Washtenaw Community College

Lenawee Intermediate School District Tech Center 2011-2012 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 2011-12 school year. 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.

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 effective dates of implementation (start date), expiration (ending), and discard dates (students are no longer able to access credit)
- The secondary program fulfills the corresponding course at the post-secondary program
- Specific courses that are the foundation of the aligned Tech Prep 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 agreed upon credits. Please see effective dates.

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.

Secondary – Post-secondary Curriculum Aligned Course List

LISD Tech Center			Washtenaw Community College		
Course Number	Title	CIP Code	Course Number	Title CIP C	ode
Auto Bo	dy Repair	47.0603		47.0	603
	Collision Repair & Refini	sh I & II	ABR 111	Introduction to Auto Body Repair	(4cr)
	Collision Repair & Refini	sh I & II	ABR 112	Introduction to Automotive Refinis (4cr)	shing
Automot	tive Technologies	47.0604		47.0	604
	Automotive Services Tec	hnology	ASV 151	Automotive Service I (4cr)	
	Automotive Services Tec	hnology	ASV 254	Suspension and Steering (2cr)	
	Automotive Services Tec	hnology	ASV 255	Brakes (2cr)	
	Automotive Services Tec	hnology	ASV 256	Electrical and Electronic Systems	(4cr)
	Automotive Services Tec	hnology	ASV 258	Engine Drivability (2cr)	
Students m	ay articulate up to 8 credits.		J.		
Marketin	g	52.1999		48.0	501
	Entrepreneurship, Marke	ting and Finance	BMG 140	Introduction to Business (3cr)	
Administ	trative Assistant Technol	ogy 11.0901	•	52.1.	203
 	Computer Information Se	ervices	CIS 100	Introduction to Computers and So Applications (3cr)	ftwar
	Computer Information Se	ervices	CIS 110	Introduction to Computer Informat Systems (3cr)	tion
	Computer Information Se	ervices	CIS 117	Windows Operating System (2cr)	
Resident	tial Construction Technol	ogy 46.0000		46.00	000
	Residential Construction		CON 104	Residential Construction I (3cr)	
Compute	er Systems Technology	45.000		11.00	000
	Alternative Energy and R	obotics	CST 118	MS Command Line Fundamentals	s (2ci
	Alternative Energy and R	obotics	CST 150	Computer Systems Technology (5	ōcr)
Compute	er Networking Technology	11.0901		11.00	000
	Computer Information Se	rvices	CNT 216	Internetworking II – Routers	-
	Computer Information Se		CNT 226	Internetworking III – Switches	
		rvices	CNT 236	Internetworking IV – WANs	
	Computer Information Se	111000			
Culinary	Computer Information Se	12.9999		20.04	499
Culinary	<u> </u>	12.9999	CUL 110		499
Culinary	Arts & Hospitality	12.9999 Arts	CUL 110 CUL 120	Sanitation and Hygiene (3cr) Culinary Skills (3cr)	499

Curriculum Aligned Course List (continued)

Digital M	edia Arts	10.0301			50.0402
· · · · · · · · · · · · · · · · · · ·	Graphic Imaging Technology		GDT 105	Introduction to Mac Graphic	S (3cr)
·	Graphic Imaging Technology		GDT 130	InDesign for Print Publishin	g (4cr)
	Graphic Imaging Technology		GDT 139	Illustrator Graphics (4cr)	
	Graphic Imaging Technology		GDT 140	Photoshop Graphics (4cr)	
Video Pro	oduction	10.0202	•		50.0402
	Video & Audio Production		VID 101	Video Production I (3cr)	
	3 C 1 O A 1: D 1 C		1.00 1.10	D: 11 (1) (1) F (1) 1 (0)	
Automoti	Video & Audio Production	.) 40.0504	VID 110	Digital Video Editing I (3cr)	40.0504
Automati	on Technology (Machine Tools Advanced Manufacturing	3) 48.0501	MTT 111	Machine Shop Theory & Pr	48.0501 actice (4cr
Automati	on Technology (Machine Tools	3) 48.0501			actice (4cr)
Automati Welding	on Technology (Machine Tools Advanced Manufacturing	48.0508	MTT 111	Machine Shop Theory & Pr	actice (4cr)
	on Technology (Machine Tools Advanced Manufacturing		MTT 111	Machine Shop Theory & Pr	actice (4cr)
	on Technology (Machine Tools Advanced Manufacturing Advanced Manufacturing		MTT 111 CAD 105	Machine Shop Theory & Problem Blueprint Reading & Analys	actice (4cr)
	on Technology (Machine Tools Advanced Manufacturing Advanced Manufacturing Advanced Manufacturing		MTT 111 CAD 105 WAF 102	Machine Shop Theory & Problem Blueprint Reading & Analysis	actice (4cr) is (3cr) 48.0508

