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Introducing the Bradfield College Bamboo Bicycle Club x Bradfield Design



Discover the fusion of sustainability, design aesthetics, and STEM principles in the groundbreaking "Beyond Bradfield" workshop, a collaborative effort by The Bamboo Bicycle Club and Bradfield Design. This transformative initiative goes beyond traditional bicycle building, serving as a gateway to intricate engineering challenges.











The Bamboo Bicycle Club, in collaboration with Bradfield Design, is proud to launch an experiential workshop that merges sustainability with design, enriched by STEM principles and cross-curricular learning. This initiative is aimed at providing a comprehensive understanding of bicycle building, serving as a gateway to more complex engineering challenges.

Community

As part of "Beyond Bradfield", a commitment to support the wider community, the workshop will be extended to other schools. The Design Centre opens its doors to everyone, offering an opportunity to master the art of crafting bicycles from eco-friendly bamboo.

Students are invited to experience the joy of hands-on work and indulge their passion for cycling. Guided by Head of Design at Bradfield College, Nick Mills and supported by Bamboo Bicycle Club founder James Marr, participants will embark on a journey from concept to completion. This includes frame design, jig setup, working with bamboo and natural composites, bicycle maintenance, and safe riding practices.

Bamboo Bicycle Club

Since 2012, the Bamboo Bicycle Club has been training individuals in bamboo bicycle building and has established partnerships globally, including educational institutes. These efforts not only enhance transport mobility but also contribute to extensive research into bamboo's applications in bicycle manufacturing.

Sustainability

Nick is passionate about sustainable design and materials with a negative carbon footprint. His journey in bamboo design began in 2012, culminating in his own bike frame in 2020. Bamboo, renowned for its strength and environmental benefits, absorbs 30% more CO2 than traditional timber, making it an essential material for future design and achieving net-zero goals.

Bamboo is also one of the fastest-growing plants on Earth, with some species growing up to 91 centimetres (36 inches) in a 24-hour period. Its rapid growth makes it an incredibly sustainable and renewable resource.

Material Strength

Bamboo exhibits remarkable strength and durability. It has a higher tensile strength than many traditional materials, making it suitable for various applications, including construction, furniture, and, as seen in the article, bicycle frames.

Nick brings his experience and passion to the bike-building courses. His team promises a unique learning experience at Bradfield College. He eagerly anticipates seeing students and staff embrace bamboo bicycles for everyday use, touring, and racing.

We will be introducing a free resource from Bamboo Bicycle Club. Look out for further announcements on the Design & Technology Association website.

" I am thrilled about the collaboration between Bradfield Design and the Bamboo Bicycle Club. This partnership not only allows us to delve into the fascinating world of sustainable design but also provides students with a unique hands-on experience. Crafting bamboo bicycles goes beyond the workshop; it's a journey of innovation, environmental responsibility, and the integration of STEM principles. Together, we are pedalling towards a future where sustainable design is not just a choice but a way of life." -

Nick Mills, Leader of the Design Centre at Bradfield College