



Future of Photography

Presentation by J. Joe



Contents and Overview

A photographer is a person whose job is taking pictures. It could be of anything: people, landscapes, merchandise, and so on. They use different types of professional cameras and equipment, depending on what it is they want to photograph. In modern society, most photographers use digital cameras instead of the traditional film cameras. Digital cameras capture images electronically, which makes editing, moving, storing, and sharing all much easier.





General Info

The most common knowledge an aspiring photographer should have is the type of photography they want to focus on. The types of photographers are:

- Portrait
- Commercial and industrial
- Aerial
- Scientific
- Photojournalists
- Fine arts
- University





Future Outlook and Demand

After deciding what type of photographer you want to be, you have to choose if you want to be self-employed or take salaried photography jobs. Both which have their own pros and cons in outlook and demand.

Self-Employed

- More artistic control
- Flexible hours
- Needs to maintain own equipment
- Difficult marketing
- Usual low demand

Salaried

- More creative influence
- Possible unexpected hours
- Equipment provided by client
- Easier to get noticed by others
- Usual high demand



Post-Secondary Schooling Requirements

There are three main photography courses offered by Ontario's colleges, each with a slightly different focus.

1. Creative and applied digital: lighting techniques, photoshop, business skills
2. Photojournalism: photography combined with journalism and writing
3. Photo arts: darkroom photography, political and social issues, portfolio building





Recent News Article

A bride was ordered to pay \$115,000 in damages after unleashing an online attack against a wedding photography company. She spent almost a year posting disparaging comments about their services, and even launched an online campaign against them. The company suffered financially, leading to the end of their business. However, a week after the court meeting the bride apologized on social media and took down the online campaign.





Grade 10 Course Info

Course Code: TGJ2O1

Introduces students to communications technology. Students learn about the production of TV/video and movies, radio and audio, photography, media, and animation. Projects include creating videos, editing photos, working with audio, cartooning, developing animations, and designing web pages. Students will explore career opportunities in various communications technology fields.





Course Outline

COURSE DESCRIPTION:

This course introduces students to communications technology from a media perspective. Students will work in the areas of TV/video and movie production, radio and audio production, print and graphic communications, photography, and animation. Student projects may include computer-based activities such as creating videos, editing photos, working with audio, cartooning, developing animations, and designing web pages. Students will also develop an awareness of related environmental and societal issues and will begin to explore secondary and postsecondary pathways leading to careers in the field.

COURSE DESTINATION: DESIGN ARTS 11, DIGITAL MEDIA ARTS 11, COMPUTER AND ART RELATED COURSES.

COURSE UNITS:

Unit	Description	Length	Evaluation Strategies
1	Graphic Design & Production - design, create and modify illustrations using a vector design software	3 Weeks	Projects, presentation, and quiz
2	Image Production & Processes - design, create and edit photo images using raster design software	3 Weeks	Projects, presentation, and quiz
3	Audio Production & Special Effects - create, manipulate and add audio effects for general media	2 Weeks	Projects, presentation, and quiz
4	Graphic Animation - design and create animated media using vector animation software	2 Weeks	Projects, presentation, and quiz
5	Audio/Video Multimedia Production - design, create and edit non-linear student video	2 Weeks	Projects, presentation, and quiz
6	Web Design - design and create your own web page using authorware	2 Weeks	Projects, presentation, and quiz
7	Web Portfolio - Culminating Project - showcase and present course work through a web portfolio	3 Weeks	Portfolio and Presentation

Education Flowchart





Preparation and Options

Mandatory Education - basic technical abilities, knowledge of equipment, vocational training or an associate's degree

Optional Education - a bachelor of arts in photography, a polished portfolio, specialization in a field, photography techniques and history

Equipment - tripods, lense filters, computer programs, proper cameras





Summary & Conclusion

Photography is a career filled with potential for anyone who has passion for the arts. There are so many opportunities with which style you are interested in, and nowadays becoming a photographer is made more available than ever. The demand is also quite high, since modern day culture revolves around social media and having a good image online. So if you want to be a photographer, don't be afraid to get out there! You just need be professional, creative, and hard-working. With those three qualities, there's no doubt in you becoming a popular photographer.





