

3.1 Information for current students of Architecture, Design or Engineering

The AA Bamboo Lab Haiti Courses cover a broad range of topics. Each will be documented for participants and along with the certificate of completion, each student will receive a course transcript.

Course transcripts will record key areas of the curriculum with learning objectives achieved and the hours devoted to each. This can potentially be used in seeking credit transferable to your college or university. If you wish to enquire about this, please contact your institution and find out if this is possible and then how we may be able to assist.

Our teaching staff comprises of working architects and graduates of all levels of the AA School whom have worked for some of the largest and most articulate design practices in the world. Including Zaha Hadid Architects, Foster and Partners, MAD China, Farshid Moussavi Architecture and Gensler. The staff also consists of local artisans, horticulturalists, engineers and architects. With a high tutor to student ratio throughout all stages of the course, students will have the opportunity to closely engage with the knowledge and passions of professionals from all over the world.

The curriculum is structured to allow for informal discourse and we look to the participants to be responsible for their own workload. The student to tutor ratio is no more than 5:1.

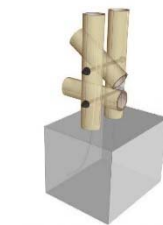
4. CONCEPTUAL AND STRUCTURAL DESIGN	<ul style="list-style-type: none"> • Critical discussion on the brief and interpreting the information from the site studies and community discussions. • Attendance of daily design tutorials with tutors. • Critical reaction to tutors input and group design decisions. • Documentation of design process. • Production of media to articulate design process.
5. COMMUNITY COLLABORATION	<ul style="list-style-type: none"> • Site visit to geographically map the site. • Discussion with residents, community groups and the end users on site. • Presentation to the local community and end users following the design phase. • Working with local contractors. • Working with carpenters from around the area. • Engagement with end users to articulate the construction process and assist in disseminating construction knowledge. • Constant critical analysis of onsite construction decisions and how they affect the design concept.
6. CONTEXT The historic environment and its setting	<ul style="list-style-type: none"> • Lecture on the building typology and the relevance to the community and national culture. • The ecological situation in Haiti and locally delivered as a lecture.
7. SOFTWARE TUTORIALS	<ul style="list-style-type: none"> • 3D modelling in Rhinoceros 3D. • Technical drawing in AutoCAD or Rhinoceros 3D. • Aerodynamic simulation through Autodesk Flow. • Structural analysis with Karamba. • V-ray and Adobe Creative Suite to render and present projects.
8. BAMBOO MODELLING	<ul style="list-style-type: none"> • Modelling with bamboo sticks to begin to develop a formal expression.
9. REPLICATABLE DESIGN	<ul style="list-style-type: none"> • Working with local bamboo technicians and craftsmen to maintain design ideas in the factory workforce. • Engagement with end users to articulate the construction process and assist in disseminating construction knowledge.
10. INFRASTRUCTURE	<ul style="list-style-type: none"> • Discussion on the issues facing developing the bamboo infrastructure in Haiti and how such an infrastructure can be established in Haiti. • Lectures on the wider bamboo infrastructure. • Production of media relating to documenting the new bamboo procurement routes of the project.
11. ON SITE CONSTRUCTION	<ul style="list-style-type: none"> • Construction of bamboo structure.
12. CONSTRUCTION OF BAMBOO JOINTS	<ul style="list-style-type: none"> • Construction of one joint or component to be built from bamboo, originating from a group's project. • Small scale construction of components of the overall structure.

SUBJECT	ACTIVITIES
1. CONSTRUCTION SITE SAFETY Health and safety	<ul style="list-style-type: none"> • Health and safety introduction to the construction site. • Daily site inspections. • Lecture on the health and safety in developing countries and the Code National du Bâtiment Haiti 2012 Health and Safety requirements.
2. CLIMATE Principals of carbon neutrality, regenerative and sustainable design	<ul style="list-style-type: none"> • Discussions regarding designing in the Caribbean and tropical climates. • Integration through design stages the ideas discussed about designing for the Haitian climate. • Use of Autodesk Flow software. • Testing of the structure in climatic analysis software.
3. COMPLIANCE Legal, regulatory and statutory framework and processes	<ul style="list-style-type: none"> • Introduction to the issues involving building in Haiti including permits and land ownership. • Experience of building to the necessary seismic and hurricane codes we will be following the CNBH 2012. • Required permits for building in the area from the political administration.

<p>13. MATERIAL STUDIES</p>	<ul style="list-style-type: none"> Lecture on precedent projects using bamboo. Taxonomy, species types indigenous to Haiti and the region. Lecture on cutting, treatments and drying, and tools. Cutting bamboo at 3am in the morning to learn about the properties of bamboo the plant.
<p>14. PORTFOLIO AND PRESENTATION</p>	<ul style="list-style-type: none"> Presentation of final projects to the local community and the structures end users. Verbal articulation of the project and issues, and discussion regarding design decisions. Portfolio of documentation of building process. Presentation of diary and portfolio at the end of the course.



PROJECTS' JOINTS



Joint de Fondation
Foundation Connection



Joint Principal
Main Connection



Entretoisement
Bracing Connection



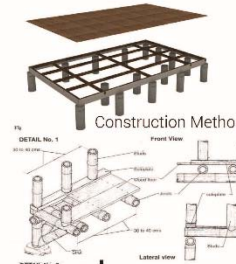
Joint de Niveau
Floor Connection

JOINTS DU PROJET

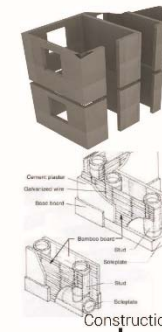
Structural Elements

Construction methods and materials

Bamboo Floors

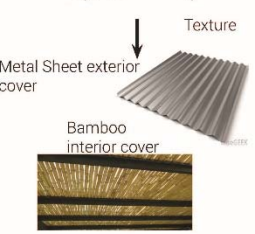
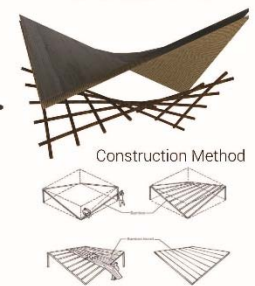


Bahareque Walls



Bahareque

Roof and Cover



Metal Sheet exterior cover

Bamboo interior cover

Limestone plaster