

# GC-BFIREPM Graduate Certificate in Bushfire Planning and Management

<b>Year and Campus:</b>	2015 - Creswick
<b>Fees Information:</b>	Subject EFTSL, Level, Discipline & Census Date, <a href="http://enrolment.unimelb.edu.au/fees">http://enrolment.unimelb.edu.au/fees</a>
<b>Level:</b>	Graduate/Postgraduate
<b>Duration &amp; Credit Points:</b>	50 credit points taken over 6 months full time. This course is available as full or part time.
<b>Coordinator:</b>	Dr Christopher Weston Email: <a href="mailto:weston@unimelb.edu.au">weston@unimelb.edu.au</a>
<b>Contact:</b>	<p><b>The Graduate School of Science</b></p> <p><i>Current Student Enquiries</i> Phone: 13 MELB (13 6352) Email: <a href="mailto:13MELB@unimelb.edu.au">13MELB@unimelb.edu.au</a> (<a href="mailto:13MELB@unimelb.edu.au">mailto:13MELB@unimelb.edu.au</a>)</p> <p><b>Future Student Enquiries</b> (<a href="https://nexus.unimelb.edu.au/NexusEnquiryForm.aspx?f=16755909770&amp;m=573578&amp;l=0&amp;programcode=K01&amp;sub=RE:%20RE:%20Forest%20Ecosystem%20Science&amp;enquirytype=2">https://nexus.unimelb.edu.au/NexusEnquiryForm.aspx?f=16755909770&amp;m=573578&amp;l=0&amp;programcode=K01&amp;sub=RE:%20RE:%20Forest%20Ecosystem%20Science&amp;enquirytype=2</a>)</p>
<b>Course Overview:</b>	<p>The GC-BFIREPM Graduate Certificate in Bushfire Planning and Management provides specialized bushfire science, planning, design and management subjects. The course meets the urgent need to equip existing professionals with world's best practice skills in planning, design and managing for fire risk in semi-urban and rural environments. Students are provided with the opportunity to participate in case studies of best practice and to develop professional networks in the fire risk management arena.</p>
<b>Learning Outcomes:</b>	<p>The GC-BFIREPM Graduate Certificate in Bushfire Planning and Management will qualify graduates for specialist bushfire management or bushfire assessment, planning and design positions within either the forest and natural resource management sectors (Bushfire Management Stream) or building and planning practice sectors (Bushfire Planning Stream) and provide a pathway to further study, by:</p> <p><b>Bushfire Planning Stream</b></p> <ul style="list-style-type: none"> <li>• Developing knowledge, skills, understanding and competence in the area of bushfire science and building and planning design to mitigate bushfire risk;</li> <li>• Developing a thorough approach to bushfire planning assessments theory and practice through an understanding of conceptual planning and building issues and knowledge of the environmental, regulatory and policy drivers that influence building and planning in bushfire-prone areas of Australia;</li> <li>• Increasing knowledge and analytical capabilities appropriate to building planning in bushfire prone environments;</li> <li>• Developing competence in the assessment, planning and design of new developments or modification to existing buildings in bushfire-prone environments using prescribed provisions</li> <li>• Extending scholarly and critical attitudes in bushfire planning disciplines.</li> </ul> <p><b>Bushfire Management Stream</b></p> <ul style="list-style-type: none"> <li>• Developing knowledge, skills, understanding and competence in the area of bushfire science and management;</li> <li>• Developing a thorough approach to bushfire management theory and practice through an understanding of the biological, environmental and social drivers of forest fire management in Australia and internationally;</li> <li>• Increasing knowledge and analytical capabilities appropriate to bushfire management;</li> <li>• Developing competence in the design, conduct and analysis of bushfire management practices;</li> <li>• Extending scholarly and critical attitudes in bushfire management disciplines.</li> </ul>

