

**INFORMATION ASSURANCE ARTICULATION AGREEMENT GUIDE**

Washtenaw Community College– **AAS in Computer Systems & Networking/Computer & Network Security**  
 Eastern Michigan University – **BS in Information Assurance and Cyber Defense**

| Washtenaw Community College   | Eastern Michigan University  |
|---|--|
| <b>Michigan Transfer Agreement Requirements (31 credits)</b>  |  |
| Students with the MTA endorsement on their community college transcript have satisfied EMU's General Education Core Requirements and will be required to complete only the EMU General Education Application Requirements of one Perspectives on a Diverse World course, one Learning beyond the Classroom experience, and one Writing Intensive course in the major. <u>Specific courses listed below for the MTA will also satisfy major or minor requirements at WCC and/or EMU.</u> Students who started before Fall 2014 may continue to follow the MACRAO Agreement until the end of summer 2019. MACRAO versions of articulation guides are posted at <a href="http://www.emich.edu/ccr/archartguide_macrao.php">http://www.emich.edu/ccr/archartguide_macrao.php</a> . For courses approved to satisfy the MTA go to the WCC website at the link below: <a href="http://www.wccnet.edu/services/transferreresources/mta/">http://www.wccnet.edu/services/transferreresources/mta/</a> |  |
| <b>1. A Course in English Composition</b>   |  |
| ENG 111 Composition ..... 4   | University Elective ..... 4  |
| <b>2. A Course in English Composition or Communication</b>  |  |
| Choose from: COM 101, 102, 142, 183, 200, or 225 ..... 3  | University Elective ..... 3  |
| <b>3. A Course in Mathematics</b>   |  |
| *MTH 160 Basic Statistics ..... 4   | STAT 170 Elem Statistics or (3)+1..... 4                           |
| <b>4. Two Natural Science courses from different disciplines</b>  |  |
| Choose from the approved MTA list ..... 8   | University Electives ..... 8                                       |
| <b>5. Two Humanities courses from different disciplines</b>   |  |
| Choose from the approved MTA list..... 6  | University Elective ..... 6  |
| <b>6. Two Social Science courses from different disciplines</b>   |  |
| Choose from the approved MTA list ..... 6   | University Electives ..... 6                                       |
| <b>7. If needed, complete additional courses from the above categories to meet the 30 credit minimum for the MTA.</b>   |  |
| <b>EMU's Perspectives on a Diverse World requirement:</b> Complete <u>one</u> course from the following list:   |  |
| Courses on this list will also satisfy an MTA area above: <b>Communication:</b> COM 225; <b>Natural Science:</b> ENV 101; <b>Humanities:</b> ART 143, 150; COM 225; DAN 180; ENG 181, 213, 214, 224, 242; HUM 150, 175; MUS 180; <b>Social Science:</b> ANT 201; ECO 280; GEO 101; HST 123, 150, 210, 230, 235, 240, 270; PLS 211; PSY 107, 251; SOC 205  |  |
| <b>WCC Computer Systems &amp; Networking (48 credits)</b>   |  |
| * CIS 121 Linux/UNIX I: Fundamentals ..... 4  | IA 212 Open Systems Platform & Network Admin (3)+1 ... 4           |
| * CIS 161 Intro to PowerShell ..... 4   | Subs for ( <b>COSC 146</b> Applied Prog & Scripting) (3)+1 ..... 4 |
| CST 118 MS Command Line Fundamentals ..... 2  | University Elective ..... 2  |
| CST 160 Computer Technology I ..... 4   | University Elective ..... 4  |
| CST 165 Computer Technology II ..... 4  | University Elective ..... 4  |
| CST 225 PC Networking ..... 3   | University Elective ..... 3  |
| CNT 201 Admin MS Windows Client Operating Systems.... 3   | University Elective ..... 3  |
| <sup>1</sup> *CNT 206 Internetworking I - Fundamentals ..... 4  | IA 110 Concepts of Network & Business Technology ..... 3           |
| * CNT 211 Installing & Configuring Windows Server ..... 4   | IA 244 Systems Administration..... 4                               |
| * CNT 216 Routing & Switching Essentials..... 4   | IA 150 Networking I (3)+1 ..... 4                                  |
| <sup>1</sup> * CSS 200 Intro to Network Security ..... 4  | IA 103 Information Security Overview (3)+1 ..... 4                 |
| * CSS 205 Essentials of Network Penetration Testing..... 4  | IA 202 Risk-Vulnerability Analysis (3)+1 ..... 4                   |
| CSS 210 Network Perimeter Protection-CCNA Security ..... 4  | University Elective ..... 4  |
| <b>Credits at WCC:..... 79</b>  | <b>Credits that transfer to EMU.....79</b>                         |

\* Required for EMU's Information Assurance and Cyber Defense program. If not transferred, must be completed at EMU.

