ARTICULATION AGREEMENT BETWEEN CROWDER COLLEGE AND THE UNIVERSITY OF MISSOURI

OVERVIEW:

This formal program articulation agreement is made and entered into by the University of Missouri, hereinafter referred to as MU, and Crowder College hereinafter referred to as Crowder. By this agreement Crowder 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 of Science in Pre-Engineering** at Crowder the opportunity to complete a **Bachelor of Science in Electrical Engineering** at MU. Any Crowder student who has earned an Associate of Science in Pre-Engineering is guaranteed that MU will accept designated freshman and sophomore credits and will apply such to a Bachelor of Science in Electrical Engineering in a manner consistent with the treatment of native students.

CONDITIONS OF TRANSFER:

Section I: Admissions and Matriculation

Crowder 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 Electrical 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 Electrical Engineering degree.

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

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

Transfer students from Crowder 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 Crowder will be subject to no further review by MU. Similarly, minimum grade standards for admission, academic progress, and graduation from Electrical Engineering at MU will not be subject to review by Crowder. MU will

apply the same academic progress and graduation standards to Crowder 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 Crowder 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, 50 hours will transfer to MU toward the Bachelor of Science in Electrical Engineering. 15 additional hours taken at Crowder are required to complete the Associate of Science in Pre-Engineering degree, for a total of 65 hours completed at Crowder.

Section III: Program Plan

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

Crowder College Associate in Science

<u>Crowder Course</u>	<u>Credits</u>	MU Equivalent	<u>Credits</u>
Semester 1			
MATH 150: Calculus I, part I	2	MATH 1500A	2
CHEM 111: General Chemistry I	5	CHEM 1310 & CHEM 1320	5
PLSC 103: National, State, Local Govt.		POL SC 1100	
or PLSC 104: Nat., State, Local Govt. Hnrs.		or POL SC 1100	
or HIST 106: United States History I	3	or HIST 1100	3
ENGL 101: English Composition	3	ENGLSH COMP1	3
*COLL 101: College Orientation	1	MISC ORIEN	1
Humanities (see list 1)	3	Humanity/Fine Arts	3
Total	17		17
Semester 2			
MATH 160: Calculus I, part II	3	MATH 1500B	3
ECON 201: Principles of Economics I		ECON 1014	
or ECON 202: Principles of Economics II	3	OR ECON 1015	3
ENG 102: Advanced English Composition*	3	ENGLSH 1000	3
Social Science (see list 2)	3	Social Science	3
*Technical Elective	3		3
Total	15		15
Semester 3			
MATH 201: Calculus II	5	MATH 1700	5
PHYS 190: General Physics I	5	PHYS 2750	5
*COMP 111: Intro to Computer Science	4	CMP SC 1040	3
*Technical Elective	3		3
Total	17		16
Semester 4			
MATH 202: Calculus III	5	MATH 2300	3
MATH 210: Differential Equations	3	MATH 4100	3
PHYS 210: General Physics II	5	PHYS 2760	5
PHYS 250: Statics	3	ENGR 1200	3
Total	16		14
TOTAL CREDITS	65		

Courses for list 1 include:		Courses fo	Courses for list 2 include:		Technical Elective options include:	
ART	101	ECON	201, 202	CHEM	112, 201	
ENGL	109, 120, 125	HIST	101, 102, 106, 107	DRFT	115	
HUM	102, 103	PLSC	103, 104	Alternative E	nergy Courses	
MUSC	101	PSYC	101			
PHIL	101, 110, 121, 201, 202	SOC	101			
SPAN	101					
TA	205					

^{*}ENGL 101, COLL 101, CMP 111 and the technical electives are required for the AS degree but to not apply toward the BS ME at MU; only 3 hours of MATH 202 apply toward the BS EE degree.

Total credits for Associate of Science in Pre-Engineering at Crowder College: 65 (51 credits will apply toward the BS EE degree)

University of Missouri Bachelor of Science in Electrical Engineering

9 semester plan

<u>Semester 5</u>	<u>Credits</u>	Semester 6	<u>Credits</u>
ECE 1000: Intro to ECE	2	CMP SC 1050: Alg. Design and Prog. I	3
ECE 1210: Intro to Logic Systems	3	ECE 3410: Electronic Circuits and Signals	4
ECE 2100: Circuit Theory I	4	ECE 3810: Circuit Theory II	4
ENGINR 1200: Statics & Elem. Str. of Mat.		ENGINR 1200: Statics & Elem. Str. of Mat.	
or ENGINR 2300: Engr. Thermodynamics		or ENGINR 2300: Engr. Thermodynamics	
or IMSE 2710: Engineering Econ Analysis	3	or IMSE 2710: Engineering Econ Analysis	3
*Humanities	3	*Humanities	3
Total	15	Total	17

Semester 7	<u>Credits</u>	Semester 8	<u>Credits</u>
ECE 3830: Trans. Anal. of Sig. and Lin. Sys.	3	ECE 3110: ECE Projects Lab	3
ECE 3510: Electromagnetic Fields	3	ECE 3610: Semiconductors and Devices	3
ECE 3210: Microprocessor Engineering	4	ECE or CS 3000+, or 2000+ Math/Sci/Engr	3
ECE or CS 3000+, or 2000+ Math/Sci/Engr	3	ECE 4XXX: Senior Lecture/Lab Course	4
STAT 4710: Intro to Mathematical Statistics	3	ECE 4XXX: Tech Elective Course	3
Total	16	Total	16

Semester 9	<u>Credits</u>
ECE 4970: Senior Capstone Design I (WI)	3
ECE or CS 3000+, or 2000+ Math/Sci/Engr	3
ECE or CS 3000+, or 2000+ Math/Sci/Engr	3
ECE 4XXX: Tech Elective Course	3
ECE 4XXX: Tech Elective Course	3
Total	15
TOTAL CREDITS	79

^{*} One humanities course must be 2000-level or above and one must be writing intensive.

Total Credits required for Bachelor of Science in Electrical Engineering: 126 Additional Hours required for Associate of Science in Pre-Engineering: 18

Total Credits to graduate: 144

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:

Crowder College and the University of Missouri enter into this program articulation agreement leading from the Associate in Engineering to the Bachelor of Science in Electrical 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
Alan D. Marble, Ph.D. President Crowder College	 Date