



## DEPARTMENT OF POWER ENGINEERING

### COURSE OUTLINE – FALL 2012

#### POF 432 CONTROLS 1.5 (13/0/10)

**INSTRUCTOR:** Augustine Ebinu  
**OFFICE:** PS 130  
**OFFICE HOURS:** As posted

**PHONE:** 780-835-6692  
**E-MAIL:** AEbinu@GPRC.AB.CA

#### **PREREQUISITE(S)/COREQUISITE:**

A high school diploma including at least:

- 65% in English 20-1 or 20 -2, AND
- 65% in Math 20-1 or 20-2, AND
- 65% in any Science (Physics, Chemistry, Biology or Science) in the 20 stream, AND
- A Career Investigation (specified format)

OR

- Mature students not meeting the above requirements may request a review of their education and prior work skills by the Power Engineering Team at GPRC.

#### **REQUIRED TEXT/RESOURCE MATERIALS:**

- PE4B Text (BOOK 1)
- PE4B Workbook
- PE3 Section 2 Chapters 11 to 13
- RECOMMENDED Reference
- Instrumentation, Kirk-Rimboi

#### **CALENDAR DESCRIPTION:**

This course covers the fundamental principles of industrial measurement and control with emphasis on power plant instrumentation. Topics include: basic control theory; pressure, flow, level and temperature sensing and control; boiler burner management; boiler

combustion and water level control; basic computer theory and computerized control as it relates to power plant operation.

**CREDIT/CONTACT HOURS:**

1.5 Credits

23 Hours

**DELIVERY MODE(S):** Fairview Campus Only

**OBJECTIVES (OPTIONAL):**

To ensure students become knowledgeable and competent in the fundamental principles of industrial measurement and control with emphasis on power plant instrumentation

**TRANSFERABILITY:** As per ABSA requirements

**\*\* Grade of D or D+ may not be acceptable for transfer to other post-secondary institutions. Students are cautioned that it is their responsibility to contact the receiving institutions to ensure transferability**

**GRADING CRITERIA:**

Method	Percentage	Minimum
Course assignments/workbooks	15%	50%
CML quizzes	15%	50%
Unit Exams	30%	50%
Final Exam	40%	50%
	100%	50%
		65% average, with no mark below 50%

GRANDE PRAIRIE REGIONAL COLLEGE			
GRADING CONVERSION CHART			
Alpha Grade	4-point Equivalent	Percentage Guidelines	Designation
A <sup>+</sup>	4.0	90 – 100	EXCELLENT
A	4.0	85 – 89	
A <sup>-</sup>	3.7	80 – 84	FIRST CLASS STANDING
B <sup>+</sup>	3.3	77 – 79	
B	3.0	73 – 76	GOOD
B <sup>-</sup>	2.7	70 – 72	
C <sup>+</sup>	2.3	67 – 69	SATISFACTORY
C	2.0	63 – 66	
C <sup>-</sup>	1.7	60 – 62	
D <sup>+</sup>	1.3	55 – 59	MINIMAL PASS
D	1.0	50 – 54	
F	0.0	0 – 49	FAIL
WF	0.0	0	FAIL, withdrawal after the deadline

**EVALUATIONS:** As per Power Engineering Student Manual

**STUDENT RESPONSIBILITIES:** As per Power Engineering Student Manual

**STATEMENT ON PLAGIARISM AND CHEATING:**

Refer to the Student Conduct section of the College Admission Guide at <http://www.gprc.ab.ca/programs/calendar/> or the College Policy on Student Misconduct: Plagiarism and Cheating at [www.gprc.ab.ca/about/administration/policies/\\*\\*](http://www.gprc.ab.ca/about/administration/policies/**)

\*\*Note: all Academic and Administrative policies are available on the same page.

**COURSE SCHEDULE/TENTATIVE TIMELINE:**

Nov. 15- Dec 17, 2012

Monday – Thursday – 12:30-14:20