

**Articulation Agreement  
between  
Washtenaw Community College  
and  
Madonna University  
Computer Science/C++**

<b>MTA Requirements</b>					
<b>Washtenaw Community College</b>			<b>Madonna University</b>		
<i>English Composition – 2 courses (Goal CC-1A)</i>					
ENG 111	Communication Skills 1	4	WRT 1010	College Composition 1	3
ENG 226	Composition 2	3	WRT 1020	College Composition 2	3
<i>Mathematics – 1 course (Goal CC-5)</i>					
MTH 176	College Algebra	4	MTH 1050	College Algebra	4
MTH 180	Precalculus	5	MTH 1210	Precalculus	5
MTH 191***	Calculus 1	5	MTH 2510	Calc with Analytic Geometry 1	5
MTH 192***	Calculus 2	4	MTH 2520	Calc with Analytic Geometry 2	4
<i>Social Science – 2 courses from different disciplines</i>					
PLS 112	American Government	3	PSC 1510	American Government(CC-3)	3
PSY 100	Intro Psychology	3	PSY 1010	General Psychology(CC-4)	3
SOC 100	Principles of Sociology	3	SOC 1020	Intro to Sociology(CC-4)	3
SOC 205	Race/Ethnic Relations	3	SOC 3120	Diversity/Discrimination(SC-9)	3
SOC 207	Social Issues/Movement	3	SOC 2020	Social Problems(CC-4)	3
<i>Humanities and Fine Arts – 2 courses from different disciplines</i>					
ART 150	Monuments from World	3	AHIS 2020	Monuments,Media(CC-2)	3
COM 101	Fundamentals of Speaking	3	COM 2350	Public Speaking(CC-1B)	3
COM 102	Interpersonal Communication	3	COM 2120	Interpersonal Comm(CC-1B)	3
ENG 223	British Lit After 1800	3	ENG 2230	Ideas in World Literature(CC-2)	3
ENG 224	World Literature 2	3	ENG 2230	Ideas in World Literature(CC-2)	3
HUM 101	Ancient to Medieval Times	3	HUM 2040	Expressive Thinking(CC-2)	3
HUM 102	Renaissance to Modern Times	3	HUM 2040	Expressive Thinking(CC-2)	3
HUM 145	Comparative Religions	3		Core Curriculum Credit(SC-8B)	3
HUM 175	Arts/Culture of Middle East	3	HUM 2040	Expressive Thinking(CC-2)	3
MUS 180	Music Appreciation	3	MUS 2020	Music Through the Ages(CC-2)	3
PHL 101	Intro to Philosophy	3	PHL 1010	Intro to Philosophy(CC-3)	3
<i>Natural Sciences – 2 courses from different disciplines, 1 course must have a lab</i>					
BIO 101	Concepts of Biology	4	BIO 1010	Intro Biology(CC-6A)*	4
BIO 102	Human Biology	4	BIO 2250	Basic Human Physiology*	3
BIO 109	Essentials of A&P	4	BIO 2250	Basic Human Physiology*	3
BIO 161	General Biology 1	4	BIO 1040	General Biology 2*	4
CEM 105	Introductory Chemistry	4	CHM 1010	Intro Principles Chem(CC-6B)**	4
CEM 111	General Chemistry 1	4	CHM 1110	General Chemistry 1**	4
Washtenaw Community College		32	Madonna University		31
<b>Minimum 30 credits</b>					

\*\*\*Also fulfills major requirement

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<b>Additional Transferrable Requirements</b>					
<b>Washtenaw Community College</b>			<b>Madonna University</b>		
<b>Computer Science (C++ Concentration) Degree Requirements</b>					
CPS 171	Introduction to Programming w/C++	4	CSC 2080	Computer Science I	3
CPS 271	Object Features of C++	4	CSC 3350	Object-Oriented Programming	3
CPS 272	Data Structures with C++	4	CSC 2480	Computer Science II	3
MTH 191	Calculus I	5	MTH 2510	Calculus I	5
MTH 192	Calculus II	4	MTH 2520	Calculus II	4
	Select <b>Two</b> CPS or CIS courses*	8	CSC	<b>Two</b> CSC Electives	8
CPS 161*	An Intro to Programming w/Java	4			
CPS 192*	Introduction to C#.Net	4			
CPS 251*	Android Programming Using Java	4			
CPS 261*	Advanced Java Concepts	4			
CPS 276*	Web Programming	4			
CPS 278*	Java Server Programming	4			
CPS 292*	Intermediate and Advanced C#.Net	4			
CPS 293*	C#.NET	4			
CPS 295*	Advanced C#.Net and ASP.Net	4			
CIS 221*	Linux/UNIX Programming & Scripting	4			
CIS 282*	Database Principles and Application	4			
CSS 200*	Introduction to Network Security	4			
CST 270*	Computer Forensics I	4			
CST 275*	Computer Forensics II	4			
<b>Credits From Washtenaw Community College</b>		<b>27</b>	<b>Madonna University Credit</b>		<b>27</b>
<b>Additional Transferrable Credits at WCC</b>					
Elective Credit		29/34	Elective Credit		29/34
<b>Total Washtenaw Credit Hours</b>		<b>90</b>	<b>Total Credits Accepted at Madonna</b>		<b>90</b>
<b>Bachelor Degree Requirements at Madonna University</b>					
CSC 3030	Operating Systems				3
CSC 3050	Computer Architecture				3
CSC 3280	Analysis of Algorithms				3
CSC 3290	Programming Language Concepts				3
CSC 3910	Cooperative Education in Software				3
CSC 4850	Seminar: Computers & Society				2
MTH 2450	Discrete Mathematics				3
SC-7	Literature and Informational Fluency				3
SC-8A	The Madonna Heritage				3
	Elective Credit (See Madonna advisor for course options)				4
<b>Madonna University Credit Hours</b>					<b>30</b>

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- The Michigan Transfer Agreement (MTA) will satisfy all Madonna University Core Courses. MTA does not satisfy Madonna University Signature Courses.
- Madonna University will transfer a maximum of 74 credits from community colleges towards the minimum total of 120 semester hours needed for a first Bachelor degree unless noted otherwise in the articulated agreement. Courses must be approved for transfer, non-remedial and have a grade above a 2.0 ("C") or higher. Students pursuing a course of study under an existing articulation agreement should contact Madonna University's Articulation Specialist, kardanowski@madonna.edu in the Office of the Registrar to discuss approved and maximum credit allowances.
- Madonna University requires all incoming students to complete a writing assessment scored by MU writing faculty
- Students who are pursuing or who have earned the MACRAO Transfer Agreement should contact Madonna University as the requirements in the Core Curriculum will vary.
- Contact Washtenaw Community College for any questions regarding MTA or MACRAO at 734-677-5102.
- Contact Madonna University for questions regarding the Computer Science Major, admission requirements or to set up an appointment with an advisor at 734-432-5339 or admissions@madonna.edu.