

**Major: BA-- Mathematics/Applied(Pre-Engineering -- Civil, Electrical, Mechanical, Mining)**

**I. TOTAL UNIVERSITY ORIENTATION**

UNV 101/102 University Orientation

Credit	Grade	Semester
1		

**II. GENERAL STUDIES**

**A. Language and Reasoning**

ENG 101 English Composition I  
 ENG 102 English Composition II  
 SPE 103 Interpersonal Communication  
 MAT 131 Calculus I  
 Foreign Language I  
 Foreign Language II

3		
3		
3		
5		
3		
3		
<b>20</b>		

**Total**

**B: Fine Arts and Letters (Select One)**

ART 130 Introduction to Art **OR**  
 THE 130 Introduction to Theatre **OR**  
 MUS 130 Introduction to Music **OR**  
 ENG 211 Introduction to Literature

<b>3</b>		

**Total**

**C. Social and Behavioral Science (Select Two Courses)**

POS 101 American Government **OR**  
 FIN 101 Financial Literacy **OR**  
 HIS 103 Western Civilization **OR**  
 ECO 200 Survey of Economics **OR**  
 PSY 200 General Psychology **OR**  
 SOC 203 Principles of Sociology

<b>6</b>		

**Total**

**D. Natural Sciences**

PHY 211 General Physics I  
 PHY 212 General Physics II

5		
5		
<b>10</b>		

**Total**

**E. Integrative Studies**

IGS 200 Foundations of Cultures  
 IGS 201 Convergence of Cultures

3		
3		

**Select ONE COURSE from Below**

IGS 300 Search for New Forms of Culture **OR**  
 IGS 301 Studies in African Cultures **OR**  
 IGS 302 Studies in Asian Cultures **OR**  
 IGS 303 Studies in Latin American Cultures **OR**  
 IGS 305 The Latino Experience **OR**  
 COS 303 Human Perspective on Computing **OR**  
 ENG 313 Non-Western Literature **OR**  
 ENG/AAS Literature of African-Americans **OR**  
 MAT 304 Perspectives on Mathematics **OR**  
 MGT International Bus. Management/International Bus. Marketing **OR**  
 MUS/AAS African-American Music **OR**  
 MUS/AAS Jazz History and Literature/History and Literature **OR**  
 MUS 333 Music of Africa and Asia

<b>9</b>		

**Total**

**TOTAL GENERAL STUDIES**

<b>48</b>		
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**III. MAJOR: Mathematics/Applied(Pre-Engineering -- Civil, Electrical, Mechanical, Mining)**

**A. Core Requirements**

Grade Semester

- MAT 131 Calculus I (Satisfied in General Studies)
- MAT 132 Calculus II
- PHY 211 General Physics I (Satisfied in General Studies)
- PHY 212 General Physics II (Satisfied in General Studies)
- Total Core**

5		
<b>5</b>		

**B: Concentration/Specialization**

- PHY 311 Engineering Statics
- PHY 320 Engineering Thermodynamics
- PHY 350 Electrical Circuits
- Total Concentration**

3		
3		
4		
<b>10</b>		

**C. Supporting Courses**

- CHE 101 General Chemistry I
- CHE 102 General Chemistry II
- CHE 110 General Chemistry Lab I
- CHE 120 General Chemistry Lab II
- MAT 231 Calculus III
- MAT 232 Calculus IV
- MAT Elec Either MAT 315, MAT 321, or MAT 333
- PHY 390 Special Topics (Capstone Course)
- COS 108 Principles of Computer Science I
- COS 109 Principles of Computer Science II
- Total Support Courses**

3		
3		
1		
1		
3		
3		
3		
3		
4		
4		
<b>28</b>		

**TOTAL MAJOR**

<b>43</b>		
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**IV. ELECTIVES**

**A. 300-400 Courses (Degree program must have at least 42 hours of 300-400 courses)**

- \_\_\_\_\_ Courses transfer from UK to reach 120 hours total which depend upon particular engineering program.

26		
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**B. Free Electives**

- \_\_\_\_\_ Free Electives

2		
<b>28</b>		

**TOTAL FREE ELECTIVES**

**TOTAL DEGREE PROGRAM**

<b>120</b>		
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*Note: Courses beginning with a zero (0XX-Developmental courses) do not count toward graduation)*