Sources

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MECHANICAL ENGINEER

Is it right for you?

CONTENTS OVERVIEW

- What is a mechanical engineer?
- Future demand for this career
- Post-secondary requirements
- News article
- High school pathway
 - Related gr10 course
 - Flowchart
 - Course outline
- Career prep
- Conclusion
- Sources



What is a Mechanical Engineer

A mechanical engineer;

- is needed to design and manufacture all the parts and devices that go into a system or product
- Has a large range of skills are needed to succeed
- Analyze the product's functionality, aesthetics, reaction to the environment it's in, while also determining the best way to manufacture it without failure.



Future Demand

With our continuous need and dependency on machines increasing, the need for mechanical engineers also increases.



A report done by CDI corp. reveals

- a high demand for mechanical engineers in Canada over the next decade
- need to fill jobs left empty by baby boomers (a forecasted 2,100 job openings appearing each year)
- salaries are expected to increase as well (especially in western parts of Canada where there is a major economic activity shift).

Post-Secondary Requirements

- minimum you are required to have a bachelor's degree
- earn some licensure (education, supervised work experience, several examinations)
- expected to learn the basics of civil, electrical, and chemical engineering.
- There are also extra courses you can take in high school



Article - Mechanical Engineering Drones



The production and idea of drones has recently evolved and is beginning to be used for many different purposes (delivery, aid, film), but there has always been major restriction based on the weight the drone can carry. A mechanical engineer at the George W. Woodruff School of Mechanical Engineering named Jonathan Rogers is designing and building robotic drones that can link up and carry larger, heavier objects as a unit.

"Rogers has designed the world's first heavy lift small drones - robots that can work together to lift and evacuate wounded soldiers from the battlefield or civilians from a disaster area. Theoretically, three to four man-portable robots fly out together, connect to the person, and lift them 500 yards out of harm's way."

These drones would be able to go into places that are difficult or dangerous for humans, creating the next frontier of drone engineering.

