# Washtenaw Community College

Lenawee Intermediate School District
LISD Technical Center

2017 - 2018 School Year

2018 - 2019 School Year

2019 - 2020 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 2017-18. The articulation agreements will be continued for the 2018-2019 and 2019-2020 school 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.

#### 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 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 the 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** 

|   | e Agreement                             |                         | w Community College                                       |
|---|---|-------------------------|---|
| Course #                                | Title CIP Code                          | Course #                | Title CIP Code  |
| Automobi                                | e Technician                            |                         | Auto Services   |
|   | 47.0604                                 | 101/100                 | 47.0604   |
|   | Statewide Agreement                     | ASV 130                 | Automotive Maintenance (4cr)                              |
| Duainasa                                | Admin Maunt 9 Operations                | ASV 132                 | Automotive Engine (4cr)                                   |
| Business                                | Admin., Mgmt. & Operations 52.0299      |                         | Business  |
|   | Statewide Agreement                     | BMG 140                 | Introduction to Business (3cr)                            |
| Marketing                               |   | Е                       | Business  |
|   | 52.1990                                 | 1                       | 52.0000   |
|   | Entrepreneurship, Marketing and Finance | BMG 140                 | Introduction to Business (3cr)                            |
| Collision F                             | Repair Technician                       |                         | Auto Body Repair  |
|   | 47.0603                                 |                         | 47.0603   |
|   | Statowide Agreement                     | ABR 111                 | Introduction to Auto Body Repair (4cr)                    |
|   | Statewide Agreement                     | ABR 112                 | Introduction to Automotive Refinishing (4cr)              |
| Computer                                | Sys. Networking and Technolog           | gy (                    | Computer Systems and Networking                           |
|   |   | CIS 100                 | Introduction to Computers and Software                    |
|   | Statewide Agreement                     | CIS 100                 | Applications (3cr)  |
|   |   | CIS 110                 | Introduction to Computer Information Systems (3cr)        |
|   | Computer Networking Services            | CNT 216                 | Internetworking II – Routers                              |
|   | Computer Networking Services            | CNT 226                 | Internetworking III – Switches                            |
|   | Computer Networking Services            | CNT 236                 | Internetworking IV - WANS                                 |
| Computer                                | Programming 11.0201                     | I                       | Information Systems 11.0103                               |
|   |   | CIS 100                 | Introduction to Computers and Software Applications (3cr) |
|   | Statewide Agreement                     | CIS 110                 | Introduction to Computer Information Systems (3cr)        |
|   |   | CPS 171 or<br>CPS 161 * | Introduction to Programming with Java                     |
|   | vill be awarded credit for CPS 171. Th  | ey may reques           | st credit for CPS 161 instead.                            |
| Computer                                | Systems Technology 45.000               |                         | 11.0000   |
|   | Alternative Energy and Robotics         | CST 118                 | MS Command Line Fundamentals (2cr)                        |
|   | Alternative Energy and Robotics         | CST 160                 | Computer Technology I (4cr)                               |
| Construct                               | ion Technology<br>46.000                | (                       | Construction Technology 46.0000                           |
|   | Statewide Agreement                     | CON 108                 | Introduction to Construction Technology (2cr)             |
|   | Statewide Agreement                     | CON 104                 | Construction Framing I (3cr)                              |
| Cosmetolo                               | <b>Dgy</b> 12.0400                      |                         | Elective Credit   |
|   | Statewide Agreement                     | TRI 300 <sup>2</sup>    | Elective Credit (20cr)                                    |
| <sup>2</sup> Students m                 | nust present their Michigan State Boa   |                         |   |
| Cooking 8                               | Related Culinary Arts                   | (                       | Culinary & Hospitality Management                         |
|   | Statewide Agreement                     | CUL 100                 | Introduction to Food Service and Hospitality              |
| *************************************** | Curriculum and Assessment               | <u> </u>                | Industry (2cr)  |

