### **Articulation Agreement Between**

Wayne State University & Macomb Community College (MCC)
Associate of Applied Science (AAS) in Construction Management or
Any Associate Degree (AA, AAS, ABA, AGS or AS)

from Macomb Community College to
Bachelor of Science in Construction Management
at Wayne State University (WSU)

Catalog Year 2019-20

This agreement made this \_\_\_\_\_ day of \_\_\_\_\_, 2019 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 seamless transfer of students who earn an Associate of Applied Science in Construction Management or any Associate of Arts, Associate of Applied Science, Associate of Business Administration, Associate of General Studies, or Associate of Science degree with the Michigan Transfer Agreement endorsement and other specific courses to complete a Bachelor of Science in Construction Management from Wayne State University, College of Engineering.

# Article I Agreement on Program Integrity

Wayne State University and Macomb Community College 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 is intended to provide a smooth and seamless curriculum transition for Macomb Community College students that transfer to Wayne State University to earn a Bachelor of Science degree from the College of Engineering. The agreement is designed for students who follow a prescribed plan of study leading to an Associate of Applied Science in Construction Management or any Associate degree (AA, AAS, ABA, AGS or AS) with the Michigan Transfer Agreement (MTA) endorsement. The credits transferred from the outlined appendices to this document, will be included in the total credit hours required for the Wayne State University baccalaureate degree. All other standard admission, curriculum, and graduation requirements of MCC and WSU must also be satisfied.

# Article III Agreement of Program Articulation

Wayne State University and Macomb Community College agree that any student, who has earned the aforementioned Associate of Applied Science in Construction Management or any Associate (AA, AAS, ABA, AGS or AS) with MTA endorsement, may transfer the credits from their program to the WSU College of Engineering toward the Bachelor of Science (BS) degree.

This agreement specifically allows the transfer of up to seventy-eight (75-78) credits from Macomb Community College to WSU. This is beyond the currently stipulated sixty-four (64) credits that was approved by the WSU Board of Governors. The purpose of allowing students to transfer additional credits is to enable them to complete the Associate of Applied Science in Construction Management with MTA endorsement with a minimal loss of credit and maximize transfer credits toward their BS degree.

The Bachelor's degree requirements for students who follow this articulation agreement are outlined on the Curriculum Guide (Attachment A).

### 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 WSU College of Engineering in conjunction with the WSU Transfer Student Success Center (TSSC).

## Article V Agreement on Communication

WSU and MCC 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 advising to students and prospective students. Joint efforts in marketing the program and student recruiting will be pursued.

Both institution 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 Agreement and Review Body Procedures

Each institution will appoint one or more faculty administrators to act as agents for the implementation of this agreement, and 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 respected academic departments at both institutions.

## Article VII 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 institution 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 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/Modifications/or Terminations Provision

Each institution agrees 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 five (5) years. Renewal will be for five 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 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.

Signatories for Macomb Community College:
Donald Ritzenhein, Ph.D. Provost and Vice President, Learning Unit  Donald Hutchison Dean, Engineering and Advanced Technology
Dean, Engineering and Advanced Technology
Date: 1-28-2020

FORM APPROVED

OI OCT 2019 OFFICE OF THE GENERAL COUNSEL Macomb Community College: Associate of Applied Science (AAS) in Construction Management

Wayne State University: Bachelor of Science (BS) in Construction Management

Articulated Program: Students who have declared this program on their student record are following a formal agreement between Wayne State University and Macomb Community College.

Macomb Community College - Before Transfer

Major Requirements	Minimum 62 Hrs
Semester 1:	
CNST 1100 - Builder's Pre-License 1 - Residential Construction	2
CIVL 2200 - Soils & Foundations	3
DRAD 1010 - Architectural Design 1	3
DRCG 1140 - Interactive Computer Graphics-Introduction to 2D & 3D AutoCAD	4
GEN ED - Group II Satisfies MTA	4
CHEM 1050 - Introduction to General Chemistry Required for WSU's program	7
Semester 2:	
CNST 1150 - Commercial Construction	2
ATTR 1150 - Technical Report Writing	2
CIVL 1050 - Construction Safety Policy & Procedures	3
DRAD 2110 - Applied Building Construction	3
GEN ED - Group III Satisfies MTA	3
ECON 1160 - Principles of Economics 1 Required for WSU's program	
Semester 3:	
GEN ED - Group I.A Satisfies MTA	
ENGL 1180 - Communications 1	3-4
or ENGL 1210 - Composition 1	15.57.139
GEN ED - Group IV satisfies MTA PHIL 2120 - Professional Ethics Required for WSU's program	3
Elective:	4
BLAW 1080 - Business Law 1 *Recommended course to fulfill Business Elective Requirement at WSU	
Semester 4:	
CNST 1160 - Construction Cost Estimating	2
DRAD 2200 - Mechanical & Electrical Systems for Buildings	3
CNST 1030 - Sustainable Building Design & Constructions	3
Semester 5:	
CNST 2600 - Builder's Pre-License 2-Construction Law	2
CLCT 1650 - Systems Design of Heating & Air Conditioning	3
DRAD 2230 - Construction Specifications	3
SURV 1100 - Elementary Surveying	3
Elective: satisfies MTA PSYC 2400 - Industrial-Organizational Psychology *Recommended course to fulfill Business Elective Requirement at WSU	3