<http://www.news.gatech.edu/2018/02/26/next-frontier-mechanical-engineering>

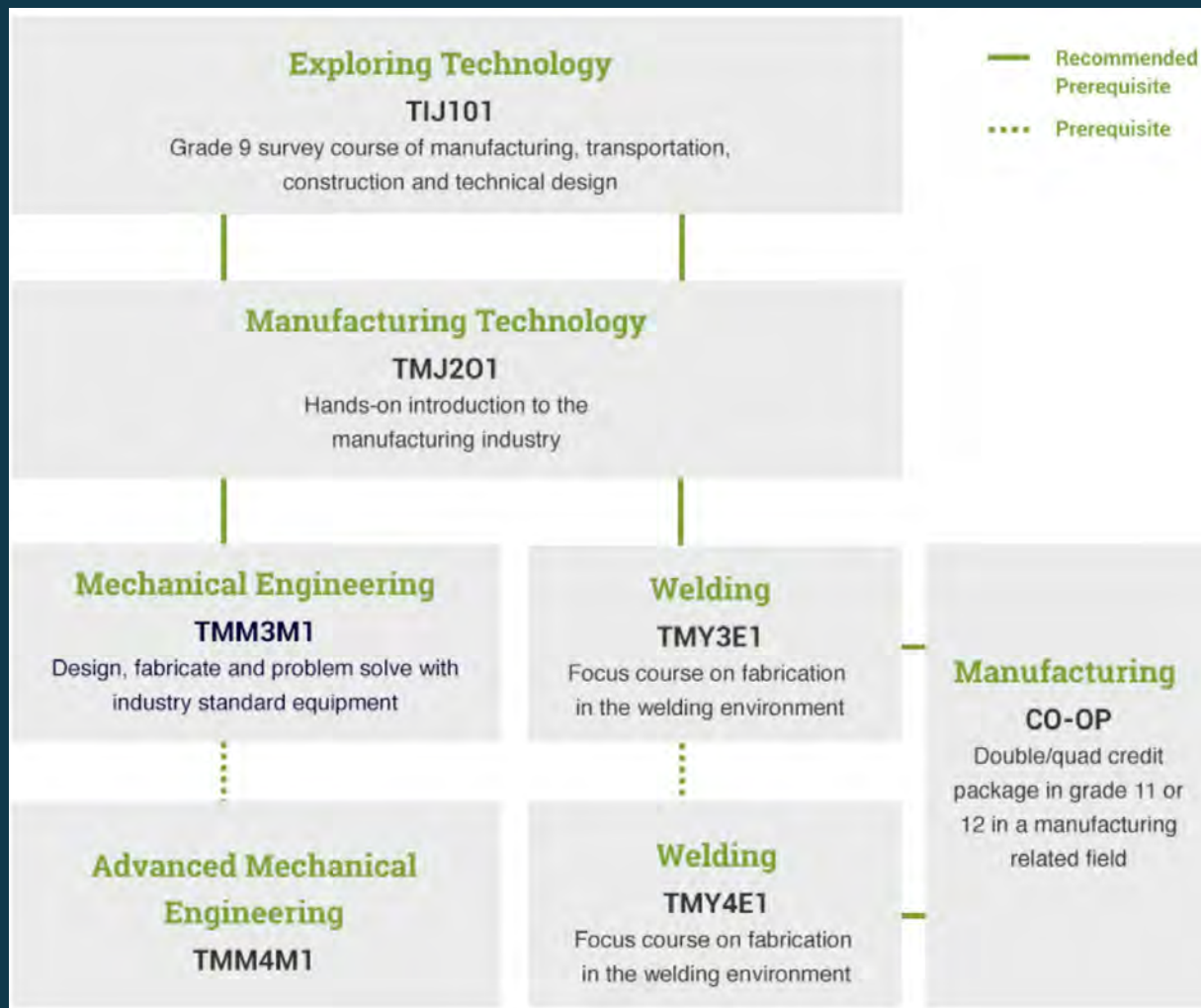
Grade 10 Course

- The course is manufacturing tech - TMJ201
- Teacher is Mr. Schneider
- One of the projects is to cut out chess peices from scrap metal

(I was unable to talk to Mr. Schneider and get the course outline, so I talked to a friend in his class about what he was doing.)

