

# ASK: Mathematics workshops

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|--|-------------|--|---|-------------------|
| Wednesday<br><b>18<sup>th</sup> January</b>  | 3.00 – 5.00 | <b>Algebra refresher</b>               | Make a revision of order of operations, rules of powers, rearranging formula.   | ASK Workshop Room |
| Wednesday<br><b>25<sup>th</sup> January</b>  | 3.00 – 5.00 | <b>Solving quadratic equations</b>     | Make a revision of quadratic equation and quadratic formula, completing the square. Learn how to sketch graphs of quadratic function. | ASK Workshop Room |
| Wednesday<br><b>1<sup>st</sup> February</b>  | 3.00 – 5.00 | <b>Complex numbers 1</b>               | Definition. Algebra of complex numbers. Argand diagram. Learn how to find modulus and argument; the polar and exponential forms.      | ASK Workshop Room |
| Wednesday<br><b>8<sup>th</sup> February</b>  | 3.00 – 5.00 | <b>Complex numbers 2</b>               | Learn how to calculate powers and roots of complex numbers. De Moivre's Theorem. Applications.  | ASK Workshop Room |
| Wednesday<br><b>22<sup>nd</sup> February</b> | 3.00 – 5.00 | <b>Matrices and Determinants</b>       | The algebra of matrices. Learn how to find determinants, inverse matrix. Using Matrices for solving simultaneous linear equations.    | ASK Workshop Room |
| Wednesday<br><b>29<sup>th</sup> February</b> | 3.00 – 5.00 | <b>Eigenvalues and Eigenvectors</b>    | Learn how to find eigenvalues and eigenvectors.   | ASK Workshop Room |
| Wednesday<br><b>7<sup>th</sup> March</b>     | 3.00 – 5.00 | <b>Introduction to differentiation</b> | Make a revision of elementary techniques of differentiation and partial differentiation. Learn how to apply linearity rule.           | ASK Workshop Room |
| Wednesday<br><b>14<sup>th</sup> March</b>    | 3.00 – 5.00 | <b>The rules of differentiation</b>    | Learn how to apply chain rule, product rule and quotient rule.  | ASK Workshop Room |
| Wednesday<br><b>21<sup>st</sup> March</b>    | 3.00 – 5.00 | <b>The basic of integration</b>        | Introduction to Integration. Elementary techniques of integration. Definite Integrals. Learn how to Integrate by substitution.        | ASK Workshop Room |
| Wednesday<br><b>28<sup>th</sup> March</b>    | 3.00 – 5.00 | <b>The rules of integration</b>        | Learn how to Integrate by substitution and by parts. Learn how to Integrate partial fractions.  | ASK Workshop Room |

Book workshops online at <http://tinyurl.com/askbrunel> to guarantee your place.

Drop in and speak to an advisor Tuesday 5-6, Wednesday 1-3, Thursday 12-1 (the ASK Workshop room)

PC lab sessions in the Library Training Room (room L317) Tuesday 3-5 (17/01/2012; 31/01; 07/02; 21/02; 28/02; 06/03; 13/03; 20/03; 27/03)

Tuesday 4-5 (24/01/2012)