

Industrial, Manufacturing & Engineering Systems

This diverse pathway prepares students to work in a hands-on environment that includes jobs from designing, developing, planning, managing, performing and processing materials into intermediate and final products.

Career Clusters Included: Manufacturing, Transportation, Distribution & Logistics, Science, Technology, Engineering & Mathematics, and Architecture & Construction

Sample Rosedale Course Pathway

Grade 10

Grade 11

Grade 12

ENG2D: English
SNC2D: Science
MPM2D: Principles of Mathematics

ENG3U: English
SCH3U: Chemistry
SPH3U: Physics
SBI3U: Biology (Optional)
MCR3U: Functions

ENG4U: English
SCH4U: Chemistry
SPH4U: Physics
SBI4U: Biology (optional)
MHF4U: Advanced Functions
MCV4U: Calculus & Vectors
MDM4U: Data Management*

Required Skills

Communication Skills,
Analytical Skills, Problem
Solving Skills, Organizational
Skills, Technical Skills,
Visualization Skills,
Mechanical Skills, Dexterity.

*courses in blue are recommended but not required

After High Schools:

Possible credentials that pathway graduates may pursue include:

- BSc (Bachelor of Science)
- BASc (Bachelor of Applied Science)
- BEng (Bachelor of Engineering)
- BAS (Bachelor of Architectural Studies)
- BBA (Bachelor of Business Admin.)
- BA (Bachelor of Arts)
- BDes (Bachelor of Design)
- Engineering Technician Diploma
- Mechanical Techniques Diploma

Possible Careers	Avg. Salary*	Job Growth*
Architect	\$89,497	
Civil Engineer	\$93,000	
Electricians	\$60,247	
Elevator Mechanics	\$87,349	
Supply Chain Officers	\$61,973	
Geologists	\$76,312	
Industrial Instrument Mechanics	\$85,935	-

*Figures based on Ontario statistics. Job growth for 2017-2021, - (average), (above average)

