

Engineering & Technology at EOM - Grades 10 to 12

Computer Engineering TEJ 3M / TEJ 4M

- hardware, networks, electronics, interfacing / programming, & project management
- prepares students for a variety of computer technology fields, engineering, and with Manufacturing for the high demand field of Mechatronics (**University / College / Trades**)

Manufacturing Engineering TMJ 2O / TMJ 3M / TMJ 4M

- CAD / CAM / CNC, design, precision machining, welding fabrication
- emphasis on materials and processes for engineering, industrial design, medical sciences, and skilled trades (**University / College / Trades**)

Participate in an *Engineer-in-Residence* challenge in grade 11!



Participate in a *Tetra Society* project in grade 12!



Communication Technology TGJ 2O / TGJ 3M / TGJ 4M

- explores the expanding world of multi-media production, with a focus on film and video production, audio and music design, photography and Photoshop skills
- engage with both physical hardware and software tools to create a variety of projects designed to combine technical prowess with creative design (**University / College / Trades**)

Technological Design TDJ 2O / TDJ 3M / TDJ 4M - NEW for 2018!

- fundamentals and history of design
- students will explore manual sketching techniques as well as CAD based design
- choose area of interest eg. architecture, automotive, fashion (**University / College / Trades**)

Specialist High Skills Major Manufacturing Engineering - NEW for 2018!

A bundle of nine grade 11 & 12 credits:

- Four Manufacturing major credits (can include Computer Engineering and some Science credits)
- Three credits in Math, English, & Science
- Two related Cooperative Education credits - experience in local industry!
- Additional, industry-recognized training certificates

ATTENTION Future Engineers!

We offer unique engineering preparation through our Computer & Manufacturing classes. The failure rate in university engineering is **still** around **30%! WHAT?!** 30% of the most academic grads **fail?!** Why? Simple. **Math and Science are NOT enough to prepare you!** You need basic knowledge of materials, processes, and computer hardware / software to survive first year. **Remember; engineers apply math & science concepts to solve real world problems, just like in Computer & Manufacturing Engineering!**

What are the basic courses required to get into Engineering?

- English, Calculus, Chemistry, & Physics - all at the 4U level
- One of either Functions, Bio, Data Management, or Comp Sci - also at 4U level
- Plus one more 4U or 4M course, **including** TMJ 4M or TEJ 4M

Prerequisites:

- Prerequisite to grade 12 courses is the grade 11 course of same type (ie. TEJ 3M for TEJ 4M)
- For Fall 2018 **only**, we will accept either TWJ 3E or TMJ 3M for TDJ 4M

Technology Certificate:

- Students will be provided with a Technology Certificate upon the successful completion of 8 credits beginning with an "I" or a "T" (eg. ICS 3U and TGJ 4M)

Engineering & Technology at Earl of March



The future is yours!