

# MAS.962. Techniques for Design and Fabrication

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## *Materials II: Responsive Composites*

The objective of this assignment is to create a responsive composite.

Responsive composites are a combination of two (or more) materials that can change property in response to a stimulus (i.e. heat, water, electricity) or that can transform one form of energy into another (i.e. electrical into heat, light into electrical etc).

Feel free to use any of the fabrication techniques and materials that you have discovered during the course, but also try to invent new ones. (Extra points for unconstrained creativity and shock value).

As you design and fabricate your composite, answer these questions:

- a. Does your composite support new and unique applications?
- b. Can you design an interaction scenario around its 'responsiveness'?
- c. How is it different from other technologies?
- d. Would it be possible to mass-produce it? How? Use CES to learn about different fabrication processes.

NOTE: "Even more extra points" for coming up with responsive composites that use materials which are not normally considered for their responsive properties (i.e. Steffen's shape changing wood would be one example).

**Deliverables:** Documentation (website + photos) of your fabrication process is due next Tuesday (12/9). You will also need to bring your final responsive composite to class and impress your peers on this date.