

## EVSC90024 Bushfire Interface Science

<b>Credit Points:</b>	12.5
<b>Level:</b>	9 (Graduate/Postgraduate)
<b>Dates &amp; Locations:</b>	2015, Parkville This subject commences in the following study period/s: June, Parkville - Taught on campus.
<b>Time Commitment:</b>	Contact Hours: 24 hours lectures + 36 hours practicals Total Time Commitment: 170 hours
<b>Prerequisites:</b>	None
<b>Corequisites:</b>	None
<b>Recommended Background Knowledge:</b>	None
<b>Non Allowed Subjects:</b>	None
<b>Core Participation Requirements:</b>	<p>&lt;p&gt;For the purposes of considering request for Reasonable Adjustments under the Disability Standards for Education (Cwth 2005), and Student Support and Engagement Policy, academic requirements for this subject are articulated in the Subject Overview, Learning Outcomes, Assessment and Generic Skills sections of this entry.&lt;/p&gt;         &lt;p&gt;It is University policy to take all reasonable steps to minimise the impact of disability upon academic study, and reasonable adjustments will be made to enhance a student's participation in the University's programs. Students who feel their disability may impact on meeting the requirements of this subject are encouraged to discuss this matter with a Faculty Student Adviser and Student Equity and Disability Support: &lt;a href="http://services.unimelb.edu.au/disability"&gt;http://services.unimelb.edu.au/disability&lt;/a&gt;&lt;/p&gt;</p>
<b>Coordinator:</b>	Mr Justin Leonard
<b>Contact:</b>	<p><b>Environments and Design Student Centre</b> Ground Floor, Baldwin Spencer (building 113)</p> <p><i>Enquiries</i> Phone: 13 MELB (13 6352) Web: <a href="http://edsc.unimelb.edu.au/">http://edsc.unimelb.edu.au/</a> (<a href="http://edsc.unimelb.edu.au/">http://edsc.unimelb.edu.au/</a>) Email: <a href="mailto:edsc-enquiries@unimelb.edu.au">edsc-enquiries@unimelb.edu.au</a> (<a href="mailto:edsc-enquiries@unimelb.edu.au">mailto:edsc-enquiries@unimelb.edu.au</a>)</p>
<b>Subject Overview:</b>	<p>This subject adopts an evidence-based approach to understanding house loss in bushfires. This knowledge is the basis for the delivery of alternative solutions and performance-based building and planning solutions for bushfire risk mitigation.</p> <p><i>Bushfire Interface Science</i> requires some critical background knowledge in order to be effectively delivered, the key pre-requisites are the successful completion of the building planning stream of the Postgraduate Certificate in Bushfire Planning and Management.</p> <p><b>Note:</b> This subject includes a pre-teaching period. During the pre-teaching period students are expected to complete the course readings, review the lectures and any other course preparation as outlined on the LMS. The LMS will become available at the commencement of the pre-teaching dates. <b>Pre teaching starts on 14/06/2015</b></p>
<b>Learning Outcomes:</b>	<p>By the end of the subject students should:</p> <ul style="list-style-type: none"> <li># Have an understanding of how to quantify fire weather and its influence on both fire arrival severity and urban interface vulnerability;</li> <li># Fire progression &amp; behaviour (advanced understanding);</li> <li># Have an understanding of how to quantify fire progression and behaviour as it transitions from continuous fuels into the urban interface;</li> <li># Have an understanding of how to quantify the various mechanisms implicit in a bushfire event and also recognise synergistic influences they have in the built form;</li> <li># Have a firm grounding in the historic evidence of building loss and the urban design and building system contexts that influenced these losses;</li> </ul>

	<ul style="list-style-type: none"> <li># Have an understanding of human behaviour in a fire environment and understand the process of decision-making, occupant response and the physiological and psychological effects of fire;</li> <li># Be able to consider the above fundamentals within a risk-based framework;</li> <li># Be introduced to the approaches taken in advanced risk mapping and in various settlement patterns.</li> </ul>
<b>Assessment:</b>	Literature review (1500 words) due prior to commencement of intensive (30%) Assignment on quantification techniques for interface exposure (1500 words) due at completion of intensive (30%) Major written assignment on risk assessment (2000) due 3 weeks after completion of intensive (40%)
<b>Prescribed Texts:</b>	None
<b>Breadth Options:</b>	This subject is not available as a breadth subject.
<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>Related Course(s):</b>	Graduate Diploma in Bushfire Planning and Management Master of Forest Ecosystem Science Postgraduate Diploma in Bushfire Planning and Management
<b>Related Majors/Minors/ Specialisations:</b>	Melbourne School of Design multidisciplinary elective subjects