physical Science, Chemistry, and Engineering Dept.

### The University of Texas Rio Grande Valley:

Dr. Robert A. Freeman

Chair, Mechanical Engineering Dept.

Executed by the undersigned representatives of the two institutions on December 12, 2016

APPROVED:

THE UNIVERSITY OF TEXAS RIO GRANDE VALLEY

Dr. Havidán Rodriguez

Provost/Executive Vice President for Academic Affairs

Dr. Ali Esmaeili

Dean, Math, Science, and Bachelors Programs

SOUTH TEXAS COLLEGE

Dr. Anahid Petrosian

Vice President for Academic Affairs

Dr. Alexander Domijan, Jr.

Dean, College of Engineering and Computer Science

# The University of Texas Rio Grande Valley/South Texas College Suggested Four-Year Road Map for Transfer Students, Academic Year 2016-2017

This Road Map is a tool to assist you and your advisor in planning your academic program.

Use it along with your department's official degree plan.

Degree: BSME Major: Mechanical Engineering			
First Year - Fall Semester - STC	Hours	First Year - Spring Semester - STC	Hours
ENGL 1301 Composition	3	ENGL 1302 Composition II - Rhetoric	3
HIST 1301 U.S. History I	3	PHYS 2425 University Physics I	4
MATH 2413 Calculus I	4	ENGR 1304 Engineering Graphics	3
CHEM 1411 General Chemistry I	4	MATH 2414 Calculus II	4
ENGR 1201 Introduction to Engineering	2	THE PERSON OF TH	
Total Fall Semester Hours	16	Total Spring Semester Hours	14
Second Year - Fall Semester - STC	Hours	Second Year - Spring Semester - STC	Hours
HIST 1302 U.S. History II	3	Creative Arts Elective	3
MATH 2415 Calculus III	4	GOVT 2306 Texas Government	3
GOVT 2305 Federal Government	3	ENGR 2405 Electrical Circuits	4
PHYS 2426 University Physics II	4	ENGR 2302 Dynamics	3
ENGR 2301 Statics	<u>3</u>	MATH 2418 Linear Algebra (Recommended prior to transfer)	4
Total Fall Semester Hours	17	Total Spring Semester Hours	17
Summer I		Summer II	
MECE 2350 Numerical Methods (UTRGV)	3	PHIL 2306 Introduction to Ethics (STC/UTRGV)	3
ECON 2301 Princ. of Econ. I Macro (STC/UTRGV)	3	MANE 2332 Engineering Statistics	3
Total Summer I Hours	6	Total Summer II Hours	6
Third Year - Fall Semester - UTRGV	Hours	Third Year - Spring Semester - UTRGV	Hours
		MANE 3364 Manufacturing Processes	3
MECE 2140 Engineering Materials Lab	3	MANE 3164 Manufacturing Processes Lab	1
MECE 2340 Engineering Materials	3	MECE 3304 System Dynamics	3
MECE 2335 Thermodynamics	3	MECE 3320 Measurements and Instrumentation	3
MECE 3321 Mechanics of Solids	3	MECE 3115 Fluid Mechanics Lab	1
MECE 3450 Mechanical Engineering Analysis II	4	MECE 3315 Fluid Mechanics	3
Total Fall Semester Hours	16	Total Spring Semester Hours	14
Summer I		Summer II	
Total Summer I Hours		Total Summer II Hours	
Fourth Year Fall Semester - UTRGV	Hours	Fourth Year Spring Semester - UTRGV	Hours
MECE 3380 Kinematics and Dyanmics of Machines	3	Tourtain Cari Spring Semester Critical	LIOUIS
		MECE 3336 Thermodynamics II	3
MECE 3160 Heat Transfer Lab	1 3		3
MECE 3160 Heat Transfer Lab MECE 3360 Heat Transfer	3	MECE 43xx Technical Elective II	3
MECE 3160 Heat Transfer Lab MECE 3360 Heat Transfer MECE 43xx Technical Elective I	3	MECE 43xx Technical Elective II MECE 43xx Technical Elective III	3
MECE 3160 Heat Transfer Lab MECE 3360 Heat Transfer MECE 43xx Technical Elective I MECE 4350 Machine Elements	3 3 3	MECE 43xx Technical Elective II MECE 43xx Technical Elective III MECE 4362 Senior Design II	3
MECE 3160 Heat Transfer Lab MECE 3360 Heat Transfer MECE 43xx Technical Elective I MECE 4350 Machine Elements MECE 4361 Senior Design I Total Fall Semester Hours	3	MECE 43xx Technical Elective II MECE 43xx Technical Elective III	3

Note: This bachelor's degree requires 48 advanced hours (3000-4999 level). This has 50 advanced hours.

Updated 12/05/2016

<sup>\*</sup> Demonstration of second language proficiency is a requirement of all degrees at UTRGV