

**EASTERN MICHIGAN UNIVERSITY
ARTICULATION GUIDE**

January 2010

**Lansing Community College – Associate in Business in Networking & Security Management Academy
Eastern Michigan University – Bachelor of Science in Information Assurance**

Lansing Community College

Eastern Michigan University

MACRAO Requirements	(32 credits)	(32 credits)	
1. English Writing Requirement	(8 credits)	(8 credits)	
WRIT 121 Composition I or WRIT 131.....	4	ENGL 120 English Composition I (University Elective)....	4
WRIT 122 Composition II or WRIT 132 or ENG 122.....	4	ENGL 121 English Composition II (3) +1.....	4
2. Math/Science Requirement	(8 credits)	(8 credits)	
*1 Complete one course: (complete at LCC).....	4-5	One course:.....	4
STAT 215 Intro Probability & Statistics (4)		MATH 170 Elem Statistics (3)+1	
MATH 121 Precalculus I (4)		MATH 105 College Algebra (3)+1(subs for MATH 170)	
ISCI 131 Integrated Science.....	4	ESSC 000 General Transfer Credit.....	4
3. Social Science Requirement See note below	(8 credits)	(8 credits)	
Complete a minimum eight hours from two areas:.....	8	Minimum of eight hours:.....	8
Choose from courses approved by LCC to satisfy The MACRAO social science requirement.		Courses may transfer as equivalent courses, Gen Ed transfer credit, or general transfer credit.	
4. Humanities Requirement See note below	(8 credits)	(8 credits)	
Complete a minimum of eight hours in two subjects:.....	8	Two courses:.....	8
Choose from courses approved by LCC to satisfy The MACRAO humanities requirement.		Courses may transfer as equivalent courses, Gen Ed transfer credit, or general transfer credit.	
<i>NOTE: In completing the Humanities and Social Science requirements, choose at least <u>one</u> course from the following to satisfy EMU's Global Awareness/US Diversity requirement: Social Science: ANTH 270; GEOG 120, 200; POLS 201, 260; SOCL 185, 260; Humanities: ENG 211, 212, 260; HUMS 214; HIST 150, 214, 240; MUSIC 240, 241; PHIL 211, 212; RELG 211, 212;</i>			
LCC Program Requirements	(39 credits)	(39 credits)	
BUSN 118 Introduction to Business.....	3	COB 200 Intro to Business (Univ Elective).....	3
*CITD 250 Database Concepts.....	3	IS 000 (sub for <u>BMMT 496</u> or <u>IS 380</u>) AIA Concentration	3
*CITF 120 Operating Systems Concepts.....	3	NITA 000 (sub for <u>COSC 105</u>).....	3
CITF 125 Best Practices ITIL ISO.....	3	AACR GEN Transfer Credit.....	3
CITF 140 Information Technology Ethics.....	3	AACR GEN Transfer Credit.....	3
^{2,3} CITF 200 Information Systems and Problem Solving.....	3	NITA 422 End User Sys: Plan & Des (IAM & AIA Conc)	3
² CITF 240 IT Project Management.....	3	AACR GEN (sub for <u>IS 425</u>) IAM Concentration.....	3
*CITN 220 Networking Fundamentals.....	3	NITA 210 Concepts of Network & Business Tech.....	3
CITN 225 Routing Protocols & Concepts.....	3	NITA 000 General Transfer Credit.....	3
*CITN 230 Linux/UNIX Operating System.....	3	NITA 212 Open Source Platform / Network Admin.....	3
*CITN 280 IT Security Foundations.....	3	IA 103 Information Security Overview.....	3
CITS 131 Computer Support: A+ Technician.....	3	NITA 000 General Transfer Credit.....	3
SPCH 110 Oral Comm in the Workplace.....	3	CTAS 124 Fundamentals of Speech (Univ Elec).....	3
EMU Courses that may be taken at LCC or EMU (Choose a concentration first) (15-17 credits)			
See concentrations on page 2 before completing courses below. NITA 344 & MATH 120 are not required for all concentrations)			
*CITP 190 Introduction to Programming JAVA.....	3	COSC 111 Introduction to Programming.....	3
³ CITS 121 Computer Support: A+ Essentials (AIA Conc).....	3	NITA 344 Admin of Computer Systems (AIA Conc).....	3
⁴ MATH 151 Calculus I (IAE concentration).....	4	MATH 120 Calculus I (IAE concentration).....	4
Open Electives (If needed to graduate at EMU).....	8-11	University Electives (If needed to reach 124 hours) ...	8-11
Maximum Credits at LCC:.....	85-88	Credits that transfer to EMU.....	85-88

* Required for EMU's Information Assurance program, all concentrations.

¹ MATH 121 or STAT 215 should be completed at LCC to satisfy EMU's QR requirement. If completed at EMU, MATH 110 is required, unless waived by ACT/SAT or math placement score. MATH 121 is prerequisite for EMU's Encryption Concentration only, for other concentrations take STAT 215.

² Required for the EMU Information Assurance Management Concentration.

³ Required for the EMU Applied Information Assurance Concentration.

⁴ Required for the EMU Information Assurance Encryption Concentration.

Note: EMU will accept substitutions for courses above that transfer as General Transfer Credit or University Electives.

