## **Washtenaw Community College**

&

Michigan High Schools 2023 - 2024 School Year 2024 - 2025 School Year 2025 - 2026 School Year

## Secondary/Post Secondary Articulation Agreement Annual Reauthorization

The instructors convened and agree that the current articulation agreements for the courses and programs contained in this document meet agreed upon conditions and the outcomes have been updated. The articulation agreements for all programs contained in this document will be reauthorized for students for the 2023-2024 academic year. The articulation agreements will continue for the 2024-2025 and 2025-2026 academic years following a review of course and/or program changes. An addendum will be attached to note any changes for subsequent academic years.

Participating teachers at the secondary level will provide the appropriate student performance record for each student which certifies areas and levels of task achievement. This record will serve as proof of competency for the recommended credit.

Eligible students will be informed of the opportunity to earn college credit.

Articulated High School credit is intended to be used toward the completion of a Washtenaw Community College degree or certificate. An articulation agreement between a high school and WCC requires a high school to certify to WCC that the student has achieved the agreed upon level of knowledge and skills from a particular course. Once accepted by WCC, High School articulated credit may not transfer to other colleges or universities. WCC makes no guarantees whether other institutions accept credit hours or count articulated high school credit toward the completion of their degree requirements. Students should check with the college/university they are transferring to from WCC in order to see if the credits are eligible for transfer.

## Contained in this document are:

- List of specific parties in the 2+2 program alignment and articulation
- The secondary and post-secondary state approved CIP code
- The agreement start date for years one, two and three
- The H.S. graduation for years one, two and three
- Last date to post credit for graduates during years one, two and three
- The secondary program fulfills the corresponding course at the post-secondary program
- Specific courses that are the foundation of the aligned Career Technical Education (CTE) program articulation agreement. Include academic as well as technical course requirements
- Specific timeline to apply for the credit, or to take a competency test to qualify for the credit

 Specific requirements from the post-secondary institution that a student must meet before articulated credits are granted

This agreement remains effective for two additional years after expiration date to permit student access to the agreed upon credits. Please see effective dates below.

Curriculum information contained in this document is subject to change at any time. Please consult with college advisor or college website for more current and up-to-date information.

### **Effective Dates**

## Year 1:

Agreement start date: September 1, 2023

H.S. Graduation during: 2024

Last date to post credit: December 31, 2026

Year 2:

Agreement start date: September 1, 2024

H.S. Graduation during: 2025

Last date to post credit: December 31, 2027

Year 3:

Agreement start date: September 1, 2025

H.S. Graduation during: 2026

Last date to post credit: December 31, 2028

Documentation of secondary instruction delivery/segments is available for review at secondary institution.

