

**GRANDE PRAIRIE REGIONAL COLLEGE**  
**Industrial Training**

**Industrial Maintenance Technician Program**

**COURSE SYLLABUS - SEMESTER II**

---

**COMPUTER APPLICATIONS: IM0030**

This course is designed to allow students to gain an appreciation of computer fundamentals as it applies in an industrial setting. Students will be exposed to the terminology and concepts of a computer. Labs will cover practical applications in Windows and DOS, word processing, spreadsheets, database, and programmable logic control systems.

**Prerequisites:** None  
**Textbook:** TBA  
**Class Hours:** See Timetable

**Course Objectives**

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

1. know the basic terminology of computers.
2. understand how computers can be used in an industrial setting.
3. demonstrate fundamental skills on specific software applications.
4. understand the operating principle of a Programmable Logic Controller
5. understand the principle behind the hardware components associated with a personal computer.
6. appreciate personal computer future trends.

**Evaluation**

The students will be evaluated as follows.

- |                                     |     |
|-------------------------------------|-----|
| 1. Lab Assignments .....            | 40% |
| 2. Midterm Exam .....               | 10% |
| 3. Final Exam (theory).....         | 20% |
| 4. Final Exam (lab).....            | 20% |
| 5. Term Paper (approved topic)..... | 10% |

**Attendance** Refer to the Attendance Policy - Progression Criteria

## SEMESTER II

### THEORY AND LAB HOURS

UNIT	THEORY HOURS	LAB HOURS
Bearings and Seals	24	14
Lubrication	8	2
Gaskets	6	3
Couplings, Clutches, and Brakes	18	8
Alignment and Levelling	9	9
Power Transmissions	20	12
Gears and Speed Changer	12	5
Reciprocating Compressors	26	20
Hydraulics	13.5	23
<b>TOTAL</b>	<b>136.5</b>	<b>96</b>

Some hours will be allotted for outside work (shop) ie. Hydraulics.

Catalogue & manual data homework assignment.