

## **Workshop Outline**

***Creating Responsive Cloth: An introduction to electronics for dynamic textile objects and wearables***

Function Keys Conference at Centre3

Presented by Barbara Layne and RythÂ Kesselring

November 10-11, 2018

The workshop will address technical, aesthetic and artistic issues including:

- A discussion of basic electronics and designing simple circuits using a Flora platform (microcontroller) and an introduction to Arduino programming;
- The development of soft circuitry by sewing conductive threads into fabrics;
- A discussion of sensing devices and interactivity;
- Presentations of projects developed by different artists and designers of responsive textiles.

Workshop participants will design and create a small project that incorporate LEDs, a light sensor and switches. Previous knowledge of sewing or electronics is not required.

### DAY 1: (7.5 hours) November 10, Saturday 9:30am – 4:00pm

- Introduction of participants and presentation of workshop outline
- Introduction to Basic Electronics
- Introduction to Flora and Arduino
- Create circuit with alligator clips and components
- Participants will review circuit schematics with Barbara or RythÂ

### Day 2 (5 hours) November 11, Sunday 9:30am – 2:30pm

- Final review of circuit schematics with Barbara or RythÂ
- Demonstration: Sewing with soft circuitry and discussion of mixing soft and hard components
- Make project
- Online presentation of websites for material sourcing, coding elements, sensing devices and other valuable info
- Finishing, testing & debugging
- Cleanup & show-and-tell