Statistical Applied Mathematics at Bath

SAMBa

EPSRC
Pioneering research and skills

UNIVERSITY OF BATH
SAMBa will create a new generation of interdisciplinary mathematicians, trained for careers in both university and UK industry focusing on the fusion of stochastics and industrial and applied mathematics.

Their primary strengths will be:

- Problem solving ability
- Breaking the cultural separation between applied mathematics and stochastics
- Preparation to work in the emerging world of big models and big data
Statistical Applied Mathematics
Statistical Applied Mathematics
Infographic Ebola virus disease.

- 1440 ill
- 800 dead

79% of cases result in death.

Symptoms:
- Headache
- Vomiting
- Stomach pain
- Fever
- Muscle pain
- Diarrhea

World map showing affected areas.
Environment

- Total value of Centre approximately £6M.
- One of 12 EPSRC Centres for Doctoral Training in the UK focused on or related to mathematical sciences.
- 50 fully funded studentships over five years based around a 1+3 Ph.D. training model (MRes + PhD).
- Further students will be funded by industry and international sources.
- 7 students started Sept 2014. Target of at least 11 students for 2015 intake.
- Good links with industrial partners for collaborative projects, placements and studentships.
- Physically housed at the Department of Mathematical Sciences, University of Bath.
Student Progression through SAMBa

- Recruitment
- Reading List
- Induction
- Semester 1: 4 Courses
- Symposium
- ITT 1
- Semester 2: 4 Courses
- Symposium
- ITT 2
- Summer 1: Thesis Formulation
- Year 2: Thesis
- 2 Courses + ITT
- Years 3-4: Research
- ITT
- Industrial and Academic Partners
- 3 month Placement
What does an Integrative Think Tank look like?

<table>
<thead>
<tr>
<th>Monday</th>
<th>Tuesday</th>
<th>Wednesday</th>
<th>Thursday</th>
<th>Friday</th>
</tr>
</thead>
<tbody>
<tr>
<td>9:30 – 12:30</td>
<td>13:30 – 16:30</td>
<td>17:00 – 18:00</td>
<td>Break</td>
<td>Observaton Day</td>
</tr>
<tr>
<td>Introduction to ITT</td>
<td>Panel discussion of problems presented</td>
<td>Group work, Student presentations</td>
<td>Group work beginning to develop proposals</td>
<td>Consolidation of ideas, Student presentations</td>
</tr>
<tr>
<td>Industry presentations on general problems</td>
<td>Lunch</td>
<td>Further group work with roving academics</td>
<td>Lunch</td>
<td>Identify outputs, Determine next steps, Feedback from participants</td>
</tr>
<tr>
<td>Lunch</td>
<td>18:00 – 22:00</td>
<td>17:00 – 18:00</td>
<td>17:00 – 18:00</td>
<td></td>
</tr>
<tr>
<td>18:00 – 22:00</td>
<td>17:00 – 18:00</td>
<td>Review progress</td>
<td></td>
<td></td>
</tr>
<tr>
<td>SAMBa dinner</td>
<td>Review progress, Future projects (SAMBa and other)</td>
<td>Review progress, Future projects (SAMBa and other)</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>


- Week-long, intensive, facilitated events
- Focal points in the calendar of SAMBa activity, and central to its goals
- Includes SAMBa peers (years 2-4), academics, industry and other partners
- Present and discuss problems requiring research solutions
- Students define routes to the solution of problems, forming basis of PhDs
How can you get involved in SAMBa?

- Presenting at student symposia
- Attending ITTs
- Co-supervising students
- Inviting us to get involved with your research

Follow us on Twitter: @SAMBa_CDT
Check out the website: www.bath.ac.uk/samba
Connect with us on LinkedIn: www.linkedin.com/in/sambacdt