

# Melanie Cairns

B.Eng., Electrical E.I.T.,  
p-CFEI



P.O. Box 50057  
Rivergrove PO  
Winnipeg, MB R2V 1M5

## EDUCATION

Bachelor of Engineering, Lakehead University (2019)  
Diploma in Electrical Engineering Technology, Lakehead University (2018)

## CERTIFICATION

Provisional Certified Fire and Explosion Investigator (p-CFEI)

## PROFESSIONAL REGISTRATIONS

Engineers Geoscientists Manitoba (EGM)  
Institute of Electrical and Electronics Engineers (IEEE)

## TECHNICAL ASSOCIATIONS

Canadian Association of Fire Investigators (CAFI)  
National Association of Fire Investigators (NAFI)

## PROFESSIONAL EXPERIENCE

Melanie is a Forensic EIT with an Engineering Degree and a Diploma in Electrical Engineering Technology from Lakehead University. She has comprehensive knowledge of electrical systems and electronics as well as experience managing projects and working with contractors. She has attended over 100 fire scene investigations and evidence examinations.

### June 2019 to Present

Forensic E.I.T., **Origin and Cause Inc.**

Winnipeg, Manitoba

- Attended fire investigations for scene examination, documentation, and evidence collection
- Forensic investigations including research, failure analysis and reporting for evidence examinations

### 2016 to 2018 (April to September)

*Engineering Assistant/Technical Support, **Manitoba Hydro***

Winnipeg, Manitoba

- Reviewed engineering documents and reports
- Scheduled meetings, attended meetings, took meeting notes
- Extracted data from Lotus Notes and SharePoint for analysis
- Contributed to monthly/annual project cost analysis in Excel
- Built and maintained multiple project and process documentation in a SharePoint Wiki for teams and Project Managers to refer to
- Maintained and designed SharePoint sites and pages for multiple projects
- Established working relationships with all departments
- Collaborated with Project Managers and teams to create and update project schedules in Primavera
- Contributed to monthly reports and provided analytic reports to Department Managers, e.g. cost, project processes, scheduling
- Provided technical and administrative support
- Assisted in a tendering process with contractors
- Participated in site visits and assessed health and safety precautions on construction sites

### April 2015 to September 2015

*Technical Support Summer Student, **Manitoba Hydro***

Winnipeg, Manitoba

- Worked independently as well as in a team environment to create an estimate database tool using Excel

- Scheduled and attended meetings, created a project charter, Gantt chart and project completion report for supervisor
- Checked AutoCAD drawings for corrections

#### **FURTHER TRAINING AND EDUCATION**

- CFI Online Courses (acknowledged by IAAI)
  - Critical Evaluation and Testing of Commonly Reported Accidental Causes
  - Arc Mapping Basics
  - Basic Electricity
  - Electrical Safety
  - Fire Investigations for Fire Officers
  - How First Responders Impact the Fire Investigation
- Working at Heights, Winnipeg MB, November 2019
- NFPA 921 Course, Mississauga ON, November 2019