



University of  
Roehampton  
London

# Mathematics PGCE

## Welcome Pages



## Welcome

Welcome to the PCGE Mathematics at the University of Roehampton. The year ahead will undoubtedly be full of rewards and challenges and we look forward to sharing these with you. The subject studies sessions aim to add to and develop your existing body of knowledge; helping you to shape this for classroom contexts. The modules we teach have been designed to ensure that you receive both experience in classrooms and seminars which should help you to form a theoretical underpinning to your practice.

To help you prepare for the year, please see the following pages for some suggested reading and activities. Books recommended are readily available to buy and will be in the university library (many as e-books). It is also highly recommended you familiarise yourself with the [ITT Early Career Framework](#) which outlines the minimum context student teachers will cover.

If you require any further assistance with pre-course reading, please email me: [atif.jaleel@roehampton.ac.uk](mailto:atif.jaleel@roehampton.ac.uk).

Atif Jaleel  
Subject Studies Lead, Mathematics

## Subject Knowledge

Over the year you will be expected to continually update and develop your subject knowledge. To help get started why not:

Look at the following useful website to help recap areas you might feel you wish to revisit. There is a cost of £75 to access this however you do gain access for a year.  
<https://integralmaths.org/for-learners/integral-for-trainee-teachers/>

Use the GCSE/A Level Specifications to get a sense of what texts will be taught in school:

AQA: <http://www.aqa.org.uk/subjects/mathematics>

EDEXCEL:

<https://qualifications.pearson.com/en/qualifications/edexcel-gcses/mathematics-2015.html>

OCR: <http://ocr.org.uk/qualifications/by-subject/mathematics/>

## Media

**Listen** to as many of Craig Barton's free online podcasts as you can! You can also access these on most podcast players such as Apple Podcast. It is of course available on his website: <https://podcast.mrbartonmaths.com/>  
I recommend #181 with Mark McCourt

**Watch** some of Eddie's videos of his teaching.

<https://www.youtube.com/@misterwootube>. I recommend

<https://www.youtube.com/watch?v=eAEsrXUkMWY> on Completing the Square.

## Pedagogy

You may wish to familiarise yourself with some mathematics-based pedagogy. Have you seen any of these in schools you have visited?

**NCETM – Concrete - Pictorial - Abstract**

<https://www.youtube.com/watch?v=31Pwwkx5CY>

## Networks

There is a large network of mathematics teachers at local and national level who like working together and sharing resources. You may find joining the following beneficial. You may see various names such as ATM and MA however most have come under a new combined organisation AMiE.

Association of Mathematics in Education (membership fee)

<https://m-a.org.uk/>

## Essential Reading

Johnston-Wilder, S., Lee, C., & Pimm, D. (Eds.). (2016). Learning to Teach Mathematics in the Secondary School: A companion to school experience (4th ed.). Routledge. <https://doi.org/10.4324/9781315672175> Chapter 1  
(*This is a key text for the course. You can usually pick up old editions cheaply. An e-book/paper copy will be available in the library when you enrol.*)

Foster, C. (2012). The Essential Guide to Secondary Mathematics: Successful and enjoyable teaching and learning (1st ed.). Routledge.

<https://doi.org/10.4324/9780203118832>

## Recommended Reading

*[a wider reading/resource list will be available from the start of the year].*

Barton, C. (2018). How I Wish I Had Taught Maths. London: Hachette.

Chambers P., Timlin R., . (2019). Teaching mathematics in the secondary school. London: SAGE.

Gates, P. (Ed.). (2001). Issues in Mathematics Teaching (1st ed.). Routledge.

<https://doi.org/10.4324/9780203469934>

Ineson, G., & Povey, H. (Eds.). (2020). Debates in Mathematics Education (2nd ed.). Routledge.

<https://doi.org/10.4324/9780429021015>



***‘A Froebelian approach to teacher development, with the pastoral and learning needs of the whole child’***