## Secondary – Post-secondary

## **Curriculum Aligned Course List**

Statewide A	<u>Agreement</u>	Washtena	w Community College	
Course #	Title CIP Code	Course #	Title CIP Cod	e
Automobile	Technician 47.0604	,	Auto Services	47.0604
	17.0007	ASV 130	Automotive Maintenance (4cr)	17.0001
S	tatewide Agreement	ASV 132	Automotive Engines (4cr)	
Business Ad	dmin., Mgmt. & Operations 52.0299	E	Business	52.0000
	Statewide Agreement	BMG 140	Introduction to Business (3cr)	
Collision Re	pair Technician 47.0603	P	Auto Body Repair	47.0603
		ABR 111	Introduction to Auto Body Repair (4c)	r)
	Statewide Agreement	ABR 112	Introduction to Automotive Refinishin	g (4cr)
Computer S	ys. Networking and Technolo 11.0901	gy (	Computer Systems and Networking	11.0901
	Statewide Agreement	CIS 110	Introduction to Computer Information (3cr)	Systems
Computer P	rogramming 11.0201	ı	nformation Systems	11.0103
		CIS 110	Introduction to Computer Information (3cr)	Systems
	Statewide Agreement	CPS 171 or CPS 161*	Introduction to Programming with C+ or Introduction to Programming with Jav	
*Students wil	ll be awarded credit for CPS 17	1. They may r	equest credit for CPS 161 instead.	
Cosmetolog	y 12.0400		Elective Credit	
	Statewide Agreement	TRI 3001	Elective Credit (20cr)	
<sup>1</sup> Students mu	ust present their Michigan State	Board of Cos	metology License to be awarded credi	t.
Digital Multi	media 11.0801	V	Veb Design and Development	11.0801
	Statewide Agreement	WEB 110	Web Development I (4cr)	
Finance		-	Accounting	50.0000
	52.0800	100 101		52.0302
_	Statewide Agreement	ACC 131	QuickBooks Software (3cr)	
Graphic and	Printing Technology 10.0301	Graphic Design		54.0409
	Statewide Agreement	GDT 106 GDT 108	Illustrator Graphics (3cr) Photoshop Graphics (3cr)	
Health/Thera	apeutic Services 51.0000	<u> </u>	lealth Science	51.1601
	Statewide Agreement	HSC 100 <sup>3</sup> or HSC 165 HSC 101	Basic Nursing Assistant Skills (4cr) or Foundations of Caregiving (4cr) Healthcare Terminology (1cr)	

	HSC 131 <sup>4</sup>	CPR/AED for the Professional Rescuer and First Aid (1cr)
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<sup>&</sup>lt;sup>3</sup> Students must bring in their C.N.A. Certificate in order to receive credit for HSC 100. Students must meet additional criteria to apply for admission to the Registered Nursing Program. Additional information is available on the WCC website at <a href="http://www4.wccnet.edu/departments/health/">http://www4.wccnet.edu/departments/health/</a>. Students who complete the CNA program, but do not have proof/documentation of passing the CNA certification exam may be awarded credit for HSC 165 instead.

<sup>4</sup> Students must present their card(s) for CPR/AED, Child and Infant CPR and First Aid from the American Red Cross to receive credit for HSC 131. Credit will only be granted if all three (3) sections have been passed and are documented.

Mechatro	Mechatronics Mechatronics			
14.4201		1	15.04	05
	Statewide Agreement	MEC 101	Blueprint Reading for Manufacturing (2cr)	
	Statewide Agreement	ROB 101	Robotics I – I (2cr)	
Radio & TV Broadcasting Technology Digital Video Production			Digital Video Production	
	10.0	202	59.060	02
	Statewide Agreement	VID 105	Foundations in Digital Video I	
Welding	Welding Welding			
48.0508		3	48.05	08
Statewide Agreement WAF 103		WAF 103	Introduction to Gas Tungsten Arc Welding (2	?cr)

# Accounting/Finance HIGH SCHOOL COURSE SEQUENCE

9 <sup>th</sup> Grade	10 <sup>th</sup> Grade	11 <sup>th</sup> Grade	12 <sup>th</sup> Grade
English 9 Speech Art or Music or Graphics Biology Algebra Non Western Civilization Law P.E. / Fitness	English 10 Physical or Earth Science Geometry Western Civilization P.E. Elective	Literature Chemistry Algebra 3, 4 U.S. History Computer Accounting I	English Elective Physics Math Analysis U.S. Government Computer Accounting II

