



## **Automotive Transmission Lab**

### **Course Covered:**

AUT-373-L Automotive Transmission and Transaxle

**DEPARTMENT OF AUTOMOTIVE ENGINEERING  
TECHNOLOGY**

**PUNJAB TIANJIN UNIVERSITY OF TECHNOLOGY, LAHORE**

## Course Title: AUT-373-L Automotive Transmission and Transaxle

### List of Experiments:

1. 1 Diagnosis, and service of manual transmission and transaxle.
2. Identify the main components & assemblies of AT.
3. Disassemble automatic transmission and Analysis the structure of AT.
4. Assignment for analysis/design of planetary gear set box (4 groups)
  - Forward low gear
  - Direct drive
  - Over drive
  - Reverse drive
5. Analysis the structure of planetary gear system
6. Identify the components and function of Ravigneaux AT.
7. Identify the structure and assembly of Ravigneaux AT holding devices.
8. Analysis of components and operation of holding devices
9. Identify and analysis of the torque converter assembly.
10. Identify and analysis of the assembly of hydraulic control system.
11. Identify and analyze the operation of Electrical system of AT.
12. Diagnosis of four-wheel drive (4WD) and all-wheel drive (AWD) systems.
13. Diagnosis and service of the transfer case, hubs, and control system.
14. identify the components and function of Simpson II AT
15. Identify the structure and assembly of Simpson II AT holding devices.



Figure 1 Automotive Transmission training Bench