AAS Applied Pre-Engineering
62 CREDITS

Description: This flowchart is designed to quickly identify course prerequisites to assist in planning which courses should be taken first. The red arrows ➡ indicate when a class is a prerequisite for another class.

Instructions: This flowchart uses a bottom-up approach. Begin on Line 1 at the bottom of the chart. The General Education requirements are grouped together on the right of the chart, and the program requirements are to the left of the General Educations requirements. The courses can be taken in any order, but it is recommended that you take all of the courses on line 1, then all of the courses on line 2, and so forth.

KEY
⬆ Classes are pre-requisites

✳ Reading or Math Assessment Scores Required

Line 4

✳ **EGR 102 (3)** Introduction to Engineering — Prerequisite: MAT 187

CNC 202 (3) 3-D Programming and Rapid Protyping for CNC — Prerequisite: CNC 201

PHY 151 (5) Physics for Scientists and Engineers II — Prerequisite: MAT 230 and PHY 150.

Arts & Humanities OR Social & Behavioral Science (3)

Line 3

CNC 201 (3) Computer Aided Programming for CNC Machining — Prerequisite: CNC 101 (may be taken concurrently)

PHY 150 (5) Physics for Scientists and Engineers — Prerequisite: MAT 220.

*One year of high school physics or PHY 111/PHY 112 is strongly recommended

✳ **MAT 230 (5)** Calculus and Analytic Geometry II — Prerequisite: MAT 220

ENG (3)102 or 104 College Composition II or Col. Comp. I Honors (ENG 101or 103 pre-req) *(Recommended Composition)*

Line 2

ELT 130 (3) Introduction to Robotics

CNC 102 (2) CNC Machine Setup — Prerequisite: CNC 101.

✳ **MAT 220 (5)** Calculus and Analytic Geometry i — Prerequisite: MAT 187 or MAT 152 and MAT 183

Arts & Humanities OR Social & Behavioral Science (3)

✳ **ENG (3)101 or 103** College Composition I or Col. Comp. I Honors *(Recommended Composition)*

Line 1

ELT 183 (3) Digital Circuits

CNC 101 (2) CNC Machine Operator

CHM 151 (5) General Chemistry I *(Required Physical and Biological Science)* Prerequisite: MAT 097 or higher or two years of high school algebra.

✳ **MAT 187 (5)** Precalculus *(Required Mathematics)* Prerequisite: MAT 097, or two years of high school algebra and one year of geometry

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