## GEORGE MASON UNIVERSITY THE VOLGENAU SCHOOL OF ENGINEERING

B.S. DEGREE IN COMPUTER ENGINEERING (3100 Nguyen Engineering Building, 703-993-1569)

https://ece.gmu.edu/undergraduate-studies/bachelors-programs/bs-computer-engineering 2017-2018 CATALOG

Completed/

|         | Departme  | ent(s) & Course #(s) | Grade(s)      | Needed |
|---------|---|----------------------|---------------|--------|
| M       | ASON CORE REQUIREMENTS (24)   |                      |               |        |
| a.      | Written Communication: ENGH 101 (100), ENGH 302 (C or better) (3,3)     | )                    |               |        |
|         | Oral Communication: COMM 100 or 101 (please circle choice) (3)          | ,                    |               |        |
|         | Quantitative Reasoning (satisfied by completion of major requirements)  |                      |               |        |
|         | Literature (3)  |                      |               |        |
|         | Arts (3)  |                      |               |        |
| f.      | Western Civilization (HIST 100, 125, or acceptable transfer course) (3) |                      |               |        |
| a.      | ECON 103 (3)  |                      |               |        |
|         | Natural Science (satisfied by completion of major requirements)         |                      |               |        |
|         | Global Understanding (3)  |                      |               |        |
|         | Information Technology (satisfied by completion of major requirements)  |                      |               |        |
|         | Synthesis (satisfied by completion of major requirements – ECE 492 & E  |                      |               |        |
|         | Go to: http://catalog.gmu.edu/mason-core/ to link to inf                |                      | re requiremen | nts.   |
|         |   |                      |               |        |
| Μ       | ATHEMATICS AND BASIC SCIENCES (34 hours required                        | 1)                   |               |        |
|         | MATH 125 (3)  | •                    |               |        |
|         | MATH 113, 114 (4,4)   | b.                   |               |        |
|         | MATH 213, 214 (3,3)   | C.                   |               |        |
|         | MATH 203 (3)  | d.                   |               |        |
|         | STAT 346 (3)  | e.                   |               |        |
|         | PHYS 160, 161 (3,1)   | f.                   |               |        |
|         | PHYS 260, 261 (3,1)   | u                    |               |        |
|         | PHYS 262 (3)  | h.                   |               |        |
|         | NGINEERING AND COMPUTER SCIENCES (68 hours req                          |                      |               |        |
|         | ENGR 107 (2)  |                      |               |        |
|         | CS 112, CS 211 (4,3)  | h                    |               |        |
|         | CS 222 (3)  |                      |               |        |
|         | CS 310 (3)  |                      |               |        |
|         | CS 471 (3)  |                      |               |        |
|         | ECE 101 (3)   | f.                   |               |        |
| ı.<br>f | ECE 201 (3)   | f.                   |               |        |
|         | ECE 220 (3)   |                      |               |        |
|         | ECE 285 (3)*  | y.<br>f              |               |        |
|         | ECE 286 (3)*  | 1.<br>f              |               | -      |
|         | ECE 331, ECE 332 (3,1)  | ı.<br>h              |               |        |
|         | ECE 333 (writing intensive course), ECE 334 (3,1)                       | 11.                  |               |        |
|         | ECE 445 (writing intensive course) (3)                                  | .<br>                |               |        |
|         |   | j.                   |               |        |
|         | ECE 447 (4)   |                      |               |        |
|         | ECE 448 (4)   |                      |               |        |
|         | ECE 465 (3)   |                      | •             |        |
|         | ECE 491 (writing intensive course) (1)                                  |                      |               |        |
|         | ECE 492, ECE 493 (1,2)  |                      |               |        |
| ρ.      | Technical Electives (list courses) (9)                                  | p.                   |               |        |
|         | 1 2   |                      |               |        |
|         | .3  |                      |               |        |

\*Note that ECE 285/ECE 286 courses taken at Mason prior to fall 2013 or transferred to Mason prior to fall 2014 do NOT meet the circuit analysis requirement. Students who fit in either category need to contact the department as soon as possible to discuss their options

CPE students must present a C or better in all ECE, ENGR, BENG, CS, MATH and STAT courses presented as part of the 126 credit hours for the degree. Students must also complete any course required by the program that is a prerequisite to another course applicable to the degree with a grade of C or better.

## MINIMUM 126 HOURS (including Minimum 45 UPPER DIVISION HOURS) to GRADUATE

This planning form is intended to be used in consultation with your academic advisor and reflects the requirements for the 2017-2018 Catalog; the University Catalog is the official reference for program requirements.

## Course Lists (Computer Engineering)

## **Mason Core Requirements**

Written Communication: ENGH 101 (or 100) and ENGH 302

Oral Communication: COMM 100 or COMM 101

Quantitative Reasoning: MATH 113. The Math Placement Test is required to take MATH 113. See this web site for more information: <a href="http://math.gmu.edu/placement\_test.php">http://math.gmu.edu/placement\_test.php</a>

<u>Literature</u>: ARAB 325; CHIN 310, 311, 325, 328; CLAS 250, 260, 340, 350, 360, 380; ENGH 201, 202, 203, 204; FREN 325, 329; FRLN 330; GERM 325; ITAL 320, 325; JAPA 340; KORE 311; PHIL 253; RELI 235, 333; RUSS 325, 326, 327; SPAN 325

Arts: ARTH 101, 102, 103, 200, 201, 203, 204, 206, 321, 322, 324, 333, 334, 335, 340, 341, 342, 344, 345, 360, 362, 370, 372, 373, 376; AVT 103, 104, 215, 222, 232, 243, 252, 253, 262, 272, 385; DANC 101, 119, 125, 131, 145, 161, 225, 231, 245, 301, 325, 331, 345, 425, 445, 390, 391; ENGH 370, 371, 372, 396; FAVS 225; GAME 101; MUSI 100, 101, 102, 107, 280, 301, 302, 380, 381, 382, 383, 384, 385, 387, 389, 485; PHIL 156; THR 101, 150, 151, 210, 230, 395, 411, 412.

Western Civilization: HIST 100 or 125; transfer students may substitute: the following courses for HIST 100: HIST 101, 102, 301, 302, 304, 305, 306, 308, 309, 312, 314, 322, 388, 436, 480; and the following courses for HIST 125: HIST 202, 387.

Social and Behavioral Sciences: ECON 103

Natural Sciences: PHYS 160/161 & 260/261

Global Understanding: ANTH 302, 306, 307, 308, 309, 312, 313, 316, 331, 332, 382; ARTH 319, 320, 382, 383, 384, 385, 386; BUS 200; CEIE 100; COMM 305, 456; CRIM 405; DANC 118, 318, 418; ECON 360, 361, 362, 380, 390; ENGH 362, 366; FAVS 300; FRLN 331; GCH 205; GGS 101; GLOA 101; GOVT 132, 133; HIST 251, 252, 261, 262, 271, 272, 281, 282, 328, 329, 356, 357, 358, 360, 364, 365, 387, 460, 462; JAPA 310; MBUS 305; MUSI 103, 431; PHIL 243; PROV 105; PSYC 379; RELI 100, 211, 212, 313, 315, 320, 322, 341, 374; RUSS 354; SOCI 120, 320, 332; SPAN 322, 466; SYST 202; THR 359, TOUR 210; WMST 100

Information Technology: CS 112 and ENGR 107

Synthesis: ECE 492, 493