# Washtenaw Community College <br> \& <br> Livingston Educational Services Agency <br> Livingston Applied Technology Education Consortium <br> 2017-2018 School Year <br> 2018-2019 School Year <br> 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 20192020 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

| All Schools |  |  |
| :---: | :---: | :---: |
| Course \# | Title Code | CIP |
| Finance |  |  |
|  | Statewide Agreement |  |

Curriculum Aligned Course List Washtenaw Community College

Course \# | Title | CIP Code |
| :--- | :--- |

## Accounting

52.0302

| ACC 100 | Accounting Practices for Business (3cr) |
| :--- | :--- |
| ACC 131 | Accol |

ACC 131 Accounting Information Systems (3cr)

## Collision Repair Technician

## Auto Body Repair

47.0603
47.0603

|  | Statewide Agreement | ABR 111 |
| :---: | :---: | :---: |
|  |  | ABR 112 |
| Automobile Technician |  |  |
|  | 47.0604 |  |
|  | Statewide Agreement |  |
| ${ }^{1}$ Students will be required to pass a written test prior to the award of |  |  |
| Business Admin., Mgmt. \& Operations |  |  |
|  | 52.0299 |  |
|  | Statewide Agreement |  |
| Business Office Systems <br> Howell <br> 520299 |  |  |
| 570 | Business Office Administration |  |
| 570 | Business Office Administration |  |
| 570 | Business Office Administration |  |

## BMG 140 Introduction to Business (3cr)

## Business Office Administration

| BOS 101A | Introduction to Keyboarding (1cr) |
| :--- | :--- |
| BOS 101B | Intermediate Keyboarding (1cr) |
| BOS 101C | Advanced Keyboarding (1cr) |


| Business Office Systems <br> Pinckney |  |  |
| :--- | :--- | :--- |
| BUS 01523 | Business Office Administration |  |
| BUS 01555 | Business Office Administration |  |
| BUS 1553 | Business Office Administration |  |
|  |  |  |

Business Office Administration

| BOS 101A | Introduction to Keyboarding (1cr) |
| :--- | :--- | :--- |
| BOS 101B | Intermediate Keyboarding (1cr) |
| BOS 101C | Advanced Keyboarding (1cr) |

Computer Systems Technology
Computer Systems and Networking
11.000

|  | Cisco Academy CCNA Course 1 | CST 118 | MS Command Line Fundamentals (2cr) |
| :--- | :--- | :--- | :--- |
|  | Cisco Academy CCNA Courses 1 \& 2 | CST 160 | Computer Technology I (4cr) |
|  | CompTIA Security+ Bootcamp | CSS 200 | Introductions to Network Security - <br> Security+ (4cr) |
|  | Hacking Essentials | CSS 205 | Essentials of Penetrating Testing (4cr) |
|  | Cisco Academy CCNA Course 1 | CNT 206 | Internetworking I - Fundamentals (4cr) |
|  | Cisco Academy CCNA Courses 2 | CNT 216 | Internetworking II - Routers (4cr) |
|  | Cisco Academy CCNA Course 3 | CNT 226 | Internetworking III - Switches (4cr) |
|  | Cisco Academy CCNA Courses 1 \& 2 | CNT 236 | Internetworking IV - WANs (4cr) |

Computer Sys. Networking and Technology Computer Systems and Networking

| 11.0901 |  | 11.0901 |
| :---: | :---: | :---: |
| Statewide Agreement | CIS 100 | Introduction to Computers and Software Applications (3cr) |
|  | CIS 110 | Introduction to Computer Information Systems (3cr) |
| Computer Programming | Information Systems |  |

11.0201
11.0103

|  | Statewide Agreement | CIS 100 | Introduction to Computers and Software <br> Applications (3cr) |
| :--- | :--- | :--- | :--- |
|  | CIS 110 | Introduction to Computer Information Systems <br> $(3 c r)$ |  |
|  |  | CPS 171 or <br> CPS 161 * | Introduction to Programming with C++ or <br> Introduction to Programming with Java |



