

Articulation Agreement
Between
Wayne State University & Macomb Community College
Linking MCC's
Associate of Science Degree (AS)
With WSU's
Bachelor of Science in Mechanical Engineering (BSME)

This agreement made this 1st day of June, 2016 is by and between Wayne State University (WSU) and Macomb Community College (MCC).

Wayne State University and Macomb Community College wish and intend by this Agreement to set forth the terms and conditions of engaging in an educational program, to facilitate the transfer of students who earn an Associate of Science Degree (AS) and Pre Engineering Program to complete a Bachelor of Science in Mechanical Engineering Degree (BSME).

Article I
Agreement on Program Integrity

WSU and *MCC* will maintain the integrity of their separate programs and enter into this agreement as equal and cooperating partner institutions.

Article II
Agreement on Principle

This agreement between *WSU* and *MCC* is intended to provide a smooth and seamless curriculum transition for Macomb students that transfer to Wayne State to earn a Bachelor of Science in Mechanical Engineering (BSME). The agreement is designed for students who follow a prescribed plan of study leading to an Associate of Science Degree (AS) at Macomb. The credits transferred from the Associate Degree Program, as outlined in the appendices to this document, will be included in the total credit hours required for the WSU baccalaureate degree. All other standard admission, curriculum, and graduation requirements of MCC and WSU must also be met. In addition, the WSU College of Engineering requires that all courses transferred from other institutions to have a grade C or better.

The curriculum outlined in Appendix A assumes that students complete requirements to receive the MTA endorsement. Students who do not receive this endorsement must still satisfy all WSU general education requirements. This curriculum also assumes that each student completes a math/science sequence at MCC that totals a minimum of 32 credit hours, a requirement for ABET accreditation. If the associated credit hours at MCC are reduced or if a student transfers in courses that result in fewer than 32 credit hours, then an additional science course (BIOL 1000/BIO 1510 recommended) will be required.

Article III
Agreement on Program Articulation

MCC and WSU agree that any student, who has earned the aforementioned associate degree in the approved program, may transfer the credits from their program to the College of Engineering at WSU toward the Bachelor of Science in Mechanical Engineering Degree (BSME).

Article IV
Agreement on Student Support

WSU and MCC agree to track the progress and success of articulation participants. Responsibility for this tracking rests with the College of Engineering and the Department of Mechanical Engineering at Wayne State. A mechanism will be developed to track and report on MCC Students' use of this Articulation Agreement.

Article V
Agreement on Communication

MCC and WSU agree to cooperate in communication with each other and with common and respective publics concerning the established relationships between the two institutions. Communication will include the development of various kinds of publications and promotions to inform those who might benefit from the opportunities provided by this articulation agreement. The appropriate faculty and staff at both institutions will share the information in this agreement with interested and qualified students. Both institutions will provide academic counseling to students and prospective students. Joint efforts in marketing the program and student recruitment will be pursued.

WSU and MCC further agree to communicate annually concerning curriculum changes that may affect the agreed upon program relationship. Responsibility for communication related to this agreement will rest with the individuals appointed under Article VI.

Article VI
Maintenance and Review Body Procedures

Each institution will appoint one or more faculty administrators to act as agents for the implementation of this agreement, and to communicate changes to respective faculty members, advisors, and others to whom the information is pertinent. Responsibility for the oversight of this agreement rests with the Office of Articulation & Transfer at MCC and with the Chair of Mechanical Engineering at WSU.

Article VII
Agreement Regarding Independent Relationship

In the performance of their respective duties and obligations under this Agreement, each party is an independent contractor and neither is the agent, employee, or servant of the other, and each is responsible only for its own conduct. Each institution is solely responsible for the development and design of its own curriculum. Changes on the part of either party will/may necessitate review of this document.

Article VIII
Agreement Not to Discriminate

Each party covenants and agrees that it does not discriminate on the basis of race, creed, color, age, sex, or national origin and it complies with the Americans with Disabilities Act of 1990, and that it does not discriminate on the basis of "physical or mental handicap" except where there exists a bona fide academic qualification.

Each party shall be separately responsible for compliance with all federal and state laws, including nondiscrimination laws and all applicable sections of the Michigan Persons with Disabilities Civil Rights Act. Illegal discrimination by either party may be considered a material breach of this Agreement.

