

TRANSFER EVALUATION AND CHECK-OFF FORM
ELECTRICAL ENGINEERING PROGRAM

SEMESTER 1 (15 cr)	MU CR	TR CR	GR	COMMENT
CHEM 1001 ^b	4			Core SN
EECE 1953	1			
ENGL 1001 ^f	3			Core R - 1
GEEN 1200	3			
MATH 1450 ^b	4			Core MR
SEMESTER 3 (19 cr)				
EECE 2010 ¹	3			
EECE 2015 ¹	1			
EECE 2710 ¹	3			
GEEN 2952	1			
MATH 2450	4			
PHIL 1001 ^b	3			HN&E-1 (UCCS)
PHYS 1003 ^b	4			
SEMESTER 5 (17 cr)				
EECE 3010 ¹	3			
EECE 3015	2			
ELEN 3020	3			
ELEN 3110 ¹	3			
PHIL2310 ^b	3			HN&E-2 (UCCS) (PHIL 104)
THEO 1001 ^b or Core elective ^c				
SEMESTER 7 (17 cr)				
ELEN 3035	2			
ELEN 4920	3			
EE Elective ⁴	3			
EE Elective ⁴	3			
EE Elective ⁴	3			
Theology Elective ^c	3			

SEMESTER 2 (17 cr)	MU CR	TR CR	GR	COMMENT
Core elective ^c or THEO 1001 ^b	3			
Core Rhetoric 2 ^f	3			
EECE 1954	1			
EECE 1610	3			
GEEN 1210	3			
MATH 1451 ^b	4			
SEMESTER 4 (18 cr)				
EECE 2030 ¹	3			
EECE 2035	1			
ELEN 2020	3			
ELEN 2040	3			
MATH 2451	4			
PHYS 1004 ^b	4			
SEMESTER 6 (17 cr)				
Core Elective ^c	3			
ELEN 3025 ¹	2			
ELEN 3030 ¹	3			
EE Elective ⁴	3			
EE Elective ⁴	3			
MATH 4720	3			
SEMESTER 8 (15 cr)				
Core Elective ^c	3			
Core Elec ^c /Free Elec ^d	3			
EE Elective ⁴	3			
ELEN 4998	3			
SCI/MATH Elec ³	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.

Concentration areas:

| Systems and Control                       |  |                                      |           |          |
|-------------------------------------------|--|--------------------------------------|-----------|----------|
|                                           |  | Control Systems                      | ELEN 4310 | EECE 150 |
|                                           |  | Digital Control Systems              | ELEN 4320 | EECE 153 |
|                                           |  | Princ Sol State Devices              | ELEN 4430 | EECE 114 |
|                                           |  | SAW Devices and Systems              | ELEN 4450 | EECE 166 |
|                                           |  | Sensor Devices and Systems           | ELEN 4460 | EECE 176 |
|                                           |  | Digital Sig Processing               | ELEN 4510 | EECE 157 |
| Electromagnetic Fields and Communications |  |                                      |           |          |
|                                           |  | EM Fields 2                          | ELEN 3120 | EECE 122 |
|                                           |  | EM Energy Conversion                 | ELEN 3210 | EECE 123 |
|                                           |  | Antenna Theory                       | ELEN 4130 | EECE 174 |
|                                           |  | App Fin Elements in EM               | ELEN 4150 | EECE 184 |
|                                           |  | Digital Sig Processing               | ELEN 4510 | EECE 157 |
|                                           |  | Intro to Com Sys                     | ELEN 4560 | EECE 152 |
|                                           |  | Optical Fiber Com                    | ELEN 4565 | EECE 173 |
|                                           |  | Wireless Com                         | ELEN 4570 | EECE 175 |
| Power and Energy                          |  |                                      |           |          |
|                                           |  | Des/Anal Motors in Adj Speed Drives  | ELEN 4210 | EECE 185 |
|                                           |  | Power Electronics                    | ELEN 4220 | EECE 181 |
|                                           |  | Power Systems                        | ELEN 4230 | EECE 182 |
|                                           |  | Des of Pow Sys Protect/Monitor       | ELEN 4240 | EECE 186 |
|                                           |  | Elec Trans and surges in Pow Sys/Dev | ELEN 4250 | EECE 187 |
| Computer HW and SW                        |  |                                      |           |          |
|                                           |  | Mod Programming Practices            | COEN 4620 | COEN 190 |
|                                           |  | Software Testing                     | COEN 4630 | COEN 191 |
|                                           |  | Computer HW                          | COEN 4710 | COEN 171 |
|                                           |  | Embedded Sys Design                  | COEN 4720 | COEN 140 |
|                                           |  | Computer Architecture                | COEN 4730 | COEN 173 |
|                                           |  | Database Applications                | COEN 4810 | COEN 150 |
|                                           |  | Operating Systems and Networking     | COEN 4820 | COEN 183 |
|                                           |  | Intro to Computer Graphics           | COEN 4830 | COEN 151 |
|                                           |  | Computer Security                    | COEN 4840 | COEN 192 |
|                                           |  | Intro to Intelligent Sys             | COEN 4850 | COEN 130 |
|                                           |  | Intro to Neural Net & Fuzzy Sys      | COEN 4860 | COEN 131 |
|                                           |  | Evolutionary Computing               | COEN 4870 | COEN 133 |
|                                           |  | Data Structures                      | COSC 2010 | COSC 154 |
|                                           |  | Integrated Microelectronic Circuits  | EECE 4410 | EECE 164 |