# PC-MATH12 Postgraduate Certificate in Mathematics Teaching (Years 11-12)

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| **Year and Campus:** | 2010 - Parkville |
| **Fees Information:** | Subject EFTSL, Level, Discipline & Census Date, http://enrolment.unimelb.edu.au/fees |
| **Level:** | Graduate/Postgraduate |
| **Duration & Credit Points:** | 50 credit points taken over 12 months part time. |
| **Coordinator:** | Professor Kaye Stacey |
| **Contact:** | P: 8344 8746<br>E: **k.stacey@unimelb.edu.au (mailto:k.stacey@unimelb.edu.au)** |
| **Course Overview:** | The course aims to develop disciplinary knowledge of mathematics up to Year 12 level. Participants will master senior secondary school level mathematics content and significantly extend pedagogical understanding to teach effectively. The program consists of four compulsory subjects with a total accumulation of 50 credit points at completion. The course is targeted towards current secondary level mathematics school teachers, who at present are not qualified (with a mathematics major) to teach in the mathematics area. |
| **Objectives:** | Students completing this course should be able to:<br># demonstrate a good knowledge of the goals of teaching mathematics and the mathematical content expected in the school years which they are being prepared to teach;<br># demonstrate a good knowledge of the resources for such teaching;<br># understand how students of the relevant year levels learn mathematics, and understand the ways to promote their learning;<br># make effective use of research findings and evidence-based professional readings in addressing professional problems. |
| **Course Structure & Available Subjects:** | This course includes 50 credit points of coursework graduate studies which includes four compulsory subjects, each worth 12.5 credit points. |
| **Majors/Minors/ Specialisations** | Not applicable |
| **Subject Options:** | As follows: |

| Subject | Study Period Commencement: | Credit Points: |
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| EDUC90665 Mathematics Curriculum & Assessment | Semester 1 | 12.50 |
| EDUC90666 Teaching Functions and Calculus | Semester 1 | 12.50 |
| EDUC90663 Teaching Statistics and Probability | Semester 2 | 12.50 |
| EDUC90664 Effective Senior Mathematics Teaching | Semester 2 | 12.50 |

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| **Entry Requirements:** | An applicant may be eligible for entry into the Postgraduate Certificate in Mathematics Teaching (Years 11-12), if the applicant has:<br># an undergraduate degree and a fourth-year level education qualification, or equivalent, or<br># a four-year education degree, or equivalent. |
| **Core Participation Requirements:** | For the purposes of considering request for Reasonable Adjustments under the Disability Standards for Education (Cwth 2005), and Students Experiencing Academic Disadvantage Policy, academic requirements for this subject are articulated in the Subject Description, Subject Objectives, Generic Skills and Assessment Requirements of this entry. The University is dedicated to provide support to those with special requirements. Further details on the disability support scheme can be found at the Disability Liaison Unit website: http://www.services.unimelb.edu.au/disability/ |

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| **Graduate Attributes:** | This course will enable graduates to develop some of the graduate attributes that are relevant to a professional graduate degree. Students will move toward academic excellence in the discipline knowledge, pedagogical knowledge and pedagogical content knowledge for teaching the specified year levels in mathematics, through a program of lectures and structured activities. Through practical assignments undertaken in the work environment, students will develop skills of analysis and synthesis as applied to a professional work context, as well as an appreciation and respect for equity and diversity. Through playing an active role in the community of learners in the course, students will engage with meaningful evidence-based discourse in relation to the teaching of mathematics, and understand the broad goals and values of education for public and private good. |