EASTERN MICHIGAN UNIVERSITY
ARTICULATION GUIDE

September 2009

Henry Ford Community College –Associate in Applied Science in Electrical Technology
Eastern Michigan University – Bachelor of Science in Electronic Engineering Technology

Henry Ford Community College Courses:			Transfer to EMU as:	
#MACRAO Requirements		**(33 credits)**		**(33 credits)**
1. English Writing Requirement		**(6 credits)**		**(6 credits)**
ENG 131	Composition I	3	ENGL 120	English Comp I (university elective) 3
ENG 132	Composition II	3	ENGL 121	English Composition II 3
2. Math/Science Requirement		**(9 credits)**		**(9 credits)**
*[1] MATH 180	Calculus I (complete at HFCC)	5	MATH 120	Calculus I (4) +1 5
PHYS 241	Mechanics (subs for PHYS 131) (4)	4	PHY 000	General Transfer Credit 4
3. Social Science Requirement (from two subjects)		**(9 credits)**		**(9 credits)**
Complete one course:		3	Course may transfer as:	3
POLS 131, SOC 131, SSC 131, HIST 151, OR HIST 152			equivalent course, gen ed, or general transfer credit.	
Complete two courses: ***See note below***		6	Courses may transfer as:	6
Choose from courses approved by HFCC to satisfy			equivalent courses, general education transfer credit, or	
The MACRAO social science requirement.			general transfer credit.	
4. Humanities Requirement (from two subjects)		**(9 credits)**		**(9 credits)**
Complete three courses: ***See note below***		9	Courses may transfer as:	9
Choose from courses approved by HFCC to satisfy			equivalent courses, general education transfer credit, or	
The MACRAO humanities requirement.			general transfer credit.	
HFCC Program Requirements		**(46 credits)**		**(46 credits)**
ELEC 103	Basic Electricity	4	ELEC 000	General Transfer Credit 4
ELEC 106	Basic Electronics	3	ELEC 000	General Transfer Credit 3
* ELEC 115	Digital Circuits I (or ELEC 175)	3	ELEC 214	Digital Circuit Analysis I 3
* ELEC 120	Basic Hydraulics or (ELEC 170) (3) and			
* ELEC 255	Instrumentation Systems or (ELEC 230) (3)	6	(ET 100 and MET 312 will be waived)	6
ELEC 145	AC/DC Rotating Machines	3	ELEC 000	General Transfer Credit 3
* ELEC 155	Analog Electronics I (or ELEC 230)	3	ELEC 300	Analog Circuit Analysis I 3
ELEC 185	Pneumatics	3	ELEC 000	General Transfer Credit 3
* ELEC 195	AC/DC Circuit Analysis (or ELEC 180)	3	ELEC 200	Circuit Analysis I 3
* ELEC 200	Ladder Diag & Motor Cntrls (or ELEC 210)	3	ELEC 218	Motors and Controls 3
* ELEC 245	Program Logic Controllers	3	CET 427	Programmable Logic Controllers 3
[2] ELEC 260	Automation Controls & Robotics	3	CET 000	Gen Transfer Credit 3
* ELEC 295	Microprocessor Systems (or ELEC 285)	3	ELEC 320	Microcomputer Circuits 3
* ELEC 215	Digital Circuits II (program elective)	3	(sub ELEC 215 Computer-Aided Electronics)	3
* DRAF 110	Intro to Industrial Drafting (program elective)	3	PDD 122	Engineering Graphics (4)-1 3
Satisfy Computer Literacy Requirement		0-3	University Elective	0-3
EMU requirements that may be taken at HFCC or EMU		**(27 credits)**		**(27 credits)**
* CHEM 141	Principles of General Inorganic Chem	5	CHEM 121/122	General Chemistry w/lab (4) +1 5
* CIS 170	"C" Programming	3	COSC 000	(sub for COSC 246 Programming in C++) 3
* MATH 183	Calculus II	5	MATH 121	Calculus II (4) +1 5
* MATH 283	Linear Algebra	3	MATH 122	Elementary Linear Algebra 3
* MET 150	SPC in Manufacturing	3	QUAL 320	Industrial Quality Control 3
* PHYS 242	Sound, Light, & Thermodynamics	4	PHY 223	Mechanics & Sound 4
* PHYS 243	Electricity and Magnetism	4	PHY 224	Electricity & Light 4
[3]Credits at HFCC: 106			**Credits that transfer to EMU 106**	

*[1] **NOTE**: In completing the Humanities or Social Science requirements above, choose at least one course from the following to satisfy EMU's Perspectives on a Diverse World requirement: ANTH 131, 152, 154; ART 224; ENG 243, 248; GEOG 132; HIST113, 225, 255, 257; SOC 152, 251; WR 131, 233.*

 # These courses meet MACRAO (Michigan Association of Registrars & Admissions Officers) requirements and two of the three EMU MACRAO General Education provisos. Students must complete at least 12 credits toward MACRAO at HFCC. Apply for a MACRAO endorsed transcript in the HFCC Registrar's Office.