HIGH SCHOOL COURSE SEQUENCE

9 th Grade	10 th Grade	11 th Grade	12 th 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:		

Auto Body	Repair	Certificate
Major/Are	a Requirements	(32 Credits)
ABR 111	Introduction to Auto Body Repair	4
ABR 112	Introduction to Automotive Refinishing	4
ABR 113	Estimating and Shop Operations	4
ABR 114	Applied Auto Body Welding	2
ABR 116	The Evolution of the Automobile	2
ABR 119	The Art of Metal Shaping	2
ABR 123	Technical Auto Body Repair	4
ABR 124	Technical Automotive Refinishing	4
ABR 135	Collision-Related Mechanical and Electrical Repairs	4
WAF 105	Welding for Art and Engineering	2
Minimum (Credits Required for the Program:	32 Credits

Collision Repair Refinish Technician

Advanced Certificate

Major/Area Re	equirements	(18 Credits)
CRT 200	Refinish Technician I	4
CRT 220	Refinish Technician II	2
CRT 240	Refinish Technician III	4
CRT 260	Refinish Technician IV	4
CRT 280	Refinish Technician V	4
Minimum Cred	lits Required for the Program:	18 Credits

Admission Requirements:

In order to enroll in this program, students must complete the Auto Body Repair (<u>CTAUBR</u>) certificate program with a grade of "B" or better in each course.

Collision Repair Technician

Advanced Certificate

Major/Area Re	quirements	(18 Credits)
CRT 201	Collision Technician I	4
CRT 221	Collision Technician II	2
CRT 241	Collision Technician III	4
CRT 261	Collision Technician IV	4
WAF 289	MIG Welding	4
Minimum Credi	its Required for the Program:	18 Credits

Admission Requirements:

In order to enroll in this program, students must complete the Auto Body Repair (<u>CTAUBR</u>) certificate program with a grade of "B" or better in each course.

Additional Program Opportunities:

Occupational Studies Associate Degree

Automotive Technologies

HIGH SCHOOL COURSE SEQUENCE

9 th Grade	10 th Grade	11 th Grade	12 th Grade
English 9 Math 9 History 9 Science 9 Health PE	English 10 Math 10 History Science 10 Computers	English 11 Math Elective Government Science Elective Automotive Services Technology	English Elective Math Elective History Elective Automotive Services Technology

WASHTENAW COMMUNITY COLLEGE

Automo	Automotive Mechanics Certific	
Major/A	rea Requirements	(24 Credits)
ASV 151	Automotive Service I	4
ASV 152	Automotive Service II	4
ASV 153	Automotive Service III	4
ASV 154	Automotive Service IV	4
ASV 155	Automotive Service V	4
	Select 4 credits from the following: <u>ABR 116</u> The Evolution of the Automobil <u>ASV 157</u> Repair Facility Operations and Advising 2 <u>MTT 102</u> Machining for A Applications 2	
	WAF 105 Welding for Art and Engineering 2	4
Minimun	r Credits Required for the Program:	24 Credits