**EASTERN MICHIGAN UNIVERSITY
ARTICULATION GUIDE**

January 2010

Lansing Community College – Associate in Business in Networking & Security Management Academy
Eastern Michigan University – Bachelor of Science in Information Assurance

Completion of the Information Assurance Program at EMU

Major Requirements (36-39 credits)

Foundation Courses: (9 credits)

COSC 211	Programming Data Structures	3
IA 202	Risk – Vulnerability Analysis.....	3
STS 300W	Research & Writing: Tech Perspective.....	3

Concentration Requirements: (27-33 credits)

Complete one of the Concentrations below:

Information Assurance Management (30 credits)

ENGL 324	Principles of Technical Communication.....	3
IA 329	Policy Development in Info Sec.....	3
IS 350	Enterprise Resource Planning.....	3
IS 413	Information Tech Infrastructure & Security	3
LEGL 413	Cyber Space Law	3
MGMT 386	Organizational Behavior and Theory	3
MGMT 403	Managerial Communication: Theory & Appl	3
MGMT 480	Management Responsibility and Ethics.....	3
¹ Internship in MGMT, IS, CS or STS		6

Credits at EMU with the IAM Concentration: 39

Credits to Graduate:..... 124

OR

Applied Information Assurance : (27 credits)

COSC 374	Applied Cryptography	3
IA 325	Cyber Crime Investigation I.....	3
IA 327	Computer Forensics I.....	3
IA 329	Policy Development in Info Security.....	3
IA 415	Intro to Research in Information Assurance.....	3
¹ IA 416	Applied Research Project.....	3
IS 413	Information Tech Infrastructure & Security.....	3
LEGL 413	The Law and the Internet.....	3
NITA 412	Linux Security Administration	3

Credits at EMU with the AIA Concentration: .36

Credits to Graduate:..... 124

¹Satisfies EMU's Learning beyond the Classroom requirement

Note: Additional credits may be required at EMU to bring the total for graduation to the minimum of 124 credits.

OR

Information Assurance Encryption: (29 credits)

MATH 121	Calculus II	4
MATH 205	Math Structures for Computer Science	4
MATH 319	Mathematical Modeling	3
MATH 409	Cryptography.....	3
LEGL 413	Cyber Space Law	3
COSC 314	Computational Discrete Structures.....	3
IS 413	Information Tech Infrastructure & Security	3
IA 415	Introduction to Research in IA	3
¹ IA 416	Applied Research Project.....	3

Credits at EMU:..... 38

Credits to Graduate:..... 124

**EASTERN MICHIGAN UNIVERSITY
ARTICULATION GUIDE**

January 2010

**Lansing Community College – Associate in Business in Networking & Security Management Academy
Eastern Michigan University – Bachelor of Science in Information Assurance**

Additional Information:

1. In completing the coordinated program of study, as indicated on the preceding guides, substitutions should be made with the guidance of the EMU and HFCC Program Advisors to assure that program and graduation requirements will be satisfied at each institution. Each institution will be responsible for determining if their requirements are satisfied.
2. Students whose transcripts are endorsed as “MACRAO Satisfied” by the community college will be required to meet EMU’s three general education requirements, indicated on the guide and listed below. These requirements may be completed at the most appropriate time for the student whether before or after admission to EMU.
 - a) an approved course in Quantitative Reasoning: [MATH 121 or STAT 215 at LCC]
 - c) a course in Perspectives on a Diverse World: [ANTH 270; GEOG 120, 200; POLS 201, 260; SOCL 185, 260; ENG 211, 212, 260; HUMS 214; HIST 150, 214, 240; MUSIC 240, 241; PHIL 211, 212; RELG 211, 212 at LCC]
 - d) a Learning Beyond the Classroom (LBC) course or experience offered by EMU: [IA 416 or internship at EMU]*To use MACRAO, students should request a MACRAO evaluation of their transcript in the LCC Registrar’s Office. Students who do not satisfy MACRAO will have to complete EMU’s general education requirements as listed in the EMU undergraduate catalog.*
3. Only courses with a grade of “C” or better (2.0 on a 4.0 scale) will be accepted for transfer to EMU.
4. Under this agreement, EMU will waive the 60-hour rule and require that a minimum of 30 credit hours must be completed in EMU courses, 15 hours of which must be in major/program requirements at the 300-level or above. Although 36 to 39 credit hours are listed on the guide as EMU credits, it may be possible to transfer additional courses from LCC or another college, if approved by the Program Coordinator, and if the minimum of 30 credits in EMU courses is satisfied. 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, completed in-residence or accepted in transfer, is required for graduation.
5. Students must meet all admission requirements at the time of admission to EMU, including submitting transcripts from all previously attended colleges.
6. Students are encouraged to meet with the EMU Information Assurance Adviser early, before completing an admission application to EMU. A copy of the articulation guide should be brought to all advising sessions. Copies of this agreement are available at www.emich.edu/ccr/artguide.php

Effective Dates: January 1, 2010 until January 1, 2013.

If this agreement is not renewed at the end of the effective period, students will have an additional three years to be admitted to EMU under the terms of the agreement. Students who began the program prior to the effective period may use this agreement.

Contacts:

Lansing Community College

Ed Suniga, Chair
Media, Art, & Information Technologies
131 Gannon Vocational Technical Bldg.
Ph: 517-483-1546.
Email: sunigae@lcc.edu

Eastern Michigan University

Gerald “Skip” Lawver, Coordinator
Information Assurance Program
206D Roosevelt Hall
Ph: 734-487-3170
Email: skip.lawver@emich.edu