## WASHTENAW COMMUNITY COLLEGE Accounting

## **Associate in Applied Science Degree**

Semester 1		
CIS 110	Introduction to Computer Information Systems	3
BMG 140	Introduction to Business	3
ACC 111	Principles of Accounting I	3
BOS 184	Spreadsheet Software Applications I	3
Math	Select from MTH 125, 160, or 176	4
Semester Total		16
Semester 2		
TAX 101	Income Taxes for Individuals	3
ACC 122	Principles of Accounting II	3
ACC 131	QuickBooks Software	3
COM 101	Fundamentals of Speaking	3
BMG 111	Business Law I	3
ACC 110	Payroll Accounting	2
Semester Total		17
Semester 3		
Semester 3 Nat. Sci.	Elective(s)	3
	Elective(s)	3
Nat. Sci.		3
Nat. Sci. Arts/Human.	Elective(s)	3 3 3
Nat. Sci. Arts/Human. BMG 265 ACC 213 ECO 211	Elective(s) Business Statistics	3 3 3
Nat. Sci. Arts/Human. BMG 265 ACC 213	Elective(s) Business Statistics Intermediate Accounting	3 3 3
Nat. Sci. Arts/Human. BMG 265 ACC 213 ECO 211	Elective(s) Business Statistics Intermediate Accounting	3 3 3 3
Nat. Sci. Arts/Human. BMG 265 ACC 213 ECO 211 Semester Total	Elective(s) Business Statistics Intermediate Accounting	3 3 3 3 15
Nat. Sci. Arts/Human. BMG 265 ACC 213 ECO 211 Semester Total Semester 4	Elective(s) Business Statistics Intermediate Accounting Principles of Economics I	3 3 3 3 15
Nat. Sci. Arts/Human. BMG 265 ACC 213 ECO 211 Semester Total Semester 4 ACC 214	Elective(s)  Business Statistics Intermediate Accounting Principles of Economics I  Intermediate Accounting II	3 3 3 3 15 3 3 3
Nat. Sci. Arts/Human. BMG 265 ACC 213 ECO 211 Semester Total Semester 4 ACC 214 BMG 207 ACC 225 ECO 222	Elective(s)  Business Statistics Intermediate Accounting Principles of Economics I  Intermediate Accounting II Business Communication	3 3 3 3 15 3 3 3
Nat. Sci. Arts/Human. BMG 265 ACC 213 ECO 211 Semester Total Semester 4 ACC 214 BMG 207 ACC 225	Elective(s) Business Statistics Intermediate Accounting Principles of Economics I  Intermediate Accounting II Business Communication Managerial Cost Accounting	3 3 3 3 15 3 3 3
Nat. Sci. Arts/Human. BMG 265 ACC 213 ECO 211 Semester Total Semester 4 ACC 214 BMG 207 ACC 225 ECO 222	Elective(s)  Business Statistics Intermediate Accounting Principles of Economics I  Intermediate Accounting II Business Communication Managerial Cost Accounting Principles of Economics II	3 3 3 3 15 3 3 3

### **Automotive Services**

## HIGH SCHOOL COURSE SEQUENCE

9 <sup>th</sup> Grade	10 <sup>th</sup> Grade	11 <sup>th</sup> Grade	12 <sup>th</sup> Grade
English 9 Algebra Science Social Studies Health/ Physical Ed Foreign Language	English 10 Math Science Social Studies Foreign Language	English 11 Math Social Studies Science Collision Repair & Refinishing I	English 12 Math Social Studies Collision Repair & Refinishing II
Choice of Electives: Visual/Performing/Applied Arts	Choice of Electives:		

## WASHTENAW COMMUNITY COLLEGE

**Transportation Technologies, Auto Body Concentration** 

## **Associate in Applied Science**

Semester 1		
ABR 111	Introduction to Auto Body Repair	4
ABR 112	Introduction to Automotive Refinishing	4
ABR 114	Applied Auto Body Welding	2
ABR 119	The Art of Metal Shaping	2
Writing/Comp.	Elective	3
Semester Total		15
Semester 2		
ABR 123	Technical Auto Body Repair	4
ABR 124	Technical Automotive Refinishing	4
ABR 140	Aluminum Welding for Automotive Applications	4
Speech/Comp.	Elective	3
Math	Elective	3
Semester Total		18
Semester 3		
ASV 130	Automotive Maintenance	4
Rest. Elect	Restricted Elective(s): ABR 116, ABR 130, ABR 209, ABR 231, ASV 131, MST 106, or MST 230	4
Soc. Sci.	Elective	3
Arts/Hum	Elective	3
Semester Total		14
Semester 4		
ABR 113	Estimating and Shop Operations	4
ABR 201	Lightweighting Composite Repair	4
Rest. Elect	Restricted Elective(s): ABR 116, ABR 130, ABR 209, ABR 231, ASV 131, MST 106, or MST 230	4
Nat. Science	Elective	3
Semester Total		15
Program Totals		60

