



Using the British Schools Karting Championship to support STEM learning

Subject study based on the BSKC supports learning in **Key Stage 3** as shown below:

Subject	Attainment Target	BSKC related area of study
Science	AT2	Reaction times
	AT3	Metals and Composites
		Fuels
	AT4	Forces and Motion
		Speed, Velocity and Acceleration
		Equations of Motion
		Structures and strength
		Friction
		Levers and moments
		Hydraulics
		Gears
Technology	Design Technology	Form and Function
		Materials and their properties
		Manufacturing methods
		Control Systems
		Bearings and movement
		Machining methods
		Control systems
		Motors and gears
		Hydraulics
		Adjustment and improvement
Mathematics	AT1	Average, mean and median
		Statistical analysis
	AT4 Handling Data	Number and pattern



Key Stage 4

A selection of core examination and qualification programmes of study matches to project study linked to kart manufacture and competition in the BSKC:

BSKC Project	Exam Board	Syllabus
Kart design, manufacture, build and development	Cambridge	Design Technology IGCSE
	EdExcel	Engineering Diploma
	AQA	Engineering GCSE
	OCR	Resistant Materials GCSE
	WJEC	Resistant Materials GCSE
	EdExcel	Control Systems GCSE
EdExcel	BTec First	
Maximising Friction - Braking and grip	OCR	Engineering GCSE
Minimising Friction – Axles, bearings and running gear	OCR	Engineering GCSE
Competing in BSKC - Analysing Motion	EdExcel	Science GCSE (2006) Science GCSE (2011)
Competing in BSKC - Speeding up and slowing down	EdExcel	Science GCSE (2006) Science GCSE (2011)
Circuit Data - Lap Analysis and evaluation	OCR	Mathematics A GCSE