<sup>1</sup>A grade of "B-" or higher in CNT 206 (IA 110) and CSS 200 (IA 103) is required for admission to the IA program at EMU.

**Sign up with us:** If you let us know you are using this articulation agreement we can stay in touch with you and provide information and advising to you while you are still at your community college. Sign up at: [www.emich.edu/ccr/trackingssystem/Enter.php](http://www.emich.edu/ccr/trackingssystem/Enter.php)

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**Completion of the Bachelor of Science in Information Assurance & Cyber Defense**

IA 103 and IA 110 (CSS 200 and CNT 206 at WCC) must be completed with a grade of “B-” or higher for admission to the IA major and to enroll in IA 300-level courses.

**Major Requirements (48 hours)**

**Program Required Courses (42 hours)**

|  |   |
|--|---|
| One Cryptography course (see advisor for approval) ..... | 3 |
| LEGL 320 Cyber Law and Compliance .....                  | 3 |
| IA 322 Managing Security Projects.....                   | 3 |
| IA 329W Policy Development in Info Assurance.....        | 3 |
| IA 354 Networking II .....                               | 3 |
| IA 385 Database Management & Security.....               | 3 |
| <sup>1</sup> IA 387L4 Co-operative Education.....        | 3 |
| IA 400 Malware Analysis & Reverse Engineering.....       | 3 |
| IA 427 Digital Forensics I.....                          | 3 |
| IA 445 Ethical Hacking and Offensive Security.....       | 3 |
| IA 455 Incident Response.....                            | 3 |
| IA 462 Adv Operating Systems Security & Admin .....      | 3 |
| IA 473 Network Forensics & Analytics (was IA 430).....   | 3 |
| IA 495 Capstone .....                                    | 3 |

**IA Restricted Electives (6 hours)**

- IA 425 Cyber Crime Investigation I (3)
- IA 428 Digital Forensics II (3)
- IA 440 Intelligence Analysis (3)
- IA 471 Data and Privacy (3)
- IA 474 Applied Data Mining for IA (3)
- IA 475 Adv Topics in Information Security (3)
- IA 476 Enterprise Security Analytics (3)
- Any IA, CIS, or COSC 300-level or higher (3)

|                                   |            |
|-----------------------------------|------------|
| <b>Total Credits at EMU .....</b> | <b>48</b>  |
| <b>Transfer Credits.....</b>      | <b>79</b>  |
| <b>*Credits to Graduate.....</b>  | <b>127</b> |

<sup>1</sup> Satisfies EMU’s Learning beyond the Classroom requirement. If not completed, must satisfy LBC with another course or noncredit experience.

\* A minimum of 124 credits is required to graduate. If insufficient credits are transferred, students must take additional credits at EMU to satisfy the 124 credit minimum.

Sample Sequences for completing the program:

*Courses may not be offered every semester. Meet with a program advisor to plan a program of study.*

**FALL START**

**Fall semester (12 credits)**

|   |   |
|---|---|
| LEGL 320 (may be taken in any semester).....            | 3 |
| One Cryptology course (advisor approval required) ..... | 3 |
| IA 322 F Prereq: IA 202.....                            | 3 |
| IA 329W FW Prereq: IA 202 .....                         | 3 |

**Winter semester (12 credits)**

|                                  |   |
|----------------------------------|---|
| IA 354 W Prereq: IA 150 .....    | 3 |
| IA 385 FW Prereq: IA 110 .....   | 3 |
| IA 400 FW Prereq: COSC 146 ..... | 3 |
| IA 427 FW Prereq: IA 110 .....   | 3 |

**Fall semester (12 credits)**

|  |   |
|--|---|
| IA 473 FW prereq: IA 427.....            | 3 |
| IA 445 FW Prereq: IA 212 & 244.....      | 3 |
| IA 495 F Prereq: IA 329, 244 & 322 ..... | 3 |
| IA Restricted Elective .....             | 3 |

**Winter semester (12 credits)**

|  |   |
|--|---|
| IA 455 FW Prereq: IA 473 .....                     | 3 |
| IA 462 W Prereq: IA 212 & 244 .....                | 3 |
| <sup>1</sup> IA 387L4 FW Prereq: IA 329 & 244..... | 3 |
| IA Restricted Elective .....                       | 3 |