## Secondary / Post-Secondary Program Alignment

## Accounting

HIGH SCHOOL COURSE SEQUENCE

| $\mathbf{9}^{\text {th }}$ Grade | $\mathbf{1 0}^{\text {th }}$ Grade | $\mathbf{1 1}^{\text {th }}$ Grade | $\mathbf{1 2}^{\text {th }}$ Grade |
| :--- | :--- | :--- | :--- |
| English 9 | English 10 | English Elective |  |
| Speech | Physical or Earth Science | Literature | Chemistry |
| Art or Music or Graphics | Geometry | Physics |  |
| Biology | Western Civilization | U.S. History | Math Analysis |
| Algebra | C.E. Elective | U.S. Government |  |
| Non Western Civilization |  |  |  |
| Law |  |  |  |
| P.E. / Fitness |  |  |  |

WASHTENAW COMMUNITY COLLEGE
Accounting
Associate in Applied Science Degree

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

## Automotive Services

HIGH SCHOOL COURSE SEQUENCE

| $\mathbf{9}^{\text {th }}$ Grade | $\mathbf{1 0}^{\text {th }}$ Grade | $\mathbf{1 1}^{\text {th }}$ Grade | $\mathbf{1 2}^{\text {th }}$ Grade |
| :--- | :--- | :--- | :--- |
| English 9 | English 10 | English 11 | English 12 |
| Algebra | Math | Math | Math |
| Science | Science | Social Studies | Social Studies |
| Social Studies | Social Studies |  |  |
| Health/Physical Ed | Foreign Language | Refinishing Repair \& II |  |
| Foreign Language | Refinishing I |  |  |
| Choice of Electives: <br> Visual/Performing/Applied <br> Arts | Choice of Electives: |  |  |

## WASHTENAW COMMUNITY COLLEGE

## Auto Body Repair

Certificate

| Semester 1 |  |  |
| :--- | :--- | :---: |
| 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 |  | 4 |
|  | Estimating and Shop Operations or Collision-Related Mechanical <br> \& Electrical Repairs | 4 |
| ABR 123 or 135 | Technical Auto Body Repair | 4 |
| Rest. Elect | Restricted Electives | 4 |
| Semester Total |  | 12 |
| Semester 3 |  | 4 |
| ABR 124 | Technical Automotive Refinishing | 4 |
| Rest. Elect | Restricted Electives | 6 |
| Semester Total |  |  |
| Program Totals |  | 30 |

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

## Secondary / Post-Secondary Program Alignment

## Automotive Technologies

HIGH SCHOOL COURSE SEQUENCE

| $\mathbf{9}^{\text {th }}$ Grade | $\mathbf{1 0}^{\text {th }}$ Grade | $\mathbf{1 1}^{\text {th }}$ Grade | $\mathbf{1 2}^{\text {th }}$ Grade |
| :--- | :--- | :--- | :--- |
| English 9 | American Experience | Literature \& Society (060) | English Elective |
| Algebra | (056) | Composition (023) | Sociology (435) |
| Science I (311) | Public Speaking | U.S. Government (445) | Auto Tech II (945) |
| Career Prep \& Expo (905) | Geometry | Integrated Trigonometry | Accounting I (524) |
| Basic Phys Ed (612) | Science II (313) | (221) |  |
| World History (410) | U.S. History (422) | Applied Physics (331) |  |
|  | Business Service Tech I | Auto Tech I (937) |  |

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 |  | 4 |
| ASV 132 | Automotive Engines | 4 |
| ASV 133 | Automotive Fuel | 4 |
| ASV 134 | Automotive Transmission | 3 |
| Comp Lit | Elective | 15 |
| Semester Total |  | 2 |
| Semester 3 |  | 2 |
| ASV 254 | Suspension and Steering | 4 |
| ASV 255 | Brakes | 2 |
| ASV 256 | Electrical and Electronic Systems | 3 |
| ASV 258 | Engine Drivability | 3 |
| Speech | Elective | 16 |
| Arts/Hum | Elective |  |
| Semester Total |  | 3 |
| Semester 4 |  | 3 |
| Nat. Sci | Elective | 4 |
| Soc. Sci | Elective | 3 |
| Rest. Elect | ASV Restricted Elective | 13 |
| Elective | Minimum 60 credits | 60 |
| Semester Total |  |  |
| Program Totals |  | 2 |