<b>Course Structure &amp; Available Subjects:</b>	The GC-BFIREPM Graduate Certificate of Bushfire Planning and Management (50 points) consists of the core subjects Bushfire and Climate (FRST90025) and Bushfire Planning and Management (FRST90017), plus two further 12.5 point subjects according to stream (Planning or Management).																														
<b>Subject Options:</b>	<p><b>Core Subjects</b></p> <table border="1" data-bbox="392 349 1487 551"> <thead> <tr> <th>Subject</th> <th>Study Period Commencement:</th> <th>Credit Points:</th> </tr> </thead> <tbody> <tr> <td>FRST90025 Bushfire &amp; Climate</td> <td>March</td> <td>12.50</td> </tr> <tr> <td>FRST90017 Bushfire Planning &amp; Management</td> <td>March</td> <td>12.50</td> </tr> </tbody> </table> <p><b>There are two streams within this course. Students should select either the Bushfire Planning Stream or the Bushfire Management Stream.</b></p> <p><b>Bushfire Planning</b> Students to complete the following subjects;</p> <table border="1" data-bbox="392 719 1487 920"> <thead> <tr> <th>Subject</th> <th>Study Period Commencement:</th> <th>Credit Points:</th> </tr> </thead> <tbody> <tr> <td>EVSC90022 Bushfire Urban Planning</td> <td>April</td> <td>12.50</td> </tr> <tr> <td>EVSC90023 Building Behaviour in Bushfires</td> <td>May</td> <td>12.50</td> </tr> </tbody> </table> <p><b>Bushfire Management</b> Students to complete two of the following;</p> <table border="1" data-bbox="392 1003 1487 1267"> <thead> <tr> <th>Subject</th> <th>Study Period Commencement:</th> <th>Credit Points:</th> </tr> </thead> <tbody> <tr> <td>FRST90015 Forest Ecosystems</td> <td>February</td> <td>12.50</td> </tr> <tr> <td>FRST90026 Bushfire &amp; Biodiversity</td> <td>Not offered 2015</td> <td>12.50</td> </tr> <tr> <td>NRMT90007 Community Natural Resource Management</td> <td>Semester 2</td> <td>12.50</td> </tr> </tbody> </table>	Subject	Study Period Commencement:	Credit Points:	FRST90025 Bushfire & Climate	March	12.50	FRST90017 Bushfire Planning & Management	March	12.50	Subject	Study Period Commencement:	Credit Points:	EVSC90022 Bushfire Urban Planning	April	12.50	EVSC90023 Building Behaviour in Bushfires	May	12.50	Subject	Study Period Commencement:	Credit Points:	FRST90015 Forest Ecosystems	February	12.50	FRST90026 Bushfire & Biodiversity	Not offered 2015	12.50	NRMT90007 Community Natural Resource Management	Semester 2	12.50
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<b>Entry Requirements:</b>	<ol style="list-style-type: none"> <li>In order to be considered for entry, applicants must have completed: <ul style="list-style-type: none"> <li>an undergraduate degree in a cognate discipline with at least an H3 (65%) weighted average, or equivalent;</li> <li>OR</li> <li>an undergraduate degree in any area including at least 25 points in one or more of Chemistry, Biology, Mathematics or Statistics, or equivalent, and with at least an H3 (65%) weighted average, or equivalent;</li> <li>OR</li> <li>an undergraduate degree in any area and a Graduate Certificate in Environment with at least an H3 (65%) weighted average in the Certificate, or equivalent;</li> <li>OR</li> <li>a two-year associate degree or diploma in a relevant discipline, or equivalent; and</li> <li>five years documented, relevant professional experience; and</li> <li>an appropriate level of performance on a test conducted by the Selection Committee to confirm generic skills necessary for successful study in the program.</li> </ul> Meeting these requirements does not guarantee selection. </li> <li>In ranking applications, the Selection Committee will consider: <ul style="list-style-type: none"> <li>prior academic performance; and</li> <li>professional experience; and</li> <li>the score on the test conducted by the Selection Committee.</li> </ul> </li> <li>The Selection Committee may seek further information to clarify any aspect of an application in accordance with the Admission and Selection into Course Policy.</li> <li>The minimum English language requirements for this course are Band 6.5</li> </ol>																														