Article IX
Entire Agreement

This Agreement constitutes the entire agreement between the parties, and all prior discussions, agreements, and understandings, whether verbal or in writing, is hereby merged into this Agreement.

Article X
Amendment/Modification or Termination Provision

MCC and WSU agree to the terms of this Agreement. No amendment or modification to this Agreement, including any modification or amendment of this paragraph, shall be effective unless the same is in writing and signed by all parties or their Successors.


This cooperative arrangement will be in effect immediately upon signature and will be subject to review for continuance after a period of three (3) years. Renewal will be for three years unless either party notifies the other in writing by December 31 of the year preceding the last year of the agreement of their intention to renegotiate or of non-renewal of this agreement.

This Agreement is effective immediately upon program approval by WSU and MCC and shall remain in effect unless terminated by either party providing six months advance written notice. In the event that this Agreement must be terminated, all students currently enrolled in the program shall be allowed to complete the program as described.

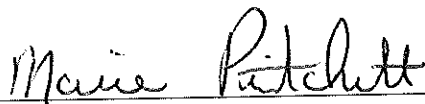
Articulation Agreement
Between
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Linking MCC
Associate of Science Degree (ABS)
With Wayne State's
Bachelor of Science in Mechanical Engineering (BSME)

Signatories for Wayne State University:

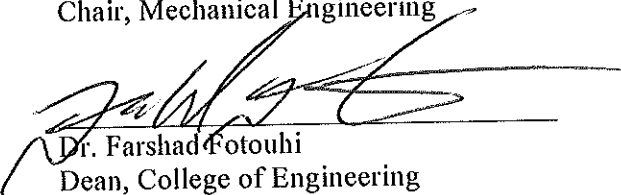
Signatories for Macomb Community College:




Dr. Nabil Chalhouh
Chair, Mechanical Engineering



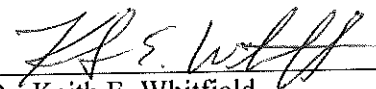
Dr. Marie Pritchett
Dean, Arts & Sciences



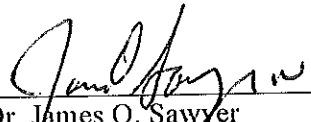
Dr. Farshad Fotouhi
Dean, College of Engineering



Mr. Joseph Petrosky
Dean, Engineering & Advanced Technology



Dr. Keith E. Whitfield
Provost & Senior V.P. for Academic Affairs



Dr. James O. Sawyer
Provost & Senior V.P., Learning Unit

Date: June 13, 2016

Date: 10-17-16

FORM APPROVED
NG
06 JUN 2016
**OFFICE OF THE
GENERAL COUNSEL**



WSU Program: BS in Mechanical Engineering
School/College: Engineering
Contact (name/email/phone): Nabil Chalhoub, chalhoub@eng.wayne.edu, 313-577-3843

Partner Institution: Macomb Community College
Partner Program: AS Pre-Engineering
Contact (name/email/phone): Dr. Joseph Petrosky, petroskyj@macomb.edu, Dr. Donna Petras, petrasd@macomb.edu, 586.263.6266

What benefit(s) does this articulated program provide to students beyond the standard transfer plan? (Examples: > 64 credits accepted as CC transfer; additional course substitutions beyond the transfer table; guaranteed admission to professional program if student meets specified minimum requirements)
This program commits Wayne State to offering the courses necessary to complete the BSME degree at its ATEC center.

What is the minimum portion of this articulated program that must be completed in order for the student to be able to take advantage of the outlined benefit(s)?
Any portion can be applied, following normal transfer policy.

Has this articulated program been evaluated to determine that it still meets the educational objectives of the WSU degree program? Yes No

If yes, describe how this assessment has been completed:
The program includes all ABET requirements, which undergo regular assessment through the processes established by the BSME program.

Has this articulated program been evaluated by the partner institution to confirm that it meets MTA/MACRAO requirements? Yes No

If no, what additional general education requirements must still be met?