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

## Secondary / Post-Secondary Program Alignment

## Business

HIGH SCHOOL COURSE SEQUENCE

| $\mathbf{9}^{\text {th }}$ Grade | $\mathbf{1 0}^{\text {th }}$ Grade | $\mathbf{1 1}^{\text {th }}$ Grade | $\mathbf{1 2}^{\text {th }}$ Grade |
| :--- | :--- | :--- | :--- |
| English 9 | English 10 | Literature | English Elective |
| Speech | Physical or Earth Science | Chemistry or Elective | Physics or Elective |
| Art or Music or Graphics | Geometry | Algebra 3/4 or Elective | Math Analysis or Elective |
| Biology | Western Civilization | U.S. History | U.S. Government |
| Algebra | P.E. Elective | Computer Applications 1 | Business |
| Non Western Civilization |  |  |  |
| Law |  |  |  |
| P.E. |  |  |  |
| Fitness |  |  |  |

## WASHTENAW COMMUNITY COLLEGE Business

Associate in Arts Degree

| Semester 1 |  |  |
| :---: | :---: | :---: |
| 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 |  |  |
| 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 |  |  |
| 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 |  |  |
| 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

## Secondary / Post-Secondary Program Alignment

## Business Office Systems

HIGH SCHOOL COURSE SEQUENCE

| $\mathbf{9}^{\text {th }}$ Grade | $\mathbf{1 0}^{\text {th }}$ Grade | $\mathbf{1 1}^{\text {th }}$ Grade | $\mathbf{1 2}^{\text {th }}$ Grade |
| :--- | :--- | :--- | :--- |
| English 9 | English 10 | Literature | English Elective |
| Speech | Physical or Earth Science | Chemistry or Elective | Physics or Elective |
| Art or Music or Graphics | Geometry | Algebra 3/4 or Elective | Math Analysis or Elective |
| Algebra | Western Civilization | U.S. History | U.S. Government |
| Biology | P.E. Elective | Business Technology | Business Applications |
| Non Western Civilization | Computer Applications 1 |  |  |
| Law |  |  |  |
| P.E. |  |  |  |
| Fitness |  |  |  |

## WASHTENAW COMMUNITY COLLEGE

Business Office Administration - Office Management Concentration
Associate in Applied Science Degree

| Semester 1 |  |  |
| :---: | :---: | :---: |
| Course \# | Course Title: | Credit Hours |
| BOS 101C | Advanced Keyboarding | 1 |
| BOS 106 | Electronic Planning, Sharing and Organization | 3 |
| BOS 206 | Personal Management Application and Internet Resources | 2 |
| Writing | Elective | 4 |
| Math | Elective | 4 |
| Semester Total |  | 14 |
| Semester 2 |  |  |
| Course \# | Course Title: | Credit Hours |
| Arts/Human. | Elective(s) | 3 |
| ACC 100 | Accounting Practices for Business | 3 |
| BOS 157 | Word Processing and Document Formatting I | 3 |
| BOS 184 | Spreadsheet Software Applications I | 3 |
| CIS 117 | Windows Operating System | 2 |
| Semester Total |  | 14 |
| Semester 3 |  |  |
| Course \# | Course Title: | Credit Hours |
| ACC 110 | Payroll Accounting | 2 |
| BMG 155 | Business on the Internet | 3 |
| BOS 207 | Presentation Software Applications | 2 |
| BOS 257 | Word Processing and Document Formatting II | 3 |
| COM 101 | Fundamentals of Speaking | 3 |
| Semester Total |  | 13 |
| Semester 4 |  |  |
| Course \# | Course Title: | Credit Hours |
| BMG 200 | Human Relations in Organizations | 3 |
| BMG 207 | Business Communication | 3 |
| BOS 182 | Database Software Applications | 3 |
| Nat. Sci. | Elective(s)* | 4 |
| Semester Total |  | 13 |
| Semester 5 |  |  |


| Course \# | Course Title: | Credit Hours |
| :--- | :--- | :---: |
| BMG 240 | Human Resources Management | 3 |
| BMG 279 | Performance Management | 3 |
| BOS 250 | Office Administration II | 4 |
| Soc. Sci. | Elective(s) | 3 |
| Semester Total |  | 13 |
| Program Totals |  | 67 |

Additional Program Concentrations are available. See the WCC website for additional options.

