Complete MEM Curriculum Flowchart Including HSS & Free Electives

**Freshman Year (31 cr)**
- **PHY 11, 12 (5)** Physics I
- **CHM 30 (4)** Intro to Chem
- **ENGR 5 (2)** Intro to Engr
- **ENGR 10 (2)** Engr Comp
- **ENGL 1 (3)**
- **ENGL 2 (3)**
- **ECO 1 (4)** (or HSS Elect.)
- (Note: ECO 1 is required HSS)
- **MATH 21 (4)** Calc I
- **MATH 22 (4)** Calc II

**SOPH 1 (15 cr)**
- **ME 10 (3)** Engr Graphics (Fall or Spring SOPH)
- **MECH 3 (3)** Fund. of Engrg. Mech.
- **ME 17 (2)** Num. Methods In ME (Take w Mech 3 if possible)
- **MATH 23 (4)** Calc III

**SOPH 2 (17-18 cr)**
- **ME 104 (3)** Thermo (Fall or Spring SOPH)
- **MECH 12 (3)** Strength of Materials
- **ME 10 (3)** Engrg Graphics (Fall or Spring SOPH)
- **ME 17 (2)** Num. Methods In ME (Take w Mech 3 if possible)
- **MATH 205 (3)** Linear Methods
- **PHY 21, 22 (5)** Physics II

**JR 1 (16-18 cr)**
- **ME 207 (2)** ME Lab III
- **ME 208 (3)** Complex Var.
- **ME 230 (3)** Num. Methods
- **ME 231 (3)** Fluid Mech.
- **ME 211 (3)** Capstone 1 (Spring Only)
- **ME 240 (3)** Manufacturing (Spring Only)
- **ME 242 (3)** Systems
- **ME 245 (3)** Vibrations

**JR 2 (17 cr)**
- **ME 111 (1)** (Fall Only)
- **ME 121 (1)** ME Lab II
- **ME 212 (2)** Capstone 2 (Fall Only)
- **ME 242 (3)** Systems
- **ME 252 (3)** Elements

**Senior Year (31-33 cr)**
- **ME 301 (3)** Heat Transfer
- **ME 221 (3)** Elements
- **ME 215 (3)** Engr. Reliability (Fall Only)
- **MATH 208 (3)** Complex Var.
- **ME 215 (3)** Elements
- **ME 243 (3)** Systems
- **ME 245 (3)** Vibrations
- **MEM Elective " A" (3)** Select from "A" List
- **MEM Elective " B" (3)** ME 3XX or MECH 3XX
- **MEM Elective " C" (3)**
- **ECE 83 &162 Spring (3+1)**
- **FREE Electives (6 credits total)**

**Total Credits Required: 129**

"C" = Co-Requisite. Courses can be taken concurrently
NOTES on BSME Program

This Flow Chart is the recommended order and schedule for classes. Your schedule & order of classes may vary, but should be determined in conjunction with your academic adviser. Ultimately you, the student, are responsible for ensuring you meet all degree requirements by your desired graduation date.

The total number of credits required for graduation is 129 (LU Catalog 2015-16).
A total of 34 credits in electives must be taken. These electives are of five types:

a) Humanities/Social Sciences: A total of 13 credits of electives in humanities and social science, (see details below).
b) MEM “A” Elective: One, 3-credit course selected from the following: MECH 302, MECH 305, ME 304, ME 322, ME 331, or ME 343.
c) MEM “B” Elective: One, 3-credit course selected from any ME 300 or MECH 300-level course, excluding ME 310.
d) MEM “C” Elective: Three, 3-credit courses selected from any ME 300/MECH 300-level course or an engineering/science/mathematics course, as approved by the Department. ME 310 may be taken once to satisfy this requirement.
e) Free electives: 6 cr. in any subject area (may include items such as Misc. AP credits, 1 cr. MUS & MIL courses, & any extra HSS credits above 13).

HSS – ELECTIVE REQUIREMENTS: BREADTH + DEPTH (Excludes REQUIRED HSS courses ENGL 1, ENGL 2 and ECO 1)
A minimum of 4 multi-credit courses and a minimum of 13 credits in courses designated as HU (humanities) or SS (social sciences) with the following restrictions:

1) Depth: At least eight credits must be in a common discipline and from the same department or program. At least three of these credits must be at the 100-level or above, or at the intermediate level or above for a single modern foreign language.
2) Breadth: At least three credits in a discipline different from, and not cross-listed with, the discipline employed to satisfy the depth requirement above.
3) At least three credits must be designated as HU.
4) None of the courses used for HSS can be taken Pass/Fail.
5) None of the courses can be one-credit courses.

DEPTH - Min 8 credits in one discipline - 3 Cr. @ 100+ level
Course 1: ______________________    _____(cr)  Course 2: ________________________    _____(cr)  Course 3: _______________________    _____(cr)

BREADTH - 3 Cr in different discipline than depth courses
Course 1: ______________________    _____(cr)  Minimum 3 Cr in Humanities (Course Used ______________________ )

CO-OP PROGRAM
To participate in the Co-op program you must rank in the top third of the engineering class after three semesters of study and attend a summer program between the sophomore and junior years. Co-op students should take ME 21 sophomore year, second semester.

Other Notes: Recommend taking ME 17 & MECH 3 concurrently. Must have Junior Standing to take TE 211. If ME 252 is pushed off to FALL SR, an MEM Tech Elective (or other SR year course) should be moved to Spring JR year.