

# *Government Polytechnic West Champaran*

## *Electrical Engineering*

### **Electric Vehicle (Basic) (2000611G) Sessional Work & Self-Learning**

#### **Scheme of Studies:**

Board of Study	Course Code	Course Title	Scheme of Study (Hours/Week)					
			Classroom Instruction (CI)		Lab Instruction (LI)	Notional Hours (TW+ SL)	Total Hours (CI+LI+TW+SL)	Total Credits (C)
			L	T				
	2000605G/ 2000608G/ 2000611G	Electric Vehicle (Advanced)	03	-	04	02	09	05

#### **Scheme of Assessment:**

Board of Study	Course Code	Course Title	Assessment Scheme (Marks)						Total Marks (TA+TWA+LA)
			Theory Assessment (TA)		Term Work & Self-Learning Assessment (TWA)		Lab Assessment (LA)		
			Progressive Theory Assessment (PTA)	End Theory Assessment (ETA)	Internal	External	Progressive Lab Assessment (PLA)	End Laboratory Assessment (ELA)	
	2000605G/2000608G/2000611G	Electric Vehicle (Advanced)	30	70	20	30	20	30	200

#### **List of Micro Projects:**

1. Design and build a physical model of an EV motor and powertrain components from scratch.
2. Build and simulate communication systems of EVs using some software tools.
3. Prepare a report on “the way carbon credit works and companies utilize it to reduce their emission values”.
4. Develop an EV prototype power train using locally procured hardware components.

#### **List of Seminar Topics:**

- Communication Systems, Sensors and batteries used in EVs.
- Safe disposal process of Used Batteries.
- Charging Technologies used for charging the EV.
- EV power transmission systems.