Automotive Services Technician

Advanced Certificate Program

Autom	diomotive Services recrimician Advanced Certin	
Major/A	rea Requirements	(18 Credits)
ASV 254	Suspension and Steering	2
<u>ASV 255</u>	Brakes	2
ASV 256	Electrical and Electronic Systems	4
<u>ASV 257</u>	Heating and Air Conditioning Systems	2
ASV 258	Engine Drivability	2
	Select 6 credits from the following: <u>ASV 174</u> ASV Co-op Education I 1-3 <u>ASV 251</u> Engine Diagnosis and Repair 2 <u>ASV 252</u> Automatic Transmissions 2 <u>ASV 253</u> Manual Drivetrain and Axles 2 <u>ASV 259</u> Diagnosis and Repair 4	0
	ASV 261 Alternative Fuels and Hybrid Vehicles 2 ASV 262 Diesel Technology 2 ASV 263 Vehicle Performance 2	0
	ASV 269 Performance Automotive 4	6
Minimum	n Credits Required for the Program:	18 Credits

Admission Requirements: Completion of the Automotive Mechanics Certificate Program (CFAM).

Additional Program Opportunities: Occupational Studies Associate Degree

Marketing

HIGH SCHOOL COURSE SEQUENCE

9 th Grade	10 th Grade	11 th Grade	12 th Grade
English 9 Math 9 History 9 Science 9 Health PE	English 10 Math 10 History Science 10 Computers	English 11 Math Elective Government Science Elective	English Elective Math Elective History Elective Entrepreneurship, Marketing and Finance

WASHTENAW COMMUNITY COLLEGE

Business	W COMMONT T COLLEGE Associat	e in Arts Degree
General Edu	ucation Requirements	(33 - 34 Credits)
CIS 110	Introduction to Computer Information Systems	3
ENG 111	Composition I	4
ENG 226	Composition II	3
COM 101	Fundamentals of Speaking	3
MTH 160 or	Basic Statistics	
MTH 176 or	College Algebra	
MTH 181	Mathematical Analysis I	4
Nat. Sci.	Elective(s)*	4 - 5
Soc. Sci.	Elective(s)**	6
Arts/Hum.	Elective(s)***	6
Major/Area	Requirements	(24 Credits)
ACC 111	Principles of Accounting I	3
ACC 122	Principles of Accounting II	. 3
BMG 140	Introduction to Business	, 1 1 - ,
BMG 207	Business Communication	3
BMG 265	Business Statistics	3
ECO 211	Principles of Economics I	3
ECO 222	Principles of Economics II	3
BMG 106 or	Legal Basics in Business	
BMG 111	Business Law I	. <u></u> 3
Required Su	ipport Courses	(3 Credits)
Elective:	Complete one course as a free elective to bring the program total to a minimum of 60 credits.****	3
Minimum Cı	edits Required for the Program:	60 - 61 Credits

Additional Program Opportunities:

Accounting Associate Degree Culinary and Hospitality Management Associate Degree Information Systems Transfer Associate Degree

Computer Information Systems

HIGH SCHOOL COURSE SEQUENCE

9 th Grade	10 th Grade	11 th Grade	12 th Grade
English 9 Math 9 History 9 Science 9 Health PE	English 10 Math 10 History Science 10 Computers	English 11 Math Elective Government Science Elective Computer Information Services	English Elective Math Elective History Elective Computer Information Services

WASHTENAW COMMUNITY COLLEGE

Administrative Assistant Technology		Associate in Applied Science Degree	
General Educa	tion Requirements	(22 - 23 Credits)	
ENG 111	Composition I	4	
COM 101	Fundamentals of Speaking	3	
MTH 125	Everyday College Math	3	
Nat. Sci.	Elective(s)*	3 - 4	
Soc. Sci.	Elective(s)	3	
Arts/Hum.	Elective(s)	3	
CIS 100	Introduction to Computers and Software Appl	ications 3	
*BIO 102 or BIG	<u>O 109</u> is required for the Medical Administrative	Assistant Option.	
Major/Area Ro	equirements	(24 Credits)	
BOS 101C	Advanced Keyboarding	1	
BOS 107	Office Administration I	4	
BOS 157	Word Processing and Document Formatting I	3	
BOS 182	Database Software Applications	3	
BOS 183	Spreadsheet Software Applications	3	
BOS 206	Scheduling and Internet Office Applications	2	
BOS 207	Presentation Software Applications	2	
BOS 225	Integrated Office Applications	3	
BOS 257	Word Processing and Document Formatting II	3	
Required Supp		(5 - 6 Credits)	
CIS 117	Windows Operating System	2	

Program Concentrations: Complete the required courses in either the Administrative Assistant or Medical Administrative Assistant Option below. Check course descriptions for prerequisites.

