Module aims and objectives:
Interaction Science is concerned with understanding how people interact with computing systems. The module aims to: (1) lay the theoretical foundation for understanding human behaviour relevant to HCI, and (2) develop the conceptual and practical skills necessary to undertake HCI research.

Students will develop an understanding of human behaviour relevant to HCI. Major topics will include: perception and motor behaviour, cognitive elements of interactive behaviour (learning, expertise, errors), and the role of context and social factors on how people interact with computing systems.

Students will develop the skills necessary to gather, analyse, and interpret qualitative and quantitative data. Major topics will include: experimental methods and statistical data analysis techniques, observational and interview methods and qualitative data analysis techniques.

Module learning outcomes:
- **Knowledge and understanding of**: Theoretical perspectives on understanding human behaviour and how people interact with computing systems.
- **Intellectual (thinking skills) – able to**: Apply theories of Interaction Science to practical case studies; Present well founded arguments relating theory to practice; Reasoning from data; Critical argumentation skills.
- **Practical skills**: Design and conduct research that develops an understanding of how people interact with a computer system, product or service; Gather and analyse qualitative and quantitative data to develop an understanding of how people interacting with a computer system.
- **Transferable skills**: Argumentation and communication of ideas; Synthesis of information from multiple sources; Data handling and analysis skills; Written and graphical presentation skills.
Assessment method:
Written Coursework (4000 words) – 50%
3 hour unseen examination – 45%
Peerwise Interactive coursework – 5%

Module schedule:
Autumn Term. Monday & Thursday afternoons.

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<th>Week</th>
<th>Monday</th>
<th>Thursday</th>
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<tr>
<td>1</td>
<td>Understanding People: Pointing</td>
<td>Quantitative Methods: Experimental Design</td>
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<tr>
<td>2</td>
<td>Understanding People: Visual Search</td>
<td>Quantitative Methods: Descriptive Statistics</td>
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<tr>
<td>3</td>
<td>Understanding People: Size, Posture and Interaction with Tasks</td>
<td>Quantitative Methods: Inferential Statistics</td>
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<td>4</td>
<td>Understanding People: Cognitive Capabilities</td>
<td>Quantitative Methods: Fitts’ Law Lab Activity</td>
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<td>5</td>
<td>Understanding People: Multitasking</td>
<td>Quantitative Methods: Multitasking Lab Activity</td>
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<td>6</td>
<td>Understanding People: Interruptions</td>
<td>Writing a Research Proposal</td>
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<td>7</td>
<td>Understanding People: Human Error</td>
<td>Qualitative Methods: When, Why, and How?</td>
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<td>8</td>
<td>Understanding People: Affective Computing</td>
<td>Qualitative Methods: Collecting Data</td>
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<td>9</td>
<td>Understanding People: Distributed Cognition</td>
<td>Qualitative Methods: Analysing Data</td>
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<td>10</td>
<td>Final Exam</td>
<td>Qualitative Methods: Reporting Findings</td>
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Note: Module descriptions may be subject to minor alterations due to lecturer availability & changes to regulations.