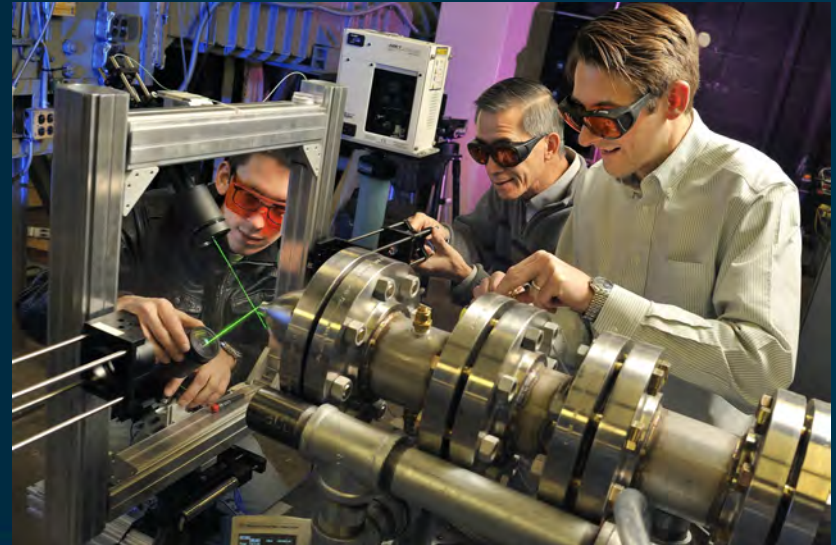


High school pathway



Career preparation

- Study the required courses
- Learn about related job opportunities in your area and trends for the demand of mechanical engineers
- Gather experience and work as an assistant to a fully trained and experienced mechanical engineer
- Take related engineering courses to get a basic understanding of; (examples)
 - Hydraulics
 - Thermodynamics
 - Physics
 - Civil engineering
 - Computer programming
 - Chemistry
 - And fluid mechanics
- GET YOUR BACHELORS AT LEAST



In Conclusion...

Mechanical engineering

- Involves problem solving and finding solutions
- Is in high demand for the years to come
- Requires basic knowledge in many different fields (mostly sciences and math)
- You get lots of money ✗
- Is ideal for logical and creative thinkers alike



Sources;

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- <http://www.mtu.edu/mechanical/engineering/>
- <http://www.cdicorp.com/report-reveals-demand-mechanical-engineers-canada/>
- https://study.com/mechanical_engineer.html
- <http://www.news.gatech.edu/2018/02/26/next-frontier-mechanical-engineering>



BY D, JOE





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CAREER INFO



- ▣ Plumbers install and maintain piping systems
- ▣ Plumbers need to weld, solder, attach fittings, install fixtures- need basic carpentry skills
- ▣ average work week is 40 hours a week. Yearly pay is 26,000\$-73,000\$



FUTURE OUT LOOK

- ▣ Good job opportunities for the next 7 years in Canada.
- ▣ From 2015-2024.
13,900 job openings are expected.
14,300 job seekers





POST-SECONDARY SCHOOLING



Apprenticeship

- ❑ Age 16 - grade 12 education.
- ❑ need 6,000 hours of on the job training
- ❑ four eight-weeks of technical training
- ❑ final certification exam.



College

- ❑ learn skills, techniques and knowledge .
- ❑ 3-4 years long course
- ❑ 4 years of on the job training





ARTICLE

https://www.thestar.com/news/canada/2009/04/29/wanted_plumbers_must_not_be_foreign.html



Immigrants in skilled trades can't get jobs

proving qualification and failing qualifying exams because of language barriers

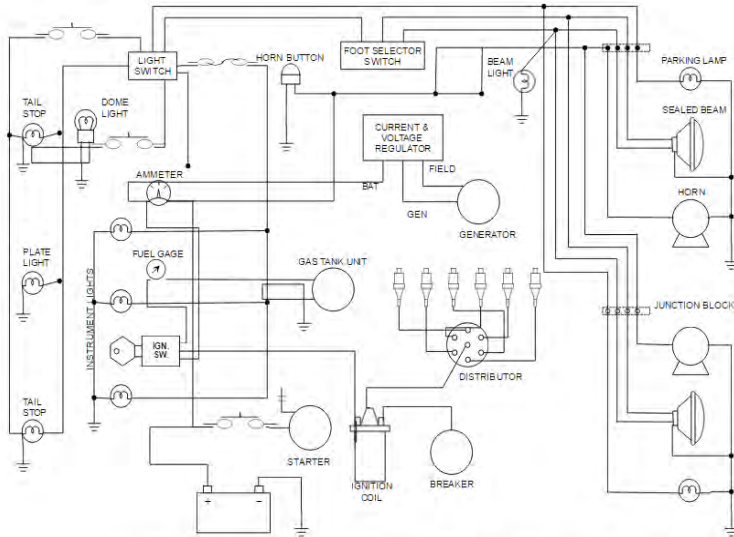
trouble getting a long term employers/jobs

employers want workers with experience and good communication skills





GR.10 COURSE INFO



WIRING DIAGRAM
AUTO ELECTRICAL WIRING DIAGRAM

DRAWN BY	CHECKED	DATE	SCALE	SHEET NO.