Interpersonal Communication

Composition II

Administrative Assistant Option (ADMA)		(13 Credits)
ACC 111	Principles of Accounting I	3
BOS 130	Office Financial Applications	3

COM 102 or

ENG 226

3 - 4

Minimum C	Credits Required for the Program:	64 - 68 Credits
HSC 131	CPR/AED for the Professional Rescuer and First Aid	1
HCC 121	CDD (AED for the Professional Resource and First Aid	1
HSC 115	Medical Office and Laboratory Procedures	3
HSC 101	Healthcare Terminology	1
BOS 224	Medical Office Insurance and Billing	4
BOS 223	Medical Office Procedures	3
BOS 210	Medical Transcription	3
Medical Ad	ministrative Assistant Option (MEDA)	(15 Credits)
BOS 250	Office Administration II	4
BOS 208	Desktop Publishing for the Office	3

Residential Construction Technology

HIGH SCHOOL COURSE SEQUENCE

9 th Grade	10 th Grade	11 th Grade	12 th Grade
English 9 Math 9 History 9 Science 9 Health PE	English 10 Math 10 History Science 10 Computers	English 11 Math Elective Government Science Elective Building Trades/Residential Construction	English Elective Math Elective History Elective Building Trades/Residential Construction

WASHTENAW COMMUNITY COLLEGE

Residential Cons	struction Associate in	Science Degree
General Educatio	n Requirements	(34 Credits)
ENG 111	Composition I	4
ENG 226	Composition II	3
Speech	Elective(s)	3
MTH 178	General Trigonometry	3
PHY 105	Conceptual Physics	4
PLS 112	Introduction to American Government	3
Soc. Sci.	Elective(s)	3
Arts/Hum. *	Elective(s)	8
Computer Lit.	Elective(s)	
Major/Area Requ	irements	(30 Credits)
CMG 130	Construction Site Safety and MIOSHA Regulations	3
CON 104	Residential Construction I	3
CON 105	Residential Construction II	
CON 106	Math, Measurement, and Graphics	3
CON 204	Residential Construction III	3
CON 205	Residential Construction IV	3
CON 220	Residential Construction Licensing, Contracts, and Start Up	3
CON 230	Residential Construction Production	3
CON 255	Residential Construction Concrete and Exterior Finishes	3
Elective:	Choose 1 elective	3
Minimum Credits	Required for the Program:	64 Credits

Footnotes:

Continuing Eligibility: Students must complete all general education and major area requirement courses with a grade of "C" or better.

^{*}SPN 111 is strongly recommended.

Computer Systems Technology/Computer Networking

HIGH SCHOOL COURSE SEQUENCE

9 th Grade	10 th Grade	11 th Grade	12 th Grade
English 9 Math 9 History 9 Science 9 Health PE	English 10 Math 10 History Science 10 Computers	English 11 Math Elective Government Science Elective Alternative Energy & Robotics	English Elective Math Elective History Elective Alternative Energy & Robotics

