

Circular Material Valuer: Course Programme Example

This is a sample course structure for an in-person or hybrid programme based on the [Circular Material Valuer Curriculum Draft](#). This document is [open for comments](#) until 15/08/2025.

Introduction

This document outlines a course programme for the Circular Material Valuer Curriculum (CMVC), a framework designed to equip circular initiatives, reuse centres, and other organisations with the skills and mindset needed to divert valuable goods from the waste stream. It is structured as an Open Educational Resource (OER), meaning it can be adapted for self-study, workshops, or formal training programmes. The programme combines theoretical learning with hands-on, project-based activities to foster a holistic understanding of material reuse from a critical, ground-level perspective.

Module 1: Systemic View and Social Value

This module provides the foundational knowledge for trainees, helping them critically understand the circular economy and its social-ecological implications.

Core Competencies

- **Critical Thinking:** Analysing mainstream circular economy discourse and identifying its limitations.
- **Systems Mapping:** Visualising local waste streams, material flows, and stakeholder networks.
- **Community Engagement:** Understanding and leveraging existing social groups and initiatives.
- **Ethical Framing:** Shifting from a consumerist "abundance" mindset to an intentional "generosity" mindset.

Methods

- **Theoretical Sessions:** Introduce key concepts like the waste hierarchy, bioregions, and the critiques of top-down circularity. Use readings and videos to spark discussion. The **agent valoriste** role will be introduced as a professional model in the social and solidarity economy.
- **Participatory Workshops:** Use **generative questions** to facilitate group discussions on local challenges and opportunities for waste prevention. Map stakeholders, resources, and material flows in a chosen locality.
- **Case Studies:** Examine successful and unsuccessful initiatives, such as community repair cafés, scrap shops like The Remakery, or historical models like the SERO System in East Germany.

Assignments

- **Local System Mapping:** Participants create a map of their own city or neighbourhood, identifying all actors involved in waste, repair, and reuse (e.g., formal waste facilities, informal donation points, repair shops, charities).
- **Stakeholder Interview:** Conduct a short interview with a local repairer, charity shop worker, or waste picker to understand their work and perspective.
- **Material Commons Plan:** Develop a small-scale, community-based project that promotes material reuse with a focus on urban generosity and social-environmental value.

Readings & Resources

- **Readings:**
 - Schröder, Patrick, et al. *Circular Economy and the Global South*. (For a critical, global perspective).
 - Clark, Liesl, and Rockefeller, Rebecca. *The Buy Nothing, Get Everything Plan*. (For the concept of a generosity mindset).
 - Thackara, John. *How to Thrive in the Next Economy*. (For the idea of bioregions and local networks).
 - Shannon Mattern, *Maintenance and Care*. In: *Places Journal*, November 2018. Accessed 08 Aug 2025. <https://doi.org/10.22269/181120>
 - Lafuente, Antonio, and Estalella, Adolfo. "Ways of science: public, open, and commons." (For participatory knowledge production).
 - Translated Articles from French websites on the **agent valoriste** role (e.g. <https://ideo.bretagne.bzh>).
- **Videos:**
 - Furtado, Jorge. *Ilha das Flores*. (A poignant documentary to ground the discussion in the human reality of waste).
 - Walker, Lucy, et al. *Waste Land*. (To provide a human-centred view of informal waste labour).
 - "L'agent valoriste - un métier de l'économie circulaire" on YouTube. (A video explicitly defining the valoriste role).

Module 2: Eyes and Hands of a Circular Valuer

This module is dedicated to developing the practical and embodied skills necessary for a material valuer, from initial assessment to hands-on intervention.

Core Competencies

- **Material Assessment:** Performing visual, manual, and functional inspections of objects.

- **Repair & Upcycling:** Executing practical, hands-on repairs and creative transformations.
- **Resourcefulness:** Using simple tools and available materials to solve problems.
- **Design Literacy:** Analysing product design for durability, repairability, and obsolescence.

Methods

- **Hands-on Labs:** Conduct workshops focused on disassembling and assessing different products (e.g., a broken electronic device, a worn-out piece of furniture) - inspired by embodied approaches to learning through practical, project-based work.
- **Skill-Sharing Sessions:** Invite a craftsperson, a professional repairer, or a seasoned upcycler to lead a practical session, embodying the "master and apprentice" model of learning.
- **Materiality Experiments:** Work with a single type of waste material (e.g., discarded wood, plastic bottles) to explore its properties and potential for transformation through minimal intervention.

Assignments

- **Repair Diary:** Participants choose a broken or unwanted object and document their repair or upcycling journey, including attempts, failures, and discoveries, using photos or sketches. This reflects a core methodology of the initial research phase.
- **The "Reshape" Project:** Apply the "Reshape strategy" to an item of industrial waste, transforming its function, form, or composition into a new product.
- **Tool Kit Development:** Create a small "tool kit" of simple, multi-purpose tools and document their use for various repair and upcycling tasks.