|   |   | CUL 110 <sup>3</sup>                          | Sanitation and Hygiene (2cr)   |                         |
|---|---|---|--|-------------------------|
|   |   | CUL 145                                       |  | nool (2or)              |
| 3 Students mus  | t submit their ServSafe Certification   |   | Introduction to Dining Room Proto edit for CUL 110. ACF requires a minim   | ' '                     |
|   | to award credit.  | on to receive on                              | edit for GOL 110. Act Tequiles a minimi  | diff of 50 contact      |
| Digital Multin  |   | V   | Veb Design and Development   |                         |
|   | 11.0801   |   |  | 11.0801                 |
|   | Statewide Agreement   | WEB 110                                       | Web Development I (4cr)  |                         |
| Finance   |   |   | Accounting   |                         |
|   | 52.0800   |   | 1  | 52.0302                 |
|   | Statewide Agreement   | ACC 100                                       | Accounting Practices for Business (3   |                         |
|   | 3   | ACC 131                                       | Accounting Information Systems (3cr  | )                       |
| Graphic and   | Printing Technology   | G   | Braphic Design   |                         |
|   | 11.0301   | 1   |  | 54.0409                 |
|   |   | GDT 106                                       | Illustrator Graphics (3cr)   |                         |
|   | Statewide Agreement   | GDT 107                                       | InDesign (3cr)   |                         |
|   |   | GDT 108                                       | Photoshop Graphics (3cr)   |                         |
| Health/Thera  | peutic Services   | ŀ   | lealth Science   |                         |
|   | 51.0000   |   |  | 51.1601                 |
|   |   | HSC 100⁴                                      | Basic Nursing Assistant Skills (4c   | r)                      |
|   | Statewide Agreement   | HSC 101                                       | Healthcare Terminology (1cr)   |                         |
|   |   | HSC 131 <sup>5</sup>                          | CPR/AED for the Professional Re Aid (1cr)  |                         |
| criteria to apply<br>website at <u>http</u><br>5 Students mus | or for admission to the Registered No.//www4.wccnet.edu/departments/full present their card(s) for CPR/AE | lursing Prograr<br>nealth/<br>D, Child and In | ve credit for HSC 100. Students must mn. Additional information is available on fant CPR and First Aid from the Americ | the WCC an Red Cross to |
| receive credit f<br>Mechatronic                               |   | anted if all three                            | e (3) sections have been passed and an   | e documented.           |
| wiecnatronic  | <b>s</b><br>14.4201   |   | Mechatronics   | 15.0405                 |
|   | Statewide Agreement   | MEC 101                                       | 3D Modeling and Blueprint Readi  |                         |
|   | Statewide Agreement   | ROB 101                                       | Robotics I-I (2cr)   |                         |
| Radio & TV E  | Broadcasting Technology   |   | Digital Video Production   |                         |
|   | 10.0202   | \   | Te e   | 59.0602                 |
|   | Statewide Agreement   | VID 105                                       | Foundations in Digital Video I   |                         |
| Welding   | 48.0508   | V   | Velding  | 48.0508                 |
|   | Statewide Agreement   | WAF 103                                       | Introduction to Gas Tungsten Arc   | Welding (2cr)           |
|   | Advanced Manufacturing  | WAF 105                                       | Introduction to Welding Processe   | s (2cr)                 |
|   |   |   |  |                         |

# 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<br>Chemistry<br>Algebra 3, 4<br>U.S. History<br>Computer Accounting I | English Elective Physics Math Analysis U.S. Government Computer Accounting II |

### **WASHTENAW COMMUNITY COLLEGE**

| ccounting Semester 1 | Associate in Applie  X Fall Winter Spring/Summer Any |    |
|----------------------|--|----|
| ENG 111              | Composition I  | 4  |
| ACC 111              | Principles of Accounting I                           | 3  |
| BOS 184              | Spreadsheet Software Applications I                  | 3  |
| Math                 | Select from MTH 125, 160, 176 or 181                 | 4  |
| Semester Total       | ,              | 14 |
| Semester 2           | FallWinterSpring/SummerX_Any                         |    |
| TAX 101              | Income Taxes for Individuals                         | 3  |
| ACC 122              | Principles of Accounting II                          | 3  |
| ACC 131              | Accounting Information Systems                       | 3  |
| CIS 110              | Introduction to Computer Information Systems         | 3  |
| Semester Total       |  | 12 |
| Semester 3           | FallWinterSpring/SummerX_ Any                        |    |
| BMG 111              | Business Law I                                       | 3  |
| BMG 220              | Principles of Finance                                | 3  |
| ACC 213              | Intermediate Accounting                              | 3  |
| BMG 140              | Introduction to Business                             | 3  |
| ECO 211              | Principles of Economics I                            | 3  |
| Semester Total       |  | 15 |
| Semester 4           | FallWinterSpring/Summer _X Any                       |    |
| Nat. Sci.            | Elective(s)  | 4  |
| Arts/Human.          | Elective(s)  | 3  |
| ACC 225              | Managerial Cost Accounting                           | 3  |
| BMG 265              | Business Statistics                                  | 3  |
| Semester Total       |  | 13 |
| Semester 5           | FallWinterSpring/SummerX_ Any                        |    |
| COM 101              | Fundamentals of Speaking                             | 3  |
| Soc. Sci.            | Elective(s)  | 3  |
| BMG 207              | Business Communication                               | 3  |
| ECO 222              | Principles of Economics II                           | 3  |
| Semester Total       |  | 12 |
| Program Totals       |  | 66 |

### **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<br>Math<br>Science<br>Social Studies<br>Foreign Language | English 11 Math Social Studies Science Collision Repair & Refinishing I | English 12<br>Math<br>Social Studies<br>Collision Repair &<br>Refinishing II |
| Choice of Electives:<br>Visual/Performing/Applied<br>Arts                     | Choice of Electives:  |   |  |