WASHTENAW COMMUNITY COLLEGE

Computer Networking	Associate in Applied Science Degree

Computer No	etworking Associate in Appli	ea Science Degree
General Educ	ation Requirements	(21 - 24 Credits)
Writing	Elective(s)	3 - 4
<u>Speech</u>	Elective(s)	3
<u>Math</u>	Elective(s)	3 - 4
Nat. Sci.	Elective(s)	3 - 4
Soc. Sci.	Elective(s)	3
Arts/Hum.	Elective(s)	3
Computer Lit.	Elective(s)	3
Major/Area F	Requirements	(40 - 43 Credits)
	Complete the Computer Systems Technology Certificate (17 credits).	0
CST 118	MS Command Line Fundamentals	2
CST 150	Computer Systems Technology I	5
<u>CST 155</u>	Computer Systems Technology II	5
CST 225	PC Networking	3
<u>ELE 174</u> or	ELE Co-op Education I	
ELE 299	Customer Relations	1 - 3
Elective:	Complete the Computer Networking Academy I Advanced Certificate (16 credits). CNT 206, CNT 216, CNT 226 and CNT 236	0
	or a second seco	0
Elective:	Complete the Computer Networking Operating Systems I Advanced Certificate (15 credits). CNT 201, CNT 211, CNT 223 and CNT 224	15 - 16
CIS 121	Linux/UNIX I: Fundamentals	3
CPS 120	Introduction to Computer Science	3
Elective:	Complete an additional 3 credits to reach a minimum of 60 credit hours.	3
Minimum Cre	dits Required for the Program:	61 - 67 Credits

Additional Program Opportunities:

Data Recovery and Analysis Associate Degree

Culinary Arts & Hospitality

HIGH SCHOOL COURSE SEQUENCE

9 th Grade	10 th Grade	11 th Grade	12 th Grade
English 9	English 10	English 11	English Elective
Math 9 History 9	Math 10 History	Math Elective Government	Math Elective History Elective
Science 9	Science 10	Science Elective	Hospitality and Culinary Arts
Health	Computers	Hospitality and Culinary Arts	
PE	<u></u>		

WASHTENAW COMMUNITY COLLEGE

Culinary & Hospitality Management	Associate in Applied Science Degree
General Education Requirements	(18 - 20 Credits)

General Education R	<u>leguirements</u>	(18 - 20 Cred	its)
Writing	Elective(s)	3	3 - 4
Speech	Elective(s)		3
MTH 125	Everyday College Math		3
Nat. Sci.	Elective(s)	9	3 - 4
Soc. Sci.	Elective(s)		3
Computer Lit.	Elective(s)		3

Students who earn a certificate prior to entering the degree program need to select at least 3 credits in each of the General Education requirement areas.

each of the General Educa	ation requirement areas.	
Major/Area Requireme	nts	(52 - 53 Credits)
CUL 100	Introduction to Hospitality Management	3
CUL 110 **	Sanitation and Hygiene	3
CUL 114	Baking I	3
<u>CUL 115</u> or	Pastry I	
CUL 124	Baking II	
CUL 118	Principles of Nutrition	3
CUL 120	Culinary Skills	3
CUL 121	Introduction to Food Preparation Techniques	3
CUL 150	Food Service Management	3
CUL 151	Food Service Marketing	3
CUL 174 ***	CUL Co-op Education I	2 - 3
CUL 210	Gardemanger	3
CUL 220	Organization/Management of Food Systems	3
CUL 224	Principles of Cost Control	3
CUL 227	Advanced Culinary Techniques	2
CUL 228	Layout and Equipment	3
CUL 230	Quantity Food Production	3
CUL 231	A La Carte Kitchen	3
CUL 250	Principles of Beverage Service	3
Minimum Credits Requi	red for the Program:	70 - 73 Credits

Footnotes:

^{**}CUL 110 must be taken as a co-requisite with any of the lab classes: CUL 114, CUL 115, CUL 120, CUL 121.

***Students who earn a certificate in Hospitality Management prior to entering the degree program, do not need to take <u>CUL 174</u>. Students who earn a certificate in Baking and Pastry, need to take <u>CUL 174</u> as a one credit course. Students who earn a certificate in Culinary Arts, need to take <u>CUL 174</u> as a two credit course.

