

Articulation Agreement
Between
Wayne State University & Washtenaw Community College
Linking Washtenaw's
Division of Advanced Technologies and Public Service Careers
With Wayne State's
Division of Engineering Technology

This agreement is made between Wayne State University (*WSU*) and Washtenaw Community College (*WCC*).

Wayne State University and Washtenaw 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 Applied Science Degree (AAS) or enrolled in WCC in the Automation Technology Program (AAS-APATEC) or Heating, Ventilation, Air Conditioning and Refrigeration Program (AAS-APHVCR) to complete a Bachelor of Science Degree in Electric/Electronic Engineering Technology (BS-EET), Electromechanical Engineering Technology (BS-EMT), or Mechanical Engineering Technology (BS-MCT).

Article I
Agreement on Program Integrity

WSU and *WCC* 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 *WCC* is intended to provide a smooth and seamless curriculum transition for Washtenaw students that transfer to Wayne State to earn a bachelor degree from the Division of Engineering Technology. The agreement is designed for students who follow a prescribed plan of study leading to an Associate of Applied Science Degree. 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 *WCC* and *WSU* must also be met.

Article III
Agreement of Program Articulation

WCC and *WSU* agree that any student who has earned the aforementioned Associate of Applied Science degree in any of the approved programs may transfer the credits from their program to the College of Engineering at *WSU* toward the *BS-EET*, *BS-EMT*, or *BS-MCT*, as outlined in the attached appendices.

The agreement specifically allows the transfer of up to eighty-seven (87) credits (depending upon bachelor degree selected) from *WCC* to *WSU*. This is beyond the currently stipulated sixty-

four (64) credits, and is contingent upon the approval of the WSU Board of Governors. The purpose of allowing WCC students to transfer additional credit is to enable them to complete all lower division courses and general education requirement for the BS program at *WCC*.

The Bachelor's degree requirements for students who follow this articulation agreement are outlined in Attachment A.

Article IV
Agreement on Student Support

WSU and *WCC* agree to track the progress and success of articulation participants. Responsibility for this tracking rests with the College of Engineering and Division of Engineering Technology at Wayne State. A mechanism will be developed to track and report on Washtenaw Students' use of this Articulation.

Article V
Agreement on Communication

WCC 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 to inform those who might benefit from the opportunities provided by this articulation agreement. The appropriate faculty and staff in 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 recruiting will be pursued.

WSU and *WCC* 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 and Transfer at *WCC* and with the Chair of the Division of Engineering Technology of the College of 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 bonafide 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 Handicapper's 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, are hereby merged into this Agreement.

Article X
Amendment/Modification/ or Termination Provision

WCC 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 *WCC* 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.

Signatories for Wayne State University:

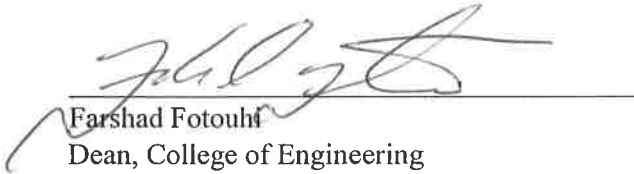
Signatories for Washtenaw Community College:



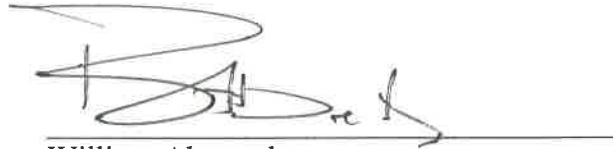
Margaret E. Winters
Provost and Senior V.P. for Academic Affairs



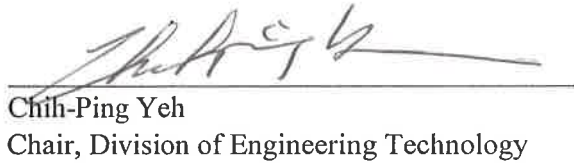
Rose Bellanca
President



Farshad Fotouhi
Dean, College of Engineering



William Abernethy
Vice President for Instruction



Chih-Ping Yeh
Chair, Division of Engineering Technology



Marilyn Donham,
Dean, Advanced Technologies and Public
Service Careers



Thomas Penird,
Chair, Industrial Technologies

Date: _____

Date: 8/13/14

FORM APPROVED
18
01 MAY 2014
OFFICE OF THE
GENERAL COUNSEL

ATTACHMENT A

Transfer from Washtenaw Community College's Associate of Applied Science in Automation Technology (AAS-APATEC) to Wayne State University's Bachelor of Science in Electrical/Electronic Engineering Technology (BS-EET)

