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| **HCMC UNIVERSITY OF TECHNOLOGY** | SOCIAL REPUBLIC OF VIETNAM |
| Faculty of Transportation Engineering | Independence - Freedom - Happiness  **------------------------------------** |

# THESIS ASSIGNMENT

**Student’s full name :** Hồ Bình Minh **Student’s ID : 1852169**

**Training program :** Automotive Engineering **Class : CC19OTO1/GT19OTO3**

1. **Thesis/Project title**: Analysis, modeling and simulation of a resistance torque model for the vehicle drive wheel system, and application for the control of Electric Powered Steering (EPS) system.
2. **Requested content :**

\_ Research how wheel alignment and specific factors such as vehicle mass, steering angle can affect the resistance torque in the steering mechanism especially in the EPS system, model and simulate it by using Matlab/Simulink software.

\_ Required to get fully understanding knowledge about the resistance torque between the tire forces and road surface in steering mechanism especially in the EPS system of VIOS.

1. **Requested products :**

⌧ Full report ⌧ Poster ◻ Scientific paper

◻ Software ◻ Firmware ⌧ Simulation model

◻ General layout drawings ◻ Detailed drawings ◻ Assembly drawings

◻ Others:

1. **Date of assignment** *(dd/mm/yyyy)* **: 23//12/2022**
2. **Date of accomplishment** *(dd/mm/yyyy)* **: 22/05/2023**

**The Thesis assignment is approved by the Department of Automotive Engineering.**

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| *Date (dd/mm/yyyy) :* …………………..  **Head of Department** | *Date (dd/mm/yyyy) :* …………………..  **Thesis Advisor** |