The following sequence of courses is recommended for Culinary Arts courses. Please check course descriptions for pre and co-requisites:

ΙĖ	İW	IS [.]	2F	2W
CUL 100	CUL 114	CUL 210	(CUL 115 or	CUL 174***
<u>CUL 110</u> **	CUL 150	CUL 228	<u>CUL 124</u>)	<u>CUL 227</u>
CUL 118	CUL 151		CUL 224	<u>CUL 250</u>
CUL 120	CUL 220		CUL 230	
CUL 121			<u>CUL 231</u>	

Visual Arts Technology

HIGH SCHOOL COURSE SEQUENCE

9 th Grade	10 th Grade	11 th Grade	12 th Grade
English 9 Math 9 History 9 Science 9 Health PE	English 10 Math 10 History Science 10 Computers	English 11 Math Elective Government Science Elective Graphic Imaging Technology	English Elective Math Elective History Elective Graphic Imaging Technology

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Grapnic Design	Associate in Applied Science Degree
General Education Requirements	(21 - 24 Credits)
ENG 107 or Technical Writing I	
ENG 111 Composition I	3 - 4
COM 101 Fundamentals of Speaking	3
MTH 125 or Everyday College Math	
MTH 151 Technical Algebra	3 - 4
Nat. Sci. Elective(s)	3 - 4
Soc. Sci. Elective(s)	3
GDT 101 History of Graphic Design	3
Computer Lit. Elective(s)	3
Major/Area Requirements	(47 Credits)
GDT 100 Typography I	4
GDT 112 Graphic Communication I	4
GDT 127 or QuarkXPress for Print Publishing	
GDT 130 InDesign for Print Publishing	4
GDT 139 Illustrator Graphics	4
GDT 140 Photoshop Graphics	4
GDT 150 Design for the Internet	4
GDT 220 Publication Design	4
GDT 239 Imaging and Illustration	4
GDT 252 Advanced Digital Studio	4
GDT 259 Graphic Communication II	4
GDT 290 Professional Practices	4
INP 152 Web Graphics I	3
Minimum Credits Required for the Program:	68 - 71 Credits

Additional Program Opportunities: 3D Animation Associate Degree Technical Writing Associate Degree

Visual Arts Technology

HIGH SCHOOL COURSE SEQUENCE

9 th Grade	10 th Grade	11 th Grade	12 th Grade
English 9 Math 9 History 9 Science 9 Health PE	English 10 Math 10 History Science 10 Computers	English 11 Math Elective Government Science Elective Video & Audio Production	English Elective Math Elective History Elective Video & Audio Production

Digital Video Production	Associate in Applied Science Degree

Digital Video Production		Associate in Applied Science Degree	
General Educatio	n Requirements	(31 - 33 Credits)	
ENG 111 and	Composition I	4	
ENG 226	Composition II	3	
COM 101	Fundamentals of Speaking	3	
<u>Math</u>	Elective(s)	3 - 4	
Nat. Sci.	Elective(s)	3 - 4	
Soc. Sci.	Elective(s)	6	
HUM 150	International Cinema	3	
HUM 160	American Film	3	
Computer Lit.	Elective(s)	3	
Major/Area Requ	irements	(34 Credits)	
INP 140	Building a Web Site	3	
<u>VID 101</u>	Video Production I	3	
VID 102	Video Production II	3	
<u>VID 110</u>	Digital Video Editing I	3	
VID 112	Digital Video Editing II	4	
<u>VID 203</u>	Web Video	3	
VID 255	Video Studio/Green Screen Effects	3	
<u>VID 276</u>	Advanced Video Graphics I	3	
VID 280	DVD Authoring	3	
<u>VID 295</u>	Professional Portfolio	3	
<u>VID 200</u> or	Lighting		
<u>VID 270</u>	Documentary and Reality Videos	3	
Minimum Credits	Required for the Program:	65 - 67 Credits	

Machine Tool Technology

HIGH SCHOOL COURSE SEQUENCE

9 th Grade	10 th Grade	11 th Grade	12 th Grade
English 9 Math 9 History 9 Science 9 Health PE	English 10 Math 10 History Science 10 Computers	English 11 Math Elective Government Science Elective Advanced Manufacturing	English Elective Math Elective History Elective Advanced Manufacturing

