

**THESIS ASSIGNMENT****Student's full name :** Trịnh Tiến Long**Student's ID :** 1852047**Training program :** Automotive Engineering**Class :** CC190TO1

1. **Thesis title :** Analysis, 3D modeling and dynamic simulation of the vehicle steering system in the VIOS car.

2. **Requested content :**

\_Build EPS model on Solidworks then import to Simscape to determine the torque acting on steering wheel with certain steering angle on EPS system

\_Build 3D model of the steering system

\_Simulation of dynamic behavior in Matlab/Simulink with Simscape

\_Validation the model for the control of an equivalent electric powered steering system

3. **Requested products :**

☒ Full report☒ Poster☐ Scientific paper☐ Software☐ Firmware☒ Simulation model☐ General layout drawings☐ Detailed drawings☒ Assembly drawings☐ Others:

4. **Date of assignment** (*dd/mm/yyyy*) : **23/12/2022**

5. **Date of accomplishment** (*dd/mm/yyyy*) : **22/05/2023**

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

*Date (dd/mm/yyyy) : .....22/05/2023.....*

**Head of Department**

*Date (dd/mm/yyyy) : .....15/05/2023.....*

**Thesis Advisor**