

Senior Design Project Description for FALL 2016 Project Title: Water Channel Rolling Road (UNCC_RROAD)

Supporter: UNC Charlotte
Supporter Technical Representative: ASSIGNED
Faculty Mentor: X ASSIGNED TBD (check one)
Single Team X Dual Team (check one)
Personnel (EN/ET): E, Cp, Cv, 3 M, SE
(Complete if the number of students required is known)
Expected person-hours: (250 per student)
Description of Project:
This team will design, manufacture, and develop the rolling road for the water channel in the Motorsports Research Building. Rolling roads are important for experimental flow analysis around vehicles with rolling tires.
Initial Project Requirements (e.g. weight, size, etc.):
The design must deal with operational issues such as vibration. It must include a method to control and match road speed with the water speed.
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):
Motorsports students only