

Senior Design Project Description for SPRING 2016 Project Title: Wind Tunnel Rolling Road (ROLL_ROAD)

Supporter: UNC Charlotte Motorsports Supporter Technical Representative: ASSIGNED Faculty Mentor: <u>X</u> ASSIGNED ____ TBD (check one) Single Team <u>X</u> Dual Team ____ (check one) Personnel (EN/ET): <u>E</u>, <u>Cp</u>, <u>Cv</u>, <u>4</u> M, <u>SE</u> (Complete if the number of students required is known) Expected person-hours: (250 per student)

Description of Project:

There is a wind tunnel in the Motorsports Research Building. This project will develop a rolling road for the wind tunnel.

Initial Project Requirements (e.g. weight, size, etc.):

The project requirements will include making a fast enough flat road surface, dealing with any operational issues such as vibration and heat, and devising a way to control and match the road speed with the wind speed. This team will work in collaboration with various grad students on this project.

Expected Deliverables/Results:

A fully operational rolling road will be provided. Testing is required to prove its performance.

List here any specific skills or knowledge needed or suggested (If none please state none):

None