Readings & Resources

- **Readings:**
 - Sennett, Richard. *The Craftsman*. (On the value of skilled manual work).
 - Jackson, Steven J. *Rethinking Repair*. (On the material and social dimensions of repair).
 - Nemer, David. *Technology of the Oppressed*. (For an understanding of "gambiarra" and "mundane technology").
 - Sander, N., et al. "Introducing the Reshape strategy: Preserving material integrity." *6th PLATE Conference 2025*. (For a detailed look at the Reshape strategy for industrial waste).
- **Videos:**
 - Hunkin, Tim. *The Secret Life of Components*. (To inspire a deeper understanding of how products work).
 - Oroza, Ernesto. "Technological Disobedience." (For creative and improvised

reuse).

- "Free Universal Construction Kit." (To demonstrate modularity and repurposing).

Module 3: Information Systems and Market Value

This module focuses on the economic and data-driven aspects of material reuse, training participants to use available resources and develop sustainable business models.

Core Competencies

- **Data Literacy:** Collecting, analysing, and contributing to open data about reuse.
- **Economic Valuation:** Assessing market value, identifying market gaps, and creating viable business models.
- **Logistics & Storage:** Managing material flows, inventories, and storage solutions.
- **Policy Advocacy:** Understanding incentive systems and advocating for supportive policies.

Methods

- **Online Research Labs:** Use online marketplaces and databases to research the market value of different materials and products. Explore tools like eBay's "sold listings" for pricing.
- **Business Model Canvas:** Apply business model frameworks to develop and critique a business plan for a reuse-focused initiative. The course will reference resources such as the Local Economies website.
- **Data Analysis Session:** Work with open data sets (e.g., from the Open Repair Alliance) to analyse repair trends, common failure points, and the impact of reuse.

Assignments

- **Material Flow Report:** Document the journey of a specific material (e.g., textiles, wood) in your city and propose a digital inventory system for it, referencing tools like The Restart Project's Fixometer.
- **Policy Proposal:** Research a local policy (e.g., a repair voucher pilot) and write a short proposal for a new incentive system to encourage reuse.
- **Market Analysis:** Conduct a market survey for a chosen second-hand item and present a pricing strategy for a social enterprise or reuse shop.

Readings & Resources

- **Readings:**
 - Mazzucato, Mariana. *The Value of Everything*. (On value creation and incentives).
 - Ostrom, Elinor. *Governing the Commons*. (On collective governance models for resources).
 - Minter, Adam. *Secondhand: Travels in the New Global Garage Sale*. (For a global view

of second-hand economies).

- Raworth, Kate. *Doughnut Economics*. (For an alternative economic framework).

- **Websites & Tools:**

- **Open Repair Alliance** (<https://openrepair.org/>): For open data on repair.
- **The Restart Project's Fixometer** (<https://therestartproject.org/fixometer-2/>): A practical tool for logging repairs.
- **Make Works** (<https://make.works/>): For connecting with local makers and fabrication resources.
- **Dsposal** (<https://dsposal.uk/>): For insights into GovTech solutions for waste.

Module 4: Stories and Personal Value

This module focuses on the human and cultural dimensions of reuse, emphasising the role of storytelling, creativity, and emotional connection in building a resilient, caring community.

Core Competencies

- **Storytelling:** Crafting narratives about objects and their journeys.
- **Visual Documentation:** Using photography and video to tell stories of reuse.
- **Ethical Reflection:** Reflecting on personal relationships with objects and the social-emotional impact of waste.
- **Community Facilitation:** Organising events that foster a sense of belonging and collective action around reuse.

Methods

- **Creative Workshops:** Engage in creative writing, photography, or video production to tell the story of a specific reused object.
- **Storytelling Circles:** Organise and participate in group sessions where trainees share personal stories about repairs, family heirlooms, or found objects.
- **Community Events:** Plan and run a small-scale event like a "swap meet," "repair café," or "maker fair" to put theory into practice and observe community dynamics.

Assignments

- **Narrative Project:** Create a video, photo essay, or written piece documenting the emotional journey of an object that was repaired or upcycled.
- **"What's in Your Drawer?" Inventory:** A personal reflection assignment where participants explore the items they own but don't use, reflecting on their stories and emotional value to cultivate an anti-disposable mindset.
- **Public Presentation:** Present a visual narrative to the cohort or a public audience, highlighting the value of a discarded material and inspiring others to engage with

reuse.

Readings & Resources

- **Readings:**

- Le Guin, Ursula K. *The Carrier Bag Theory of Fiction*. (To reframe the narrative of human history around collecting).
- Tronto, Joan C. *Moral Boundaries*. (For the ethics of care and its political implications).
- Wahl, Daniel Christian. *Designing Regenerative Cultures*. (For the concept of "inter-being" and regenerative design).

- **Videos:**

- *Waste Land*. (To understand the human stories behind waste).
- *Estamira*. (For a deep perspective on a person's relationship with waste and the landfill).
- *Trash*. (A fictional film showing the resourcefulness of children in a landfill).
- Hunkin, Tim. *The Secret Life of Machines*. (To build a deeper connection with objects).
- Prado, Marcos. *Estamira*. (A deeply human perspective on waste and the landfill).