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Additional Requirements to be completed at Macomb Community College	Minimum 12 Hrs
MATH 1465 - Accelerated Precalculus Societies MTA	5
ENGL 1190 - Communications 2 Soulsfles MTA	3-4
pr	
ENGL 1220 - Composition 2 settisfies MTA	
PHYS 1180 - College Physics 1 Satisfies MTA	4

General EducationMichigan Transfer Agreement plan*  Students who complete a Michigan Transfer Agreement (MTA or MACRAO) will have met the general education requirements for Wayne State University - Students who do not complete a Michigan Transfer Agreement will have additional requirements. See a Macomb counselor or academic advisor for specific MTA courses and requirements or visit: www.macomb.edu/transfer.	Minimum 30 Hrs
Basic Compostion: ENGL 1180 or ENGL 1210 Met in degree requirements and ENGL 1190, ENGL 1220	
Mathematics1 course: Met if selected in Semester 1, Group II  MATH 1465 - Accelerated Precalculus Required for WSU's program	-
Humanities & Fine Arts2 courses: Met if selected in Semester 3, Group IV  PHIL 2120 - Professional Ethics Required for WSU's program  And 1 additional course from a different subject area: any ARAB, any CHIN, any FREN, any GRMN, any ITAL, any SPAN (except SPAN 1265), ARTT 1620, ARTT 1625, ARTT 2650, ARTT 2660, ENGL 1730, ENGL 2410, ENGL 2420, ENGL 2510, ENGL 2520, ENGL 2600, ENGL 2610, ENGL 2640, ENGL 2710, ENGL 2720, ENGL 2730, ENGL 2740, ENGL 2800, ENGL 2810, ENGL 2850, any HUMN, INTL 2000, INTL 2300, INTL 2800, MUSC 1030, MUSC 1040, MUSC 1050, MUSC 1060, MUSC 1070, MUSC 1160, MUSC 1170, MUSC 2080, MUSC 2180, MUSC 2710, or MUSC 2720	3-4
Sciences—2 courses needed from different subject areas, with one course containing a lab CHEM 1050 - Introduction to General Chemistry Required for WSU's program PHYS 1180 - College Physics 1 Required for WSU's program	F1
Social Sciences2 courses:  ECON 1160 - Principles of Economics 1 Required for WSU'S program  PSYC 2400 - Industrial-Organizational Psychology Recommended for WSU's program	
If needed, complete an additional course(s) from the applicable general education categories above to reach the minimum 30 MTA required credit hours	27

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Wayne State University Coursework - After Transfer:	
Major Requirements	49 Hrs
CMT 3000 - Construction Estimating and Bidding	3
CMT 3010 - Introduction to Construction Management	3
CMT 3020 - Residential and Commercial Land Development and Design	3
CMT 3030 - Construction Safety Management	3
CMT 3040 - Building Codes	3
CMT 3050 - Construction Accounting and Financial Management	3
CMT 3060 - Planning and Scheduling	3
CMT 3070 - Introduction to Green Construction	3
CMT 3080 - Advanced Computers in Construction	3
CMT 4030 - Facility Management Principles	3
CMT 4050 - Construction Methods	3
CMT 4070 - Mechanical and Electrical Systems in Buildings	3
CMT 4200 - Senior Project	3
CMT Upper Elective	3
CMT 4290 - Internship	0
T 3870 - Engineering Economic Analysis	3
T 3430 - Applied Differential and Integrated Calculus	4
Maximum Macomb Credits = 78 Minimum	credits at Wayne State University = 49
Minimum credits for Bachelor of Science in Construction	on Management - 120 credit hours

