MAKERERE UNIVERSITY

College of Engineering, Design, Art and Technology (CEDAT)

ANNUAL REPORT

2024

MAKERERE UNIVERSITY

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College of Engineering, Design, Art and Technology (CEDAT)

Annual Report 2024

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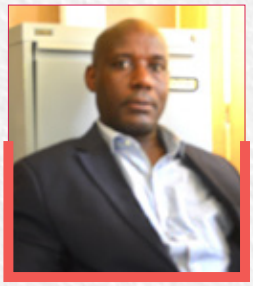

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Acronyms

ACRONYMS	IN FULL
CEDAT	College of Engineering, Design, Art and Technology
CREEK	Centre for Research in Energy and Energy Conservation
HCR	Institute of Heritage Conservation and Restoration
IUCEA	Inter-University Council for East Africa
MakCHS	College of Health Sciences, Makerere University
MAPRONANO	Materials, Product Development, and Nanotechnology
MTSIFA	Margaret School of Industrial and Fine Art
PI	Principal Investigator
RCMRD	Regional Centre for Mapping Resources for Development
UIRI	Uganda Industrial Research Institute
DVCM	Department of Visual Communication, Design, and Multimedia
DAPP	Department of Architecture and Physical Planning
DCEM	Department of Construction Economics and Management
DGLM	Department of Geomatics and Land Management
DCEE	Department of Civil and Environmental Engineering
DME	Department of Mechanical Engineering
DECE	Department of Electrical and Computer Engineering
DFA	Department of Fine Art
DIAD	Department of Industrial Art and Applied Design
GIS	Geographical Information Systems
MURCURGI	Makerere University Regional Centre for Urban Research, Governance and Innovation
UECTL	Uganda Electricity Transmission Company

Message from the **Principal**

Prof. Moses Musinguzi

It is with immense pride and heartfelt gratitude that I present the 2024 annual report for the College of Engineering, Design, Art, and Technology (CEDAT). This publication encapsulates the achievements, innovations, and milestones that have defined the year, showcasing the tireless efforts of our faculty, staff, students, and partners.

With the students as the key stakeholders and the reason as to why we exist, allow me share with you the tremendous pride that we regularly gain from the remarkable steps they are making towards becoming useful citizens of this country. Notable among our student achievements this year are the extraordinary showcases at events such as the CEDAT Open Day, poster presentations, and the Makerere Engineering Society Innovation Challenge to mention but a few. These platforms have allowed our students to display their technical expertise, creativity, and problem-solving abilities while engaging with broader audiences including academic peers, industry representatives, and members of the community. The innovations presented highlight their potential as future leaders and change-makers, committed to driving progress in their respective fields.

Additionally, our faculty members continued to do a great job in the course of the year. The outstanding staff continued to push the boundaries of research, thereby contributing to advancements that address global and local challenges. In line with the strategic Direction of the University, their scholarly work continuously bridges theory and practice, offering solutions to pressing issues such as climate change, technological innovation, and sustainable development. These achievements have helped reinforce CEDAT's reputation as a hub of academic rigor and groundbreaking research, attracting collaborations and partnerships from across the world.

The year 2024 has also seen us strengthening our commitment to inclusivity, sustainability, and the use of technology to create impact. We have embraced innovation in the way we teach, ensuring that our students are equipped with the skills and adaptability required for the rapidly evolving job market. These achievements are a testament to the unwavering dedication of everyone associated with CEDAT.

The year has also been marked by the furthering our external engagements. CEDAT's partnerships with industry, governmental bodies, and international academic institutions have ensured that our programs are aligned with current and future professional demands. These collaborations provide our students with opportunities for experiential learning, ensuring that they graduate with the skills and confidence to excel in a competitive, fast-changing world.

As we celebrate these milestones, we take cognizance of the fast changing terrain in which we operate as a college and a University. The high rate at which technology is advancing, the increasing competition, coupled with the desire to remain buoyant requires even more initiatives from all of us, the stakeholders. In the coming period therefore, the college intends to take on a strategic review of the polices, practices and activities as a way of forging even better ways of doing our trade, namely teaching and learning.

I urge all of us to continue working together in advancing the vision of CEDAT as a hub of excellence and innovation. Together, we can achieve even greater heights.

Thank you for being part of this journey.