## Automotive Technologies HIGH SCHOOL COURSE SEQUENCE

9 <sup>th</sup> Grade	10 <sup>th</sup> Grade	11 <sup>th</sup> Grade	12 <sup>th</sup> Grade
English 9 Algebra Science I (311) Career Prep & Expo (905) Basic Phys Ed (612) World History (410)	American Experience (056) Public Speaking Geometry Science II (313) U.S. History (422) Business Service Tech I	Literature & Society (060) Composition (023) U.S. Government (445) Integrated Trigonometry (221) Applied Physics (331) Auto Tech I (937)	English Elective Sociology (435) Auto Tech II (945) Accounting I (524)

## WASHTENAW COMMUNITY COLLEGE Transportation Technologies, Auto Service Concentration

## **Associate in Applied Science**

Semester 1		
ASV 130	Automotive Maintenance	4
ASV 131	Automotive Electrical	4
Math	Elective	3
Writing	Elective	3
ABR 114	Applied Auto Body Welding	2
Semester Total		16
Semester 2		
ASV 132	Automotive Engines	4
ASV 133	Automotive Fuel	4
ASV 134	Automotive Transmission	4
ABR 140	Aluminum Welding for Automotive Applications	4
Destrict Floor	Choose from: ABR 111, ASV 135, ASV 174, ASV 257, ASV 266, ASV 277, ASV 279, CSS 200, CSS 205, CSS 285, CST 185,	0
Restrict. Elect.	MST 110	2
Semester Total		18
Semester 3		•
ASV 254	Suspension and Steering	2
ASV 251	Engine Diagnosis and Repair	2
ASV 256	Electrical and Electronic Systems	4
Writ. or Comm.	Writing/Composition or Communication	3
Arts/Hum	Elective	3
Semester Total		14
Semester 4		
Nat. Sci	Elective	3
Soc. Sci	Elective	3
ASV 258	Engine Drivability	2
ASV 255	Brakes	2
ASV 266	Advanced Transmissions	2
 	Choose from: ABR 111, ASV 135, ASV 174, ASV 257, ASV 266, ASV 277, ASV 279, CSS 200, CSS 205, CSS 285, CST 185,	0
Restrict. Elect.	MST 110	2
Semester Total		14
Program Totals		62

### **Business**

## HIGH SCHOOL COURSE SEQUENCE

9 <sup>th</sup> Grade	10 <sup>th</sup> Grade	11 <sup>th</sup> Grade	12 <sup>th</sup> Grade
English 9 Speech Art or Music or Graphics Biology Algebra Non Western Civilization Law P.E. Fitness	English 10 Physical or Earth Science Geometry Western Civilization P.E. Elective	Literature Chemistry or Elective Algebra 3/4 or Elective U.S. History Computer Applications 1	English Elective Physics or Elective Math Analysis or Elective U.S. Government Business

## WASHTENAW COMMUNITY COLLEGE Business Administration

## **Associate in Arts Degree**

Semester 1		
ENG 111	Composition I	4
Math	Select one of MTH 125, MTH 160 or MTH 176	4
BMG 140	Introduction to Business	3
Nat. Sci.	Elective(s)	3
Semester Total		14
Semester 2		
CIS 110	Introduction to Computer Information Systems	3
Writ. or Comm.	Writing/Composition or Communication	3
Arts/Human.	Elective(s)	3
BMG 207	Business Communication	3
ACC 111	Principles of Accounting I	3
Semester Total		15
Semester 3		
ACC 122	Principles of Accounting II	3
Soc. Sci.	Elective(s)	3
BMG 265	Business Statistics	3
ECO 211	Principles of Economics I	3
BMG 111	Business Law I	3
Semester Total		15
Semester 4		
Arts/Human.	Elective(s)	3
ECO 222	Principles of Economics II	3
Nat. Sci.	Elective(s)	3 - 4
Elective(s)	Elective(s) to reach a minimum of 60 credits. It is recommended	6 - 7
	students complete one or more of the following: BMG 181, BMG	
	230, BMG 250	
Semester Total		16
Program Totals		60

