

Name \_\_\_\_\_

Semester Entered Program \_\_\_\_\_

<u>Course Prefix &amp; Number</u>	<u>Hours</u>	<u>Grade</u>	<u>Term</u>
<b>MATHEMATICS (17 hrs.)</b>			
MAC 2311 - Calculus w/ Anal. Geom. I	4	_____	_____
MAC 2312 - Calculus w/ Anal. Geom. II	4	_____	_____
MAC 2313 - Calculus w/ Anal. Geom. III	5	_____	_____
ECH 3301 - Intro. Proc. Anal. & Design	<u>4</u>	_____	_____
	17		

<u>Course Prefix &amp; Number</u>	<u>Hours</u>	<u>Grade</u>	<u>Term</u>
<b>BASIC SCIENCE (21 hrs.)</b>			
CHM 1045 - General Chemistry I	3	_____	_____
CHM 1045L - General Chemistry I Lab	1	_____	_____
CHM 1046 - General Chemistry II	3	_____	_____
CHM 1046L - General Chemistry II Lab	1	_____	_____
PHY 2048C - General Physics A w/ Lab	5	_____	_____
PHY 2049C - General Physics B w/ Lab	5	_____	_____
BSC 2010 - Biological Science I	<u>3</u>	_____	_____
	21		

<u>Course Prefix &amp; Number</u>	<u>Hours</u>	<u>Grade</u>	<u>Term</u>
<b>LIBERAL STUDIES – HIST/HUM/SS (15 hrs.; 6 hrs. writing)</b>			
Social Science <sup>1</sup> _____	3	_____	_____
History <sup>2</sup> _____	3	_____	_____
Humanities <sup>3</sup> _____	3	_____	_____
Ethics (FSU list) <sup>4</sup> _____	3	_____	_____
E-Series (writing) <sup>5</sup> _____	<u>3</u>	_____	_____
	15		

<u>Course Prefix &amp; Number</u>	<u>Hours</u>	<u>Grade</u>	<u>Term</u>
<b>COMPOSITION &amp; GENERAL ENGINEERING (7 hrs.)</b>			
ENC 1101 - Freshman Composition	3	_____	_____
ENC 2135 _____	3	_____	_____
EGN 1004L - First Year Engineering Lab <sup>6</sup>	<u>1</u>	_____	_____
	7		

<u>Course Prefix &amp; Number</u>	<u>Hours</u>	<u>Grade</u>	<u>Term</u>
<b>ADVANCED CHEMISTRY (9 hrs.)</b>			
CHM 2210 - Organic Chemistry I	3	_____	_____
CHM 2211 - Organic Chemistry II	3	_____	_____
CHM/BCH XXXX _____	<u>3</u>	_____	_____
(Advanced Chemistry Elective) <sup>7</sup>	9		

<u>Course Prefix &amp; Number</u>	<u>Hours</u>	<u>Grade</u>	<u>Term</u>
<b>ENGINEERING SCIENCE (7 hrs.)</b>			
EGM 3512 - Engineering Mechanics	4	_____	_____
EEL 3003 - Intro. Electrical Engineering	<u>3</u>	_____	_____
	7		

<u>Course Prefix &amp; Number</u>	<u>Hours</u>	<u>Grade</u>	<u>Term</u>
<b>CHEMICAL &amp; BIOMEDICAL ENGR SCI &amp; DESIGN (55 hrs.)</b>			
ECH 3023 - Mass and Energy Balances I	3	_____	_____
ECH 3024 - Mass and Energy Balances II	4	_____	_____
ECH 3101 - Chem-E Thermodynamics	3	_____	_____
ECH 3266 - Transport Phenomena I	3	_____	_____
ECH 3274L - Transport Phenomena Lab	3	_____	_____
ECH 3418 - Separations Processes	3	_____	_____
ECH 3854 - Chem-E Computations	4	_____	_____
ECH 4267 - Transport Phenomena II	3	_____	_____
ECH 4323 - Process Control	3	_____	_____
ECH 4323L - Process Control Lab	1	_____	_____
ECH 4404L - Unit Operations Lab	3	_____	_____
ECH 4504 - Kinetics & Reactor Design	3	_____	_____
ECH 4604 - Chem-E Process Design I	4	_____	_____
ECH 4615 - Chem-E Process Design II	3	_____	_____
ECH 4937 - Chemical Engineering Statistics	3	_____	_____
Chem-E Elective I <sup>7</sup> _____	3 <sup>8</sup>	_____	_____
Chem-E Elective II <sup>7</sup> _____	3 <sup>8</sup>	_____	_____
	52		

<sup>4,5</sup> LS-approved Ethics and E-Series (IDS) courses from FSU list.  
<sup>6</sup> May be exempted for some students, see exemptions at <https://eng.famu.fsu.edu/pre-engineering-requirements>.  
<sup>7</sup> See lists of approved Adv Chemistry & Chem-Engr Electives.  
<sup>8</sup> URP/Honors = min. of 6 credit hours.

Approved Advanced Chemistry Electives <sup>7</sup>:

ECH 4937 - Industrial & Eng. Chem.	3
BCH 4053 - General Biochemistry I	3
CHM 2211L - Organic Chemistry II Lab	3
CHM 3120 - Intro. to Anal. Chem.	3
CHM 4080/81 - Environmental Chem. I/II	3
CHM 4410/11 - Physical Chemistry I/II	3

Approved Chemical Engineering Electives <sup>7</sup>:

BME 4007 - Biomedical Engineering	3
ECH 4743 - Chem-E Bioengineering	3
ECH 4823 - Polymer Science & Engr	3
ECH 4824 - Chem-E Materials	3
ECH 4904 / 4906 - URP / Honors in ChE <sup>8</sup>	6
ECH 4937 - Special Topics in Chem-E	3

\_\_\_\_\_ **AA Degree or General Ed Requirement**

\_\_\_\_\_ **Writing Course #1 (3)** \_\_\_\_\_

\_\_\_\_\_ **Writing Course #2 (3)** \_\_\_\_\_

\_\_\_\_\_ **Multicultural (x) Reqmt** \_\_\_\_\_

\_\_\_\_\_ **Multicultural (y) Reqmt** \_\_\_\_\_

\_\_\_\_\_ **Scholarship in Practice** ECH 4604/4615

\_\_\_\_\_ **Upper Division Writing** ECH 4404L

\_\_\_\_\_ **Oral Comm. Competency** ECH 3274L

\_\_\_\_\_ **Computer Competency** ECH 3854

\_\_\_\_\_ **Overall GPA** \_\_\_\_\_

\_\_\_\_\_ **Chem-E all Cs** \_\_\_\_\_

\_\_\_\_\_ **Summer Residency** \_\_\_\_\_

**Notes:**

1. A "C" grade or higher is required in all chemical and biomedical engineering courses that apply to the degree (ECH or BME prefix).
2. Transfer students without an AA degree must meet the Liberal Studies requirements. Transfer students with an AA degree may still need to complete some courses.

<sup>1</sup> AMH 2020, ANT 2000, ECO 2013, POS 1041, PSY 2012, SYG 1000.

<sup>2</sup> One LS-approved History course.

<sup>1,2</sup> Civic Literacy – AMH 2020 or POS 1041 or CLEP or U.S. Cit. Test

<sup>3</sup> ARH 2000, HUM 2020, LIT 2000, MUL 2010, PHI 2010, THE 2000.