## Secondary / Post-Secondary Program Alignment

## Construction Technology

HIGH SCHOOL COURSE SEQUENCE

| $\mathbf{9}^{\text {th }}$ Grade | $\mathbf{1 0}^{\text {th }}$ Grade | $\mathbf{1 1}^{\text {th }}$ Grade | $\mathbf{1 2}^{\text {th }}$ Grade |
| :--- | :--- | :--- | :--- |
| English 9 | English 10 | Literature | English Elective |
| Speech | Physical or Earth Science | Chemistry or Elective | Physics or Elective |
| Art or Music or Graphics | Geometry | Algebra 3/4 or Elective | Math Analysis or Elective |
| Algebra | Western Civilization | U.S. History | U.S. Government |
| Biology | P.E. Elective | Homebuilding I |  |
| Non Western Civilization | Computer Applications 1 |  |  |
| Law |  |  |  |
| P.E. |  |  |  |
| Fitness |  |  |  |

## WASHTENAW COMMUNITY COLLEGE Construction Technology

Associate in Science Degree

| Semester 1 |  |  |
| :--- | :--- | :---: |
| 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 |  | 3 |
| 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 |
|  |  | 3 |
| Semester 3 | Elective(s) | 3 |
| Speech | Elective(s)* | 3 |
| Arts/Human. | Conceptual Physics | 3 |
| PHY 105 | Construction Finishes Interior | 3 |
| CON 204 | Construction Finishes Exterior | 3 |
| CON 205 |  | 3 |
| Semester Total |  | 3 |
| Semester 4 |  | 3 |
| Arts/Human. | Elective(s)* | 3 |
| Soc. Sci. | Elective(s) | 3 |
| CON 220 | Construction Licensing, Contracts, and Start Up | 3 |
| CON 230 | Construction Production | 3 |
| CON 255 | Construction Concrete and Masonry | 3 |
| Semester Total |  | 3 |
| Program Totals |  | 3 |

## Secondary / Post-Secondary Program Alignment

## Computer Sys. Networking \& Technology

HIGH SCHOOL COURSE SEQUENCE

| $9^{\text {th }}$ Grade | $10^{\text {th }}$ Grade | 11 ${ }^{\text {th }}$ Grade | $12^{\text {th }}$ Grade |
| :---: | :---: | :---: | :---: |
| English 9 | American Experience (056) | Literature \& Society (060) | English Elective |
| Algebra (211) or | Public Speaking | Composition (023) | Visual Imaging Technology |
| Integrated Algebra A | Integrated Geometry or | U.S. Government (445) | (924) |
| (216) | Integrated Algebra B | Business Service | Web Authoring (522) |
| Science I (311) | (217) | Technology I (526) |  |
| Career Prep \& Expo (905) | Science II (313) |  |  |
| Basic Phys Ed (612) | U.S. History (422) | Graphic Communications |  |
| World History (410) | Public Speaking | (914) |  |

## WASHTENAW COMMUNITY COLLEGE <br> Computer Systems and Networking - Computer and Network Security Concentration (CSEC) Associate in Applied Science Degree

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

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

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

## Secondary / Post-Secondary Program Alignment

HIGH SCHOOL COURSE SEQUENCE

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

## WASHTENAW COMMUNITY COLLEGE

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

| Semester 1 |  |  |
| :--- | :--- | :---: |
| 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 |  | 3 |
| Arts/Human. | Elective(s)**** | 3 |
| CIS 121 | Linux/UNIX I: Fundamentals | 4 |
| CPS 271 | Object Features of C++ | 3 |
| ENG 226 | Composition II | 4 |
| Math | MTH 176 or higher 4 credit | 17 |
| Semester Total |  | 4 |
| Semester 3 |  | 4 |
| Nat. Sci. | Elective(s)*** | 4 |
| CPS 276 | Web Programming Using Apache, MySQL and PHP | 3 |
| Elective | Elective for minimum of 60 | 15 |
| Soc. Sci. | Elective(s) |  |
| Semester Total |  | 3 |
| Semester 4 |  | 3 |
| Soc. Sci. | Elective(s) | 3 |
| Soc. Sci. | Elective(s) | 4 |
| Arts/Human. | Elective(s)**** | 4 |
| Elective | Elective for minimum of 60 | 17 |
| CPS 272 | Data Structures with C++ | 63 |
| Semester Total |  |  |
| Program Totals |  |  |