## Additional Program Opportunity: Accounting Associate Degree

# Computer Programming HIGH SCHOOL COURSE SEQUENCE

9 <sup>th</sup> Grade	10 <sup>th</sup> Grade	11 <sup>th</sup> Grade	12 <sup>th</sup> Grade
English 9 Algebra (211) or Integrated Algebra A (216) Science I (311) Career Prep & Expo (905) Basic Phys Ed (612) World History (410)	American Experience (056) Public Speaking Integrated Geometry or Integrated Algebra B (217) Science II (313) U.S. History (422) Public Speaking	Literature & Society (060) Composition (023) U.S. Government (445) Business Service Technology I (526) Basic Art (615) Computer Programming	English Elective Visual Imaging Technology (924) Computer Programming

## WASHTENAW COMMUNITY COLLEGE

### Information Systems: Programming in C++ **Associate in Science**

Semester 1		
Natural Science	Elective(s)	3
Writ. or Comm.	Writing/Composition or Communication	3
CPS 171	Introduction to Programming with C++	4
ENG 111	Composition I	4
Semester Total		14
Semester 2		
Arts/Human.	Elective(s)	3
CIS 120	Linux/UNIX I: Fundamentals	3
CPS 271	Object Features of C++	4
Soc. Sci.	Elective(s)	3
Math	MTH 176 or higher 4 credit math course	4
Semester Total		17
Semester 3		
Nat. Sci. w/Lab	Elective(s)	3
CPS 276	Web Programming Using MySQL and PHP	4
CPS 272	Data Structures with C++	4
Soc. Sci.	Elective(s)	3
Semester Total		14
Semester 4		
Arts/Human.	Elective(s)	3
Res. Elective(s)	CIS/CPS electives	7
CPS 298	Professional Team Programming	4
General Ed.	Elective (0-1 credits) to reach a minimum of 30 Gen. Ed. credits	1
Semester Total		15
Program Totals		60

# Graphic & Printing Technology HIGH SCHOOL COURSE SEQUENCE

9 <sup>th</sup> Grade	10 <sup>th</sup> Grade	11 <sup>th</sup> Grade	12 <sup>th</sup> Grade
English 9 Algebra I World History/Geography Biology World Language Phys Ed/Health	English 10 Geometry U.S. History/Geography Physics or Chemistry World Language Visual/Performing/Applied Arts	English 11 Algebra II Civics/Economics Visual Imaging Technology I Elective Visual Imaging Technology II Elective	English 12 Math Credit Science Credit Visual Imaging Technology III Elective

## WASHTENAW COMMUNITY COLLEGE Graphic Design

## **Associate in Applied Science**

Semester 1		
ENG 111	Composition I	4
GDT 101	History of Graphic Design	3
GDT 104	Introduction to Graphic Design	4
WEB 115	Interface Design I	4
Soc. Sci.	Elective(s)	3
Semester Total		18
Semester 2		
Math	Elective(s)	3
Restrict Elect	Elective(s); GDT 106 or GDT 108 may be applied	3
GDT 100	Typography I	4
GDT 112	Principles and Problem-Solving in Graphic Design	4
Semester Total		14
Semester 3		
GDT 220	Publication Design	4
GDT 215	Typography II	4
GDT 239	Imaging and Illustration	4
WEB 215	Interface Design II	4
Semester Total		16
Semester 4		
GDT 252	Advanced Digital Studio	4
GDT 290	Professional Practices	4
Nat. Sci.	Elective(s)	3
COM 101	Fundamentals of Speaking	3
Restrict Elect	Elective(s); GDT 106 or GDT 108 may be applied	3
Semester Total		17
Program Totals		65