### **WASHTENAW COMMUNITY COLLEGE**

Auto Body Repair Certificate

| Semester 1     | FallWinterSpring/Summer _XAny                                  |    |
|----------------|--|----|
| ABR 111        | Introduction to Auto Body Repair                               | 4  |
| ABR 112        | Introduction to Automotive Refinishing                         | 4  |
| Rest. Elect    | Restricted Electives   | 4  |
| Semester Total |  | 12 |
| Semester 2     | FallWinterSpring/Summer _XAny                                  |    |
|                | Estimating and Shop Operations or Collision-Related Mechanical | 4  |
| ABR 113 or 135 | & Electrical Repairs   | •  |
| ABR 123        | Technical Auto Body Repair                                     | 4  |
| Rest. Elect    | Restricted Electives   | 4  |
| Semester Total |  | 12 |
| Semester 3     | FallWinterSpring/Summer _XAny                                  |    |
| ABR 124        | Technical Automotive Refinishing                               | 4  |
| Rest. Elect    | Restricted Electives   | 2  |
| Semester Total |  | 6  |
| Program Totals |  | 30 |

# **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 Math 9 History 9 Science 9 Health PE | English 10<br>Math 10<br>History<br>Science 10<br>Computers | English 11 Math Elective Government Science Elective Automotive Services Technology | English Elective Math Elective History Elective Automotive Services Technology |

# WASHTENAW COMMUNITY COLLEGE Automotive Service Technology

# **Associate in Applied Science Program**

| Semester 1     |                                   |    |
|----------------|-----------------------------------|----|
| ASV 130        | Automotive Maintenance            | 4  |
| ASV 131*       | Automotive Electrical             | 4  |
| Math           | Elective                          | 3  |
| Writing        | Elective                          | 3  |
| ASV Elect      | ABR 116, MTT 102 or WAF 105       | 2  |
| Semester Total | * after passing additional exam   | 16 |
| Semester 2     |                                   |    |
| ASV 132        | Automotive Engines                | 4  |
| ASV 133        | Automotive Fuel                   | 4  |
| ASV 134        | Automotive Transmission           | 4  |
| Comp Lit       | Elective                          | 3  |
| Semester Total |                                   | 15 |
| Semester 3     |                                   |    |
| ASV 254        | Suspension and Steering           | 2  |
| ASV 255        | Brakes                            | 2  |
| ASV 256        | Electrical and Electronic Systems | 4  |
| ASV 258        | Engine Drivability                | 2  |
| Speech         | Elective                          | 3  |
| Arts/Hum       | Elective                          | 3  |
| Semester Total |                                   | 16 |
| Semester 4     |                                   |    |
| Nat. Sci       | Elective                          | 3  |
| Soc. Sci       | Elective                          | 3  |
| Rest. Elect    | ASV Restricted Elective           | 4  |
| Elective       | Minimum 60 credits                | 3  |
| Semester Total |                                   | 13 |
| Program Totals |                                   | 60 |

### **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 Math 9 History 9 Science 9 Health PE | English 10<br>Math 10<br>History<br>Science 10<br>Computers | English 11 Math Elective Government Science Elective | English Elective Math Elective History Elective Entrepreneurship, Marketing and Finance |

### **WASHTENAW COMMUNITY COLLEGE**

### Business

### **Associate in Arts Degree**

| Semester 1     | FallWinterSpring/Summerx_Any  |         |
|----------------|---|---------|
| ENG 111        | Composition I   | 4       |
| Math           | Select one of MTH 125, MTH 160, MTH 176 or MTH 181  | 4       |
| ACC 111        | Principles of Accounting I  | 3       |
| BMG 140        | Introduction to Business  | 3       |
| CIS 110        | Introduction to Computer Information Systems  | 3       |
| Semester Total |   | 17      |
| Semester 2     | FallWinterSpring/Summer _x_ Any   |         |
| ENG 226        | Composition II  | 3       |
| ACC 122        | Principles of Accounting II   | 3       |
| BMG 207        | Business Communication  | 3       |
| Nat. Sci.      | Elective(s)**   | 4       |
| Semester Total |   | 13      |
| Semester 3     | FallWinterSpring/SummerxAny   |         |
| COM 101        | Fundamentals of Speaking  | 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     | FallWinterSpring/Summer _xAny   |         |
| Arts/Human.    | Elective(s)***  | 3       |
| Arts/Human.    | Elective(s)***  | 3       |
| ECO 222        | Principles of Economics II  | 3       |
| Nat. Sci.      | Elective(s) *****   | 3 - 4   |
| Elective       | Complete one course as a free elective to bring the program total to a minimum of 60 credits.**** | 3       |
| Semester Total |   | 15 - 16 |
| Program Totals |   | 60 - 61 |

