Illuminating the path to the future: Expertise in lighting and landscape shared at the HKU common core curriculum

Arup is deeply committed to sharing its expertise for societal benefit and inspiring the next generation of engineers and students. This commitment is exemplified by the second episode of the common core programmes offered in collaboration with the University of Hong Kong (HKU).

Building upon the first episode’s focus on nighttime lighting, Arup has enhanced the course by bringing in technical specialists from both the Lighting and Landscape teams. These teams work in tandem, particularly in the realm of open space design. With a holistic design mindset, Arup integrates landscape and lighting design elements to craft a multi-sensory and highly inclusive experience for the public. This total design approach not only enhances the aesthetic appeal of the spaces but also bolsters the city’s resilience and vibrancy.

Practical learning for HKU students: fieldwork and data collection

In addition to a lecture at HKU, students were provided with hands-on opportunities to assist with fieldwork under the guidance of Arup specialists. Field surveys provided students with a deeper understanding of open space design. They collected data on various aspects of lighting (such as placement, illuminance level, and colour temperature) and spatial design (including seating availability, and pathway width).

The field surveys were carried out in various categories of designed spaces, including parks, promenades, and commercial and residential plazas. Students were tasked with studying both a traditional and a contemporary space in at least two categories. Comparing the configurations of these spaces allowed students to understand the key considerations during the open space design process, such as accessibility, security, lighting levels, placement of lighting, paving width, greenery, and shading elements.

Through this hands-on experience, students realised the complexity of open space design, acknowledging that there were far more factors to consider than they initially anticipated. This course has garnered enthusiastic reviews from students, a number of whom re-enrolled in this course after completing our initial course on nighttime lighting.

Post-programme analysis: enhancing design workflow at Arup

Arup is dedicated to creating spaces that are accessible and enjoyable for all. Following the course, Arup has conducted a thorough analysis of data collected from field surveys. Workshops were held internally for analysis and idea gathering on how to improve the current design workflow, streamline the logistics of design, and foster collaboration.

Furthermore, utilising the four design considerations that guided students in designing the field surveys, Arup Lighting and Landscape teams developed a landscape-lighting design toolkit, which supports us to create designs that are more centred around human needs.

Arup’s collaboration with HKU exemplifies its commitment to fostering a mutually beneficial relationship by nurturing students and enhancing its solutions through a comprehensive design approach.

Arup brings together its expertise in lighting and landscape to design open space that is safe, useful and welcoming to all.