

ARC 3723 | EBS II

Assignment 2: Embodied and Operating Energy

Due: 01/26 (end of day). Upload PDF to Canvas.

Reading: Heating, Cooling, Lighting: Sustainable Design Methods for Architects - Chapters 1, 2 and 3

Assignment: Based on the descriptions of *embodied* and *operating energy* below, write a short essay on design approaches architects and builders can use to minimize energy consumption.

- *Operating Energy:* Energy consumed by the mechanical and electrical equipment after a building has been built. It increases over time.
- *Embodied Energy:* Energy consumed in constructing a building. Embodied energy represents about one-third (can vary) of all the energy a building consumes over its life.

Groups: Work in groups of 2 or 3.

Final hand in / PDF:

- Groups of 2 - 500 to 750 words with at least 2 diagrams to support your writing.
- Groups of 3 - 750 to 1000 words with at least 3 diagrams to support your writing.
- Diagrams and images needed to support the research and text
- Format: Chicago Style
- Essays should have an introduction and conclusion
- Essays should be correctly cited and have a works referenced page

Evaluation/Assessment

- 60% Quality and relevance of research
- 20% Pertinence and quality of diagrams / illustrations / images
- 10% Conclusion / Reflection
- 5% Formatting and clarity of text
- 5% References and citations (text and all images)