## Radio & TV Broadcasting Technology HIGH SCHOOL COURSE SEQUENCE

9 <sup>th</sup> Grade	10 <sup>th</sup> Grade	11 <sup>th</sup> Grade	12 <sup>th</sup> Grade
English 9 Algebra I World History/Geography Biology World Language Phys Ed/Health	English 10 Geometry U.S. History/Geography Physics or Chemistry World Language Visual/Performing/Applied Arts	English 11 Algebra II Civics/Economics Radio & TV Broadcasting	English 12 Math Credit Science Credit Radio & TV Broadcasting

## WASHTENAW COMMUNITY COLLEGE Digital Video Production

**Associate in Arts** 

Semester 1		
PHO 111	Photography I	4
ENG 111	Composition I	4
Restrict. Elective	FLM 120 or FLM 150 or FLM 185	3
VID 105	Foundations in Digital Video I	4
Semester Total		15
Semester 2		
FLM 160	American Film	3
VID 125	Foundations in Digital Video II	4
VID 270	Documentary Video Production I	3
Arts/Humanities	Elective(s) (not FLM)	3
Math	Elective(s)	3
Semester Total		16
Semester 3		
Writing/Comm.	Writing/Composition or Communication	3
Restrict. Elective	VID 210 or VID 240	3
VID 276	Video Graphics I	3
Natural Science	Elective(s)	3
Soc. Sci.	Elective(s)	3
Semester Total		15
Semester 4		
Restrict. Elective	VID 275 or VID elective	3
Nat. Sci. w/Lab	Elective(s)	3
Soc. Sci.	Elective(s)	3
VID 203	Commercial Video Production	3
VID 295	Portfolio and Project Seminar	3
Semester Total		15
Program Totals		61

### Digital Media Arts HIGH SCHOOL COURSE SEQUENCE

9 <sup>th</sup> Grade	10 <sup>th</sup> Grade	11 <sup>th</sup> Grade	12 <sup>th</sup> Grade
English 9 Algebra I World History/Geography Biology World Language Phys Ed/Health	English 10 Geometry U.S. History/Geography Physics or Chemistry World Language Visual/Performing/Applied Arts	English 11 Algebra II Civics/Economics Web I Elective	English 12 Math Credit Science Credit Web II Elective

## WASHTENAW COMMUNITY COLLEGE Web Design and Development

## **Associate in Applied Science**

Semester 1		
Writing/Comp.	Writing/Composition	3
	Certificate Course 1	4
Rest. Elective(s)	ANI, CIS, CPS, ENG 107, ENG 209, GDT, PHO, WEB	4
Elective(s)	Open elective(s)	3-4
Arts/Human.	Elective(s)*	3
Semester Total		17
Semester 2		
	Certificate Course 2	4
Rest. Elective(s)	ANI, CIS, CPS, ENG 107, ENG 209, GDT, PHO, WEB	4
Math	Elective(s)	3
Social Science	Elective(s)	3
Semester Total		14
Semester 3		
Nat. Sci.	Elective(s)	3
Rest. Elective(s)	ANI, CIS, CPS, ENG 107, ENG 209, GDT, PHO, WEB	4
WEB Elective(s)	Complete a course not in your chosen certificate	4
	Certificate Course 3	3-4
Semester Total		14
Semester 4		
COM 101	Fundamentals of Speaking	3
Rest. Elective(s)	ANI, CIS, CPS, ENG 107, ENG 209, GDT, PHO, WEB	4
WEB Elective(s)	Complete a course not in your chosen certificate	4
Elective(s)	Open elective(s) to reach a minimum of 60 credits	4
Semester Total		15
Program Totals		60

