

EN 131

Power Engineering Self-Directed Practicum

10 Credits

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EN 131 Version: 11



Power Engineering Self-Directed Practicum

Calendar Description

This course is an evaluated power engineering/steam work experience leading to provincial certification. Work experience includes demonstrating safety procedures while working with boilers, pumps, compressors, prime movers, water treatment, air conditioning and refrigeration, and process controls. Practicum must be completed in a facility suitable under Power Engineering Regulation. Before registering for this course students must have applied for 4th Class Part A government examinations. P/F.

Rationale

Candidates who are considering a career in Power Engineering must successfully complete a course in Power Engineering. Successful completion of this 6 months work experience provides students with practical experience to qualify for 4th Class Power Engineering Certification. As a student of the college, the candidate will possess the necessary WCB and liability insurance coverage required for the duration of the practicum.

Prerequisites

EN 128 and EN 129

Co-Requisites

None

Course Learning Outcomes

Upon successful completion of this course, students will be able to

1. challenge Part B of the provincial legislated 4th Class Power Engineering certification exam.
2. as per ABSA all students are required to obtain 6 months of work experience in an operating facility satisfactory to the provincial government legislation Power Engineer Regulations.

Resource Materials

Required Text:

None

Reference Text:

PanGlobal 4th Class Power Engineering Textbooks Edition 3.0/3.5

Required Materials:

Safety apparel - Personal Protective Equipment (PPE)

Safety Courses:

The student will require the following safety related courses before starting the practicum:

H2S Alive

First Aid

TDG

WHMIS

Conduct of Course

Students find and secure 6 months of work experience in an operating facility satisfactory to the provincial government legislation Power Engineer Regulations. The host organization operating the facility agrees facilitate and supervise the work experience. The level of evaluator supervision is specified in the practicum agreement, but is at minimum include monthly communication with Lakeland College. A positive evaluation report from the host organization and a report or essay from the student detailing the operating experience and demonstrating acquired skills is required upon completion of the work experience. The host will provide documentation of completed work experience to both Lakeland College and the provincial regulatory body. The student must complete all requirements of the course within one year from the time of registration.

Evaluation Procedures

Course program completion and credit will be dependent upon

1. successful completion of 6 months' work experience in an operating capacity, in an approved plant as documented by the host organization.
2. receipt of a positive evaluation report from the host organization.
3. completion of a report or essay by the student which details acquired skills and knowledge, safety practices observed, listing of equipment and/or processes operated, pressures, temperatures, capacities, duties, and other activities pertinent to the work experience, satisfactory to Lakeland College.
4. completion of a schematic and straight line drawing of pertinent system(s) as chosen by the Lakeland College instructor.

Grade Equivalents and Course Pass Requirements

This course is graded as a Pass/Fail. No marks are assigned.

Attendance

Attendance is MANDATORY and will be kept and reported by the host organization. The instructor ensures attendance reporting is satisfactory. An attendance sheet must be signed by the chief engineer of the facility and presented to the instructor at completion.

Course Units/Topics

As arranged between the student and employer, with file copy to the instructor.



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