Washtenaw CC's AAS-APATEC students can transfer equivalent courses as listed in the following table to earn up to 86 credits for the BS-EET degree:

		WSU BS-EET Curriculum		Washtenaw CC Transfers
		Course	Cr	
Math & Science	ET 2160	(CL) Computer Applications for ET	2	CPS 171
	MAT 1800	(MC) Elementary Functions	4	MTH 180
	MAT 3430	Appl Differential & Integral Calculus	4	MTH 186 or 192
	MAT 3450	Appl Calculus & Diff Equations	4	MTH 286 or 295
	CHM 1020	(PS) General Chemistry	4	CEM 105
	PHY 2130,1	(LP) General Physics	4	PHY 111
	PHY 2140,1	(LP) General Physics	4	PHY 112
Lower Division Technical Courses	EET 2000	Electrical Principles	3	ELE 111
	EET 2100	Principle of Digital Design	3	ELE 284
	EET 2720	Microprocessor Fundamentals	3	
	EET	Lower Division Technical	21	Other APATEC.ILEC related technical courses
Upper Division Technical Courses	E T 3850	Reliability & Engineering Statistics	3	
	E T 3870	Engineering Economic Analysis	3	
	E T 5870	Project Management	3	
	EET 3100	Advanced Digital Design	3	
	EET 3150	Network Analysis	4	
	EET 3180	Analog Electronics	4	
	EET 3500	Electrical Machines & Power Sys	3	
	EET 3720	Micro & Programmable Controllers	3	
	EET 3300	Applied Signal Processing	3	
	EET 4200	Control Systems	4	
	EET	Upper Division Tech Elective	3	ROB 224
	EET	Upper Division Tech Elective	3	
	E T 4999	(WI/ST) Senior Project	3	
	General Education Courses		(BC) Basic Composition	3
		(IC) Intermediate Writing	3	
		(OC) Oral Communication	3	
		(HS) Historical Studies	3	
		(AI) American Society & Institutions	3	
		(SS) Social Science	3	
		(FC) Foreign Culture	3	
		(VP) Visual & Performing Arts	3	
		(PL) Philosophy & Letters	3	
		(LS) Life Science	3	
	(CT) Critical Thinking Exam	0		
Total Credit required for BS-EET: 128				Total WCC transfer credit applied toward BS-EET: 86
Courses to satisfy	English Composition	(BC) ENG 1020 and (IC) ENG 2XXX	7	ENG 111 and 226

MACRAO	Social Science	Choose 3 courses in more than one discipline Covers (AI), (FC), (HS), & (SS)	8-9	ANT 201, 202, 205 ECO 110, 211, 222, 280 GEO 101 HST 121, 122, 123, 235, 240, 251, 260 PLS 112, 150, 211, 220, 250, 260 SOC 100, 155, 202, 205, 207, 220, 225, 230, 250
	Science & Math	Fulfilled by courses above (LS) & (PS)	8-9	
	Humanities	(OC) COM 1010 Plus, choose 2 additional courses – Covers (CT), (PL) & (VP)	8-9	COM 101 ART 130 DAN 180 ENG 140, 160, 170, 181, 200, 211, 212, 213, 214, 222, 223, 224 HUM 101, 102, 103, 120, 145, 146, 150, 160, 175, 185 MUS 180, 185 PHL 101, 123, 200, 205, 240, 244, 245, 250

Transfer from Washtenaw Community College's Associate of Applied Science in Automation Technology (AAS-APATEC) to Wayne State University's Bachelor of Science in Electromechanical Engineering Technology (BS-EMT)

Washtenaw CC's AAS-APATEC students can transfer equivalent courses as listed in the following table to earn up to 84 credits for the BS-EMT degree:

