# Syllabus

## *Course Description*

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| **Course Title** | Design & Production |
| **Course Code** | 47205 |
| **Course Title Additional** | |
| **Scientific-Disciplinary Sector** | ICAR/13 |
| **Language** | English |
| **Degree Course** | Master in Critical Creative Practices |
| **Other Degree Courses (Loaned)** | |
| **Lecturers** | Prof. Aart van Bezooijen, Aart.vanBezooijen@unibz.it https://www.unibz.it/en/faculties/design-art/academic-staff/person/38596 |
| **Teaching Assistant** | |
| **Semester** | Second semester |
| **Course Year/s** | 1 |
| **CP** | 6 |
| **Teaching Hours** | 60 |
| **Lab Hours** | 0 |
| **Individual Study Hours** | 90 |
| **Planned Office Hours** | 18 |
| **Contents Summary** | Design and Production. Course content per sillaboThe course will provide students with a base of knowledge and understanding concerning production processes from self-built tools to industrial production systems in the context of design. |
| **Course Topics** | The course will support the development of practical skills and hands-on experiences, aiming to build up a base of knowledge and understanding concerning production processes from self-built tools to industrial production systems in the context of design. In parallel, the course encourages the development of a critical attitude towards traditional and emerging production techniques |

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| | within circular and bio-based economies.<br><br>The choice of an appropriate fabrication process is one of the most important decisions in the process of making physical things. What material is being used, what quantity of parts is to be produced and what sort of geometry do they have? Processes are selected depending on our needs. If a process is not available for serial production, we might even need to create it ourselves.<br><br>Together we will be documenting the landscape of selected manufacturing processes available as industrial solutions, in-house faculty workshops, and do-it-yourself solutions. Through a systematic overview by clustering, comparing, and reviewing selected production methods we will consider how to adapt traditional processes and explore alternative ways of creation within a more eco-social future.<br><br>We will explore, analyze and prototype more accessible, distributed and democratic ways of manufacturing. Every semester includes a special focus on one or more development and processing techniques. Your so called "machine project(s)" should empower a do-it-yourself approach to local manufacturing using materials which are currently discarded or unconsidered.¿<br>The course will be in close collaboration with the faculty workshops and the BITZ unibz fablab. With excursions, factory visits and guest lectures we will get a closer look at the known and lesser-known realities of how things are made. The course program is adaptive and encourages any form of collaboration, relations and synergies with other fields and courses. |
| **Keywords** | Mass production, personalized production, peer production, distributed manufacturing, product service systems, bio fabrication, digital fabrication, do-it-yourself processes, open-source documentation, product life cycle, circular design, material research, environmental and social impacts, urban mining, traditional crafts, sustainable futures. |
| **Recommended Prerequisites** | - |
| **Propaedeutic Courses** | |
| **Teaching Format** | Research presentations: After the project introduction, we will research and discuss selected manufacturing processes. Individual |

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| | research results are gathered and shared with each other.¿<br>Design for (dis)assembly: Through disassembling existing products and assembling new applications we will make the first experiences with the process of making and unmaking. Experimental setups should allow design improvisation and understanding of how things are made on an industrial scale.<br><br>Guest lectures: Guest speakers will give us a better insight in the business practices of production. For example, through interviews with a design studios/labels producing in small series and factory visits at industrial manufacturing companies.<br><br>Skill sharing: This course allows us to learn from lecturers, guests and each other. We put high value on the dialogue between the participants and will support this process of skill sharing. The content and format of the courses will be fine-tuned according to the dialogues, collaborations and dynamics of you as a group.<br><br>Learning by doing: The approach of this semester project comes with an "Learning by Doing" approach involving theme-based hands-on workshops with guest lecturers and doing practical exercises at the university workshops.<br><br>Designer maker: Unlike developing a single final product - this course focuses more on getting to know different ways of making. We provide you with inspiring talks, hands-on exercises, group discussions and creative methods for problem solving and solution finding for current and future design projects. |
| **Mandatory Attendance** | Highly recommended. |
| **Specific Educational Objectives and Learning Outcomes** | Educational objectives<br><br>The class promotes critical and analytical thinking, allowing students to evaluate and interpret artistic and design practices in the context of the current sociocultural and technological dynamics. New possibilities for innovation in artistic and design production and, more importantly, the opportunities for synergy between contemporary culture and technological progress, fostering a mutual exchange of ideas and advancements will be explored. Advanced research skills will be developed to explore |

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| | emerging frontiers in the field of art and design and new opportunities for technological innovation in the creative sector.<br><br>learning outcomes<br><br>Knowledge and understanding:<br><br>know the history of spatial practices in art and design, and their main techniques and methodologies;<br>possess specific knowledge on the interactions between space and culture and on the sociopolitical implications of spatial practices;<br>understand the processes of transformation of space in the contemporary context, analyzing them considering the connections with other fields of knowledge, such as sociology, anthropology and urban sciences.<br><br>Applying knowledge and understanding:<br><br>design and implement spatial interventions, exhibitions, artistic installations and design projects that explore and reinterpret public and private spaces.<br>use reading, analysis, mapping and visualization tools to analyze and communicate complex ideas relating to space.<br>create spatial interventions that respond to the needs of communities, promoting inclusiveness and social participation.<br><br>Making judgements:<br><br>Device originals projects that take into account the transformations induced by globalization and internationalization processes.<br>Apply the knowledge acquired in the professional context.<br><br>Communication skills:<br>Using visual and multimedia tools to create engaging and informative presentations.<br><br>Learning skills:<br><br>The strengthening of the critical operational autonomy of students.<br>The development of their ability to choose, compare and adapt to |

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| | the new knowledge and technologies. |
| **Specific Educational Objectives and Learning Outcomes (additional info.)** | - |
| **Assessment** | Oral:<br>- Physical presentation of the students' complete design process, artifacts and material samples produced in the different phases and parts and especially the final project.<br>- Holding a knowledgeable and critical discourse concerning both the final developed project and more generally towards the world of materials in design and the related product logic and sustainability aspects as discussed in the course.<br>- The presentation takes place as a separately from the semester project.<br>- Students must deliver a complete documentation of the semester work.<br><br>Assessment of non-attending students:<br>Non-attending students have the same assessment criteria as attending students. All requested assignments need to be done, and all deliverables (both intermediary and final) need to be provided in time. The knowledge shared in the theoretical and practical lectures need to be acquired. Hence, the exam of non-attending students might last longer to test that specific knowledge has been acquired and applied to the presented project.<br><br>N.B. – ALL STUDENTS TAKING THE EXAM AS NON-ATTENDING STUDENTS MUST AGREE UPON THE CONTENT WITH THE LECTURER. |
| **Evaluation Criteria** | Level of the acquired knowledge concerning materials, manufacturing and design in all aspects and perspectives as discussed in the course.<br><br>Originality and coherence of the design project in relation to the use of materials and aspects of the production process.<br><br>Effectiveness in communicating the project.<br><br>Attitude, participation and active contribution to the course. |

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| **Required Readings** | “Making it: Manufacturing techniques for product design” by Chris Lefteri<br><br>“Materiology : the creative's guide to materials and technologies” by MatériO<br><br>“Werkzeuge für die Designrevolution“ by the Institute of Design Research Vienna<br><br>“Social Label Works: An open book about designing work” by Petra Janssen and Simone Kramer |
| **Supplementary Readings** | |
| **Further Information** | |
| **Sustainable Development Goals (SDGs)** | Industry, innovation and infrastructure, Responsible consumption and production, Sustainable cities and communities |