ADDITIONAL REGULATIONS MASTER OF SCIENCE IN SUSTAINABLE ARCHITECTURE

Towards a zero emission built environment

1. Learning Aims
Participants in the international MSc programme for Sustainable Architecture will learn to identify and apply the correct measures and resources to design high-quality, cost effective architecture that contributes towards achieving a zero emission built environment.
In a global and European perspective, buildings are accountable for about 40 % of all GHG emissions. IPCC reports point to measures in the building sector as being the most economical (when compared to other important sectors).
The MSc programme aims to educate and train building professionals in the use and development of competitive methods and solutions for existing and new buildings that will contribute to lowering GHG emissions related to the production, use, management, and demolition of architecture in a life-cycle perspective. The Master programme encompasses residential, commercial and public architecture as well as its effect on the urban and rural built environment.

2. Course Structure
The curriculum consists of 3 consecutive semesters with theory and project courses, and a fourth semester during which the participants write their MSc thesis. Throughout the two years of the MSc programme, a holistic perspective stresses the many architectural expressions and possibilities encompassed within a zero emission built environment. Within each of the theory and project courses, high demands are made towards integrated design strategies to ensure usability and synergy of the design with its surroundings and users. The students are continuously trained in interdisciplinary co-operation in order for them to integrate this integrated design method in their professional practice.

- Semester 1. Environmental performance: Light in Lighting (theory); Climate and Built Form (theory); Project course
- Semester 2. Environmental impact: Emissions as design drivers (theory); Project course + Experts in Team
- Semester 3: Integrated Energy design: Energy systems and services and their integration in architectural design (theory); Project course + Energy in Buildings
- Semester 4: Master thesis

3. Career Prospects
The MSc programme in Sustainable Architecture lies in the forefront of research, innovation and implementation related to reducing GHG emissions in architecture which the students will be able to transfer into their practice as building professionals. The continuous focus on integrated design methodology will enable the students to perform in any building design team, both as co-worker and leader.
The programme's close link to the interdisciplinary Research Centre on Zero Emission Buildings ensures close contact with State-of-the-Art research and practice in Norway and abroad with whom the students will be in contact during their education: education and research institutions; producers of materials and products for the building industry; contractors, consultants, architects; trade organisations; public administration; public and private construction and property management; and users. Among the international partners of the Research Centre are VTT (Finland), Chalmers (Sweden), Fraunhofer (Germany), TNO (The Netherlands), LBL and MIT (USA), University of Strathclyde (Scotland), and Tsinghua University (China).

4. Entry Qualifications
A 3-year Bachelor Degree in Architecture, Engineering or Urban Planning. Students with a background in other relevant fields may be considered for admission as well, after discussion with the MSc coordinator and Advisory Board.
English Language Requirements: TOEFL Score 500/170; IELTS mark 5.0

5. Studies at other universities
Students may spend one of the four semesters as exchange student at another university on the condition that the courses taken are equivalent to the programme at NTNU.

6. Contacts
For further information on admission and administrative matters: studadm@ab.ntnu.no.
For information on academic matters: luca.finocchiaro@ntnu.no.