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

## Secondary / Post-Secondary Program Alignment

Cooking and Related Culinary Arts

HIGH SCHOOL COURSE SEQUENCE

| $\mathbf{9}^{\text {th }}$ Grade | $\mathbf{1 0}^{\text {th }}$ Grade | $\mathbf{1 1}^{\text {th }}$ Grade | $\mathbf{1 2}^{\text {th }}$ Grade |
| :--- | :--- | :--- | :--- |
| English 9 | English 10 <br> Algebra I <br> World History/Geography <br> Biology <br> World Language <br> Phys Ed/Health | U.S. History/Geography <br> Physics or Chemistry <br> World Language <br> Visual/Performing/Applied <br> Arts | English 11 <br> Algebra II <br> Civics/Economics <br> Cooking \& related <br> Culinary Arts |

WASHTENAW COMMUNITY COLLEGE Program Layout by Semester
Culinary and Hospitality Management
Associate in Applied Science

| Semester 1 |  |  |
| :---: | :---: | :---: |
| Course \# | Course Title: | Credit Hours |
| 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 |  |  |
| Course \# | Course Title: | Credit Hours |
| 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 |  |  |
| Course \# | Course Title: | Credit Hours |
| Social Science | Elective(s) | 3 |
| Nat. Sci. | Elective(s) | 3 |
| Semester Total |  | 6 |
| Semester 4 |  |  |
| Course \# | Course Title: | Credit Hours |
| 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 |  |  |


| Course \# | Course Title: | Credit Hours |
| :--- | :--- | :---: |
| 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 |

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

## Secondary / Post-Secondary Program Alignment

Graphic \& Printing Technology

HIGH SCHOOL COURSE SEQUENCE

| $9^{\text {th }}$ Grade | $10^{\text {th }}$ Grade | $11^{\text {th }}$ Grade | $12^{\text {th }}$ 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 | Visual Imaging Technology | Visual Imaging Technology |
| World Language | World Language | I Elective | III Elective |
| Phys Ed/Health | Visual/Performing/Applied Arts | Visual Imaging Technology <br> II Elective |  |

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 |  | 3 |  |
| Speech | Elective(s) | 3 |  |
| Restrict Elect | Elective(s) | 4 |  |
| GDT 100 | Typography I | 4 |  |
| GDT 112 | Principles and Problem Solving in Graphic Design | 3 |  |
| INP 170 | Web Coding II | 17 |  |
| Semester Total |  | 4 |  |
| Semester 3 |  | 4 |  |
| GDT 220 | Publication Design | 4 |  |
| INP 154 | Interaction Design I | 3 |  |
| MTH 125 or higher | Everyday College Math or higher | 15 |  |
| Restricted | Elective(s) | 4 |  |
| Semester Total |  | 4 |  |
| Semester 4 |  | 4 |  |
| GDT 252 | Advanced Digital Studio | 4 |  |
| GDT 290 | Professional Practices | 4 |  |
| Nat. Sci. | Elective(s) | 16 |  |
| INP 254 | Interaction Design II | 64 |  |
| Semester Total |  |  |  |
| Program Totals |  |  |  |

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

## Secondary / Post-Secondary Program Alignment

Radio \& TV Broadcasting Technology

HIGH SCHOOL COURSE SEQUENCE

| $\mathbf{9}^{\text {th }}$ Grade | $\mathbf{1 0}^{\text {th }}$ Grade | $\mathbf{1 1}^{\text {th }}$ Grade | $\mathbf{1 2}^{\text {th }}$ Grade |
| :--- | :--- | :--- | :--- |
| English 9 | English 10 | English 11 | English 12 |
| Algebra I | Algebra II | Math Credit |  |
| Weorld History/Geography | U.S. History/Geography <br> Biology <br> Whysics or Chemistry <br> Chys Language | Civics/Economics <br> Wadio \& TV Broadcasting | Science Credit <br> Vadio \& TV Broadcasting <br> Visual/Performing/Applied <br> Arts |

WASHTENAW COMMUNITY COLLEGE Program Layout by Semester

| Digital Video Production |  | Associate in Arts |
| :---: | :---: | :---: |
| Semester 1 |  |  |
| 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 |  |  |
| 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 |