**Additional Program Opportunities:** Accounting Associate Degree, Culinary and Hospitality Management Associate Degree, Information Systems Transfer Associate Degree

# Marketing

### 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 Math 9 History 9 Science 9 Health PE | English 10<br>Math 10<br>History<br>Science 10<br>Computers | English 11 Math Elective Government Science Elective | English Elective Math Elective History Elective Entrepreneurship, Marketing and Finance |

### **WASHTENAW COMMUNITY COLLEGE**

### **Business**

### **Associate in Arts Degree**

| Semester 1     | FallWinterSpring/Summerx_Any                                |         |
|----------------|---|---------|
| ENG 111        | Composition I   | 4       |
| Math           | Select one of MTH 125, MTH 160, MTH 176 or MTH 181          | 4       |
| ACC 111        | Principles of Accounting I                                  | 3       |
| BMG 140        | Introduction to Business                                    | 3       |
| CIS 110        | Introduction to Computer Information Systems                | 3       |
| Semester Total |   | 17      |
| Semester 2     | FallWinterSpring/Summer _x_ Any                             |         |
| ENG 226        | Composition II  | 3       |
| ACC 122        | Principles of Accounting II                                 | 3       |
| BMG 207        | Business Communication                                      | 3       |
| Nat. Sci.      | Elective(s)**   | 4       |
| Semester Total |   | 13      |
| Semester 3     | FallWinterSpring/SummerxAny                                 |         |
| COM 101        | Fundamentals of Speaking                                    | 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     | FallWinterSpring/Summer _xAny                               |         |
| Arts/Human.    | Elective(s)***  | 3       |
| Arts/Human.    | Elective(s)***  | 3       |
| ECO 222        | Principles of Economics II                                  | 3       |
| Nat. Sci.      | Elective(s) *****   | 3 - 4   |
| Elective       | Complete one course as a free elective to bring the program | 3       |
|                | total to a minimum of 60 credits.****                       |         |
| Semester Total |   | 15 - 16 |
| Program Totals |   | 60 - 61 |

**Additional Program Opportunities:** Accounting Associate Degree, Culinary and Hospitality Management Associate Degree, Information Systems Transfer Associate Degree

# **Construction 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 Math 9 History 9 Science 9 Health PE | English 10<br>Math 10<br>History<br>Science 10<br>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 Construction Technology

# **Associate in Science Degree**

| Semester 1     | FallWinterSpring/Summerx_Any                    |     |
|----------------|---|-----|
| ENG 111        | Composition I                                   | 4   |
| Arts/Human.    | Elective(s)*                                    | 3   |
| CON 108        | Introduction to Construction Technology         | 2   |
| MTH 178        | General Trigonometry                            | 3   |
| CON 104        | Construction Framing I                          | 3   |
| Semester Total |   | 15  |
| Semester 2     | FallWinterSpring/Summerx_ Any                   |     |
| ENG 226        | Composition II                                  | 3   |
| CMG 130        | Construction Site Safety and MIOSHA Regulations | 3   |
| PLS 112        | Introduction to American Government             | 3   |
| CON 105        | Construction Framing II                         | 3   |
| Computer Lit.  | Elective(s)*                                    | 3   |
| Semester Total |   | 15  |
| Semester 3     | FallWinterSpring/Summer _x_ Any                 |     |
| Speech         | Elective(s)                                     | 3   |
| Arts/Human.    | Elective(s)*                                    | 3   |
| PHY 105        | Conceptual Physics                              | 4   |
| CON 204        | Construction Finishes Interior                  | 3   |
| CON 205        | Construction Finishes Exterior                  | 3   |
| Semester Total |   | 16  |
| Semester 4     | FallWinterSpring/Summer _xAny                   |     |
| Arts/Human.    | Elective(s)*                                    | 3   |
| Soc. Sci.      | Elective(s)                                     | 3   |
| CON 220        | Construction Licensing, Contracts, and Start Up | 3   |
| CON 230        | Construction Production                         | 3 3 |
| CON 255        | Construction Concrete and Masonry               | 3   |
| Semester Total |   | 15  |
| Program Totals |   | 61  |

# **Computer Sys. Networking & 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 Math 9 History 9 Science 9 Health PE | English 10<br>Math 10<br>History<br>Science 10<br>Computers | English 11 Math Elective Government Science Elective Alternative Energy & Robotics | English Elective Math Elective History Elective Alternative Energy & Robotics |

