1

# ENGR 7030 BUSHFIRE DESIGN AND CLIMATE CHANGE

#### Credit Points 10

**Coordinator** Grahame Douglas (https://directory.westernsydney.edu.au/ search/name/Grahame Douglas/)

Description This subject considers the concept of 'design bushfire' and the impact of climate change upon varying weather and climate conditions in Australia and globally. The potential implications of climate change on bushfire behaviour and bushfire design are developed. Students will be introduced to the concept of "Bushfire Protection Design Guidelines" including the concepts of Bushfire Design Brief and Bushfire Design Subsystems, as well as the Bushfire Verification Method adopted by the National Construction Code. Students will be able to calculate recurrence conditions for bushfire behaviour and bushfire weather conditions using extreme values techniques. Students will compare different bushfire behaviour models and their implications for future climatic conditions in developing performance solutions for bushfire protection. The role of landscape fires and fire generated winds will also be considered in the context of planning and building for bushfire protection. The role of traditional Aboriginal burning practices and culture also forms an important aspect of this subjectt.

School Eng, Design & Built Env

Discipline Fire Technology

Student Contribution Band HECS Band 2 10cp

Level Postgraduate Coursework Level 7 subject

**Teaching Periods** 

## Autumn (2022)

#### Parramatta City - Macquarie St Composite

Subject Contact Grahame Douglas (https:// directory.westernsydney.edu.au/search/name/Grahame Douglas/)

View timetable (https://classregistration.westernsydney.edu.au/even/ timetable/?subject\_code=ENGR7030\_22-AUT\_PC\_C#subjects)

### Autumn (2023)

#### Parramatta City - Macquarie St

Hybrid

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View timetable (https://classregistration.westernsydney.edu.au/odd/ timetable/?subject\_code=ENGR7030\_23-AUT\_PC\_3#subjects)