## Health Science Technology HIGH SCHOOL COURSE SEQUENCE

9 <sup>th</sup> Grade	10 <sup>th</sup> Grade	11 <sup>th</sup> Grade	12 <sup>th</sup> Grade
English 9 Speech Art or Music or Graphics Biology* Algebra * Non Western Civilization Law P.E. / Fitness	English 10 Physical or Earth Science Geometry Western Civilization P.E. Elective Computer Applications 1	Literature Chemistry* Algebra 3/4 or Elective U.S. History Health Sciences Technology Health Sciences Internship	English Elective Physics or Elective Math Analysis or Elective U.S. Government Health Sciences Technology Health Sciences Internship

## WASHTENAW COMMUNITY COLLEGE

**Health Care Foundations \*** 

Certificate

<sup>\*</sup> Please see the WCC website for other programs and detailed admissions requirements. www.wccnet.edu/health

Semester 1		
Course #	Course Title:	Credit Hours
HCFELEC1	Required Elective 1: BIO 101, BIO 102, 109, 111	4
HCFELEC2	Required Elective 2: COM 101, COM 102 or COM 200	3
ENG 111	Composition I	4
HSC 101	Healthcare Terminology	1
HSC 131	CPR/AED for the Professional Rescuer and First Aid	1
Semester Total		13
Semester 2		
Course #	Course Title:	Credit Hours
HCFELEC3	Required Elective 3: MTH 125, MTH 160, MTH 169 or any Math Level 4 or higher course	4
HCFELEC4	Required Elective 4: HSC 100 or HSC 103 or HSC 165 or RAD 100	1 - 4
PHL 244	Ethical and Legal Issues in Health Care	3
HCFELEC5	PSY 100, PSY 206 or SOC 100	3
Semester Total		11
Program Totals		24

<sup>\*</sup> Please see the WCC website for current program and detailed admissions requirements and course information. www.wccnet.edu/health

Additional Program Opportunities: Dental Assisting Certificate, Health Program Preparations
Associate in Science Degree, Medical Assisting Certificate, Medical Billing and Coding Certificate,
Nursing Associate in Applied Science Degree, Physical Therapist Assistant Associate in Applied
Science Degree. Radiography Associate in Applied Science Degree, Sterile Processing Certificate,
Surgical Technology Associate in Applied Science Degree

### Mechatronics

## HIGH SCHOOL COURSE SEQUENCE

9 <sup>th</sup> Grade	10 <sup>th</sup> Grade	11 <sup>th</sup> Grade	12 <sup>th</sup> Grade
English 9	English 10	English 11	English 12
Algebra I	Geometry	Algebra II	Math Credit
World History/Geography	U.S. History/Geography	Civics/Economics	Science Credit
Biology	Physics or Chemistry	Mechatronics	Mechatronics
World Language	World Language		
Phys Ed/Health	Visual/Performing/Applied		
_	Arts		

## WASHTENAW COMMUNITY COLLEGE

**Mechatronics –Robotics and Automated Systems** 

## **Associate in Applied Science**

Semester 1		
MEC 101	Blueprint Reading for Manufacturing	2
MEC 105	Pneumatics and Hydraulics in Fluid Power	4
ROB 101	Robotics I - I	2
ROB 110	Robotics I - II	2
ELE 111	Electrical Fundamentals	4
Semester Total		14
Semester 2		
ELE 211	Basic Electronics	4
NCT 100	Foundation Concepts for Manufacturing (CNC)	3
ROB 212	Robotics II	4
Math	Elective(s)	3
Semester Total		14
Semester 3		
NCT 120	Introduction to 2D CAD CAM Programming and Applications	2
Writing/Comp.	Writing/Composition	3
Nat. Sci.	Elective(s)	3
Semester Total		8
Semester 4		
Social Science	Elective(s)	3
Speech/Comp.	Elective(s)	3
ELE 224	Programmable Controllers (PLCs) I	4
ROB 221	Robotics III	4
Semester Total		14
Semester 5		
ELE 254	Programmable Controllers (PLCs) II	4
Art/Humanities	Elective(s)	3
MEC 224	Robotics IV	4
MEC 201	Mechanisms	2
Semester Total		13
Program Totals	Program Totals	63

