

BSc /HND Automotive and Motorsport Engineering

Data Acquisition and Dynamics Introduction

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Introduction

The aim of this module is to develop an understanding of the factors affecting the dynamic performance of vehicle's suspension systems and to analyse collected vehicle track and simulation data using Motec to investigate the effect of changes made to the suspension specification

By the time we finish...

You will be able to ...

Measure static vehicle parameters to a suitable level of accuracy to enable valid wheel load and hence vehicle balance predictions to be made.

Quantify and predict the result of suspension changes on wheel load distribution and hence a car's handling balance.

Collect and analyse data from a simulator session or track test to measure dynamic parameters and verify predicted loads and handling balance

How do you meet the aims?

By successfully completing assessments that will enable you to show that you have achieved the expected outcomes expected of the module.

The Assessments

The assessments you will be taking are an **Assignment** that you will complete this term which will give **70%** of the overall mark for the module and an **Exam** in April/ May which is worth the other **30%**.

Assignment

The assignment will involve using data acquisition results from either a car on track or from our simulator to compare with results obtained by your own calculation of wheel load distribution in the cornering car.