

Name: \_\_\_\_\_ SID #: \_\_\_\_\_

**CERTIFICATE MAJOR: ENGINEERING**  
**(Certificate of Achievement)**

CERTIFICATE REQUIREMENTS	Units	Other Colleges	Fa/Sp/Su and Year	Grade Earned
<b>REQUIRED CORE:</b>	<b>31</b>			
ENGR 1A Intro. to Engineering (3)				
MATH 20A Calc. w/Analytic Geom. I (4)				
MATH 20B Calc. w/Analytic Geom. II (4)				
MATH 20C Calc. of Several Variables (4)				
MATH 32 Differential Equations (4)				
PHYS 3A Science & Engr. Physics I (4)				
PHYS 3B Science & Engr. Physics II (4)				
PHYS 3C Science & Engr. Physics III (4)				
<b>Select one track from the following:</b>	<b>13-23</b>			
<b>Mechanical, Civil, Aerospace, Manufacturing (22-23 units)</b>				
CHEM 1A General Chemistry I (5)				
ENGR 2 Engineering Design Graphics (3)				
ENGR 4 Engineering Materials (4)				
ENGR 8 Engineering Statics (3)				
ENGR 12 Engineering Circuits (3)				
& ENGR 12L Engineering Circuits Lab (1)				
ENGR 17 Pgm/Prob.-Solving in MATLAB (3)				
or CSIS 10C Pgm Methods 1.5: C and C++ (4)				
<b>Electrical (13 units)</b>				
CHEM 1A General Chemistry I (5)				
CSIS 10C Pgm Methods 1.5: C and C++ (4)				
ENGR 12 Engineering Circuits (3)				
& ENGR 12L Engineering Circuits Lab (1)				
<b>Computer, Software (19 units)</b>				
CSIS 10A Pgm Methods I: Java (4)				
CSIS 10B Pgm Methods II: Java (4)				
CSIS 10C Pgm Methods 1.5: C and C++ (4)				
CSIS 12 Discrete Structures (3)				
or MATH 40 Discrete Mathematics (3)				
ENGR 12 Engineering Circuits (3)				
& ENGR 12L Engineering Circuits Lab (1)				
<b>TOTAL CERTIFICATE UNITS</b>	<b>44-54</b>			

**C**

At least 12 units in the major in residence	
Completion of Major (Grade of "C" or better in each course)	

Counselor Signature: \_\_\_\_\_

Date: \_\_\_\_\_