### **WASHTENAW COMMUNITY COLLEGE**

Computer Systems and Networking - Computer and Network Security Concentration (CSEC)
Associate in Applied Science Degree

| _               | Associate in Applied Sc                                 | ionioc Dogree |
|-----------------|---|---------------|
| Semester 1      | FallWinterSpring/Summer _X_Any                          |               |
| CST 118         | MS Command Line Fundamentals                            | 2             |
| CST 160         | Computer Technology I                                   | 4             |
| CST 165         | Computer Technology II                                  | 4             |
| CST 225         | PC Networking   | 3             |
| Speech          | Elective(s)   | 3             |
| Semester Total  |   | 16            |
| Semester 2      | FallWinterSpring/Summer _XAny                           |               |
| Writing         | Elective(s)   | 3             |
| Math            | Elective(s)   | 3             |
| CIS 121         | Linus/UNIX I: Fundamentals                              | 4             |
| CNT 201         | Administering Microsoft Windows Client Operating System | 3             |
| CNT 211         | Installing and Configuring Windows Server 2012          | 4             |
| Semester Total  |   | 17            |
| Semester 3      | FallWinterSpring/Summer _XAny                           |               |
| Natural Science | Elective(s)   | 3             |
| Soc. Sci.       | Elective(s)   | 3             |
| CNT 206         | Internetworking I - Fundamentals                        | 4             |
| CNT 216         | Internetworking II - Routers                            | 4             |
| CSS 200         | Introduction to Network Security                        | 4             |
| Semester Total  |   | 18            |
| Semester 4      | FallWinterSpring/Summer _XAny                           |               |
| Arts/Human.     | Elective(s)   | 3             |
| CIS 161         | Introduction to PowerShell                              | 4             |
| CSS 205         | Essentials of Network Penetration Testing               | 4             |
| CSS 210         | Basic Network Perimeter Protection                      | 4             |
|                 |   |               |
| Semester Total  |   | 15            |
| Program Totals  |   | 66            |

**Additional Program Concentrations Include:** Computer Forensics (CSFC), Linux Network Operating System (LNOS). Local and Wide Area Networking (NETW), Microsoft Network Operating System (MNOS)

### 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 Math 9 History 9 Science 9 Health PE | English 10<br>Math 10<br>History<br>Science 10<br>Computers | English 11 Math Elective Government Science Elective Alternative Energy & Robotics | English Elective Math Elective History Elective Alternative Energy & Robotics |

# WASHTENAW COMMUNITY COLLEGE Information Systems: Programming in C++

### **Associate in Science**

| Semester 1     | FallWinterSpring/Summerx_Any                |    |
|----------------|---|----|
| COM 225        | Intercultural Communication                 | 3  |
| Computer Lit   | Computer Literacy (if CIS 100 is used)      | 3  |
| CPS 171        | Introduction to Programming with C++        | 4  |
| ENG 111        | Composition I                               | 4  |
| Semester Total |   | 14 |
| Semester 2     | FallWinterSpring/Summer _x Any              |    |
| Arts/Human.    | Elective(s)****                             | 3  |
| CIS 121        | Linux/UNIX I: Fundamentals                  | 3  |
| CPS 271        | Object Features of C++                      | 4  |
| ENG 226        | Composition II                              | 3  |
| Math           | MTH 176 or higher 4 credit                  | 4  |
| Semester Total |   | 17 |
| Semester 3     | FallWinterSpring/Summer _x Any              |    |
| Nat. Sci.      | Elective(s)***                              | 4  |
| CPS 276        | Web Programming Using Apache, MySQL and PHP | 4  |
| Elective       | Elective for minimum of 60                  | 4  |
| Soc. Sci.      | Elective(s)                                 | 3  |
| Semester Total |   | 15 |
| Semester 4     | FallWinterSpring/Summer _x Any              |    |
| Soc. Sci.      | Elective(s)                                 | 3  |
| Soc. Sci.      | Elective(s)                                 | 3  |
| Arts/Human.    | Elective(s)****                             | 3  |
| Elective       | Elective for minimum of 60                  | 4  |
| CPS 272        | Data Structures with C++                    | 4  |
| Semester Total |   | 17 |
| Program Totals |   | 63 |

### **Cooking and Related Culinary 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 Math 9 History 9 Science 9 Health PE | English 10<br>Math 10<br>History<br>Science 10<br>Computers | English 11 Math Elective Government Science Elective Hospitality and Culinary Arts | English Elective Math Elective History Elective Hospitality and Culinary Arts |

