PRO
MON
TORIO

BERNER FACHHOCHSCHULE BFH
BIEL, SWITZERLAND
2015

A multi-storey university complex
built in a laminated wood system

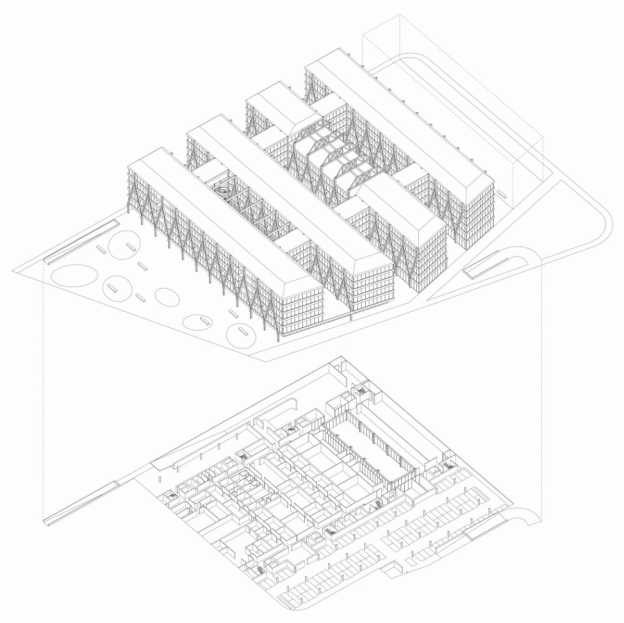
In accordance with the competition brief, the site for the new campus of the Berner Fachhochschule (BFH), in the city of Biel, has a ‘peripheral’ feel, caused by the incoherence and dispersion of the differently scaled buildings that, over time, have accumulated in the space between the railway and the Zihl channel.

The old town of Nidau and its castle, on one hand, and the railway station hub, on the other, are the most recognisable urban references in the immediate surroundings. The design premises of the then-current urban plan for the areas around the future campus indicated a desire to pursue unity, densification and clarity. This proposal pursues this intention, aiming to create a public-space strategy that helps to relevantly bundle the surroundings while making the site the undisputable new centre point of the city. The campus building is therefore envisioned as a permeable urban block with an even height of six floors, allowing a smooth transition of scale between it and the adjacent buildings, both planned and existing. This block extends to the plot limit and is therefore constrained to the south-east by *Salzhausstrasse*, and to the southwest by *Aarbergstrasse*. The *Johann-Aeberli-Strasse* delineates the building to the north-east.

Two areas carved out of this massed urban texture generate public space and a receded space for the campus. Firstly, the *Marcelin-Chipot-Strasse*, to the north-west, becomes the campus square. The square is three-sided, generous and open towards the city, and is strongly tied to the Swiss Innovation Park, while also bundling the main pedestrian flows coming from Biel’s centre and the railway station, thus combining a social interaction space with what is the campus gateway. Secondly, the south corner reacts to the crossing of *Guido-Müller-Platz* — which articulates the traffic flows from *Nidau*, *Aarbergstrasse*, *Bernstrasse* and *Salzhausstrasse* — by setting the building back in such a way as to create an additional frontage to the whole development. The campus volume is then shaped as an ensemble of five parallel, interconnected volumes, oriented north-east to south-west — the same direction as *Salzhausstrasse* and the major warehouses that border the campus on the north side, and perpendicular to the Zihl channel. The space between these volumes creates courtyards that allow natural light to flow into the building mass, while at ground level public passages connect *Aarbergstrasse* and *Johann-Aeberli-Strasse*.

The longitudinal six-storey volumes, each roughly 19 m wide, are spatially devised to keep the floor plan as free of structure and infrastructure as possible. The vertical wooden framework enables 18-m single spans at ground level — the required stipulations for spatially column-free areas such as the *Aula*. In the upper floors, the spatial organisation is straightforward, involving a double-loaded layout and a central corridor, which carries the infrastructure, freeing the remaining space from mechanical systems.

The proposed BFH Campus is a dense, compact, yet delicate structure, infused by natural light flowing into the courtyards between each of the longitudinal volumes. Despite their similar proportions, each courtyard use is different, providing an atrium, public nodes and services. Each volume is served by two vertical cores, interconnected via a common distribution axis. These cores provide vertical circulation, escape routes and infrastructure shafts. The buildings are orientated to minimise exposure to the north and to admit natural light into all the required spaces. The exposed wooden frame, with a 9-m grid, gives the ensemble a somewhat tectonic expressionism while leaving the interior space free of any substantial vertical structure. In addition to the character of the façade, at the top-floor level the joist slabs are equipped with a three-dimensional frame, with the floor suspended by tension bars that hold the middle of each joist. This wooden latticework rests on a concrete plinth enveloping the basement, out of which the vertical cores extend.



Location: Biel/Bienne, Switzerland
Client: Berner Fachhochschule (BFH)
Associate architects: Stähelin Architekten (Basel)
Scope of services: Architecture, interior design and landscape architecture
Project brief: University campus
Gross floor area: 60,000 sq. m (plus 14,500 sq. m expansion)
Project status: 2015 (public competition, 2nd tier)
Rendering: 4+Arquitectos