### CHEMICAL ENGINEERING

#### General Education Requirements

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<td>LIFE</td>
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<td>Honors</td>
<td>Athlete</td>
<td>RiSE</td>
<td>ROTC</td>
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#### Other

| LIFE | Palmetto Fellows | Honors | Athlete | RiSE | ROTC | Med School |

#### Change of Major Checklist

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GPA = 2.0; C or Better Required in Each Class

### FRESHMAN YEAR

- **4 CH 1010 General Chemistry**
- **3 ENGL 1030 Accelerated Composition**
- **2 ENGR 1020 Engineering Discipline and Skills**
- **4 MATH 1060 Calculus of One Variable I**
- **3 Gen Ed<sup>1</sup>**

Total Semester Hours: 16

### SOPHOMORE YEAR

- **3 CH 2230 Organic Chemistry**
- **4 CHE 2110 Mass and Energy Balances**
- **4 MATH 2060 Calculus of Several Variables**
- **3 PHYS 2210 Physics with Calculus II**
- **3 Gen Ed<sup>1</sup>**

Total Semester Hours: 17

### JUNIOR YEAR

- **1 CH 3390 Physical Chemistry Lab.**
- **3 CHE 3210 Chemical Engr. Thermodynamics II**
- **4 CHE 3300 Mass Transfer and Separation Proc.**
- **2 ECE 2070 Basic Electrical Engineering Lab.**
- **3 STAT 4110 Statistical Methods for Process Dev. and Control**
- **3 Emphasis Area Requirement<sup>2</sup>**

Total Semester Hours: 17

### SENIOR YEAR

- **3 CHE 4070 Unit Operations Lab. II**
- **3 CHE 4310 Chemical Process Design I**
- **2 CHE 4430 Safety, Environ & Prof. Practice I**
- **3 CHE 4500 Chemical Reaction Engineering**
- **3 Emphasis Area Requirement<sup>2</sup>**

Total Semester Hours: 17

131 Total Semester Hours

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**Notes**

- See the policy on Humanities and Social Sciences for Engineering Curricula. Six of these credit hours must also satisfy the Cross-Cultural Awareness and Science and Technology in Society requirement.
- See advisor for details. Nine credit hours devoted to completion of an emphasis area or approved minor are required. Emphasis areas are Applied Engineering; Mathematics and Science; Biomolecular Science and Engineering; Business Management; Energy Studies; Environmental Engineering and Science; and Polymeric Materials.

**No student may exceed a maximum of two attempts, including a W, to complete successfully any CHE course.**

**CHE 1300 is only taught in the Spring and Summer.**
2016 – 2017 General Education Worksheet for Engineering

Complete

C. Arts and Humanities: Literature [Lit] ......................................................... 3 credits
    ENGL 2020, 2120, 2130, 2140, 2150, CHIN 4010, GER 2600, HON 1900, 2210, JAPN 4010, RUSS 3600, 3610
    Literature taught in a foreign language: FR 3000, 3040, GER 3060, 3600, 3610, ITAL 3010, 3020, JAPN 4060, SPAN 3040, 3110, 3130

C. Arts and Humanities: Non-Literature [NL] .................................................. 3 credits
    AAH 1010, ART 2100C, 3750, ASL 3050C, CAAH 2010C, CHIN (PHIL) 3120, (PHIL) 3130, 4990, COMM 1800C, 3030, 3080, 3090, 4020,
    ENGL (GW) 3010, 3550, 3570, ENGL (LANG) 4540, FR 3070, GW (ENGL) 3010, 4050, GER 3400, HON 1910, 2010ST, 2030, 2100, 2220, HUM 3010, 3020,
    HUM 3060, 3090C, JAPN 3070, 3080, LANG 3400, 3250, 3560, (ENGL) 4540, LARC 1160ST, MUSC 2100C, 3080, 3090, 3110, 3120, 3130, 3140C,
    MUSC 3170, 3610, 3620, 3630, 3640, 3690, 3700, 3710, 3720, PHIIL 1010, 1020, 1030, 1240ST, 2100ST, (CHIN) 3120, (CHIN) 3130, 3160, 3170, 3180,
    PHIIL 3230, 3240ST, 3250, 3260ST, 3270, 3440, 3450ST, REL 1010C, 1020C, 3010, 3020, 3030, 3060, 3070, 3090, 3120, 3130, 3150, RUSS 3400,
    SPAN 3070, 3080, STS 1010ST, 1020ST, 2150ST, 3010ST, 3030ST, THEA 2100, 2790, 3080, 3090, THEA 3150, 3160, 3170, WS 3010

