

**NORTHERN LIGHTS COLLEGE  
REGISTRAR'S OFFICE  
PROGRAM INFORMATION AND COMPLETION GUIDE**

**Program Name:** Wind Turbine Maintenance Technician  
**Credential/Certification:** Certificate in Wind Turbine Maintenance Technician  
**Date Submitted:** March 2017  
**Effective Date:** **September 2017**

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**Program Description:** Students in the Wind Turbine Maintenance Technician program explore the theory supporting wind turbines and the practical maintenance procedures required to maintain turbine output. Safe work practice is stressed throughout. Upon completion of the program, students are prepared to enter the field as wind turbine technicians, or to progress to higher levels of certification in the industry.

Graduates also have the opportunity to gain international certification that will allow them to work around the world. Graduates are eligible to write the BZEE Certification Examination (at an additional cost). Then, to qualify for a permanent BZEE certificate, graduates must provide Northern Lights College (NLC) with a letter from their employer indicating they have completed a minimum of 160 hours employment (paid or unpaid) within the wind turbine technician field along with an application for the BZEE certificate.

As well, upon successful completion of the Electrical portion of the program, students will write the NLC Electrical Level 1 Apprenticeship exam. Recognition from the Industry Training Authority of British Columbia will be granted to students who achieve a minimum of 70 per cent on the exam.

**Admission Requirements:** Applicants will fit one of three specific groups:

1) High school dual credit students:

Grade 11 level completion that includes:

Grade 11 English, or Career and College Preparation English 040 Advanced English, with "C+" or higher

Grade 11 Math (Pre-Calculus 11), or Career and College Preparation Math 040 Advanced Algebraic Mathematics, with "C+" or higher

Grade 11 Physics (or equivalent), with "C+" or higher

2) Adults – Submission of a high school transcript indicating:  
Grade 11 level completion that includes:  
Grade 11 English, or Career and College Preparation English 040 Advanced English, with "C+" or higher  
Grade 11 Math (Applications, Principles or Pre-Calculus 11), or Career and College Preparation Math 040 Advanced Algebraic Mathematics, with "C+" or higher  
Grade 11 Physics (or equivalent), with "C+" or higher

3) Adults or high school dual credit students – Completion of Canadian Adult Achievement Test (CAAT): An applicant who does not have the above academic background is required to write a CAAT in Reading Comprehension, Number Operations, Problem Solving, and Mechanical Reasoning; and an Electrical Math Assessment. A minimum Grade Equivalent (GE) score of 12.0 or higher is required for Reading Comprehension; 12.0 or higher is required for Number Operations and Problem Solving; an above average score (51/70; 6th Stanine) required for Mechanical Reasoning; and a score of 70% or higher in the Electrical Math Assessment. Based on the results of the assessment(s), applicants may be required to participate in an assessment interview to determine admissibility. Interview may be conducted via teleconference if necessary.

**Length of Program:** (weeks and total hours)

40 weeks

1193 hours

**Program Intake:** (start/finish dates)

Start: September of each year

Finish: June of each year

**Available Seats:** 16

**Application Deadline:** All completed applications must be received one month prior to start of the program. Completed applications received after this date will be reviewed based on seat availability.

**Career Prospects:** Wind Turbine Maintenance Technician. Demand is strong not only in North America, but in Europe as well.

**Affiliations/Partnerships:**

Lethbridge College  
Vestas Americas  
BZEE--International affiliation  
Industry Training Authority

**Location:** Dawson Creek

**Additional Requirements/Supplies:** (fees, supplies, materials)

- Assessment Fee (if applicable)
- Textbooks
- Safety Gear (CSA approved steel toe boots and glasses)
- Instruction Related Fees (panel, electronics, and fluid mechanics kits)

**Eligibility for Canada Student Loans:** (Yes or No)

Yes

**Required Minimum Grade:** (overall and/or minimum within a course)

70% within each course

**Residency Requirement:** (percentage of courses which must be taken at NLC)

100%

**Required Courses:** (list courses required to complete credential  
and total hours for each course)

Term One:

- WTMT 150 - Jobsite Safety (36 hours)
- WTMT 102 - Wind Turbine Electrical Safety (108 hours)
- WTMT 103 - Electrical Fundamentals (238 hours)
- WTMT 104 - Meters and Test Equipment (36 hours)
- WTMT 105 - Semi Conductors (109 hours)
- WTMT 106 - SCRs Diacs and Triacs (18 hours)
- WTMT 109 - Transformers (36 hours)
- WTMT 117 - Wind Turbine Rotor Blades (43 hours)

Term Two:

- WTMT 101 - Wind Turbine Basics (96 hours)
- WTMT 107 - Wind Turbine Construction (54 hours)
- WTMT 108 - Wind Turbine Towers (16 hours)
- WTMT 110 - Wind Turbine Mechanical (122 hours)
- WTMT 111 - Wind Turbine Specific Maintenance (50 hours)
- WTMT 112 - Wind Turbine Gear Maintenance and Inspection (60 hours)
- WTMT 113 - Wind Turbine Hydraulics (60 hours)
- WTMT 114 - Wind Turbine Fluids and Seals (24 hours)
- WTMT 115 - Wind Turbine Cooling Systems (30 hours)
- WTMT 116 - Work Planning (57 hours)

Important notes:

- Program graduates are responsible for paying to write the BZEE Certification Examination. Cost is approximately €250 (250 EUROS), subject to change without notice.
- A time notified interim certificate will be issued by BZEE upon successful completion of the program. Then, to qualify for a permanent BZEE certificate, graduates must provide Northern Lights College (NLC) with a letter from their employer indicating they have completed a minimum of 160 hours employment (paid or unpaid) within the wind turbine technician field along with an application for the BZEE certificate.