TEC1301 Workshop Practice (Core)

Period per Week			Contact Hour per Semester	Weighted Total Mark	Weighted Exam Mark	Weighted Continuous Assessment Mark	Credit Units
LH	PH	TH	CH	WTM	WEM	WCM	CU
00	300	00	30	100	0	100	2

Rationale

This course is designed to give the student practical exposure to setting up and repairing the hardware of a computer. The student is also introduced to practical work done outside Computer Engineering in preparation for multidisciplinary work.

Objectives

The course aims to:

- Provide the student with basic vocational skills.
- Enable the student to appreciate the work of technicians hence prepare him or her for managerial positions.
- Develop student's technical reporting and writing on practical work.

Course Content

1. ***The Computer Workshop***
   - PC assembly
   - PC cleaning (blowing)
   - Computer repairs and upgrade
   - Hardware troubleshooting
   - Installation of motherboard, sound card, video card, DVD burner, modem, wireless network card, disk drives
   - Installation and troubleshooting of printers, scanners, digital cameras
   - Operating system installation
   - BIOS configuration
   - Network cable termination
   - Data backup and recovery
2. ***Manual Practice***
   - Introduction to tools
   - Marking off
   - Measurement
   - Fitting

3. ***Machine Shop Processes***
   - Turning
   - Milling
   - Grinding
   - Drilling
4. ***Fabrication Practice***
   - Joining processes (screw fastening, riveting, welding, adhesive bonding)
   - Fabrication of items
5. ***Electrical House Wiring***
   - Regulations
   - Consumer circuits and wiring accessories
   - Diagnosis and Repair of Electric appliances
6. ***Repair of Electronic Equipment***
   - Radios
   - TVs
7. ***Building Construction***
   - Brickwork
   - Concrete work
   - Trusses and Plumbing
8. ***Building Finishing Processes***
   - painting,
   - varnishing and
   - decorating