**WINTER START**

**Winter semester (12 credits)**

|   |   |
|---|---|
| LEGL 320 (may be taken in any semester).....            | 3 |
| One Cryptology course (advisor approval required) ..... | 3 |
| IA 329W FW Prereq: IA 202 .....                         | 3 |
| IA 354 W Prereq: IA 150 .....                           | 3 |

**Fall semester (12 credits)**

|                                  |   |
|----------------------------------|---|
| IA 322 F Prereq: IA 202.....     | 3 |
| IA 385 FW Prereq: IA 110 .....   | 3 |
| IA 400 FW Prereq: COSC 146 ..... | 3 |
| IA 427 FW Prereq: IA 110 .....   | 3 |

**Winter semester (9 credits)**

|                                     |   |
|-------------------------------------|---|
| IA 473 FW prereq: IA 427.....       | 3 |
| IA 445 FW Prereq: IA 212 & 244..... | 3 |
| IA 462 W Prereq: IA 212 & 244 ..... | 3 |
| IA Restricted Elective .....        | 3 |

**Fall semester (12 credits)**

|  |   |
|--|---|
| IA 455 FW Prereq: IA 473 .....                     | 3 |
| IA 495 F Prereq: IA 329, 244 & 322 .....           | 3 |
| <sup>1</sup> IA 387L4 FW Prereq: IA 329 & 244..... | 3 |
| IA Restricted Elective .....                       | 3 |

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### Additional Information:

1. Each institution will determine the satisfaction of their individual program and degree requirements. Both WCC and EMU agree to accept transferable courses from each other and from other regionally accredited colleges. WCC courses indicated with an \* are required for EMU's Information Assurance major. Substitutions for these courses must be approved by the EMU program coordinator.
2. Students with the MTA endorsement on their community college transcript have satisfied EMU's General Education Core Requirements and will be required to complete only the General Education Application Requirements of one "Perspectives on a Diverse World" course, one "Learning beyond the Classroom" experience, and a "Writing Intensive" course in the major. The Perspectives on a Diverse World requirement may be transferred to EMU.  
*To use the Michigan Transfer Agreement (MTA), students must have an official community college transcript, with the "MTA Satisfied" endorsement sent to EMU's Admissions Office. Students who do not have "MTA Satisfied" on their community college transcript, will be required to satisfy EMU's general education requirements as applied to transfer students. The MTA may be completed after admission to EMU, however, students should inform their advisors or they may be advised to complete additional courses for the general education program. Students who enrolled in college prior to September 2014 will have until the end of August 2019 to complete the MACRAO agreement. If already on the transcript, the MACRAO designation will be accepted at EMU after August 2019.*
3. A grade of "C" or better (2.0 on a 4.0 scale) is required for courses to transfer to either institution.
4. Under this agreement, EMU will waive the 60-hour rule and require that a minimum of 45 credit hours must be completed at the four-year college level, with at least 30 credit hours at EMU, 15 hours of which must be in program requirements at the 300-level or above. Of the last 30 hours completed before graduation, a minimum of 10 hours must be in courses offered by EMU. A minimum of 124 credit hours, in EMU courses or accepted in transfer, is required for graduation. The limit of 60 credit hours in one subject area will be waived, and students will be allowed up to 69 credit hours in the IA discipline.
5. Students must satisfy all admission requirements at the time of admission to EMU
  - a. Completion of IA 103 and IA 110 (CSS 200 and CNT 206 at WCC) with a grade of "B-" or higher
  - b. Submit transcripts of all colleges attended to [cot-isac@atari.emich.edu](mailto:cot-isac@atari.emich.edu) by October 1, February 1, or July 1
  - c. Attend a mandatory meeting with an IA/CD faculty member or designated COT advisor. Student will be contacted to schedule an appointment after receipt of application. Students may enroll in two IA 300-level courses in the semester they apply to the program.
  - d. Students must maintain a minimum GPA of 2.5
6. Students are encouraged to meet with the EMU Information Assurance advisor before completing an admission application to EMU. To facilitate advising and the evaluation of transcripts, sign up for this articulation agreement using the link [www.emich.edu/ccr/trackingssystem/Enter.php](http://www.emich.edu/ccr/trackingssystem/Enter.php), and bring a copy of this guide to all advising sessions.

### Effective Dates: January 1, 2017 until January 1, 2020.

This is a renewal of an agreement made in September 2009 and extended in September 2012. Students who began this program prior to the new effective date have the option of changing to this guide or may follow the guide they started under for up to seven years. If the agreement is not renewed at the end of the effective period, students who already began the program at WCC will have three additional years to be admitted to EMU under the terms of the agreement.

### Contacts:

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