		WSU BS-EMT Curriculum		Washtenaw CC Transfers
		Course	Cr	
Math & Science	ET 2160	(CL) Computer Applications for ET	2	CPS 171
	MAT 1800	(MC) Elementary Functions	4	MTH 180
	MAT 3430	Appl Differential & Integral Calculus	4	MTH 186 or 192
	MAT 3450	Appl Calculus & Diff Equations	4	MTH 286 or 295
	CHM 1020	(PS) General Chemistry	4	CEM 105
	PHY 2130,1	(LP) General Physics	4	PHY 111
	PHY 2140,1	(LP) General Physics	4	PHY 112
Lower Division Technical Courses	ET 2140	Computer Graphics	3	
	EET 2000	Electrical Principles	3	ELE 111
	EET 2100	Principle of Digital Design	3	ELE 284
	EET 2720	Microprocessor Fundamentals	3	
	EET	Lower Division Technical	18	Other APATEC.IELC related technical courses
Upper Division Technical Courses	ET 3030	Statics	3	
	ET 3050	Dynamics	3	
	ET 3850	Reliability & Engineering Statistics	3	
	ET 5870	Engineering Project Management	3	
	MCT 3010	Instrumentation	3	
	MIT 3500	Manufacturing Processes Lab	1	
	EET 3720	Micro & Programmable Controllers	3	
	EET 3150	Network Analysis	4	
	EET 3500	Electrical Machines & Power Sys	1	MTT 102
	EET 4200	Control Systems	4	
		Upper Division Tech Elective	3	ROB 224
		Upper Division Tech Elective	3	
		Upper Division Tech Elective	3	
E T 4999	(WI) Senior Project	3		
General Education Courses		(BC) Basic Composition	3	Associate Applied Science degree graduates should take appropriate General Education courses to satisfy WSU Gen Ed requirements, or take additional courses to satisfy MACRAO Agreement. Please consult with Washtenaw CC or Wayne State advisor
		(IC) Intermediate Writing	3	
		(OC) Oral Communication	3	
		(HS) Historical Studies	3	
		(AI) American Society & Institutions	3	
		(SS) Social Science	3	
		(FC) Foreign Culture	3	
		(VP) Visual & Performing Arts	3	
		(PL) Philosophy & Letters	3	
		(LS) Life Science	3	
	(CT) Critical Thinking Exam	0		
Total Credit required for BS-EMT: 128			Total WCC transfer credit applied toward BS-EMT: 84	
Courses to satisfy	English Composition	(BC) ENG 1020 and (IC) ENG 2XXX	7	ENG 111 and 226

MACRAO	Social Science	Choose 3 courses in more than one discipline Covers (AI), (FC), (HS), & (SS)	8-9	ANT 201, 202, 205 ECO 110, 211, 222, 280 GEO 101 HST 121, 122, 123, 235, 240, 251, 260 PLS 112, 150, 211, 220, 250, 260 SOC 100, 155, 202, 205, 207, 220, 225, 230, 250
	Science & Math	Fulfilled by courses above (LS) & (PS)	8-9	
	Humanities	(OC) COM 1010 Plus, choose 2 additional courses – Covers (CT), (PL) & (VP)	8-9	COM 101 ART 130 DAN 180 ENG 140, 160, 170, 181, 200, 211, 212, 213, 214, 222, 223, 224 HUM 101, 102, 103, 120, 145, 146, 150, 160, 175, 185 MUS 180, 185 PHL 101, 123, 200, 205, 240, 244, 245, 250

Transfer from Washtenaw Community College's Associate of Applied Science in Automation Technology (AAS-APATEC) to Wayne State University's Bachelor of Science in Mechanical Engineering Technology (BS-MCT)

Washtenaw CC's AAS-APATEC students can transfer equivalent courses as listed in the following table to earn up to 87 credits for the BS-MCT degree:

	WSU BS-MCT Curriculum		Cr	Washtenaw CC Transfers
	Course			
Math & Science	ET 2160	(CL) Computer Applications for ET	2	CPS 171
	MAT 1800	(MC) Elementary Functions	4	MTH 180
	MAT 3430	Appl Differential & Integral Calculus	4	MTH 186 or 192
	MAT 3450	Appl Calculus & Diff Equations	4	MTH 286 or 295
	CHM 1020	(PS) General Chemistry	4	CEM 105
	PHY 2130,1	(LP) General Physics	4	PHY 111
	PHY 2140,1	(LP) General Physics	4	PHY 112
Lower Division Technical Courses	ET 2140	Computer Graphics	3	
	ET 2200	Engineering Materials	3	AMS 103
	EET 2000	Electrical Principles	3	ELE 111
	MCT	Lower Division Technical	21	Other AAS-APATEC related technical courses
Upper Division Technical Core Courses	ET 3030	Statics	3	
	ET 3050	Dynamics	3	
	ET 3850	Reliability & Engineering Statistics	3	
	ET 3870	Engineering Economic Analysis	3	
	ET 5870	Engineering Project Management	3	
	MCT 3010	Instrumentation	3	
	MIT 3500	Manufacturing Processes Lab	1	MTT 102
		Upper Division Tech Elective	3	ROB 224
		Upper Division Tech Elective	3	
	Upper Division Tech Elective	2		
	E T 4999 (WI) Senior Project	3		
Design Track Courses	MCT3100	Mechanical of Materials	3	
	MCT3410	Kinematic and Dynamics of Machines	3	
	MCT4150	Applied Thermodynamics	3	
	MCT4400	Design of Machine Elements	3	
Energy Track Courses	MCT4150	Applied Thermodynamics	3	
	MCT4180	Fluid Dynamics	3	
	MCT4210	Heat Transfer	3	
	MCT5210	Energy Source and Conversion	3	
Manu-facturing Track Courses	MIT 3520	Manufacturing Processes Lecture	2	
	MIT3600	Process Engineering	3	
	MIT4700	Computer Aided Manufacturing	3	
	MIT4800	Statistical Quality Control	4	
General Education Courses		(BC) Basic Composition	3	Associate Applied Science degree graduates should take appropriate General Education courses to satisfy WSU Gen Ed requirements, or take additional courses to satisfy MACRAO Agreement. Please consult with Washtenaw CC or
		(IC) Intermediate Writing	3	
		(OC) Oral Communication	3	
		(HS) Historical Studies	3	
		(AI) American Society & Institutions	3	
		(SS) Social Science	3	
		(FC) Foreign Culture	3	
	(VP) Visual & Performing Arts	3		

	(PL) Philosophy & Letters	3	Wayne State advisors.	
	(LS) Life Science	3		
	(CT) Critical Thinking Exam	0		
Total Credit required for BS-MCT: 128			Total WCC transfer credit applied toward BS-MCT: 87	
Courses to satisfy MACRAO	English Composition	(BC) ENG 1020 and (IC) ENG 2XXX	7	ENG 111 and 226
	Social Science	Choose 3 courses in more than one discipline Covers (AI), (FC), (HS), & (SS)	8-9	ANT 201, 202, 205 ECO 110, 211, 222, 280 GEO 101 HST 121, 122, 123, 235, 240, 251, 260 PLS 112, 150, 211, 220, 250, 260 SOC 100, 155, 202, 205, 207, 220, 225, 230, 250
	Science & Math	Fulfilled by courses above (LS) & (PS)	8-9	
	Humanities	(OC) COM 1010 Plus, choose 2 additional courses – Covers (CT), (PL) & (VP)	8-9	COM 101 ART 130 DAN 180 ENG 140, 160, 170, 181, 200, 211, 212, 213, 214, 222, 223, 224 HUM 101, 102, 103, 120, 145, 146, 150, 160, 175, 185 MUS 180, 185 PHL 101, 123, 200, 205, 240, 244, 245, 250

Transfer from Washtenaw Community College's Associate of Applied Science in Heating, Ventilation, Air Conditioning and Refrigeration (AAS-APHVCR) to Wayne State University's Bachelor of Science in Mechanical Engineering Technology (BS-MCT)