Automation Tec	MMUNITY COLLEGE hnology Associate in Applied Science Degree
General Education	n Requirements (21 - 24 Credits)
Writing	Elective(s) 3 - 4
Speech	Elective(s)
<u>Math</u>	Elective(s)
Nat. Sci.	Elective(s) 3 - 4
Soc. Sci.	Elective(s)
Arts/Hum.	Elective(s)
Computer Lit.	Elective(s)
Core Courses	(12 Credits)
AMS 103	Materials and Processes 3
BMG 241	Innovation: Process and Application 1
FLP 101	Fluid Power Fundamentals - I
MTT 102	Machining for Auto Applications 2
NCT 101	Introduction to Computerized Machining (CNC) - I
ROB 101	Robotics I - I
*Core courses mus	t be taken before Major/Area Requirements.
Major/Area Requ	
ELE 111	Electrical Fundamentals 4
ELE 224	Introduction to PLCs 4
FLP 110 *	Fluid Power Fundamentals - II
NCT 110 *	* Introduction to Computerized Machining (CNC) - II 2
ROB 110	Robotics I - II
ROB 212	Robotics II 4
ROB 222	Robotics Simulation 2
ROB 223	Robotics III 2
ROB 224	Robotics IV

Program Concentrations:

Certificates are made up of the core courses listed above and the following option courses with the following exception: Industrial Electronics Technology (CFIET).

Advanced	Man	ufacturing Specialty (ADVM)	(14 Credits)
AMS 104	riaii	Rapid Prototyping and Methods	3
			3
AMS 105		Lean Manufacturing Methods	3 4
AMS 204		Innovations Application	•
AMS 205		Build Concept Prototype	4
Fluid Pow	er Sp	pecialty (FPWR)	(12 Credits)
FLP 110	*	Fluid Power Fundamentals - II	2
FLP 214		Hydraulic Circuits and Controls	4
FLP 225		Fluid Power Motion Control	3
FLP 226		Pneumatics	3
Industrial	Elec	tronics Specialty (IELC)	(15 Credits)
ELE 211		Basic Electronics	4
ELE 254		PLC Applications	4
FLP 226		Pneumatics	3
MTT 111		Machine Shop Theory and Practice	4
Machine T	ool T	echnology Specialty (MTTE)	(13 Credits)
CAD 105		Blueprint Reading and Analysis	3
MTT 111		Machine Shop Theory and Practice	4
MTT 203		Advanced Machine Tool Operations	4
NCT 110	**	Introduction to Computerized Machining (CNC) - II	2
Numerical	l Con	trol Specialty (NCTL)	(14 Credits)
NCT 110	**	Introduction to Computerized Machining (CNC) - II	2
NCT 121		Manual Programming and NC Tool Operation	4
NCT 221		Advanced Manual Programming and NC Tool Operation	4
NCT 249		CAD/CAM CNC Programming	4
Minimum	Cred	its Required for the Program:	71 - 77 Credits

Footnotes:

See an advisor to assist in scheduling and planning for each semester as some classes have limited offering.

^{*}Students who have successfully completed <u>FLP 110</u> as part of their certificate do not need to take this course as a Major/Area requirement. Course can only be taken once for credit.

^{**}Students who have successfully completed <u>NCT 110</u> as part of their certificate do not need to take this course as a Major/Area requirement. Course can only be taken once for credit.

Welding

HIGH SCHOOL COURSE SEQUENCE

9 th Grade	10 th Grade	11 th Grade	12 th Grade
English 9 Math 9 History 9 Science 9 Health PE	English 10 Math 10 History Science 10 Computers	English 11 Math Elective Government Science Elective Advanced Manufacturing	English Elective Math Elective History Elective Advanced Manufacturing

