

WESTERN NEW MEXICO UNIVERSITY
Degree Plan -AS Degree in Mathematics - Pre-Engineering (1705)
Department of Mathematics and Computer Science

Student Name: _____ ID # _____ Tel #: _____
 Address: _____ Email: _____
 Catalog Authority: 2020-21 Expected Completion: _____ Advisor: _____
Deadline for Application for Graduation: June 1st for Fall; September 1st for Spring; February 1st for Summer.

GENERAL EDUCATION REQUIREMENTS (31)

AA or AS earned within New Mexico: YES _____ NO _____ If earned, then General Education is complete.

| Course(Credits) | Sem/Year | Grade | Course(Credits) | Sem/Year | Grade |
|---|----------|-------|-----------------|----------|-------|
| <u>Applied Liberal Arts and Sciences (9)</u> | | | | | |
| ALAS 1810 Humanities | (3) | _____ | ALAS 1830 STEM | (3) | _____ |
| ALAS 1820 Social/ Behav Sci. | (3) | _____ | | | |

Area I - Communications (6) ¹ **ENGL 1110 Pre-requisite/Co-req**
 ENGL 1120 Composition II ¹ (3) _____
 COMM 1130 Public Speaking _____
 COMM 1140 Intro to Media Writing _____
 COMM 2140 Small Group Communication _____
 Course: (3) _____

Area IV - Social and Behavioral Sciences (3)
 ANTH 1140 Intro to Cultural Anthropology _____
 GEOG 1120 World Regional Geography _____
 GEOG 1130 Human Geography _____
 ECON 1110 Survey of Economics _____
 ECON 2110 Macroeconomic Principles _____
 ECON 2120 Microeconomic Principles _____
 POLS 1110 Intro to Political Science _____
 POLS 1120 American National Government _____
 PSYC 1110 Intro to Psychology _____
 SOCI 1110 Intro to Sociology _____
 SOCI 2310 Contemporary Social Problems _____
 Course: (3) _____

Area II - Mathematics (3) ⁴ **BCIS 1110 is Pre-requisite/Co-req**
 MATH 1010 Mathematics for School Teachers _____
 MATH 1130 Survey of Mathematics ² _____
 MATH 1220 College Algebra ² _____
 MATH 1350 Intro to Statistics ² _____
 MATH 1510 Calculus I ² _____
 Course: () _____

Area V - Humanities (3)
 ENGL 1410 Intro to Literature _____
 HIST 1110 United States History I _____
 HIST 1120 United States History II _____
 HIST 1150 Western Civilization I _____
 HIST 1160 Western Civilization II _____
 ENGL 2310 Intro to Creative Writing _____
 PHIL 1115 Intro to Philosophy _____
 Course: (3) _____

Area III - Science (4)
 Pick **one** course (plus lab) from the following:
 BIOL 1110/1110L General Biology & Lab _____
 BIOL 1140/1140L5 Biology for Health Sciences & Lab _____
 BIOL 2110/2110L Principles of Biology: Cell/Molecular & Lab _____
 BIOL 2210/2210L Human Anatomy & Physiology I & Lab _____
 BIOL 2642/2642L Plant Form, Function and Diversity & Lab _____
 BIOL 2644/2644L Animal Form, Function and Diversity & Lab _____
 CHEM 1120/1120L Intro to Chemistry & Lab _____
 CHEM 1215/1215L General Chemistry I for STEM Majors & Lab _____
 GEOL 1110/1110L Physical Geology & Lab _____
 GEOL 1120/1120L Environmental Geology & Lab _____
 GEOL 2110/2110L Historical Geology & Lab _____
 PHSC 1120/1120L Forensic Science I & Lab _____
 Course: (4) _____

Area VI - Creative & Fine Arts (3-4)
 ARTS 1250 Design II _____
 ARTS 1410 Intro to Photography _____
 ARTS 1610 Drawing I _____
 ARTS 1630 Painting I _____
 ARTS 2321 Appreciation of Clay _____
 ARTS 2841 Appreciation of Sculpture _____
 MUSC 1130 Music Appreciation _____
 Course: () _____

Mathematics Core Requirements (18 credit hours)

| Course(Credits) | Sem/Year | Grade | Course(Credits) | Sem/Year | Grade |
|--|----------|-------|-------------------------------|----------|-------|
| MATH 1230 Trigonometry * | (3) | _____ | MATH 1350 Intro to Statistics | (3) | _____ |
| CMPS 1x1 Prob Solving Java I or MATH 308 MATLAB: Intractv Envrnmnt | | | MATH 1510 Calculus I | (5) | _____ |
| Course: (3) _____ | | | MATH 1520 Calculus II | (4) | _____ |

*May be waived with proper background evidence by test score on Accuplacer, or transfer (grade of C or better) from another college.

Electives - Select from the following courses to obtain the minimum 60 credit hours required:

MATH 2431 Discrete Math (3), MATH 2530 Calculus III (4) ³, MATH 421 Adv. Appld Stats (3), MATH 323 Differential Equations (3)
 MATH 470 Topics in Mathematics (3), CMPS **1x1** Prob Solving Java I (3), CMPS 321 Prob Solving Java II (3),
 CHEM 1225/1225L Gen'l Chem II STEM & Lab (4) ³, PHYS 1240/1240L Algebra-based Physics II & Lab (4) ³,
 PHYS 1320/1320L Calculus-Based Physics II & Lab (4) ³ ³(recommended for pre-engineering students)
 Course: (3) _____ Course: (3) _____
 Course: (3) _____ Course: (3) _____

Total Credit Hours (minimum 60 required): _____

Student Signature: _____ **date:** _____

Advisor Signature: _____ **date:** _____