ARTICULATION AGREEMENT

South Texas College (STC)
Division of Mathematics and Science

Texas A&M University–Kingsville (TAMUK)
Frank H. Dotterweich College of Engineering

Pre-Engineering Program (STC)
and
Bachelor of Science Degrees in Engineering (TAMUK)

Architectural Engineering
Chemical Engineering
Civil Engineering
Electrical Engineering
Environmental Engineering
Mechanical Engineering
Natural Gas Engineering

This articulation agreement is designed to facilitate the transfer of students from the Pre-Engineering Program at South Texas College (STC) to the Bachelor of Science programs in Architectural Engineering (BSAE), Chemical Engineering (BSChE), Civil Engineering (BSCE), Electrical Engineering (BSEE), Environmental Engineering (BSEnvE), Mechanical Engineering (BSME), and Natural Gas Engineering (BSNGE) programs at Texas A&M University at Kingsville (TAMUK). The Division of Mathematics and Science at STC and the Frank H. Dotterweich College of Engineering at TAMUK enter into this agreement under the following provisions:

1. Articulation for the purpose of student transfer between the above departments refers specifically to this written agreement that identifies courses, or sequence of courses from STC that are comparable to, or acceptable in lieu of, specific course requirements at TAMUK and enable the student's progression to the next level of course sequence or requirements at TAMUK.
2. All STC courses listed in the STC-TAMUK Course Map are transferable to TAMUK and satisfy the indicated courses in the various TAMUK BS engineering degree programs.
3. Both parties to this agreement acknowledge that, in accordance with Sec. 61.822 of the Texas Education Code, completion of all requirements of the STC Core Curriculum will satisfy all TAMUK General Education requirements. However, a STC student transferring to TAMUK before completion of the STC Core Curriculum is subject to a course-by-course evaluation of his/her transcript for acceptance by TAMUK and fulfillment of the TAMUK General Education requirements
4. All articulated science and engineering courses must be completed with a "C" or better for acceptance into any BS engineering program at TAMUK.

5. STC students wishing to transfer must apply for admission to TAMUK and meet all University and College of Engineering admission requirements.
6. All students, including students intending to transfer from STC, are strongly encouraged to work closely with the TAMUK College of Engineering Academic Advisor to ensure timely completion of all BS degree requirements and adherence to the provisions of this articulation agreement. However, it is the responsibility of the student to be knowledgeable of all degree requirements and the provisions of this agreement.
7. The articulation agreement may be published and provided to STC students as a transfer guide during academic advisement. This articulation agreement will be reviewed annually by the STC Division of Mathematics and Science and the TAMUK College of Engineering and adjusted, if necessary, to ensure the ease of transfer of students from STC to TAMUK.
8. Change(s) to this agreement must be agreed upon by both parties.

Executed by the undersigned representatives of the two institutions on November 19, 2013:

South Texas College	**Texas A&M University-Kingsville**
Dr. Anahid Petrosian Interim Vice President for Academic Affairs	Dr. Rex Gandy Provost and Vice President for Academic Affairs
Dr. Ali Esmaeili Dean, Division of Mathematics and Science	Dr. Stephan J. Nix Dean, College of Engineering

STC-TAMUK Course Map

Pre-Engineering Course of Study (STC)
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A. Core Curriculum - 42 credit hours

The indicated STC courses are part of the STC Core Curriculum. They also substitute for the corresponding courses in the TAMUK Core Curriculum. STC students should note that they give themselves more flexibility in course options by completing the Core Curriculum at STC. More importantly, completing the entire STC Core Curriculum automatically satisfies the TAMUK Core Curriculum without the need for a course-by-course evaluation.

This course map is based on the TAMUK Core Curriculum adopted for students beginning their studies in the 2014-15 academic year. Current students basing their STC studies on earlier versions of the TAMUK Core Curriculum should consult academic advisors at STC and TAMUK, although in nearly all cases the course mapped below will satisfy the TAMUK Core Curriculum in place for several years prior.

