

<b>Thesis Title</b>	<b>Assessing Building Resilience to Heat Waves Using ENVI-met</b>
<b>Programme of Studies</b>	MSc in Energy Engineering
<b>Course</b>	MEE 540 - MSc Thesis
<b>Area of Study</b>	Computational Building Physics – Urban Modelling
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<b>Semester</b>	Fall Semester 2025
<b>Short Description</b>	<p>This thesis investigates building and urban resilience to heat waves through microclimate simulations using ENVI-met software. Various architectural configurations and passive cooling strategies—such as green roofs, reflective materials, shading devices, and vegetation—are analysed under extreme temperature scenarios. Thermal comfort indicators including air temperature, mean radiant temperature, and humidity are assessed to quantify overheating risks. The study provides climate-adapted design recommendations aimed at improving thermal resilience, reducing heat stress, and supporting sustainable urban development in Mediterranean climates.</p>