

# COLLEGE OF ARTS & SCIENCES

## 2020-21 PHYSICAL SCIENCE (PRE-ENGINEERING) 3-2 DUAL DEGREE PLAN

FIRST YEAR - FRESHMAN							
Fall Semester				Spring Semester			
Dept	Crse#	Course Name	Hrs	Dept	Crse#	Course Name	Hrs
BIB	121	The Life of Christ <sup>1</sup>	2	BIB	122	Acts of Apostles <sup>1</sup>	2
CHE	121	General Chemistry I	3	CHE	122	General Chemistry II <sup>3</sup>	3
CHE	121L	General Chemistry I Lab	1	CHE	122L	General Chemistry II Lab <sup>3</sup>	1
ENG	101	English Composition I <sup>1</sup>	3	ENG	102	English Composition II <sup>1,3</sup>	3
ENS	101	Introduction to Engineering	2	ENS	103	Engineering Graphics	3
MAT	120	Pre-calculus <sup>2</sup>	4	MAT	122	Analytics and Calculus I <sup>3</sup>	4
			<b>15</b>				<b>16</b>
SECOND YEAR - SOPHOMORE							
Fall Semester				Spring Semester			
Dept	Crse#	Course Name	Hrs	Dept	Crse#	Course Name	Hrs
BIB		Bible	2	BIB		Bible	2
CIS	171	Computer Programming I	3	MAT	224	Analytics and Calculus III <sup>3</sup>	4
MAT	223	Analytics and Calculus II <sup>3</sup>	4	PHS	212	Physics for Sci. & Engrs. II <sup>3</sup>	4
PHS	211	Physics for Sci. & Engrs. I <sup>2,3</sup>	4	1			3
1			3	4			3
			<b>16</b>				<b>16</b>
THIRD YEAR - JUNIOR							
Fall Semester				Spring Semester			
Dept	Crse#	Course Name	Hrs	Dept	Crse#	Course Name	Hrs
BIB	346	Found. of Faith <sup>1</sup> (or BIB 446)	3	BIB	495	Values in Human Thought <sup>1,3</sup>	3
ENS	231	Engr. Mech. I: Statics <sup>3</sup>	3	ENS	232	Engr. Mech. II: Dynamics <sup>3</sup>	3
1			3	MAT	345	Differential Equations <sup>3</sup>	3
4			3	1			3
4			3	4			3
4			3	4			3
			<b>18</b>				<b>18</b>

<sup>1</sup>Liberal Arts Core Requirement

<sup>2</sup>Liberal Arts Core Requirements in *Undergraduate Catalog*

<sup>3</sup>Course has prerequisite. See corresponding *Undergraduate Catalog*

<sup>4</sup>Consult with the pre-engineering advisor for engineering school requirements.

## ADDITIONAL ITEMS RELATED TO THE MAJOR

- Liberal Arts Core courses should be chosen to satisfy FHU and engineering school requirements.
- CHE 321 and CHE 322 may be recommended for Chemical Engineering, check with engineering school.
- ACC 231 and ACC 233 may be recommended for Industrial Engineering, check with engineering school.

**The following guidelines are important. Failure to follow these guidelines may delay graduation.**

1. Plan schedules carefully. Plan to fulfill prerequisites for future courses.
2. Do not alter the sequence of courses without consulting with your academic adviser as not all classes are offered every semester.
3. Before the enrollment period, check to make sure holds will not prevent you from
4. Register for classes early during the registration period to secure classes.

**The 3-2 Dual Degree Plan is a suggested plan of study. This plan does not replace the *Undergraduate Catalog*. The *Undergraduate Catalog* provides the official listing of program requirements.**

2020-21 Undergraduate Liberal Arts Core Requirements	
<p><b>I. Biblical Values</b> BIB 121 AND 122 AND 346 OR 446      7</p> <p><b>II. Basic Skills</b></p> <p><b>A. Written Communication</b> ENG 101 AND ENG 102      6</p> <p><b>B. Oral Communication</b> COM 140 Speech Communication      3</p> <p><b>C. Quantitative Reasoning</b> MAT 100 OR MAT 101 OR      3 or 4 MAT 120 OR MAT 122 OR MAT 235</p> <p><b>III. Broadened Perspectives</b></p> <p><b>A. Behavioral Sciences</b> BIB/FAM 230 OR PSY 210 OR      3 SOC 241 OR SWK 251</p>	<p><b>B. Natural Sciences</b> BIO 100 OR BIO 105 OR BIO 110 OR      3 or 4 BIO 111 OR BIO 112 OR BIO 211 OR CHE 121 w/CHE121L OR PHS 111 OR PHS 112 OR PHS 201 OR PHS 211</p> <p><b>C. Arts and Humanities</b></p> <p><b>1. History</b>      3 HIS 111 OR HIS 112 OR HIS 221 OR HIS 222 OR HUM399A OR POL 251</p> <p><b>2. Creative Works</b>      3 ART 110 OR ART 201 OR ART 234 OR ENG 225 OR ENG 226 OR ENG 235 OR ENG 236 OR ENG 245 OR ENG 246 OR ENG 299A/399A OR MUS 110 OR MUS 2 PHI 243 OR PHI 245 OR PHI 246 OR THE 160 OR THE 265 OR THE 299A/399</p> <p><b>3. Humanities Capstone</b>      3 BIB/HUM 495</p>
<p>Complete course names and descriptions for the liberal arts core requirements are located in the <i>Undergraduate Catalog</i>.</p>	