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

HIGH SCHOOL COURSE SEQUENCE

| $9^{\text {th }}$ Grade | $10^{\text {th }}$ Grade | $11^{\text {th }}$ Grade | $12^{\text {th }}$ 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 | Web I Elective | Web II Elective |
| World Language | World Language |  |  |
| Phys Ed/Health | Visual/Performing/Applied Arts |  |  |

## WASHTENAW COMMUNITY COLLEGE Program Layout by Semester

## 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 |
| Semester Total |  | 16 |
| Semester 2 |  |  |
| 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 to meet minimum of 60 credit 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.

## Secondary / Post-Secondary Program Alignment

## Health Science Technology

HIGH SCHOOL COURSE SEQUENCE

| $9^{\text {th }}$ Grade | $10^{\text {th }}$ Grade | $11^{\text {th }}$ Grade | $12^{\text {th }}$ Grade |
| :---: | :---: | :---: | :---: |
| English 9 | English 10 | Literature | English Elective |
| Speech | Physical or Earth Science | Chemistry* | Physics or Elective |
| Art or Music or Graphics | Geometry | Algebra 3/4 or Elective | Math Analysis or Elective |
| Biology* | Western Civilization | U.S. History | U.S. Government |
| Algebra * | P.E. Elective | Health Sciences | Health Sciences Technology |
| Non Western Civilization Law P.E. / Fitness | Computer Applications 1 | Technology Health Sciences Internship | Health Sciences Internship |

## WASHTENAW COMMUNITY COLLEGE

Health Care Foundations - Nursing Intent

## Certificate

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

| Semester 1 |  |  |  |  |
| :--- | :--- | :---: | :---: | :---: |
| BIO 111 | Anatomy and Physiology - Normal Structure and Function | 5 |  |  |
| COM 101, 102 <br> or 200 | Fundamentals of Speaking, Interpersonal Communication <br> or Family Communication | 3 |  |  |
| ENG 111 | Composition I | 4 |  |  |
| HSC 100 | Basic Nursing Assistant Skills | 4 |  |  |
| Semester Total |  | 16 |  |  |
| Semester 2 |  | 1 |  |  |
| HSC 101 | Healthcare Terminology | 1 |  |  |
| HSC 131 | CPR/AED for the Professional Rescuer and First Aid | 3 |  |  |
| MTH 167 | Math Applications for Health Science | 3 |  |  |
| PHL 244 | Ethical and Legal Issues in Health Care | 3 |  |  |
| PSY 100 | Introduction to Psychology | 11 |  |  |
| Semester Total |  |  |  |  |
| Program Totals |  | 27 |  |  |

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


## Additional Program Opportunities:

Dental Assisting
Health Program Preparations Associate Degree
Medical Assisting
Nursing
Pharmacy Technology
Physical Therapist Assistant Associate Degree
Radiography Associate Degree
Surgical Technology

## Secondary / Post-Secondary Program Alignment

## Mechatronics

HIGH SCHOOL COURSE SEQUENCE

| $9^{\text {th }}$ Grade | $10^{\text {th }}$ Grade | $11^{\text {th }}$ Grade | $12^{\text {th }}$ 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* <br> Associate in Applied Science

*One of 3 possible concentrations

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


| 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 |

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

## Welding

HIGH SCHOOL COURSE SEQUENCE

| $9^{\text {th }}$ Grade | $10^{\text {th }}$ Grade | $11^{\text {th }}$ Grade | $12^{\text {th }}$ 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 |  |  |
| Phys Ed/Health | Visual/Performing/Applied Arts |  |  |

WASHTENAW COMMUNITY COLLEGE
Welding
Associate in Applied Science

| 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:
H.S. Graduation during:

Last date to post credit:

## 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 |
| Business Office Systems | Aaron Metz, Business Services Technology <br> Penny Ventrone, Pinckney High School <br> Amy Loskowski, Washtenaw Community College |
| Computer Sys. Networking and Technology | Statewide Agreement <br> John Trame, Washtenaw Community College |
| 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 <br> Randy Schafer, Howell High School <br> Mark Stein, Pinckney High School <br> Glenn Kay II, Washtenaw Community College |