# WASHTENAW COMMUNITY COLLEGE

**Culinary and Hospitality Management** 

# **Associate in Applied Science**

| Semester 1     | , ,   |    |
|----------------|---|----|
| CUL 100        | Introduction to Food Service and Hospitality Industry | 2  |
| CUL 110        | Sanitation and Hygiene**                              | 2  |
| Arts & Human.  | Elective  | 3  |
| Writing        | Elective  | 3  |
| Math           | Elective  | 4  |
| Semester Total |   | 14 |
| Semester 2     |   |    |
| Speech         | Elective(s)   | 3  |
| Computer Lit   | Elective(s)   | 3  |
| CUL 104        | Baking Science  | 2  |
| CUL 116        | Fundamental Culinary Principles                       | 3  |
| CUL 118        | Principles of Nutrition                               | 3  |
| CUL 145        | Introduction to Dining Room Protocol                  | 3  |
| Semester Total |   | 17 |
| Semester 3     |   |    |
| Social Science | Elective(s)   | 3  |
| Nat. Sci.      | Elective(s)   | 3  |
| Semester Total |   | 6  |
| Semester 4     |   |    |
| CUL 114        | Fundamentals of Baking                                | 3  |
| CUL 115        | Fundamentals of Pastry                                | 3  |
| CUL 120        | Classical Kitchen Operations                          | 3  |
| CUL 121        | Modern Kitchen Operations                             | 3  |
| CUL 150        | Food Service Management and Supervision               | 3  |
| Semester Total |   | 15 |
| Semester 5     |   |    |
| CUL 210        | Advanced Kitchen Operations: Garde Manger             | 3  |
| CUL 224        | Principles of Cost Control                            | 3  |
| CUL 226        | Advanced Dining Room and Beverage Management          | 3  |
| CUL 230        | Advanced Kitchen Operations: American Regional        | 3  |
| CUL 231        | Advanced Kitchen Operations: Global Cuisines          | 3  |
| Semester Total |   | 15 |
| Program Totals |   | 67 |

### **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 Math 9 History 9 Science 9 Health PE | English 10<br>Math 10<br>History<br>Science 10<br>Computers | English 11 Math Elective Government Science Elective Graphic Imaging Technology | English Elective Math Elective History Elective Graphic Imaging Technology |

### WASHTENAW COMMUNITY COLLEGE Program Layout by Semester

# **Graphic Design**

# **Associate in Applied Science**

| Semester 1        |  |    |
|-------------------|--|----|
| ENG 107 or 111    | Technical Writing I or Composition I             | 3  |
| GDT 101           | History of Graphic Design                        | 3  |
| GDT 104           | Introduction to Graphic Design                   | 4  |
| WEB 115           | Introduction to Interface Design                 | 4  |
| Soc. Sci.         | Elective(s)                                      | 3  |
| Semester Total    |  | 17 |
| Semester 2        |  |    |
| Speech            | Elective(s)                                      | 3  |
| Restrict Elect    | Elective(s)                                      | 3  |
| GDT 100           | Typography I                                     | 4  |
| GDT 112           | Principles and Problem Solving in Graphic Design | 4  |
| INP 170           | Web Coding II                                    | 3  |
| Semester Total    |  | 17 |
| Semester 3        |  |    |
| GDT 220           | Publication Design                               | 4  |
| INP 154           | Interaction Design I                             | 4  |
| MTH 125 or higher | Everyday College Math or higher                  | 4  |
| Restricted        | Elective(s)                                      | 3  |
| Semester Total    |  | 15 |
| Semester 4        | FallWinterSpring/SummerAny                       |    |
| GDT 252           | Advanced Digital Studio                          | 4  |
| GDT 290           | Professional Practices                           | 4  |
| Nat. Sci.         | Elective(s)                                      | 4  |
| INP 254           | Interaction Design II                            | 4  |
| Semester Total    |  | 16 |
| Program Totals    |  | 64 |

Please see the current Washtenaw Community College catalog for up-to-date program requirements.

### 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 Math 9 History 9 Science 9 Health PE | English 10<br>Math 10<br>History<br>Science 10<br>Computers | English 11 Math Elective Government Science Elective Video & Audio Production | English Elective Math Elective History Elective Video & Audio Production |

### WASHTENAW COMMUNITY COLLEGE Program Layout by Semester

Digital Video Production Associate in Arts

| Semester 1     | 7,0000141                       |    |
|----------------|---------------------------------|----|
| Computer Lit   | Elective(s)*                    | 3  |
| ENG 111        | Composition I                   | 4  |
| HUM 150        | International Cinema            | 3  |
| Speech         | Elective (s)                    | 3  |
| VID 105        | Foundations in Digital Video I  | 4  |
| Semester Total |                                 | 17 |
| Semester 2     |                                 |    |
| HUM 160        | American Film                   | 3  |
| VID 125        | Foundations in Digital Video II | 4  |
| VID 180        | Television Studio I             | 4  |
| VID 255        | Green Screen I                  | 3  |
| Math           | Elective(s)                     | 4  |
| Semester Total |                                 | 18 |
| Semester 3     |                                 | ·  |
| ENG 226        | Composition II                  | 3  |
| VID 210        | Screenplays                     | 3  |
| VID 276        | Video Graphics I                | 3  |
| VID            | Elective(s)                     | 3  |
| Soc. Sci.      | Elective(s)                     | 3  |
| Semester Total |                                 | 15 |
| Semester 4     | FallWinterSpring/Summer _x _Any |    |
| Nat. Sci.      | Elective(s)                     | 4  |
| Soc. Sci.      | Elective(s)                     | 3  |
| VID 203        | Web Video                       | 3  |
| VID 295        | Portfolio and Project Seminar   | 3  |
| Semester Total |                                 | 13 |
| Program Totals |                                 | 63 |

