ENVS3056: Advanced Building Simulation

Module Tutor: Dr Dimitrios Rovas

Aims
This module aims to enable students to become skilled users of tools to simulate the performance of buildings; develop a critical view of the use of simulation results; have a fuller understanding of the errors and confidence that can be placed on the results of such tools. Development of good practice and competence in the use of simulation will be developed by undertaking a series of modelling studies; as part of the coursework, students are expected to develop their own modelling portfolio.

Intended Learning Outcomes
At the end of this course, students will be able to:

- understand the underlying concepts & theories regarding the modelling & simulation of complex systems, of which buildings are one type;
- identify the types of modelling & simulation tools available for advanced building performance analysis & understand the limitations of application of each;
- establish the link between basic building physics concepts and their implementation by building simulation tools;
- understand principles of sensitivity and uncertainty analysis and quantify the impact of uncertain / unknown parameters to the accuracy of the outputs.

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<tr>
<th>Method of Assessment</th>
<th>Credit Value/Percentage Weighting</th>
<th>To be passed in order to progress Y/N</th>
<th>Examination length or coursework word count</th>
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<tbody>
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<td>Coursework</td>
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