TRANSFER EVALUATION AND CHECK-OFF FORM
ELECTRICAL ENGINEERING PROGRAM

SEMESTER 1 (15 cr)	MU CR	TR CR	GR	COMMENT	SEMESTER 2 (17 cr)	MU CR	TR CR	GR	COMMENT
CHEM 1001[b]	4			Core SN	Core elective[c] or THEO 1001[b]	3			
EECE 1953	1				Core Rhetoric 2[f]	3			
ENGL 1001[f]	3			Core R - 1	EECE 1954	1			
GEEN 1200	3				EECE 1610	3			
MATH 1450[b]	4			Core MR	GEEN 1210	3			
					MATH 1451[b]	4			
SEMESTER 3 (19 cr)					**SEMESTER 4 (18 cr)**				
EECE 2010 [1]	3				EECE 2030 [1]	3			
EECE 2015 [1]	1				EECE 2035	1			
EECE 2710 [1]	3				ELEN 2020 [1]	3			
GEEN 2952	1				ELEN 2040	3			
MATH 2450	4				MATH 2451	4			
PHIL 1001[b]	3			HN&E-1 (UCCS)	PHYS 1004[b]	4			
PHYS 1003[b]	4								
SEMESTER 5 (17 cr)					**SEMESTER 6 (17 cr)**				
EECE 3010 [1]	3				Core Elective [c]	3			
EECE 3015	2				ELEN 3025	2			
ELEN 3020[1]	3				ELEN 3030 [1]	3			
ELEN 3110 [1]	3				EE Elective [4]	3			
PHIL2310 [b]	3			HN&E-2 (UCCS) (PHIL 104)	EE Elective [4]	3			
THEO 1001 [b] or Core elective [c]					MATH 4720	3			
SEMESTER 7 (17 cr)					**SEMESTER 8 (15 cr)**				
ELEN 3035	2				Core Elective [c]	3			
ELEN 4920	3				Core Elec[c]/Free Elec[d]	3			
EE Elective [4]	3				EE Elective [4]	3			
EE Elective [4]	3				ELEN 4998	3			
EE Elective [4]	3				SCI/MATH Elec[3]	3			
Theology Elective [e]	3				TOTAL CREDITS	135			

UCCS Requirement	Course No.	EE Electives	Course No.	Course No.	Course No.
Diverse Cultures (DC)		Systems & Control			
Histories of Cul & Soc (HCS)		EM & Communications			
Indiv & Soc Behav (ISB)		Power & Energy			
Lit & Perform Arts (LPA)		Computer HW & SW			

DEGREE REQUIREMENTS INCLUDE:

- Every required course
- Approved elective program.
- A "C" (2.0) or more average at Marquette
- A "C" (2.0) or more average in Engineering courses
- A minimum of 135 semester hours
- No course may be taken for credit without the required prerequisite(s)
- All substitutions and/or departures from stated curriculum must be approved in writing in advance

Notes:

University Core of Common Studies:

(a) Refer to the College of Engineering section of this bulletin for details relating to footnotes b, c, d, e, and f.

~~~ College Notes ~~~~

(b) This course satisfies requirements of the University Core of Common Studies.

(c) The Core Electives must satisfy University Core Requirements in the following four Knowledge Areas: Diverse Cultures, Histories of Cultures and Societies, Individual and Social Behavior, and Literature/Performing Arts. See the section on University Core of Common Studies for lists of acceptable courses. Only one of these courses can be a dual application course.

(d) If the previous Core Electives span all four Knowledge Areas (as listed in the previous footnote), a three-credit free elective may be chosen. This situation will exist if one of the student's core electives is a dual application core course, as described in the section on the University Core of Common Studies.

(e) The Theology Elective must be selected from the list of approved Core courses in the Theology Knowledge Area. See the section on University Core of Common Studies.

(f) The Core Rhetoric 1 requirement is to be fulfilled by ENGL 1001; the Core Rhetoric 2 requirement is to be fulfilled by either ENGL 1002 or COMM 1100.

Department notes:

(1) A C or better grade is required in this course to meet the prerequisites for subsequent computer and/or electrical engineering required courses.

(2) These electives will normally be an upper division elective in EECE, COEN, COSC, MATH, PHYS and/or CHEM. Other courses may be acceptable with prior approval of the department.

(3) The science/math elective can be fulfilled with any upper division math or physics course or any biology or chemistry course for which the prerequisite requirements are met.

(4) The six EE Electives must satisfy both a breadth and a depth requirement. To satisfy the breadth requirement, the student must take EE Electives in at least three of the following four areas: Systems and Control; Electromagnetics, Power and Energy; Communications; and Computer Hardware and Software. To satisfy the depth requirement, the student must take at least three EE Electives in one of the aforementioned areas.

Elective Choices

The breadth requirement: Students must choose at least one course from at least 3 different concentration areas.
The depth requirement: Students must choose at least 3 courses from one concentration area.

Courses count in ONLY one concentration area.

Concentration areas:

Systems and Control		
	ELEN 4310	Control Systems
	ELEN 4320	Digital Control Systems
	ELEN 4390	Developments in Control
	EECE 4410	Integrated Microelectronic Circuits
	ELEN 4430	Physical Principles of Solid State Devices
	ELEN 4450	Surface Acoustic Wave Devices and Systems
	ELEN 4460	Sensor Devices and Systems
	EECE 4510	Digital Signal Processing
	ELEN 4565	Optical Fiber Communications
Electromagnetic Fields and Communications		
	ELEN 3120	Electromagnetic Fields 2
	ELEN 3210	Electromagnetic Energy Conversion
	ELEN 4130	Antenna Theory and Design
	ELEN 4150	Applied Finite Elements in Electromagnetics
	ELEN 4190	Developments in Electromagnetics
	EECE 4510	Digital Signal Processing
	ELEN 4560	Introduction to Communication Systems
	ELEN 4565	Optical Fiber Communications
	ELEN 4570	Wireless Communications
	ELEN 4590	Developments in Communications
Power and Energy		
	ELEN 3120	Electric Drives
	ELEN 4210	Design & Analysis of Electric Motor Drive Systems
	ELEN 4220	Power Electronics for Renewable Energy Systems
	ELEN 4230	Renewable and Legacy Electric Energy Systems Analysis
	ELEN 4240	Protection & Monitoring of Electric Energy Systems
	ELEN 4250	Transients in Electric Energy Systems and Devices
	ELEN 4290	Developments in Energy and Power
Computer Hardware & Software		
	COEN 4620	Mod Programming Practices
	COEN 4630	Software Testing
	COEN 4710	Computer Hardware
	COEN 4720	Embedded Systems Design
	COEN 4730	Computer Architecture
	COEN 4810	Database Applications
	COEN 4820	Operating Systems and Networking
	COEN 4830	Introduction to Computer Graphics
	COEN 4840	Computer Security
	COEN 4850	Introduction to Intelligent Systems
	COEN 4860	Introduction to Neural Networks & Fuzzy Systems
	COEN 4870	Evolutionary Computation
	EECE 4410	Integrated Microelectronic Circuits