Welding	Associate in Applie	ed Science Degree
General Educa	ation Requirements	(21 - 24 Credits
Writing	Elective(s)	3 - 4
Speech	Elective(s)	3
Math	Elective(s)*	3 - 4
Nat. Sci.	Elective(s)	3 - 4
Soc. Sci.	Elective(s)	3
Arts/Hum.	Elective(s)	5
Computer Lit.	Elective(s)	
*MTH 157 is re	commended.	
Major/Area R	equirements	(45 Credits
	Complete the Welding Certificate (21 credits).	. (
WAF 105	Welding for Art and Engineering	
WAF 106	Blueprint Reading for Welders	
WAF 111	Welding I Oxy-Acetylene	4
WAF 112	Welding II Basic ARC	
WAF 123	Welding III Advanced Oxy-Acetylene (OAW)	4
WAF 124	Welding IV Advanced ARC (SMAW)	4
	Complete the Welding Mechanics Advanced Certificate (24 credits).	(
WAF 200	Layout Theory Welding	•
WAF 210	Welding Metallurgy	;
WAF 215	Welding V Advanced GTAW and GMAW	: ¹
WAF 226	Specialized Welding Procedures	4
WAF 227	Basic Fabrication	
WAF 229	Shape Cutting Operations	;
WAF 289	MIG Welding	•
Minimum Con	dits Required for the Program:	66 - 69 Credits
rinninum Cred	and required for the Frogram.	00 01 010010

Conditions & Requirements

- 1. Students must meet admissions requirements of the college.
- 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 2011 and matriculates to Washtenaw Community College by Fall of 2014.
- 2. Exception: Students entering the Nursing Program must meet program requirements at the time of entry into the program.
- 3. All federal, state, and accreditation mandates supersedes this articulation agreement.

Effective Dates

Agreement implementation date: September 1, 2011

Agreement term date: August 31, 2012

Agreement discard date: September 1, 2014

Documentation of secondar	y instruction delivery/segn	nents is available for re	eview at secondary institution.
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Participating Instructors

Program	Instructors	
Auto Body Repair	Chris Harvey, LISD Tech Center	
	Scott Malnar, Washtenaw Community College	
Automotive Services	Mark LaFollette, LISD Tech Center	
	Justin Carter, Washtenaw Community College	
Computer Information Systems	Carlos Garcia, LISD Tech Center	
	Clem Hasselbach, Washtenaw Community College	
Computer Systems Technology/ Computer Networking	Carlos Garcia, LISD Tech Center	
Computer Networking	Clem Hasselbach, Washtenaw Community College	
Culinary Arts	Corbett Day, LISD Tech Center	
	Terri Herrera, Washtenaw Community College	
Residential Construction Technology	Steve Kosino, LISD Tech Center	
	Kevin Brown, LISD Tech Center	
	Cristy Lindemann, Washtenaw Community College	
Machine Tool Technology	Al Constable, LISD Tech Center	
	Kevin Cooper, LISD Tech Center	
	Tom Penird, Washtenaw Community College	
Marketing	Elizabeth Pechaitis, LISD Tech Center	
	Joel Steudle, LISD Tech Center	
	Kim Hurns, Washtenaw Community College	
Digital Media Arts	Joel Buetler, LISD Tech Center	
	Melissa Conklin, LISD Tech Center	
	Dan Kier, Washtenaw Community College	
	Jennifer Baker, Washtenaw Community College	
Welding	Kevin Cooper, LISD Tech Center	
	Coley McLean, Washtenaw Community College	

SD Career Center		Washtenaw Community College	
Allie Snyder, CTE Director	10/26/11 Date	Resemany Wilson, Dean Business & Computer Technologies	9/24/1 Date
		Ross Gordon, Interim Dean Vocational Technology	9/8/1/ Date
		Department Chair/Instructor Auto Body Repair	8-23-20 i Date
		Department Chair/Instructor Automotive Services	8·23·// Date
		Department Chair/Instructor Computer Information Systems, Computer Systems Technology,	8-23-1) Date
	C	and Computer Networking The House Department Chair/Instructor Cylinary Arts	$\frac{7-3}{\text{Date}}$
		Department Chair/Instructor Residential Construction	A 11 Date
		Department Chair/Instructor Machine Tool Technology	<i>É[23] 201</i> 7 Date
	0	Department Chair/Instructor Marketing	8/23/1/ Date
		Department Chair/Instructor Ungital Media Arts	Date 1)

Department Chair/Instructor Welding

Date