Engineering (EGR)

**EGR 100 - ENGINEERING MATHEMATICS**  
Semester Hours: 3

Centered around disciplinary engineering applications, this course will demonstrate the role of essential mathematics in engineering at a freshman level. These include algebraic manipulation of engineering equations, trigonometry, vectors and complex numbers, sinusoids and harmonic signals, systems of equations and matrices, differentiation, integration and differential equations. All math topics will be presented within the context of an engineering application, and reinforced through extensive examples of their use in the core engineering courses.

**EGR 101 - INTRO COMPUTING ENGINEERS**  
Semester Hours: 3

Introduces students to the fundamental principles of programming for solving engineering problems. It familiarizes students with the process of computational thinking and the translation of real-life engineering to computational problems. Languages may include Matlab, Python, and others as appropriate. Prerequisites: MA 113 w/concurrency or Math placement level 2000.

**EGR 105 - INTRODUCTION TO AERONAUTICS**  
Semester Hour: 1

**EGR 299 - ENGINEERING MENTORING I**  
Semester Hours: 0

Yearly mentoring and advising from engineering faculty and staff. Prerequisite: ENG 101 or EGR 101 and MA 201 w/concurrency.

**EGR 399 - ENGINEERING MENTORING II**  
Semester Hours: 0

Yearly mentoring and advising from engineering faculty and staff. Prerequisites: EGR 299 and (CE 272 or MAE 272 or CHE 244 or CPE 212) or with concurrency (EE 382 or ISE 391).