

THE UNIVERSITY OF HONG KONG

Master of Science in Advanced Architectural Design

CREDIT UNIT STATEMENT**Overview**

Candidates entering the Master of Science in Advanced Architectural Design will take a total of 72 credits for the one-year full time curriculum, consisting of 36 credits of design research studio courses (including a capstone experience studio), 18 credits of core courses, and 18 credits of elective courses. The design research studios are 12 credit courses, while the cores and electives are 6 credit courses using distinctive teaching and learning modes. 240 hours of student learning activity (including both contact hours and all other forms of student learning activity) is the norm for a 12-credit course, while 120 hours of student learning activity is the norm for a 6-credit course. The total study load of this curriculum is 1,440 hours of student learning activity. The proposed curriculum consists of four types of courses, including 1) Design-based Research Studios; 2) Digital Fabrication and Technologies; 3) Sustainable Building Techniques; and 4) Design Research Methods. The four course categories are summarized below:

1) Design-based Research Studios

This sequence consists of three Design-based Research Studio courses in which students will participate in a collective research and develop personal design projects (MAAD6101 Design Research Studio I; MAAD6102 Design Research Studio II; MAAD6103 Design Research Studio III). In MAAD6101 and MAAD6102, students gain first-hand experience in research and develop technical knowledge from material processes, building techniques to prototyping. Later in MAAD6103, students further develop their research and collectively make a design prototype as a capstone project under the supervision of the studio instructors. All these courses are assessed through continuous coursework assessment (100%). Assessment methods are decided by the Programme Director and course leader to align with the course learning outcomes, and may include design prototyping, class participation, teamwork performance, etc. Total written output varies among different courses and ranges from 0 to 10,000 words for each course. Total studio contact hour is 150 hours. Total student learning activity hour is 240 hours.

2) Digital Fabrication and Technologies

These courses provide fundamental knowledge and skill sets of digital tools to students in support of their design research projects. Teaching is conducted in lectures and/or tutorials/workshops/seminars (normally 24 contact hours per course) and activities include site visits, workshops, practical sessions, case studies, the preparation of assignments, and project reports. There is one core course (MAAD6202 Topics in Fabrication: Techniques and Technologies) and three elective courses (MAAD6302 New Materials and Bioplastics; MAAD6304 AR/VR in Architecture Construction; MAAD6305 Robotic Fabrication) in this category. All courses are assessed through continuous coursework assessment (100%). Assessment tasks may include design prototyping, in-class tests, class participation, teamwork performance, etc. Total written

output varies among difference courses and ranges from 200 to 5,000 words for each course. Total student learning activity hour is 120 hours.

3) Sustainable Building Techniques

This category of courses introduces students to traditional and contemporary building techniques and highlights their innovation in relation to issues of sustainability and environment, including one core course (MAAD6203 Topics in Contemporary Sustainability) and three elective courses (MAAD6301 Updating Traditional Building Techniques; MAAD6303 Innovations in Making; MAAD6306 Non-Extractive Construction). Teaching is conducted in lectures and/or tutorials/workshops/seminars (normally 24 contact hours per course) and activities include site visits, workshops, practical sessions, case studies, the preparation of assignments, and project reports. All courses are assessed through continuous coursework assessment (100%). Assessment tasks may include design prototyping, in-class tests, class participation, teamwork performance, etc. Total written output varies among difference courses and ranges from 200 to 5,000 words for each course. Total student learning activity hour is 120 hours.

4) Design Research Methods

This category of courses introduces students to different design-based research methods, and aims to provide students with opportunities to demonstrate their research interests and capacity, and to transfer their acquired knowledge, skills and techniques to building prototypes, including one core course MAAD6201 Research-based Design: Case Studies And one elective course MAAD6307 Critical Urbanism. Teaching is conducted in lectures and/or tutorials/workshops/seminars (normally 24 contact hours per course) and activities include site visits, workshops, practical sessions, case studies, the preparation of assignments, and project reports. All courses are assessed through continuous coursework assessment (100%). Assessment tasks may include design prototyping, in-class tests, class participation, teamwork performance, etc. Total written output is up from 200 to 5,000 words. Total student learning activity hour is 120 hours.