# Welding HIGH SCHOOL COURSE SEQUENCE

9 <sup>th</sup> Grade	10 <sup>th</sup> Grade	11 <sup>th</sup> Grade	12 <sup>th</sup> Grade
English 9 Algebra I World History/Geography Biology World Language Phys Ed/Health	English 10 Geometry U.S. History/Geography Physics or Chemistry World Language Visual/Performing/Applied Arts	English 11 Algebra II Civics/Economics Welding	English 12 Math Credit Science Credit Welding

### **WASHTENAW COMMUNITY COLLEGE**

Advanced Manufacturing (CNC) - Machine Tool Setup, Operation and Programming

**Associate in Applied Science** 

Semester 1		
Math	Elective(s)	3
MEC 101	Blueprint Reading for Manufacturing	2
NCT 100	Foundation Concepts for Manufacturing (CNC)	3
NCT 120	Introduction to 2D CAD CAM Programming and Applications	2
Art/Humanities	Elective(s)	3
Semester Total		13
Semester 2		
MEC 100	Materials and Processes	3
NCT 101	Introduction to Computerized Machining (CNC) – I	2
NCT 110	Introduction to Computerized Machining (CNC) – II	2
Rest. Elective(s)	Choose from: ELE, MEC, NCT, ROB	2
Nat. Science	Elective(s)	3
Semester Total		12
Semester 3		
NCT 123	2D CAD CAM CNC Programming for Mills and Lathes	2
Rest. Elective(s)	Choose from: ELE, MEC, NCT, ROB	2
Speech/Comp.	Elective(s)	3
Social Science	Elective(s)	3
Writing/Comp.	Writing/Composition	3
Semester Total		13
Semester 4		
ELE 111	Electrical Fundamentals	4
MEC 201	Mechanisms	2
NCT 121	Manual Programming and NC Tool Operation	4
NCT 201	Geometric Dimensioning and Tolerancing (GD&T)	2
Semester Total		12
Semester 5		
NCT 221	Advanced Manual Programming and NC Tool Operation	4
NCT 244	Advanced Manufacturing Capstone (CNC)	3
WAF 103	Introduction to Gas Tungsten Arc Welding	2
Rest. Elective(s)	Choose from: ELE, MEC, NCT, ROB	3
Semester Total		12
Program Totals		62

## **Conditions & Requirements**

- 1. Students must meet admissions requirements of the college.
  - Students can apply online for free at: <a href="https://www.wccnet.edu/start-now/">https://www.wccnet.edu/start-now/</a>
- 2. Students should successfully complete a preponderance of tasks at the employable level.
- 3. Students must receive recommendation from the high school instructor.
- 4. Students must apply for articulated credit within 24 months following high school graduation.
- 5. Students must successfully complete 1 credit hour at WCC. Students should also check the requirements of their programs to determine if specific courses are required or recommended.
- 6. Students shall meet requirements of the intended curriculum and program of study.

## **Special Conditions**

- 1. This agreement is in effect for students who enter into their career and technical program beginning Fall of 2023 and earn credit at Washtenaw Community College by the end of Fall semester 2025. Exception: Students entering the Nursing Program must meet program requirements at the time of entry into the program. Please see website for information: www.wccnet.edu/health
- 2. All federal, state, and accreditation mandates supersedes this articulation agreement.

## How to apply for articulated credit

- 1. Secondary instructors can prepare students' performance records and submit it directly to WCC through CATEMA.
- 2. Students must also create a <u>CATEMA</u> account and enroll in their instructor's course through CATEMA.
- 3. Students can apply for articulated credit within 24 months following high school graduation by contacting <a href="mailto:transcripteval@wccnet.edu">transcripteval@wccnet.edu</a>.