Fab I Can Statements

DESIGN	
Design.1	I can be responsible for various activities throughout a design process within a group with instructor guidance.
Design.2	I can participate in design reviews with prepared presentation materials as well as give and receive feedback from peers.
Design.3	I can initiate design processes to generate multiple solutions to problems I have framed for multiple stakeholders.

COMPUTER PROGRAMMING	
Programming.1	I understand the basic structure of a simple program and can modify values, variables, or other parameters to alter its output, function, or behavior.
Programming.2	I can create a program with more than one instruction.
Programming.3	I can create a program with multiple instructions and branching elements as well as reading / controlling inputs and outputs on a microcontroller board.

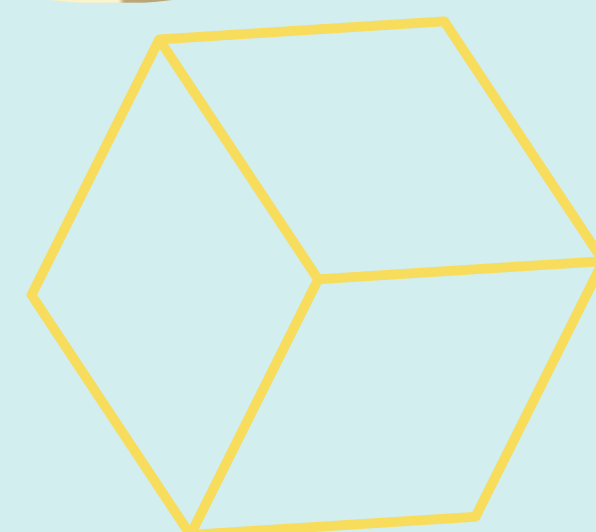| ELECTRONICS	
Electronics.1	I can follow instructions to build a simple electrical circuit using conductive material basic components and power.
Electronics.2	I can follow a schematic diagram and create a circuit including a microcontroller with electronic components.
Electronics.3	I can create my own schematic diagrams and use them to build electronic circuits including microcontrollers.

MODELING	
Modeling.1	I can arrange and manipulate simple geometric elements, 2D shapes, and 3D solids using a variety of technologies.
Modeling.2	I can construct compound shapes and multi-part components ready for physical production using multiple representations.
Modeling.3	I can define complex systems with parametric relational modeling using generative, algorithmic, or function representation.

FABRICATION	
Fabrication.1	I can follow instructor guided steps that link a software to a machine to produce a simple physical artifact.
Fabrication.2	I can develop workflows across four or more of the following: modeling software, programming environments, fabrication machines, electronic components, material choices, or assembly operations.
Fabrication.3	I can make my own applications, machines, or electronic components to solve new problems and to grow my Fab Lab's capacity.

SAFETY	
Safety.1	I can safely conduct myself in a Fab Lab and observe operations under instructor guidance.
Safety.2	I can operate equipment in a Fab Lab following safety protocols.
Safety.3	I can supervise others in a Fab Lab and ensure safety protocols are being followed.

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