- ▣ Course code- TCJ3E1/TCJ4E1
- ▣ Teacher- Mr.Franzen
- ▣ construction/workplace safety.
- ▣ learn about building codes and designs
- ▣ how to create and read technical drawings.
- ▣ learn about trade work like, carpentry, masonry, electrical systems, HVAC and plumbing for residential construction.
- ▣ hand on experience by building projects



WESTERN TECHNICAL - COMMERCIAL SCHOOL COURSE OUTLINE



COURSE TITLE: Construction Technology

CODE: TCJ3/4E1

SUBJECT AREA: Tech

RESOURCES: mfranzen.ca

TEACHER NAME: Mr. Franzen

DATE: Sept 2015

PREREQUISITE: None

**COURSE COST
MATERIAL FEE:** None

COURSE DESCRIPTION:

This course enables students to develop technical knowledge and skills related to carpentry, masonry, electrical systems, heating and cooling, and plumbing for residential construction. Students will gain hands on experience using a variety of materials, processes, tools, and equipment to design, lay out, and build projects. They will create and read technical drawings, learn construction terminology, interpret building codes and regulations, and apply mathematical skills as they develop construction projects. Students will also develop an awareness of environmental and societal issues related to construction technology, and explore postsecondary and career opportunities in the field. Students will focus on Electrical and how it relates to the other trades.

COURSE DESTINATION: CONSTRUCTION, TECHNOLOGY DESIGN, TRANSPORTATION, MANUFACTURING, ROBOTICS

COURSE UNITS:

Unit	Description	Length	Evaluation Strategies
1	Introduction to construction and general safety	2 Weeks	Procedures, routines, quiz, practical work, written assignments
2	Technical drawings, building codes and design	3 Weeks	Test, practical work, written assignments
3	Trade work - masonry, carpentry, electrical, plumbing, HVAC	3 Weeks	Quiz, practical work, written assignments, presentation
4	Building construction projects related to the trades	10 Weeks	Test, practical work, written assignments

OVERALL EXPECTATIONS: By the end of the course students will...

- apply the design process to develop solutions, products, processes, or services in response to challenges or problems in construction technology;
- describe the properties and application of building materials, and of construction techniques and processes;
- describe the different technologies, materials, tools, and equipment applicable to construction technology;
- identify building codes, regulations, and standards applicable to construction, including those for electrical, mechanical, and structural systems.
- apply the design process to a variety of construction projects;
- demonstrate an ability to use resources such as technical data, reports, charts, tables, and building codes, regulations, and standards;
- demonstrate a general understanding of construction systems in terms of loads and stresses, structural members (shape, size, and placement), and the strength of the materials used for the foundation, floor, wall-framing, and roof systems found in residential and light construction projects;
- demonstrate appropriate technical skills involving the use of construction tools, materials, and equipment;
- apply mathematical and estimation skills in a variety of construction projects.
- explain the effects of technological change in the construction industry on society and on the environment;
- apply appropriate health and safety legislation; general shop and site safety rules; and rules specific to the use of materials, tools, and equipment;
- describe careers in construction technology, identifying the skills, education, and training required for each;
- identify and describe the employability skills required and the need for lifelong learning in the construction industry.



