

## Project proposal template – Faculty studentships Summer 2014

<b>Project proposal template – Faculty studentships Summer 2014</b>			
<i>Project title</i>	<input style="width: 100%;" type="text" value="The Development of Mathematical and Statistical Models of Sports Betting, with a View to Detection of Irregular Activities"/>	<i>Director of Study</i>	<input style="width: 100%;" type="text" value="Dr Gordon Hunter"/>
<i>Second Supervisor</i>	<input style="width: 100%;" type="text" value="Dr Peter Soan"/>	<i>School</i>	<input style="width: 100%;" type="text" value="Mathematics"/>
<i>Other members of supervisory team</i>	<input style="width: 100%; height: 40px;" type="text"/>	<i>Any requirements from applicant (eg degree in specific subject area)</i>	<input style="width: 100%;" type="text" value="Degree in Mathematics or Statistics (or a closely related)"/>
<b>Project summary (max 1,000 characters)</b>			
<p>Corrupt activities in professional sport linked to illegal betting have received much attention in the press over recent months, tarnishing sports’ reputation, which could lead to great reductions in revenue. Authorities would welcome methods to enable the detection and prevention of such illegal activities. Reade &amp; Akie (2013) attempted this for Soccer, using forecasting methods to estimate probabilities of matches ending in draws.</p> <p>Comprehensive data on many major sports are now freely available via the internet and provide a rich source of information for statistical investigation of the above issues.</p> <p>The successful candidate will, for sport(s) of their choice, develop and evaluate statistical models, based on real data, predicting probabilities for the possible outcomes of sports matches from information available before the match, and compare these with bookmakers’ odds and the actual match results. In cases of corruption there should be major discrepancies between the odds and the result probabilities.</p> <p>This will make progress towards developing methods to aid sporting and legal authorities detect result fixing and illegal gambling.</p>			