

STORY 10

Building female skills and aspirations in the Kenyan AECO market

Across Kenya's AECO sector, women are under-represented and have fewer employment opportunities. Access to training is often limited – and there's a lack of visible female role models and mentors.

One initiative is bridging these gaps.

The Build4Skills programme has successfully equipped young women from Kenyan TVET institutions with industry-relevant digital skills. The programme, designed by Authorized Learning Partner, HiCAD Africa, is delivered in partnership with Autodesk and GIZ (Deutsche Gesellschaft für Internationale Zusammenarbeit).

HiCAD identified a significant gap between current educational practices and AECO sector's growing demand for advanced technical skills, especially in design and drafting software. The training provider recognised the importance of equipping students and educators with tools and

training that are directly aligned with industry standards.

By combining practical training in Autodesk Revit and Civil 3D, with certification and work experience, the programme bridges the gap between traditional education and the evolving demands of the construction and engineering industries. The initiative aligns with Kenya's national priorities for technical skills development in the AECO sector, supporting Vision 2030 by enhancing infrastructure development and ensuring that technical training meets industry demands³¹.



Ruchika Gajjar from HiCAD said: *“The Build4Skills programme has been transformative in equipping young women with critical digital skills for the AEC industry. By integrating practical training with industry-standard software and real-world experience, we are not only preparing students for the workforce but also upskilling TVET trainers to ensure sustainable knowledge transfer.*

“This initiative is creating a new generation of highly skilled professionals—both men and women—who are ready to meet industry demands and drive innovation in the sector.”

Programme overview

Over the course of eight weeks, 20 talented female students from Kiambu Institute, Thika Technical Institute, and Nairobi Technical Institute underwent intensive training by HiCAD in digital design tools. These students, specialising in civil engineering, architecture, electrical engineering, and mechanical engineering, were given hands-on exposure to Autodesk software. They learnt about the role such software plays in BIM.

Seeking to empower young women in a traditionally male-dominated field, the programme is designed to enhance their technical proficiency, equipping them with skills to compete in the job market. The participants, aged between 19 and 25, were selected through a rigorous process based on academic performance, passion for the AECO industry, and their commitment to intensive training.

Marion, a Revit Mechanical student commented: *“The training program was an incredible opportunity. I loved the comprehensive approach that combined both theoretical learning and hands-on practical experience.*

“The instructor was highly knowledgeable and supportive, creating an environment that fostered growth and curiosity. The collaborative nature of the program gave me insight on a part of my career that I never knew existed of which I am grateful for.”

Participating students were universally motivated and recognised the importance of the skills developed through the programme:

“Before this programme, I had never heard of Revit, let alone used it. Now, I can confidently create 3D models and collaborate in BIM environments,” Sheila, Revit Architecture student

“I used to think AutoCAD was the only design software in the world. Now, I feel like I’ve unlocked engineering superpowers!” Ogeto, Revit Electrical student

Collaboration with industry

Following the training aspect of the programme, the students completed industrial placements, gaining real-world experience at top firms across the industry. These four-week placements were hosted by organisations including National Housing Corporation, Norkun Intakes, Triad Architects, Estee Construction Ltd, DLR Group Africa, Kiri Consult and Emplan Ltd.

Participating companies highlighted their commitment to supporting young professionals and integrating digital tools into industry workflows. Organisations acting as work experience hosts were impressed with the students’ dedication and skills.

Emplan Ltd commented: *“Part of our mission to drive transformative change in the building services sector across East Africa, we are committed to fostering innovation and nurturing future talent. And having a long-standing relationship with Hi-CAD offered us the opportunity to support the young women during their attachment training.*

“We aim to empower the next generation of engineers while promoting diversity and inclusion within the industry. This initiative not only supports the development of critical skills but also reflects our dedication to shaping a sustainable, innovative future. We believe in setting higher standards in MEP services and are excited to collaborate with Hi-CAD to create lasting value for both our region and the engineering community even in the future.”

Several students have since been retained by their host companies, securing jobs in the AECO industry. Two have also joined the HiCAD Africa team, where they mentor other TVET students and support ongoing BIM training initiatives. HiCAD Africa continues to connect graduates with job opportunities and strengthen mentorship in TVET institutions.

Leaders from the participating TVET institutions recognise Build4Skills for addressing the gap in practical, industry-relevant training for women. Industry partners who hosted the students for professional attachments noted that many graduates lack the technical skills required in today’s job market – their feedback reaffirmed the value of initiatives like Build4Skills in better preparing students for industry demands.



Women in construction – some facts:

- Women constitute only 9.5% of the global construction workforce²⁶.
- Women account for just 3% of the workforce in Kenya’s construction industry, which was worth more than CAD20 billion in 2023²⁷.
- Gender pay gaps still exist in the digital construction sector. Men are paid more for the same job than their female counterparts³².



HiCAD Africa is an Autodesk Authorized Training Center based in Nairobi, Kenya. It specialises in BIM Consultancy, focused on empowering AECO companies through innovative Building Information Modelling (BIM) solutions. It is dedicated to empowering professionals and students with the skills and knowledge they need to excel in their careers, providing hands-on, practical experience with industry-leading software tools which are led by certified instructors.



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