Additional References

- **Books:**

- Anderson, Chris. *Makers: The New Industrial Revolution*. Crown Business, 2012. (For critical context on the maker movement's commercialisation).
- McDonough, William, and Braungart, Michael. *Cradle to Cradle*. North Point Press, 2002. (For the concepts of "waste = food" and the design for circularity).
- McDonough, William, and Braungart, Michael. *The Upcycle: Beyond Sustainability--Designing for Abundance*. Melcher Media, 2013. (Explores adding value through upcycling).
- Viña, Victor. "DIY in Context From Bricolage to Jugaad." *Scribd*, 2012. (Explores diverse forms of DIY and improvisation).
- Mazzucato, Mariana. *The Value of Everything: Making and Taking in the Global Economy*. Penguin, 2018. (For a critical perspective on value creation and distribution, relevant to incentive systems and business models).
- Minter, Adam. *Secondhand: Travels in the New Global Garage Sale*. Bloomsbury Publishing USA, 2019. (Provides a global perspective on the economic realities of second-hand markets).
- Schröder, Patrick, et al. *Circular Economy and the Global South: Towards a Justice-Oriented and Inclusive Transition*. Routledge, 2020. (Provides a critical perspective on circular economy in diverse global contexts).

- Ostrom, Elinor. *Governing the Commons: The Evolution of Institutions for Collective Action*. Cambridge University Press, 1990. (Foundational for understanding commons-based governance systems for shared resources).
- Raworth, Kate. *Doughnut Economics: Seven Ways to Think Like a 21st-Century Economist*. Penguin Random House, 2017. (Offers a framework for economic models that respect planetary boundaries and social foundations).
- **Articles & Reports:**
 - Lafuente, Antonio, and Alonso, Alberto. "Right to Know, New Technologies and New Communities of Citizenship." In *Knowledge Communities*. Nevada University, Reno, USA, 2011.
 - Lafuente, Antonio, and Estalella, Adolfo. "Ways of science: public, open, and commons." In *Open Science, Open Issues*, edited by S. Albagli, M. L. Maciel, and A. Hannud Abdo, pp. 27–57. IBICT, Brasília, 2015.
 - Sander, N., Laursen, L. N., Bak, B. L. V., & Damgaard-Møller, E. (2024). Starting from scraps: Design reuse assessment of waste materials. *DRS2024: Boston*. (<https://doi.org/10.21606/drs.2024.888>).
 - Thackara, John. *How to Thrive in the Next Economy: Designing Tomorrow's World Today*. Thames & Hudson, 2017.
- **Videos & Documentaries:**
 - "Ceci n'est pas un déchet" (Festival video showcasing diverse circular economy initiatives).
 - Dannoritzer, Cosima. *The Lightbulb Conspiracy*. 2010. (Film illustrating the historical context and practices of planned obsolescence).
 - "Forest Economics" Workshop (Video if available, exploring biomimetic economic models).
 - "Free Universal Construction Kit." [Video/Project] (Demonstrates how digital fabrication can create connectors for disparate toy systems, promoting reuse).
 - Furtado, Jorge. *Ilha das Flores* (Isle of Flowers). 1989. (Short documentary offering a poignant critique of waste and social inequality).
 - Gershenfeld, Neil. "Unleash your creativity in a Fab Lab." *TED Talk*, 2006. [Video] (Provides foundational insights into the Fab Lab movement).
 - Hunkin, Tim. *The Secret Life of Machines*. Channel 4, 1988-1993. [Video series] (Explores the inner workings of everyday machines, promoting understanding and repair).
 - Oroza, Ernesto. "Technological Disobedience." (Works exploring improvised solutions and "rikimbili" in Cuba, highlighting creative adaptation).
 - Prado, Marcos. *Estamira*. 2004. (Brazilian documentary about a woman living and working in a landfill, offering a profound human perspective on waste).
 - [YouTube - POP-MACHINA Webinar](#)

- Walker, Lucy, et al. *Waste Land*. 2010. (Documentary following artist Vik Muniz in Brazil working with waste pickers, highlighting the human stories in waste).
- **Websites and Organisations:**
 - [CE Hub Berlin](#)
 - [Dsposal](#) (For insights into waste data and GovTech solutions).
 - [Gambiarra: Repair Culture](#)
 - [IAAC \(Institute for Advanced Architecture of Catalonia\) - POP-MACHINA Project](#)
 - [Local Economies: Circular Economy Aspects](#)
 - [Make Works](#) (For connecting with local manufacturers and fabrication resources).
 - [The Maintainers Movement](#)
 - [Open Repair Alliance](#)
 - [Plastic Bank](#)
 - [POP-MACHINA EU Project Results](#)
 - [Recology's Artist in Residence Program](#)
 - [Recycleye - WasteNet](#)
 - [The Remakery](#)
 - [reusedeutschland.org](#)
 - [Salvage Garden - Remakelt Workshops](#)
 - [Schwaebische.de - Second-Hand Cafe Challenges](#)
 - [What Are You Doing Singapore? - Bridging the Digital Divide](#)