STC Equivalents			**TAMUK BS Engineering Courses**		
Course Number	**Title**	**Hours**	**Course Number**	**Title**	**Hours**
Communication – 6 credit hours					
ENGL 1301	Composition I	3	ENGL 1301	Rhetoric & Composition I	3

ENGL 1302	Composition II - Rhetoric	3	ENGL 1302	Rhetoric & Composition II	3
Mathematics – 3 credit hours The [extra credit hour] for MATH 2413 can be counted against the Component Area Option (Other) at the end of this section. Other mathematics courses required for an engineering degree are listed in sections B and C.					
MATH 2413	Calculus I	3 [+1]	MATH 2413	Calculus I	3 [+1]
Life and Physical Sciences – 6 credit hours The extra STC credit hours in brackets] for CHEM 1411 and PHYS 2425 can be counted against the Component Area Option (Other) at the end of this section. Other science courses required for an engineering degree are listed in sections B and C.					
CHEM 1411	General Chemistry I	3 [+1]	CHEM 1311	General Inorganic Chemistry I	3
PHYS 2425	University Physics I	3 [+1]	PHYS 2325	University Physics I	3
Language, Philosophy & Culture – credit hours (select one)					
Various literature courses	ENGL 2321, 2323,2331, 2341	3	*Various literature courses*	ENGL 2342 or 2362	3
PHIL 1301	Introduction to Philosophy	3	PHIL 1301	Introduction to Philosophy	3
SPAN 2311	Intermediate Spanish I	3	SPAN 2311	Intermediate Spanish I	3
SPAN 2312	Intermediate Spanish I	3	SPAN 2312	Intermediate Spanish I	3
Creative Arts – credit hours (select one)					
ARTS 1303	Art Survey I	3	ARTS 1303	Art History I	3
ARTS 1311	Design I	3	ARTS 1311	Design I	3
ARTS 1316	Drawing I	3	ARTS 1316	Drawing I	3
ARTS 2316	Painting I	3	ARTS 2316	Painting I	3
ARTS 2326	Sculpture I	3	ARTS 2326	Sculpture	3
ARTS 2333	Printmaking I	3	ARTS 2333	Printmaking	3
ARTS 2346	Ceramics I	3	ARTS 2346	Ceramics	3

American History – 6 credit hours					
HIST 1301	United States History I	3	HIST 1301	American History to 1877	3
HIST 1302	United States History II	3	HIST 1302	American History Since 1877	3
Government/Political Science – 6 credit hours					
GOVT 2305	Federal Government	3	POLS 2301	Government & Politics of U.S	3
GOVT 2306	Texas Government	3	POLS 2302	Government & Politics of Texas	3
Social and Behavioral Sciences – 3 credit hours (select one)					
ANTH 2302	Introduction to Archeology	3	ANTH 2301	Introduction to Archeology	3
ECON 2301	Principles of Economics I - Macro	3	ECON 2301	Principles of Macroeconomics	3
PSYC 2301	General Psychology	3	PSYC 2301	Introduction to Psychology	3
SOCI 1301	Introductory Sociology	3	SOCI 1301	Principles of Sociology	3
SOCI 1306	Contemporary Social Problems	3	SOCI 1306	Social Problems	3
Component Area Option (Communication) – 3 credit hours					
SPCH 1321	Business and Professional Speaking	3	COMS 1315	Business and Professional Communication	3
Component Area Option (Other) – 3 credit hours The extra credit hour from the Mathematics Area and the lab credits hours from the Life and Physical Sciences Area are included here.					
CHEM 1411	General Chemistry I Lab	1	CHEM 1111	General Inorganic Chemistry I Lab	1
MATH 2413	Calculus I	1 [+3]	MATH 2413	Calculus I	1 [+3]
PHYS 2425	University Physics I Lab	1	PHYS 2125	University Physics I Lab	1
TOTAL CREDIT HOURS		**42**	**TOTAL CREDIT HOURS**		**42**

STC-TAMUK Course Map (continued)

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B. Other STC courses that contribute to most (see notes in parentheses) engineering degrees at TAMUK

The STC courses listed below fulfill the corresponding TAMUK courses. There is one instance a STC course with more credit hours is used to satisfy a TAMUK course, thus causing the STC student to take one more credit than their peers at TAMUK. The student must decide (ideally with the advice of his/her STC academic advisor and the TAMUK College of Engineering Academic Advisor) if this is in his/her best interest. STC students always have the option of completing these courses at TAMUK rather than STC to avoid accumulating the extra credit hours.

STC Equivalents			**TAMUK BS Engineering Courses**		
Course Number	**Title**	**Hours**	**Course Number**	**Title**	**Hours**
PHYS 2426	University Physics II	4	PHYS 2326	Univ. Physics II *(Lab is not required for Mechanical Engineering.)* and Univ. Phys. II Lab	4 (3+1)
MATH 2414	Calculus II	4	MATH 2414	Calculus II	4
MATH 2415	Calculus III	4	MATH 3415	Calculus III *(Math elective in Architectural Engineering and Civil Engineering; not required for Environmental*	4

				Engineering and Natural Gas Engineering.)	
MATH 2420	Differential Equations	4	MATH 3320	Differential Equations	3

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C. STC courses meeting requirements for specific engineering degrees at TAMUK

The STC courses listed below fulfill the corresponding TAMUK courses. There are a few instances – because of course content or a co-requisite requirement – in which a combination of STC courses (or a single STC course) with more credit hours is used to satisfy a TAMUK course, thus causing the STC student to take more credits than their peers at TAMUK. The student must decide (ideally with the advice of his/her STC academic advisor and the TAMUK College of Engineering Academic Advisor) if this is in his/her best interest. STC students always have the option of completing these courses at TAMUK rather than STC to avoid accumulating the extra credit hours.