Wayne State University Approval Process (enter date complete and forwarded)

- 1. **Department Chair** 4/1/15
Meets Program requirements
- 2. **School/College Dean**
Meets School/College requirements
- 3. **Transfer Student Success Center** 4/28/15
Meets University requirements
- 4. **Registrar**
Meets HLC requirements



Transfer Student
Success Center

**Articulation Agreement
Submission Cover Sheet**

*Documents then forwarded to General Counsel for review of legal framework
and to Provost for final signature.*

**Articulated Program - Macomb Community College AS Baccalaureate Studies to
State University BS Mechanical Engineering**

Wayne

		Macomb Community College			Credit Hours In	Wayne State University			
		Min Credits Taken at		Articulated	WSU Credit	Equiv WSU			
		MCC		Program*	Hours	Credits**	Course No	Course Name	
University General Education	MATH 1760	Calculus I (4)	4				MAT 2010		
	CHEM 1170	Principles of Chemistry (4)	4				CHM 1225/1230		
	PHYS 2220	Analytical Physics I (5)	5				PHY 2175		
	ENGL 1180 or 1210	Comm or Comp I (3-4)	3				ENG 1020		
	PHI 2120	Professional Ethics (3)	3				PHI 1120	University Gen Ed Requirements Under MTA	
	2nd Humanities Course	From MTA List (3 cr)	3	28		32			
	ECON 1160 or 1170	Economics (3)	3				ECO 2010/2020		
	2nd Social Sciences Course	From MTA List (3 cr)	3						
	ENGL 1190 or 1220	Comm or Comp II (3-4)	3		3	3	ENG 3050	Tech Comm. Report Writing I (IC)	
	Commun.				3	3	3	ENG 3060	Tech Comm. Presentations (OC)
School/College Requirements	PRDE 2100 or 2000 or ENGR 1000	Design Intent and Analysis (3) OR Product Development Process (3) OR Intro to Engineering (3)	3	3		3	BE 1200	Engineering Design	
				3	3	3	BE 1300	Science of Engineering Materials	
				1	1	1	BE 1310	Science of Engineering Materials Lab	
				3	3	3	BE 1500	Int to Program. And Computing (MATLAB)	
				3	3	3	BE 2100	Probability/Statistics Engg Applications	
	MATH 1770	Calculus II	4	4		4	MAT 2020	Calculus II	
	MATH 2760	Calculus III	4	4		4	MAT 2030	Calculus III	
	MATH 2770	Diff equations	3	3		4	MAT 2150	Differential Equations +	
	MATH 2000	Linear Algebra	3	3		3	BIO 1510	Basic Life Mechanisms	
	BIO 1000	General Biology I	3	3		4	PHY 2185	General Physics II	
PHYS 2230	Analytical Physics II	5	5						
Major Requirements	BRCG 1140 or PRDE 1400	Computer-aided Drafting (4) OR Unigraphics Int. Solid Modeling (3)	3	3		2	ME 2050	Introduction to Computer Aided Mechanical Drafting	
				4	4	4	ECE 3300	Int. Elect. Circuits	
				3	3	3	ME 2200	Thermodynamics	
				3	3	3	ME 2410	Statics	
				3	3	3	ME 2420	Mech. Of Materials	
				2	2	2	ME 2500	Numerical Methods	
				4	4	4	ME 3300	Fluid Mechanics	
				3	3	3	ME 3400	Dynamics	
				3	3	3	ME 3450	Manufacturing Processes	
				4	4	4	ME 4150	Design of Machine Elementsd	
				4	4	4	ME 4210	Heat Transfer	
				4	4	4	ME 4300	Thermal Fluid Systems Design	
				4	4	4	ME 4410	Vibrations	
				4	4	4	ME 4420	Controls Dyn. Systems	
				4	4	4	ME 4500	ME Design II (WI)	
				4	4	4	ME 5000 Level	ME 5000 level elective	
				4	4	4	ME 5000 Level	ME 5000 level elective	
	Total Credits			129		129			
MCC Credits		56							
Wayne State Credits					73				

* Credit hours are based on the listed institution where the course is taken.

** If all coursework is taken at Wayne State

NOTE: Students completing this articulated program are not required to take BIO 1510 as their LS requirement is satisfied through the MTA and they meet the ABET requirement for 32 math/science credits through the combination of mathematics, chemistry, and physics.