

## MEGR 2299 – Motorsports Engineering Clinic I

<b><i>Catalog Data:</i></b>	Motorsports Engineering Clinic I Introduction to equipment and tools used by engineers in the motorsports industry.
<b><i>Textbooks(s):</i></b>	None. Handouts will be provided as needed by the instructor.
<b><i>Goals:</i></b>	The goal of this course is to introduce students to the theory and use of common tools and equipment used by race engineers in the design, fabrication and testing of race cars and road vehicles.
<b><i>Prerequisites:</i></b>	Admission to motorsports concentration; Sophomore standing.
<b><i>Topics:</i></b>	Engine dynamometer Chassis dynamometer Flow bench (wet and dry) Shock dynamometer Spring rater Coordinate measuring machine TIG and MIG welder Chassis setup Lubricants Data acquisition
<b><i>Outcomes/Objectives:</i></b>	At the conclusion of this course, students will be familiar with the various pieces of equipment in the UNC Charlotte motorsports laboratory. A more complete understanding of the theory behind the equipment will come as the students complete their coursework.
<b><i>Computer Usage:</i></b>	Most of the equipment has a computer interface.
<b><i>Grading:</i></b>	Grades will be based of attendance and the final exam.
<b><i>Follow-up courses:</i></b>	MEGR 3255. Motorsports Engineering Clinic II
<b><i>Coordinator:</i></b>	J. M. Hill
<b><i>Prepared by:</i></b>	J. M. Hill, Spring 2009