HIGH SCHOOL FLOWCHART

Exploring Technology

TIG101

Grade 9 survey course of construction, manufacturing, and transportation

— Recommended
Prerequisite
.... Prerequisite

Cabinetmaking

TCJ201

Introduction to Cabinetmaking and furniture making

Construction

TCJ201P

Residential construction introduction: carpentry, plumbing and electrical

Cabinetmaking

TCJ3C1

Focus on industrial woodworking

Construction

TCJ3E1

Residential carpentry

Construction / Cabinetmaking

CO-OP

Double/quad credit package in grade 11 or 12 in any construction related field

Cabinetmaking

TCJ4C1

Design and build custom furniture

Construction

TCJ4E

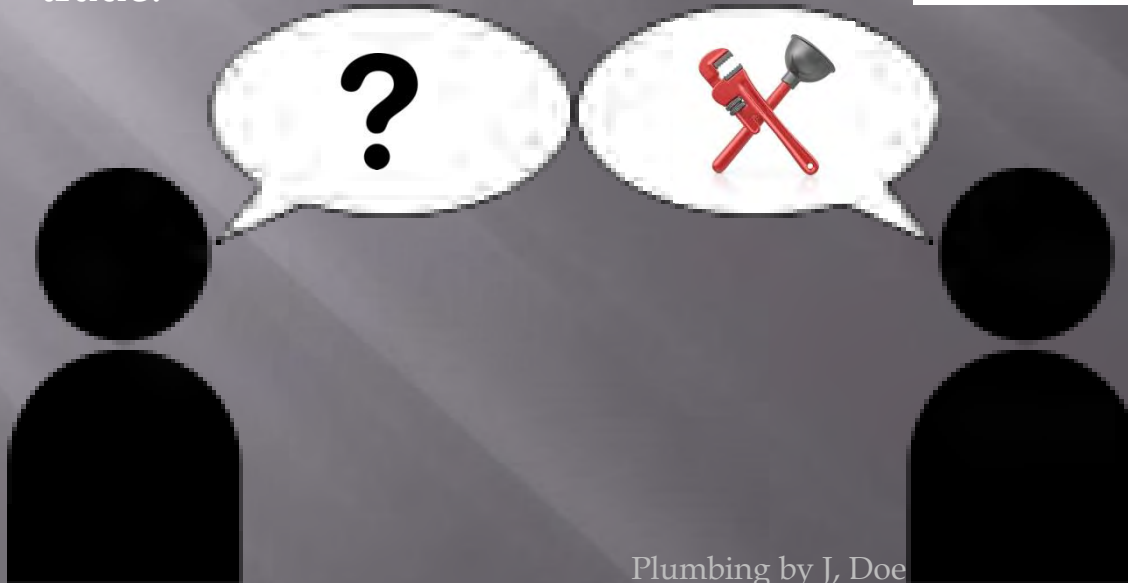
Advanced residential carpentry

Plumbing by J, Doe



CAREER PREPARATION

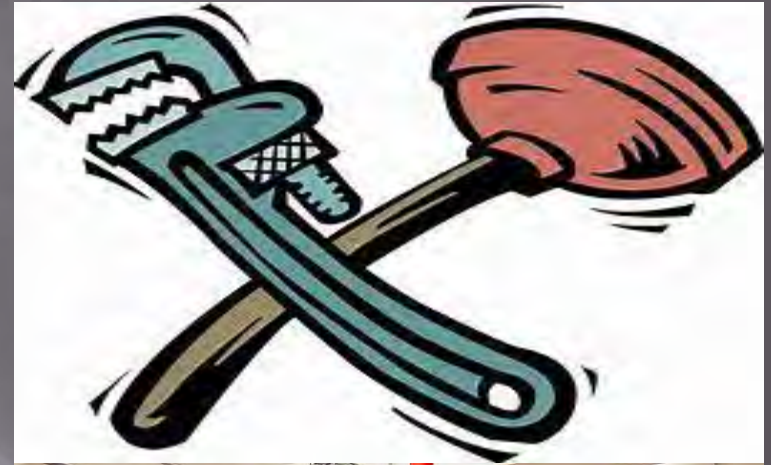
- ▣ In high school take tech courses to get ready for an apprenticeship or college
- ▣ Get familiarized with welding, carpentry and pipes
- ▣ how tools and pipes are manufactured and installed.
- ▣ Talk to someone in the plumbing trade.





CONCLUSION

- ▣ Plumber work with different piping systems
- ▣ different skills needed.
- ▣ good job opportunities in Canada .
- ▣ Plumbers train for 8 year to be fully certified





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