	<p>Note: The requirement for at least H3 (65%) weighted average in each case may be waived where the applicant can demonstrate significant professional development in a relevant area since graduation.</p> <p>The task-based assessment will be conducted in a single period of two hours duration where students will be required to demonstrate the following abilities to gain entry to graduate study:</p> <ul style="list-style-type: none"> <li>• analyze and interpret scientific or technical data</li> <li>• comprehend and use scientific literature</li> <li>• conceptualize a problem</li> </ul>
<p><b>Core Participation Requirements:</b></p>	<p>The Faculty of Science (Science) welcomes applications from students with disabilities. It is University and School policy to take reasonable steps to make reasonable adjustments so as to enable the student's participation in the Faculty's programs. Science contributes to the New Generation degrees and offers a broad range of programs across undergraduate and post-graduate levels many of which adopt a multi-disciplinary approach. Students of the Faculty's courses must possess intellectual, ethical, and emotional capabilities required to participate in the full curriculum and to achieve the levels of competence required by the Faculty. Candidates must have abilities and skills in observation; motor in relevant areas; communication; in conceptual, integrative, and quantitative dimensions; and in behavioural and social dimensions. Adjustments can be provided to minimise the impact of a disability, however students need to be able to participate in the program in an independent manner and with regard to their safety and the safety of others.</p> <p>I. Observation: In some contexts, the student must be able to observe demonstrations and experiments in the basic and applied sciences. More broadly, observation requires reading text, diagrams, maps, drawings and numerical data. The candidate should be able to observe details at a number of scales and record useful observations in discipline dependant contexts.</p> <p>II. Communication: A candidate should be able to communicate with fellow students, professional and academic staff, members of relevant professions and the public. A candidate must be able to communicate effectively and sensitively. Communication includes not only speech but also reading and writing.</p> <p>III. Motor: Candidates should have sufficient motor function necessary for participation in the inherent discipline-related activities. The practical work, design work, field work, diagnostic procedures, laboratory tests, require varying motor movement abilities. Off campus investigations may include visits to construction sites, urban, rural and/or remote environments.</p> <p>IV. Intellectual-Conceptual, Integrative and Quantitative Abilities: These abilities include measurement, calculation, reasoning, analysis, and synthesis. Problem solving, the critical skill demanded of professionals in land and environment industries, requires all of these intellectual abilities. In addition, the candidate should be able to comprehend three-dimensional relationships and to understand the spatial relationships of structures.</p> <p>V. Behavioural and Social Attributes: A candidate must possess behavioural and social attributes that enable them to participate in a complex learning environment. Students are required to take responsibility for their own participation and learning. They also contribute to the learning of other students in collaborative learning environments, demonstrating interpersonal skills and an understanding of the needs of other students. Assessment may include the outcomes of tasks completed in collaboration with other students. Students who feel their disability will prevent them from meeting the above academic requirements are encouraged to contact the Disability Liaison Unit.</p>
<p><b>Further Study:</b></p>	<p>The GC-BFIREPM entitles graduates 50 points credit towards the coursework GD-BFIREPM (100 points) and the Master of Forest Ecosystem Science (200 points), each of which enables progression to Master of Philosophy (MPhil) or Doctor of Philosophy (PhD).</p>
<p><b>Graduate Attributes:</b></p>	<p>The GCert Bushfire Planning and Management will be distinguished by a commitment to:</p> <ul style="list-style-type: none"> <li>• learning and teaching based on the best available research in bushfire planning and management and related disciplines;</li> <li>• a respect for the intellectual maturity and diversity of experience in the student cohort;</li> <li>• pedagogies that promote independent critical inquiry, analysis and reflection;</li> <li>• a strong engagement with the bushfire science and planning professional community in designing and delivering the program;</li> <li>• the full utilization of human and material resources of the Department of Forest and Ecosystem Science.</li> </ul> <p>Graduates of the PGCert Bushfire Planning and Management will meet the University of Melbourne graduate attributes at a high level, and, in particular will:</p> <ul style="list-style-type: none"> <li>• be well-prepared for accomplished practice in bushfire planning and management and related risk management professions;</li> <li>• demonstrate a respect for the evidence base of research underpinning best practice in bushfire planning and management;</li> <li>• have a strong commitment to principles of ethical practice and to furthering equity and diversity within the forest and natural resource management profession;</li> <li>• be committed to ongoing development of their own professional knowledge and skills through continuing critical inquiry;</li> <li>• demonstrate leadership by their capacity to plan and implement creative and productive change in their workplace and their profession;</li> <li>• be able to communicate</li> </ul>

	bushfire science professional knowledge both to their peers and to members of the general community.
<b>Professional Accreditation:</b>	Students completing the GC-BFIREPM (Bushfire Planning Stream) will be eligible to apply for accreditation under the Bushfire Planning and Design (BPAD) scheme administered by FPA Australia (Fire Protection Authority Australia)
<b>Links to further information:</b>	<a href="http://graduate.science.unimelb.edu.au/bushfire-planning-management">http://graduate.science.unimelb.edu.au/bushfire-planning-management</a>
<b>Notes:</b>	Please note that some subjects are taught at the Creswick campus and some are taught at the metropolitan campuses. Costs associated with accommodation and travel is at the students' own expense.