** Required for EMU's EET program. Other courses will transfer as electives or general transfer credit but are not required for EMU's program.*

[1] MATH 180 or MATH 115 must be completed at HFCC to satisfy EMU's Quantitative Reasoning Requirement. If completed at EMU, MATH 110 will also be required, unless waived by ACT/SAT or math placement score.

[2] ELEC 260 may transfer as CET 247 if ELEC 245 is not completed.

[3] All of the courses completed with a "C" or better will transfer to EMU, but no more than 94 credits will be applied toward graduation at EMU.

Copies of this guide are also available on-line at: http://www.emich.edu/ccr/artguide.php

Henry Ford Community College –Associate in Applied Science in Electrical Technology
Eastern Michigan University – Bachelor of Science in Electronic Engineering Technology

Completion of the Electronic Engineering Technology Program at EMU

Major Requirements (30 credits)

CET 426	Engineering Product Information	3
ELEC 210	Circuit Analysis II	3
ELEC 314	Digital Circuit Analysis II	3
ELEC 310	Analog Circuit Analysis II	3
ELEC 326	Transform Circuit Analysis with Calc	3
[1] ELEC 387	Co-op in Electronic Technology (LBC)	3
ELEC 415	Communication Circuits	3
ELEC 420	Advanced Microprocessors	3
ELEC 450	Senior Design Project	3
SET 350W	Applied Technical Writing	3

Minimum Credits at EMU: 30
Minimum Credits to Graduate: 136

Suggested Sequence for completing the program:

Winter Semester (12 credits)

ELEC 210	Circuit Analysis II	3
ELEC 310	Analog Circuit Analysis II	3
ELEC 314	Digital Circuit Analysis II	3
ELEC 420	Advanced Microprocessors	3

Fall Semester (12 credits)

ELEC 326	Transform Circuit Analysis with Calc	3
ELEC 415	Communication Circuits	3
ELEC 387	Co-op in Electronic Technology	3
SET 350W	Applied Technical Writing	3

Winter Semester (9 credits)

CET 426	Engineering Product Information	3
ELEC 450	Senior Design Project	3

[1] *Meets EMU's Learning beyond the Classroom requirement.*

EASTERN MICHIGAN UNIVERSITY
ARTICULATION GUIDE

September 2009

Henry Ford Community College –Associate in Applied Science in Electrical Technology
Eastern Michigan University – Bachelor of Science in Electronic Engineering Technology

Additional Information:

1. In completing the coordinated program of study for this articulation agreement, course substitutions should be made with the guidance of the advisors (indicated below) at both institutions to assure that all requirements are satisfied. Courses indicated with an * are required for EMU's Electronic Engineering Technology Program.
2. Students whose transcripts are endorsed as "MACRAO Satisfied" will only be required to meet three of EMU's general education requirements, noted on the articulation 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 180 at HFCC]
   b) an approved course in Global Awareness or US Diversity: [ANTH 131, 152, 154; ART 224; ENG 243, 248; GEOG 132; HIST113, 225, 255, 257; SOC 152, 251; WR 131, 233 at HFCC]
   c) an approved Learning beyond the Classroom Experience offered by EMU. [ELEC 387 at EMU]

   To use MACRAO, students should request a MACRAO evaluation of their transcript from the community college Student Records or Registrar's Office. Students who do not satisfy MACRAO will have to satisfy EMU's general education requirements as listed in the Undergraduate Catalog.
3. Only courses with a grade of "2.0" or better (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 courses offered by EMU, 15 hours of which must be in program requirements at the 300-level or above. Of the last 30 hours completed before graduating, a minimum of 10 credit 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 application for admission to EMU, including submitting transcripts from all previously attended colleges. HFCC students will receive equal consideration with other students for course registration and financial aid.
6. Students are encouraged to make an appointment with the Electronic Engineering Technology Program Coordinator before applying to EMU. To facilitate the evaluation of transcripts students should indicate they are using this articulation guide on their EMU admission application and bring a copy of the guide to all advising sessions. Copies of the articulation guide are available on EMU's webpage at www.emich.edu/ccr/artguide.php

Effective Dates: September 1, 2009 until August 31, 2012.

This is a renewal of the Electronic Engineering Technology articulation agreement of April 1, 2006. Students who began this program prior the effective date may continue to follow the guide that was in place at the time they started or change to this articulation guide. If this agreement is not renewed at the end of the effective period, students who already started the program will be given three additional years to be admitted to EMU under the terms of this agreement.

Contacts:

Henry Ford Community College
Mark Siedlik, Program Advisor
Room 211H Technology Building
313-845-6353, msiedlik@hfcc.edu

Eastern Michigan University
Jamal Bari, Coordinator
Electronic Engineering Technology Program
118 Sill Hall, 734-487-2040, jamal.bari@emich.edu