STC Equivalents			**TAMUK BS Engineering Courses**		
Course Number	**Title**	**Hours**	**Course Number**	**Title**	**Hours**
Architectural Engineering					
BIOL 1406 or GEOL 1403	Biology for Science Majors I or Physical Geology	4	BIOL 1306 or GEOL 1303	General Biology I or Physical Geology *(science elective; select one)*	3

ENGR 1304	Engineering Graphics	3	AEEN 1310	Computer-Based Graphics and Design I	3
ENGR 2301	Statics	3	CEEN 2301	Mechanics I	3
Chemical Engineering					
BIOL 1406	Biology for Science Majors I	4	BIOL 1306	General Biology I	3
CHEM 1412	General Chemistry II	4	CHEM 1312 and CHEM 1112	General Inorganic Chemistry II and General Inorganic Chem. II Lab	4 (3+1)
CHEM 2423	Organic Chemistry I	4	CHEM 3323 and CHEM 3123	Organic Chemistry I and Organic Chemistry I Lab	4 (3+1)
CHEM 2425	Organic Chemistry II	4	CHEM 3325 and CHEM 3125	Organic Chemistry II and Organic Chemistry II Lab	4 (3+1)
COSC 1436	Programming Fundamentals I (STC Core Curriculum course)	4	CSEN 2303	Introduction to Computing Using Visual Basic and Excel	3
Civil Engineering					
BIOL 1406 or GEOL 1403	Biology for Science Majors I (4) or Physical Geology (4)	4	BIOL 1306 or GEOL 1303	General Biology I or Physical Geology *(science elective; select one)*	3
ENGR 1304	Engineering Graphics	3	AEEN 1310	Computer-Based Graphics and Design I	3
ENGR 2301	Statics	3	CEEN 2301	Mechanics I	3
Electrical Engineering					
COSC 1436	Programming Fundamentals I (STC Core Curriculum course)	4	CSEN 2304	Introduction to Computer Science	3
ENGR 2301 and ENGR 2302	Statics (3) and Dynamics (3)	6 (3+3)	MEEN 2355	Statics and Dynamics of Rigid Bodies	3

ENGR 2405	Electrical Circuits I	4	EEN 2323	Network Analysis I	3
ENGR 2406	Digital Systems Engineering I	4	EEEN 2340	Digital Logic Design	3
Environmental Engineering					
BIOL 1406	Biology for Science Majors I	4	BIOL 1306	General Biology I	3
CHEM 1412	General Chemistry II	4	CHEM 1312 and CHEM 1112	General Inorganic Chemistry II and General Inorganic Chem. II Lab	4 (3+1)
CHEM 2423	Organic Chemistry I	4	CHEM 3323 and CHEM 3123	Organic Chemistry I and Organic Chemistry I Lab	4 (3+1)
COSC 1436	Programming Fundamentals I (STC Core Curriculum course)	4	EVEN 2304	Computer Methods for Environmental Engineers	3
ENGR 2301 and ENGR 2302	Statics (3) and Dynamics (3)	6 (3+3)	MEEN 2355	Statics and Dynamics of Rigid Bodies	3
Mechanical Engineering					
ENGR 1304	Engineering Graphics	3	MEEN 1310	Computer Based Graphics and Design I	3
ENGR 2301	Statics	3	CEEN 2301	Mechanics 1	3
ENGR 2302	Dynamics	3	MEEN 2302	Mechanics II	3
Natural Gas Engineering					
CHEM 1412	General Chemistry II	4	CHEM 1312 and CHEM 1112	General Inorganic Chemistry II and General Inorganic Chem. II Lab	4 (3+1)
CHEM 2423	Organic Chemistry I	4	CHEM 3323 and CHEM 3123	Organic Chemistry I and Organic Chemistry I Lab	4 (3+1)

GEOL 1403	Physical Geology	4	GEOL 1303 and GEOL 1103	Physical Geology and Physical Geology I Lab	4 (3+1)
ENGR 2301 and ENGR 2302	Statics (3) and Dynamics (3)	6 (3+3)	MEEN 2355	Statics and Dynamics of Rigid Bodies	3