#### **Important Information:**

- 1. All content is for informational purposes and is designed to be used as a tool to assist students with transfer information but should not be used for self-advising.
- 2. Courses may require prerequisite courses not included on this guide. Consult with your academic advisor before registering for classes.
- 3. When pursuing a Macomb degree work closely with a Macomb and Wayne State University advisor to ensure BOTH Macomb and Wayne State University degree requirements are being met.
- 4. A minimum cumulative 2.00 GPA or better is required for admission.
- 5. This transfer guide may contain more than the maximum number of allowable transfer credits Wayne State University will accept.
- 6. Macomb and Wayne State University reserve the right to make any necessary changes to courses, provisions, or transfer requirements without notice.
- 7. It is the responsibility of the student to be aware of changes that affect their transfer program. Students are strongly encouraged to contact Wayne State University on an annual basis to review their program requirements.
- 8. Students may concurrently be enrolled and taking courses at both Macomb and Wayne State University the same semester after completing the minimum requirements for Wayne State University. Meet with an academic advisor or counselor for additional information.
- 9. Macomb Community College has a Reverse Transfer Agreement with Wayne State University. If you decide to transfer before graduating from Macomb you may be eligible to earn your associate degree after the fact.

#### www.macomb.edu/transfer

- 10. Please contact Wayne State University at 586-447-3905 to schedule an appointment, or to view additional information visit: Wayne State University Macomb University Center
- 11. Please refer to Wayne State University's transfer guide, or consult with a WSU Engineering Technology advisor before taking these classes. <a href="https://wayne.edu/transfercredit/">https://wayne.edu/transfercredit/</a>

Macomb Community College:
Any Associate Degree (AA, AAS, ABA, AGS, AS)

Wayne State University:
Bachelor of Science (BS) in
Construction Management <u>OR</u> Computer Technology

Articulated Program: Students who have declared this program on their student record are following a formal agreement between Wayne State University and Macomb Community College.

### Macomb Community College - Before Transfer

Requirements vary with each Macomb degree. The courses below fulfill Wayne State University's curriculum requirements for CM and CT programs, as well as MTA course requirements. Consult with your Macomb Advisor to ensure Macomb degree requirements are also being met.

Program Requirements	Minimun 62 Hrs
Satisfies MTA	
ENGL 1180 - Communications 1	3-4
or	3-4
ENGL 1210 - Composition 1	
Sotisfies MTA	
ENGL 1190 - Communications 2	3-4
or ENGL 1220 - Composition 2	
	5
PHYS 1180 - College Physics 1 Soutsfles MTA	4
CHEM 1050 - Introduction to General Chemistry Satisfies MTA	4
ECON 1160 - Principles of Economics 1 Satisfies MTA	3
PHIL 2120 - Professional Ethics Soutsfies MTA	3
BCOM 2050 - Business Communications	4
Construction Management: 18 credits	
Computer Technology: 25 credits	
Complete required credits from selected program by selecting from the following subject areas:	18-25
ATAM, ATAP, ATBC, ATDD, ATEM, ATMT, ATPP, ATSS, ATTR, ATWD, AUTO, CIVL,	
CLCT, CORE, DRAD, DRCG, ELEC, ENGR, MACA, MECT, PRDE, RNEW, ROBO, SURV	
Construction Management Pathway	
DRCG 1140 - Interactive Computer Graphics-Introduction to 2D & 3D AutoCAD	4
DRAD 2110 - Applied Building Construction	3
CIVL 2200 - Soils & Foundations	3
Additional Electives May be fulfilled within degree, MTA, and/or prerequisite courses	(8)
Computer Technology Pathway	
TCS 2530 - C++ Programming 1	4
ELEC 1211 - Digital Electronics Basics	3
ELEC 2270 - Microcontroller Programming	3

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General EducationMichigan Transfer Agreement plan* Students who complete a Michigan Transfer Agreement (MTA or MACRAO) will have met the general education requirements for Wayne State University. Students who do not complete a Michigan Transfer Agreement will have additional requirements. See a Macomb counselor or academic advisor for specific MTA courses and requirements or visit: www.macomb.edu/transfer.	Minimum 30 Hrs
Basic Compostion2 courses: ENGL 1180 or ENGL 1210 and ENGL 1190 or ENGL 1220	-
Mathematics1 course: MATH 1465 - Accelerated Precalculus	-
Humanities & Fine Arts2 courses:  PHIL 2120 - Professional Ethics  And 1 additional course from a different subject area:  any ARAB, any CHIN, any FREN, any GRMN, any ITAL, any SPAN (except SPAN 1265), ARTT 1620,  ARTT 1625, ARTT 2650, ARTT 2660, ENGL 1730, ENGL 2410, ENGL 2420, ENGL 2510, ENGL 2520,  ENGL 2600, ENGL 2610, ENGL 2640, ENGL 2710, ENGL 2720, ENGL 2730, ENGL 2740, ENGL 2800,  ENGL 2810, ENGL 2850, any HUMN, INTL 2000, INTL 2300, INTL 2800, MUSC 1030, MUSC 1040,  MUSC 1050, MUSC 1060, MUSC 1070, MUSC 1160, MUSC 1170, MUSC 2080, MUSC 2180,  MUSC 2710, or MUSC 2720	3-4
Sciences2 courses needed from different subject areas, with one course containing a lab CHEM 1050 - Introduction to General Chemistry PHYS 1180 - College Physics 1	-
Social Sciences2 courses from different subject areas: ECON 1160 - Principle of Economics 1 And 1 additional course from subject area: any ANTH, any GEOG, any HIST, INTL 2010, any POLS, any PSYC, or any SOCY	3-4
If needed, complete an additional course(s) from the applicable general education categories above to reach the minimum 30 MTA required credit hours	-