D. Social Sciences [SS] .................................................................................... 6 credits
    AGRB 2020, ANTH 2010C, ECON 2000, 2110, 2120, GEOG 1010, 1030C, 1060, HIST 1010, 1020, 1220ST, 1240ST, 1720C, 1730C, 1930C,

E. Cross-Cultural Awareness [CCA] ................................................................. 3 credits
    AAH 1020, AGRB 2050ST, ANTH 2010ST, ART 2100NL, ASL 3050NL, CAAH 2010NL, COMM 1800NL, GEORG 1030SS, HIST 1720SS, 1730SS, 1930SS,
    HON 1930, 2090, HUM 3090NL, IS 1010, 2100, LANG 2500, 2540, MUSC 2100NL, 3140NL, PAS 3010SS, POBC 1020SS, 1040SS, PSYC 2500SS,
    REL 1010NL, 1020NL, WS 1030, or through a University-approved cross-cultural experience

F. Science and Technology in Society [STS] ...................................................... 3 credits
    AGED (EDF) 4800, AGRB 2050C, (ECON) 4570, AVS 3150, 4150, BIOL 2000, 2010, 2030, 2040, 2100, 2110, 2200, 4730, CH 1050, 1060, COMM 1070,
    COMM 3070, CPSC 2920, CTE 1150, 2210, ECE 1010, ECON 3190, (AGRB) 4570, ENGL 3490, ENGR 2200, 2210, ENR 3120, (FOR) 4160,
    ENSP (GEOL) 1250, 2000, (PES) 3150, ENSP 4000, ENT 2000, FDSC 2140. FOR (ENR) 4160, GEOL 1120, 1200, (ENSP) 1250, 2700, 3000,
    HCG (NURS) 3330, HIST 1220SS, 1240ST, 3210, 3220, 3230, 3920, 4240, 4910, HLTH 4310, HON 1940, 2010NL, 2060, IE 4880, LARC 1160NL,
    MKT 4450, MUSC 3180, NURS 1400, (HCG) 3330, NUTR 2030, 2100, PES (ENSP) 3150, PHIIL 1240NL, 2100NL, 3240NL, 3260NL, 3280, 3400, 3450NL,
    PHYS 2450, PKSC 3680, PLPA 2130, PRMT 2110, PSYC 2750ST, RS (SOC) 4010, SOC (RS) 4010, 4030, STAT 2220, STS 1010NL, 1020NL, 1200, 1710,
    2150NL, 2160, 3010NL, 3030NL, 4980, 4990

Additional A&H/SS Requirement [**5th and ***6th] ........................................... as required by engineering major

Any 1000 – 4999 course in the following rubrics: AAH, ANTH, ARAB, ART, ASL, CHIN, DANC, ECON, FR, GEOG, GER, GW, HIST, HUM, ITAL, JAPN, LANG, LAW, MUSC, PA, PAS, PHIIL, PORT, POBC, PSYC, REL, RS, RUSS, SOC, SPAN, THEA, WS
Rubrics with exceptions for additional requirement: AGRB 1000-2999, CAAH 2010, COMM [except 1500, 2500], EAS 1230, ENGL 2000-4999 [except 2170, 3040, 3100, 3120, except ENGL 3140, 3150, 3160, 3330], HON 1900, 1910, 1920, 2010, 2030, 2100, 2200, 2210, 2220, IS 2100, STS 1010, 1020, 3030

** Additional course (5th) only required by CHE, ENVE, ME and MSE. CPE and EE require the additional 5th or a technical elective.

*** 6th requirement for CHE only.

BOLD indicates no pre-reqs required

Underline indicates MUSC courses require auditions, are 1 hour, may be repeated or grouped to achieve credit required.

This is an unofficial document: Responsibility for satisfying these requirements rests with the student. Evaluation based on catalog year 2016 – 2017

Updated – June 9, 2016