

Course Outline

TTED 4050 Power Technology

School of Manufacturing, Electronics and Industrial Processes

Program: Technology Teacher Education

Start Date:	September 2006	End Date:	November 21, 2006
Total Hours: Hours/Week:	132 <b>Total Weeks</b> 11 12 <b>Lecture:</b> 4 <b>Lab:</b> 8	Term/Level: Shop:	3 Course Credits: 9 0 Seminar: 0 Other: 0
Prerequisites	TTED 4050 is a Prerequisite for:		
Course No.	Course Name	Course No.	Course Name
TTED 3050 TTED 4000 TTED 4010 TTED 4025 TTED 4040	Power Technology Foundations Design, Drawing & CAD 1 Computer Applications for TTED Power Manufacturing for TTED Materials Science for TTED	TTED 5050 TTED 5080 TTED 6099	Teaching Automotive Systems Directed Technical Project 1 Safety across Tech Ed Curriculum

#### **Course Description**

This course will continue the investigations that began in TTED 3050, into various engine and related support system design, function and maintenance in detail. Transmission of power, robot design and function will also be included. Lab work and self directed shop projects will be used to provide students with practical experience to support the theory material studied..

#### **Evaluation**

Practical work will contribute 60%, and theory work 40% of the final course grade.

## NOTE: Student must "pass" both the Theory and Practical components of TTED 4050 to gain course credit.

Practical assignments will be apportioned marks in accordance with the percentage of course time allotted/budgeted for each assignment by the instructors.

Theoretical knowledge will be tested via one midterm and a final examination. Theory marks will be the simple average of these two tests.

Practical work	60%
Theory work	40%
TOTAL	100%

# **Course Learning Outcomes/Competencies**

See detailed "Topic for Discussion" reading, reference and learning objective outline for each theory topic to be studied.

#### Verification

I verify that the content of this course outline is current.	
MI state	SEPT 5/06
Authoring Instructer	Date
I verify that this course outline has been reviewed.	Sept 5/06
Program Head/Chief Instructor	Date
I verify that this course outline complies with BCIT policy.	2006/09/05

Note: Should changes be required to the content of this course outline, students will be given reasonable notice.

### Instructor(s)

Roger Bortignon

Office Location: SW9 205

Office Hrs.:

Office Phone:

604-412-7412

Peter Trant

SW9 201F

By appointment

604-432-8280

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### Learning Resources

Required:

Small Gas Engines. Roth, Charles C. The Goodheart-Wilcox Company Inc. ISBN 1-56637, copyright 2004

Power Technology. Stephenson, George E. Delmar Publishers Inc. ISBN 0-8273-2446-4. Copyright 1986 This text is being reprinted and is available through the BCIT bookstore

#### Information for Students

Assignments: Late assignments, lab reports or projects will be devalued 10% per day late. Assignments, lab reports or projects must be done on an individual basis unless otherwise specified by the instructor.

Makeup Tests, Exams or Quizzes: There will be no makeup tests, exams or quizzes. If you miss a test, exam or quiz, you will receive zero marks. Exceptions may be made for documented medical reasons or extenuating circumstances. In such a case, it is the responsibility of the student to inform the instructor immediately.

Ethics: BCIT assumes that all students attending the Institute will follow a high standard of ethics. Incidents of cheating or plagiarism may, therefore, result in a grade of zero for the assignment, quiz, test, exam, or project for all parties involved and/or expulsion from the course.

Attendance: The attendance policy as outlined in the current BCIT Calendar will be enforced. Attendance will be taken at the beginning of each session. Students not present at that time will be recorded as absent.

Illness: A doctor's note is required for any illness causing you to miss assignments, quizzes, tests, projects, or exam. At the discretion of the instructor, you may complete the work missed or have the work prorated.

Attempts: Students must successfully complete a course within a maximum of three attempts at the course. Students with two attempts in a single course will be allowed to repeat the course only upon special written permission from the Associate Dean. Students who have not successfully completed a course within three attempts will not be eligible to graduate from the appropriate program.

Course Outline Changes: The material or schedule specified in this course outline may be changed by the instructor. If changes are required, they will be announced in class.

Advancement: Students who fail three or more courses in a term cannot advance to the next term and may be asked to discontinue from the program.