

**ARTICULATION AGREEMENT
BETWEEN
METROPOLITAN COMMUNITY COLLEGE
AND THE
UNIVERSITY OF MISSOURI**

Associate in Engineering to a Bachelor of Science in Mechanical Engineering

OVERVIEW:

This formal program articulation agreement is made and entered into by the University of Missouri, hereinafter referred to as MU, and the Junior College District of Metropolitan Kansas City, Missouri, hereinafter referred to as MCC. By this agreement MCC and MU express a shared commitment to increasing opportunities for student access to and success in higher education. By clarifying transfer policies and procedures which assure articulation between programs, the institutions seek to assist students in making a seamless transfer from the associate to the baccalaureate degree.

PURPOSE:

This agreement provides students who have earned an **Associate in Engineering** at MCC the opportunity to complete a **Bachelor of Science in Mechanical Engineering** at MU. Any MCC student who has earned an Associate in Engineering is guaranteed that MU will accept designated freshman and sophomore credits and will apply such to a Bachelor of Science in Mechanical Engineering in a manner consistent with the treatment of native students.

CONDITIONS OF TRANSFER:

Section I: Admissions and Matriculation

MCC students maintaining continuous enrollment under this agreement will be afforded the same treatment and protection as MU native students enrolled under a specific catalog. Criteria for admissions to the Bachelor of Science in Mechanical Engineering will be based on the catalog year the student enters MU.

Criteria for acceptance into MU for transfer students is based upon their past academic performance and the admission requirements for the Bachelor of Science in Mechanical Engineering degree.

MCC, upon request of students, will provide verification of completed courses to MU through its Admissions Office.

The transcripts of students transferring from MCC will be evaluated by the Admissions Office.

Transfer students from MCC will have access to financial aid and student services on the same basis as native students.

Minimum grade standards for academic progress and graduation from MCC will be subject to no further review by MU. Similarly, minimum grade standards for admission, academic progress, and graduation from Mechanical Engineering at MU will not be subject to review by MCC. MU will apply the same academic progress and graduation standards to MCC transfer students as those applicable to native students at MU.

Section II: Transfer of Credit and Admission to Degree Program

While there is no maximum number of credit hours that can be transferred by a student from MCC to MU, 30 of the last 36 hours of credit must be completed with MU authored courses.

Of the courses completed through this articulation agreement, 58 credits from MCC will transfer to MU toward the Bachelor of Science in Mechanical Engineering. Nine additional hours taken at MCC are required to complete the Associate in Engineering degree.

Transfer students from MCC who have completed the Associate in Engineering, upon acceptance to the Bachelor of Science in Mechanical Engineering program at MU, will have junior standing at MU.

Section III: Program Plan

Students falling under this program articulation agreement will be responsible for successful completion of the following requirements.

Metropolitan Community College

Associate in Engineering

(Other course options may be available with consultation with an MU Mechanical Engineering advisor.)

<u>Semester 1</u>	<u>Credits</u>	<u>Semester 2</u>	<u>Credits</u>
MATH 180 Analy Geom & Calc	5	Math 190 Analy Geom & Calc II	5
CHEM 111 Gen College Chem I	5	ENGL 102 Comp & Rdg II	3
HIST 120 US History to 1865		CSIS 123 Prog Fund	
or HIST 121 US History Since 1865	3	or ENGR 104 Program for Engr & Sci	3
ENGL 101 Comp & Rdg I	3	ENGR 113 Engr Dsgn Microcomp App	3
ENGR 101 Intro to the Profession	1	SPDR 100 Fund of Speech	3
Total	17	Total	17

<u>Semester 3</u>	<u>Credits</u>	<u>Semester 4</u>	<u>Credits</u>
MATH 210 Analy Geom & Calc III	5	MATH 230 Diff Equations	3
PHYS 220 Engineering Physics I	5	PHYS 221 Engineering Physics II	5
POLS 135 Intro to Political Science		ENGR 230 Dynamics	3
or POLS 136 Intro to Am National Politics		ENGR 240 Mechanics of Materials	3
or POLS 137 Intro to State & Local Politics	3	*MUSI 108 Music Appreciation	
ENGR 229 Statics	3	or PHIL 100 Intro to Philosophy	3
Total	16	Total	17
		TOTAL CREDITS	67

*Course is not required for the AE degree but it is recommended to take this course at MCC to reduce the course requirements at MU for completion of the BS ME degree.

Total credits for Associate in Engineering at Metropolitan Community College: 64

Additional credits at MCC: 3

Total credits at MCC: 67 (58 hours will apply toward the BS ME degree)

University of Missouri
Bachelor of Science in Mechanical Engineering

<i>Semester 5</i>	<i>Credits</i>	<i>Semester 6</i>	<i>Credits</i>
MAE 2100 Computer Programming	2	MAE 3100 Comput Methods for Engr Dsgn	4
STAT 4710 Intro to Mathematical Statistics or IMSE 2110 Prob & Stat for Engineers	3	MAE 3900 Mechanical Design I	3
ENGR 2100 Circuit Theory for Engineers	3	MAE 4300 Heat Transfer	3
ENGR 2300 Engineering Thermodynamics	4	ENGR 1110 Solid Modeling for Engr Design	1
MAE 3200 Engineering Materials (WI)	3	IMSE 2710 Engineering Economic Analysis	3
MAE 3400 Fluid Mechanics	3	*Art/Humanity	3
Total	18	Total	17

<i>Semester 7</i>	<i>Credits</i>	<i>Semester 8</i>	<i>Credits</i>
MAE 3600 Dynamic Systems and Control	3	*Social/Behavioral Science	3
MAE 3800 Instrum & Measurements Lab	3	MAE 4980 Senior Capstone Design	3
MAE 4500 Manufacturing Methods	3	Technical Elective	3
MAE 4800 Thermal and Fluid Science Lab	3	MAE Elective	3
MAE 4900 Mechanical Design II	3	MAE Elective	3
MAE Elective	3		
Total	18	Total	15
		TOTAL CREDITS	68

*One art/humanity or social/behavioral science course must be 2000-level or above and one course must be Writing Intensive.

Total credits required for Bachelor of Science in Mechanical Engineering: 126

Additional credits required for Associate in Engineering Degree: 9

Total credits to graduate: 135

TERMS OF AGREEMENT:

This agreement is made and entered into in the academic year 2011-2012 and remains in force unless changed in writing by mutual agreement of both parties. The agreement may be amended at any time with the approval of both parties and is subject to regular review to assure currency with the respective degree requirements. Should either party desire to discontinue this agreement, advance notification of two years will be required.

SIGNATURES:

The Junior College District of Metropolitan Kansas City, Missouri and the University of Missouri enter into this program articulation agreement leading from the Associate in Engineering to the Bachelor of Science in Mechanical Engineering degree by the affixing of signatures of the chief executive officers of both institutions.

James E. Thompson, Ph.D.
Dean, College of Engineering
University of Missouri

Date

Brady J. Deaton, Ph.D.
Chancellor
University of Missouri

Date

Mark S. James
Chancellor
Metropolitan Community College

Date