Fig. 7 Wood and metal shop plan
Fig. 8 Wood and metal shops section
Body of theory

The thesis side includes four interventions, namely library, classrooms and exhibit, studios, and jury room.

I chose the third floor loggia of the north cloister to house the library. The original tile roof was lost and was substituted by concrete slab. Four corner columns attached to the old structure supported this slab. This solution was practical but far from being architectural. For this reason I decided to remove the attached columns and create a new set of steel beams and columns that will hold the slab. The new columns are separated from the old structure, making a clear statement of what is old and what is new.

Another thoughtless intervention was to cover the loggia’s arcades with masonry walls through out. I removed these walls revealing the old columns buried in them and created a more permeable enclosure. The enclosure consists of overlapping canvas strips, fixed at the bottom and articulated at the top. When open, they resemble the sail of ships that once sailed the nearby bay. The books are stored in wooden boxes inside three weather-tight rooms. The now open loggia serves as general reading area, individual study cubicles, and reading niches inside the windows.

The classrooms/ exhibit building floats adjacent to the north cloister and it shares the same modular proportions of its neighbor. Bridges connect the old structure to the new one. A shallow pool of water evoking the seawater that once destroyed the eastern part of the convent surrounds the building. Structurally it is composed by four coral stone walls and 3 slabs that join them. A teak lattice skin covers the main facades. Although not to this scale, latticework is one of the vernacular characteristics of Cuban architecture.

The classrooms are in the first floor. Their seating area is stepped, in each step there are several polish stone pieces for the students to seat. The black board is made from slate stone. Behind the black board there is storage space.

The two remaining floors are dedicated to exhibition. On the second floor, display panels move from the coral stone wall enclosing two exhibit areas. Fabric, as a display surface, is used on the third floor. This display system consists of a large fabric woven between steel rods. The rods run vertically through steel cables on each side, allowing them to create different spatial configurations.
The final conversion of the theoretical body was the studios and jury room. When the basilica's dome was destroyed, a diagonal wall closed the interior space off. The basilica felt incomplete, so I decided to remove this wall and built a new structure where the dome used to be. This new building materialized the collective memory of the dome, still present in the city. The building consists of an exterior shell, an inner critique area, and crowning it a library for the thesis books. The exterior walls are conceived as several equidistant columns of different widths. Each width corresponds to a number from 1 to 8 of the Fribonacci series. The concrete columns are casted in coral stone using the lost form method. The exterior envelope encloses the only surviving column that once carried the dome. This envelope dimensions as well as the wood one inside were determined using the quadratura. Formal critiques and thesis presentations are given in the inner wood structure. One of its sides extends into the basilica's central aisle, providing pin up space. A parallel slate wall runs through the main entrance, it is meant to be use as drawing surface and sitting area for informal critiques. The two flanking aisles are furnished with tables for the students to work. Some of this tables pivot down from existing niches in the wall. Along the right aisle a loft of thin steel structure was built to provide more working area. For the new floor of the basilica, white concrete and coral stone were used. The new pavement relates the old structure with its new head, the jury room building.