## **Common Engineering Courses (EG) - Online**

**EG 501 Engineering Mathematics 6 Cr.**First and second order differential equations, basic matrix algebra with emphasis on solving systems of equations and understanding eigenvalues and eigenvectors, numerical techniques for solving both differential and algebraic equations, and an introduction to partial differential equations. Basic concepts in probability and statistics, random variables, testing hypotheses, confidence intervals, and correlation along with the least square line. In addition to solving problems by hand, students will also be using software tools. Prerequisite: acceptance into the Master of Civil Engineering program.