#### Wayne State University Coursework - After Transfer: Major Requirements **Construction Management Program Requirements** 55 Cr ET 3430 - Applied Differential and Integrated Calculus 4 ET 3870 - Engineering Economic Analysis 3 **Business Electives** 6 CMT 3000 - Construction Estimating and Bidding 3 3 CMT 3010 - Introduction to Construction Management CMT 3020 - Residential and Commercial Land Development and Design 3 CMT 3030 - Construction Safety Management 3 CMT 3040 - Building Codes 3 CMT 3050 - Construction Accounting and Financial Management 3 CMT 3060 - Planning and Scheduling 3 CMT 3070 - Introduction to Green Construction 3 CMT 3080 - Advanced Computers in Construction 3 CMT 4030 - Facility Management Principles 3 CMT 4050 - Construction Methods 3 CMT 4070 - Mechanical and Electrical Systems in Buildings 3 CMT 4200 - Senior Project 3 **CMT Upper Elective** 3 CMT 4290 - Internship 0 **Computer Technology Program Requirements** 54 Cr ET 3430 - Applied Differential and Integrated Calculus 4 ET 3850 - Reliability and Engineering Statistics 3 ET 3870 - Engineering Economic Analysis 3 ET 5870 - Engineering Project Management EET 3100 - Advanced Digital Design 3 EET 3720 - Micro and Programmable Controllers 3 EET 4100 - Computer Hardware Design 3 **EET 5720 - Computer Networking Applications** 4 CSC 2110/1 - Compuer Science I + Lab 4 CSC 2200/1 - Computer Science II + Lab 4 CSC 3750 - Introduction to Web Technology 3 CSC 4110/1 - Software Engineering + Lab 4 CSC 4420/1 - Computer Operating Systems + Lab 4 CSC 4710 - Introduction to Database Management Systems 3 **Upper Division Tech Electives** 6 ET 4999 - Senior Project Maximum Macomb Credits = 75-78 Minimum credits at Wayne State University = 54 Minimum credits for Bachelor of Science in CM - 120 credit hours; or CT - 124 credit hours

Updated 1/27/2020

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- 2. Courses may require prerequisite courses not included on this guide. Consult with your academic advisor before registering for classes.
- 3. When pursuing a Macomb degree work closely with a Macomb and Wayne State University advisor to ensure BOTH Macomb and Wayne State University degree requirements are being met.
- 4. A minimum cumulative 2.00 GPA or better is required for admission.
- 5. This transfer guide may contain more than the maximum number of allowable transfer credits Wayne State University will accept.
- 6. Construction Management requires 8 elective credits that may or may not be met within the prescribed or prerequisite courses. Consult with
- a Wayne State University Advisor to ensure maximum transferability of courses for program fulfillment.
- 7. Wayne State University's Bachelor of Science in Construction Management program requires a minimum of 120 credits to graduate.
- 8. Wayne State University's Bachelor of Science in Computer Technology program requires a minimum of 124 credits to graduate.
- 9. Macomb and Wayne State University reserve the right to make any necessary changes to courses, provisions, or transfer requirements without notice.
- 10. It is the responsibility of the student to be aware of changes that affect their transfer program. Students are strongly encouraged to contact Wayne State University on an annual basis to review their program requirements.
- 11. Students may concurrently be enrolled and taking courses at both Macomb and Wayne State University the same semester after completing the minimum requirements for Wayne State University. Meet with an academic advisor or counselor for additional information.
- 12. Macomb Community College has a Reverse Transfer Agreement with Wayne State University. If you decide to transfer before graduating from Macomb you may be eligible to earn your associate degree after the fact.

#### www.macomb.edu/transfer

13. Please contact Wayne State University at 586-447-3905 to schedule an appointment, or to view additional information visit:

### Wayne State University - Macomb University Center

14. Please refer to Wayne State University's transfer guide, or consult with a WSU Engineering Technology advisor before taking these classes. https://wayne.edu/transfercredit/

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