TRANSFER EVALUATION AND CHECK-OFF FORM
COMPUTER ENGINEERING PROGRAM

SEMESTER 1 (13 cr)	MU CR	TR CR	G R	COMMENT	SEMESTER 2 (16 cr)	MU CR	TR CR	G R	COMMENT
EECE 1200	2				EECE 1210	2			
ENGL 1001 or ESSV1	3			MCC	EECE 1610	3			
MATH 1450	4				ENGL 1001 or ESSV1	3			MCC
PHYS 1003	4				MATH 1451	4			
					PHYS 1004	4			
SEMESTER 3 (19 cr)					SEMESTER 4 (17 cr)				
EECE 2010	3				COEN 2020	3			
EECE 2015	1				COEN 2610	3			
CHEM 1001	4				EECE 2030	3			
GEEN 2952	1				EECE 2035	1			
COSC 2010	3				MATH 2451	4			
MATH 2450	4				PHIL 1001 or THEO 1001	3			MCC
PHIL 1001 or THEO 1001	3			MCC					
SEMESTER 5 (17 cr)					SEMESTER 6 (18 cr)				
EECE 3010	3				COEN 4710	3			
EECE 3015	2				COEN 4820	3			
COEN/TECH ELEC	3			Recommend ELEN 3020	COEN/TECH ELEC [3]	3			
MATH 2100	3				COEN/TECH ELEC [3]	3			
CORE 1929	3			MCC	MATH 4720	3			
DSCV [1, 2]	3				DSCV [1, 2]	4			
SEMESTER 7 (15 cr)					SEMESTER 8 (15 cr)				
COEN 4720	3				COEN 4998	3			
COEN 4920	3				COEN/TECH ELEC [3]	3			
COEN/TECH ELEC [3]	3				COEN/TECH ELEC [3]	3			
COEN/TECH ELEC [3]	3				CORE 4929	3			MCC
DSCV [1, 2]	3				DSCV [1, 2]	3			MCC
					TOTAL CREDITS	**130**			

MCC Requirement	Course No.	COEN Electives	Course No.	Course No.	Course No.
1. DSCV		Hardware Engineering			
2. DSCV		Software Engineering			
3. DSCV		Intelligent Systems			
4. DSCV		Other Tech elective			
5. WRIT [2]					
6. ESSV2 [2]					

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:

Marquette Common Core (MCC):
(1) The four courses in the Discovery Tier (DSCV) of the MCC must be completed in the same theme and include the following content areas: Humanities (HUM), Social Science (SSC), Natural Science and Mathematics (NSM) and one elective (ELE), which is an additional course from any of the three content areas. A maximum of two courses in the Discovery Tier can apply towards a primary major.
(2) Students must also complete the Writing Intensive (WRIT) and Engaging Social System and Values 2 (ESSV2) requirements of the MCC. These requirements can be fulfilled through designated courses in the Discovery Tier or other degree requirements.
Computer Engineering Major
(3) At least five of the six electives must be from the COEN areas of concentration. The remaining elective can be in any technical area. Of the five electives, one must be in the Hardware Engineering area, one must be in the Software Engineering area, and one must be in the Intelligent Systems area. Of the five electives, three must be in one of the following areas: Hardware Engineering, Software Engineering, or Intelligent Systems. A course listed in two concentration areas may be counted toward only one elective requirement.

Computer Engineering Concentration Area Courses
AY 2020-2021

Breadth: Students must complete a breadth course from each of the three concentration areas.

Depth: Students must complete three total breadth/depth courses from a single concentration area.

Hardware		
Breadth courses (can be used toward either breadth or depth requirement)	COEN 4730	Computer Architecture
	COEN 4790	Developments in Computer Hardware
	EECE 4410	Integrated Microelectronic Circuits
	EECE 4740	Advanced VHDL and FPGA Design
Depth courses	ELEN 3030	Analog Electronics
	ELEN 3025 AND ELEN 3035	Instrumentation Lab and Analog Lab (Taking BOTH counts as a single breadth course)
	EECE 4510	Digital Signal Processing
	EECE 4310	Control Systems
	EECE 4560	Introduction to Communication Systems
	COSC 4290	Real-Time and Embedded Systems
Software		
Breadth courses (can be used toward either breadth or depth requirement)	COEN 4610	Object-Oriented Software Engineering
	COEN 4620	Modern Programming Practices
	COEN 4630	Software Testing
	COEN 4650	Introduction to Algorithms
	COEN 4690	Developments in Computer Software
	COEN 4830	Introduction to Computer Graphics
Depth courses	COEN 4810 or COSC 4800	Database Applications (COEN 4810) Principles of Database Systems (COSC 4800)
	COEN 4840	Computer Security
	COSC 3410	Programming Languages
	COSC 4400	Compiler Construction
	COSC 4860	Component-Based Software Construction
	COSC 4300	Networks and Internets
	COSC 3550	Programming Computer Games
Intelligent Systems		
Breadth courses (can be used toward either breadth or depth requirement)	COEN 4650	Introduction to Algorithms
	COEN 4850 or COSC 4600	Introduction to Intelligent Systems (COEN 4850) Fundamentals of Artificial Intelligence (COSC 4600)
	COEN 4860	Introduction to Neural Nets & Fuzzy Systems
	COEN 4870	Evolutionary Computation
Depth courses	COEN 4840	Computer Security
	~~COSC 4110~~	~~Formal Languages and Computability~~
	COSC 4610	Data Mining
	COSC 3550	Programming Computer Games