<u>Please see the current Washtenaw Community College catalog for up-to-date program requirements.</u>

### **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<br>Algebra II<br>Civics/Economics<br>Web I Elective | English 12<br>Math Credit<br>Science Credit<br>Web II Elective |

### **WASHTENAW COMMUNITY COLLEGE**

### Web Design and Development - Web Design Concentration

### **Associate in Applied Science**

| Semester 1     |   |     |
|----------------|---|-----|
| ENG 107 or 111 | Technical Writing I or Composition I                        | 4   |
| WEB 110        | Web Development I   | 4   |
| WEB 113        | Web User Experience I                                       | 4   |
| WEB 115        | Introduction to Interface Design                            | 4   |
|                | Introduction to interface Design                            |     |
| Semester Total |   | 16  |
| Semester 2     | W 1 5 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1                     | T . |
| WEB 210        | Web Development II  | 4   |
| WEB 213        | Web User Experience II                                      | 4   |
| WEB 215        | Intermediate Interface Design                               | 4   |
| Speech         | Elective(s)*  | 3   |
| Semester Total |   | 15  |
| Semester 3     |   |     |
| Arts/Human.    | Elective(s)*  | 3   |
| Social Science | Elective(s)*  | 3   |
| WEB 235        | Advanced Interface Design                                   | 4   |
| Elective       | Any course from ANI, GDT, PHO, VID or WEB                   | 3   |
| Elective       | WEB 233 or any GDT Course                                   | 4   |
| Semester Total |   | 17  |
| Semester 4     |   |     |
| Nat. Sci.      | Elective(s)*  | 4   |
| Math           | Elective(s)*  | 4   |
| Elective       | Any 100 level ANI, GDT, PHO, VID or WEB for of 60 cr. hours | 3   |
| WEB 255        | Interaction Design  | 4   |
| Semester Total |   | 15  |
| Program Totals |   | 63  |

Please see the current Washtenaw Community College catalog for up-to-date program requirements.

# **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

| Compostor 1       |   |              |
|-------------------|---|--------------|
| Semester 1        |   |              |
| Course #          | Course Title:   | Credit Hours |
| HCFELEC1          | Required Elective 1: BIO 101, BIO 102, 109, 111                               | 5            |
| HCFELEC2          | Required Elective 2: COM 101 or COM 102                                       | 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    |   | 14           |
| Semester 2        |   |              |
| Course #          | Course Title:   | Credit Hours |
| HCFELEC3          | Required Elective 3: MTH 160 or MTH 167 or MTH 169                            | 4            |
| HCFELEC4          | Required Elective 4: HSC 100 or PTA 102 or PHT 106 or RAD 100 for 1-4 credits | 1-4          |
| PHL 244           | Ethical and Legal Issues in Health Care                                       | 3            |
| Computer Literacy | Elective  | 3            |
| HCFELEC5          | PSY 100 or SOC 100  | 3            |
| Semester Total    |   | 14 -17       |
| Program Totals    |   | 28 - 31      |

<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, Nursing Associate in Applied Science Degree, Pharmacy Technology Certificate, Physical Therapist Assistant Associate in Applied Science Degree. Radiography Associate in Applied Science Degree, 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 Program Layout by Semester

# Mechatronics - Numerical Control Programming Concentration\* Associate in Applied Science \*One of 3 possible concentrations

Semester 1 2 FLP 101 Fluid Power Fundamentals - I 2 FLP 110 Fluid Power Fundamentals - II 2 Introduction to Computerized Machining (CNC) - I NCT 101 2 **NCT 110** Introduction to Computerized Machining (CNC) - II\*\* **ROB 101** Robotics I - I 2 **ROB 110** Robotics I - II 3 Elective(s) Math Semester Total 15 Semester 2 4 **ELE 111 Electrical Fundamentals** 3 **MEC 100** Materials and Processes 2 MEC 101 3D Modeling and Blueprint Reading 2 Machining for Auto Applications MTT 102 11 Semester Total Semester 3 2 MEC 201 Mechanisms 4 NCT 121 Manual Programming and NC Tool Operation 4 **ROB 212** Robotics II 3 Speech Elective(s) 3 Writing Elective(s) Semester Total 16 Semester 4 4 Advanced Manual Programming and NC Tool Operation NCT 221 4 **ELE 224** Introduction to PLCs 2 **ROB 222 Robotics Simulation** 2 **ROB 223** Robotics III 3 Soc. Sci. Elective(s) Semester Total 15 Semester 5 3 Arts/Human. Elective(s)

| Nat. Sci.      | Elective(s)             | 4  |
|----------------|-------------------------|----|
| MEC 224        | Robotics IV             | 4  |
| NCT 249        | CAD/CAM CNC Programming | 4  |
| Semester Total |                         | 15 |
| Program Totals | Program Totals          | 72 |

