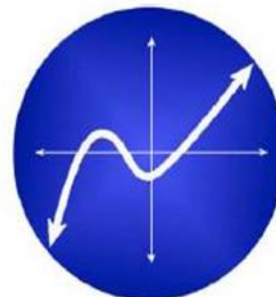


**Science****Technology****Engineering****Mathematics**

STEM is a curriculum which educates students in four specific disciplines: Science, Technology, Engineering, and Mathematics – using an interdisciplinary and applied approach. STEM integrates these four disciplines into a cohesive and engaging learning program based on real-world applications. Project Based Learning is one of the keys to our successful STEM Education Program. Emphasis is on hands-on learning and applying skills learned in the core subjects to actual problem solving situations. Students participate in open dialog classes where ideas and creativity are encouraged and respected. Students often work together in small teams where they build valuable collaborative skills. Peer evaluation and reflective analysis are also employed to encourage maturation in peer/personal performance and development.

Acceptance by Application. Applications available during course selection in room 230.

760 Engineering Fundamentals (1 Cr, HL, Grade 11, 12)

Engineering Fundamentals: Students work in teams to apply the skills learned in core subjects to design and create novel solutions and gain an understanding of a range of engineering career paths.

763 3D Design, Printing Production (.5 Cr, HL, Grade 12) and Introduction to Architectural Design (.5 Cr, HL, Grade 12)

Courses are paired together – offered in Semester 1 and Semester 2, and must be taken together.

3 D Design, Printing Production: Learn the basics of 3D design; get hands-on training in the use of computer based 3D design software and print 3D models using state of the art 3D printers. Prerequisite: Program Director and Assistant Principal for Academic Affairs Approval

Introduction to Architectural Design: Learn the elements of 2D and 3D design, study top architects and their design modalities, visit unique architectural structures and get hands on training in computer-based architectural design software. Prerequisite: Program Director Approval Please Note: STEM Education Program courses are offered depending on enrollment, student eligibility, and teacher availability. Students interested in STEM Education Program courses are to consult with their Guidance Counselor and/or the Assistant Principal for Academic Affairs.