DESIGN & MAKING is the creative process of imagining an idea, researching the user, designing a concept, choosing materials, practicing technique, fabricating prototypes, and interpreting the built environment.

KNOWLEDGE

Design Process
The learner understands the design process of brainstorming, ideation, prototyping, and testing and knows specific design methods and techniques.

Personal Growth
The learner identifies and understands pathways to opportunities that allow for personal, professional, or academic growth.

Questioning
The learner understands the importance of questions in the maker process and identifies what questions to ask, who to ask, and how to research and find answers to questions.

Rules & Procedures
The learner knows and respects the rules, policies, procedures, and routines of the space.

Selecting Materials
The learner knows the properties, characteristics, and sustainability of different materials and identifies which are best-suited to achieve the intended goals.

Systems Thinking
The learner predicts and anticipates the potential social, financial, and environmental consequences of a given design or product.

SKILLS

Assess & Plan
The learner assesses what materials, procedures, and supports are necessary to accomplish the intended goal and formulates a plan to gather the necessary components, both material and immaterial, accordingly.

Communication
The learner communicates clearly with peers, mentors, and others about concepts, goals, decisions, and processes.

Reflection
The learner pauses to self-evaluate during the design process. The learner connects the effect of design to his or her life and the world at large.

DISPOSITIONS

Empathy
The learner demonstrates the ability to understand the feelings of others and knows that others may have different goals and objectives.

Open Mindedness
The learner is open to constructive criticism, unexpected ideas, new ways of thinking, and growth. The learner is willing to re-evaluate personal ideas and opinions when faced with new information.

Perseverance
The learner works through challenges and does not give up when obstacles are encountered. The learner applies knowledge gained from failures to future endeavors.

Playfulness
The learner plays with, tinkers with, and explores materials, methods, and ideas in a joyful manner.

Value of the Process
The learner appreciates the lessons learned while making the product in addition to valuing the final product itself.

Learn more about competencies and digital badges at remakelearning.org/competencies.