<u>Please see the current Washtenaw Community College catalog for up-to-date program requirements.</u>

# 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               | 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      | Welding  | Welding                |
| World Language          | World Language            | , and the second | · ·                    |
| Phys Ed/Health          | Visual/Performing/Applied |  |                        |
|                         | Arts                      |  |                        |

### **WASHTENAW COMMUNITY COLLEGE**

Welding Associate in Applied Science

| Troiding       |                                     | Abboolate III Applica Coloride |
|----------------|-------------------------------------|--------------------------------|
| Semester 1     |                                     |                                |
| Math           | Elective(s)*                        | 3                              |
| WAF 105        | Introduction to Welding Processes   | 2                              |
| WAF 111        | Oxy-fuel Welding                    | 4                              |
| WAF 112        | Shielded Metal Arc Welding          | 4                              |
| Semester Total |                                     | 13                             |
| Semester 2     |                                     |                                |
| Speech         | Elective(s)                         | 3                              |
| WAF 106        | Blueprint Reading for Welders       | 3                              |
| WAF 123        | Advanced Oxy-fuel Welding           | 4                              |
| WAF 124        | Advanced Shielded Metal Arc Welding | 4                              |
| Semester Total |                                     | 14                             |
| Semester 3     |                                     |                                |
| Arts/Human.    | Elective(s)                         | 3                              |
| Computer Lit.  | Elective(s)                         | 3                              |
| WAF 215        | Advanced Gas Tungsten Arc Welding   | 4                              |
| WAF 288        | Gas Metal Arc Welding               | 4                              |
| Semester Total |                                     | 14                             |
| Semester 4     |                                     |                                |
| WAF 200        | Layout Theory Welding               | 3                              |
| WAF 210        | Welding Metallurgy                  | 3                              |
| Soc. Sci.      | Elective(s)                         | 3                              |
| WAF 226        | Specialized Welding Procedures      | 4                              |
| Semester Total |                                     | 13                             |
| Semester 5     |                                     |                                |
| Nat. Sci.      | Elective(s)                         | 4                              |
| WAF 227        | Basic Fabrication                   | 3                              |
| WAF 229        | Shape Cutting Operations            | 3                              |
| Writing        | Elective(s)                         | 3                              |
| Semester Total |                                     | 13                             |
| Program Totals |                                     | 67                             |

Please see the current Washtenaw Community College catalog for up-to-date program requirements.

### **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 2017 and earn credit at Washtenaw Community College by the end of Fall semester 2019. 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.

### **Effective Dates**

### Year 1:

Agreement start date: September 1, 2017

H.S. Graduation during: 2018

Last date to post credit: December 31, 2020

**Year 2:** 

Agreement start date: September 1, 2018

H.S. Graduation during: 2019

Last date to post credit: December 31, 2021

**Year 3:** 

Agreement start date: September 1, 2019

H.S. Graduation during: 2020

Last date to post credit: December 31, 2022

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

# **Participating Instructors**

| Program                                 | Instructors         |
|---|---------------------|
| Accounting/ Finance                     | Statewide Agreement |
| Automotive Services                     | Statewide Agreement |
| Collision Repair                        | Statewide Agreement |
| Business                                | Statewide Agreement |
| Computer Sys. Networking and Technology | Statewide Agreement |
| Computer Programming                    | Statewide Agreement |
| Construction                            | Statewide Agreement |
| Cosmetology                             | Statewide Agreement |
| Culinary Arts/Cooking                   | Statewide Agreement |
| Digital Media                           | Statewide Agreement |
| Graphic and Printing Technology         | Statewide Agreement |
| Health Science                          | Statewide Agreement |
| Mechatronics                            | Statewide Agreement |
| Radio & Broadcasting Technology         | Statewide Agreement |
| Welding                                 | Statewide Agreement |

# Signatures

| LISD Tech Center   |          | Washtenaw Community College                                   |                      |
|--|----------|---|----------------------|
| JEnny Heath  | 8/4/2015 |   |                      |
| Jenny Heath, Assistant Principal<br>Curriculum and Instruction | Date     | Kimberly Hurns, Dean<br>Business & Computer Technologies      | Date Date            |
|  |          | Valerie Greaves, Dean<br>Health Science                       | <br>Date             |
|  |          | Brandon Tucker, Dean<br>Advanced Technologies and Public Serv | Date<br>vice Careers |
|  |          | Kristin Good, Dean<br>Math, Science and Engineering Technol   | Date logy            |
|  |          | Department Chair/Instructor<br>Business                       | Date                 |
|  |          |   | Date                 |
|  |          |   | Date                 |