Washtenaw CC's AAS-APHVCR students can transfer equivalent courses as listed in the following table to earn up to 87 credits for the BS-MCT degree:

	WSU BS-MCT Curriculum		Cr	Washtenaw CC Transfers
	Course			
Math & Science	ET 2160	(CL) Computer Applications for ET	2	CPS 171
	MAT 1800	(MC) Elementary Functions	4	MTH 180
	MAT 3430	Appl Differential & Integral Calculus	4	MTH 186 or 192
	MAT 3450	Appl Calculus & Diff Equations	4	MTH 286 or 295
	CHM 1020	(PS) General Chemistry	4	CEM 105
	PHY 2130,1	(LP) General Physics	4	PHY 111
	PHY 2140,1	(LP) General Physics	4	PHY 112
Lower Division Technical Courses	ET 2140	Computer Graphics	3	
	ET 2200	Engineering Materials	3	AMS 103
	EET 2000	Electrical Principles	3	ELE 111
	MCT	Lower Division Technical	21	Other AAS-APATEC related technical courses
Upper Division Technical Core Courses	ET 3030	Statics	3	
	ET 3050	Dynamics	3	
	ET 3850	Reliability & Engineering Statistics	3	
	ET 3870	Engineering Economic Analysis	3	
	ET 5870	Engineering Project Management	3	
	MCT 3010	Instrumentation	3	
	MIT 3500	Manufacturing Processes Lab	1	MTT 102
		Upper Division Tech Elective	3	HVA 203+205
		Upper Division Tech Elective	3	
	Upper Division Tech Elective	2		
Design Track Courses	E T 4999	(WI) Senior Project	3	
	MCT3100	Mechanical of Materials	3	
	MCT3410	Kinematic and Dynamics of Machines	3	
	MCT4150	Applied Thermodynamics	3	
	MCT4400	Design of Machine Elements	3	
Energy Track Courses	MCT4150	Applied Thermodynamics	3	
	MCT4180	Fluid Dynamics	3	
	MCT4210	Heat Transfer	3	
	MCT5210	Energy Source and Conversion	3	
Manu- facturing Track Courses	MIT 3520	Manufacturing Processes Lecture	2	
	MIT3600	Process Engineering	3	
	MIT4700	Computer Aided Manufacturing	3	
	MIT4800	Statistical Quality Control	4	
General Education Courses		(BC) Basic Composition	3	Associate Applied Science degree graduates should take appropriate General Education courses to satisfy WSU Gen Ed requirements, or take additional courses to satisfy MACRAO Agreement. Please
		(IC) Intermediate Writing	3	
		(OC) Oral Communication	3	
		(HS) Historical Studies	3	
		(AI) American Society & Institutions	3	
		(SS) Social Science	3	
	(FC) Foreign Culture	3		

	(VP) Visual & Performing Arts	3	consult with Washtenaw CC or Wayne State advisors.
	(PL) Philosophy & Letters	3	
	(LS) Life Science	3	
	(CT) Critical Thinking Exam	0	

Total Credit required for BS-MCT: 128			Total WCC transfer credit applied toward BS-MCT: 87
--	--	--	--

Courses to satisfy MACRAO	English Composition	(BC) ENG 1020 and (IC) ENG 2XXX	7	ENG 111 and 226
	Social Science	Choose 3 courses in more than one discipline Covers (AI), (FC), (HS), & (SS)	8-9	ANT 201, 202, 205 ECO 110, 211, 222, 280 GEO 101 HST 121, 122, 123, 235, 240, 251, 260 PLS 112, 150, 211, 220, 250, 260 SOC 100, 155, 202, 205, 207, 220, 225, 230, 250
	Science & Math	Fulfilled by courses above (LS) & (PS)	8-9	
	Humanities	(OC) COM 1010 Plus, choose 2 additional courses – Covers (CT), (PL) & (VP)	8-9	COM 101 ART 130 DAN 180 ENG 140, 160, 170, 181, 200, 211, 212, 213, 214, 222, 223, 224 HUM 101, 102, 103, 120, 145, 146, 150, 160, 175, 185 MUS 180, 185 PHL 101, 123, 200, 205, 240, 244, 245, 250