01
INTRODUCTION

1.0 INTRODUCTION

The College of Engineering, Design, Art and Technology (CEDAT) is one of the 10 constituent Colleges of Makerere University with over 2000 students and 153 members of staff spread across 3 schools and eleven departments namely: School of Engineering, School of the Built Environment and the Margaret Trowel School of Industrial and Fine Art. The College is known for its innovative teaching and learning, research output, and services, boasting state-of-the-art facilities used for education and research by faculty and students worldwide. It is one of the few colleges that take on the best, the cream of students in Uganda, specifically in the area of sciences. The teaching staff includes professors, researchers, and industry professionals of international repute, and they are involved in various research initiatives worldwide. This report is a presentation of the performance of the College of Engineering, Design, Art, and Technology in 2024. It covers developments in teaching and learning, research and innovations, community engagements, as well as local and international collaborations, among others.

1.1. CEDAT Mandate

The mandate of the college falls within the overall mandate of Makerere University, namely;

(a) Provision of higher education through teaching and learning, research, and knowledge transfer partnerships in Engineering, Design, Art, and Technology;
(b) Dissemination of knowledge and allowing all persons to acquire higher education regardless of sex, race, color, or disability.
(c) Provision of accessible physical facilities to the users of the Public University

1.2. Mission Statement

To provide transformative, innovative teaching, learning, research, and outreach services responsive to dynamic national, regional, and global needs in Engineering, Design, Art, and Technology.

1.3 Strategic Objectives

The college sets out to achieve several strategic objectives listed below.

- To integrate gender and ICT in teaching and learning
- To integrate Ethics and Entrepreneurship courses in all programs
- To promote collaboration with Stakeholder Institutions in the design of academic programs
- To strengthen Industrial Training and Internship attachments

- To increase the visibility of research centers
- To strengthen the research coordination system
- To promote the use and application of Indigenous, conventional, and emerging technologies
- To increase the visibility of CEDAT in knowledge transfer partnerships and community engagement
- To improve the staff performance management system in the college

1.4. Core values

The College is guided by the core values as stated in the University strategic plan namely;

- Accountability
- Professionalism
- Inclusivity
- Integrity
- Respect

02

TEACHING AND LEARNING

2.0. TEACHING AND LEARNING

The College of Engineering, Design, Art, and Technology has a robust teaching environment offering on-demand programs nationally and internationally across the three schools. The college has the infrastructure needed for the realization of the primary mandate. This includes the laboratories and studios that are a key factor in research and innovation, and the much-needed practical learning.

2.1. Programs offered at CEDAT

The college runs several programs in tandem with the institution's main mandate, which is teaching and learning. As indicated in the tables below, the programs range from Bachelor's Degrees, postgraduate diplomas, Masters and PhDs.

Best of Me Art Exhibition

Table 1. List of Bachelor's programs offered at CEDAT

PROGRAM	DURATION
Bachelor of Architecture	5 years
Bachelor of Science in Civil Engineering	4 years
Bachelor of Science in Electrical Engineering	4 years
Bachelor of Science in Mechanical Engineering	4 years
Bachelor of Science in Telecommunication Engineering	4 years
Bachelor of Science in Computer Engineering	4 years
Bachelor of Science in Computer and Communications Engineering	4 years
Bachelor of Science in Construction Management	4 years
Bachelor of Science in Valuation	4 years
Bachelor of Science in Land Economics	4 years
Bachelor of Science in Land Surveying and Geomatics	4 years
Bachelor of Science in Quantity Surveying	4 years
Bachelor of Urban and Regional Planning	4 years
Bachelor of Visual Communication, Design and Multi-Media	3 years
Bachelor of Fine Art	3 years
Bachelor of Industrial and Applied Design	3 years
Bachelor of Industrial and Fine Arts	3 years

Table 2. List of Postgraduate programs

PROGRAM	DURATION
MSc. Architecture	2 years
MSc. Urban Planning and Design	2 years
Post Graduate Diploma in Urban and Regional Planning and Design	1 year
MSc. Construction Management	2 years
Post Graduate Diploma in Construction and Project Management	1 year
Post Graduate Diploma in Sanitation	1 year
MSc. Geo-Information Science and Technology and Technology	2 years
MSc. in Land Management	2 years
MSc. Civil Engineering	2 years
MSc. Power Systems Engineering	2 years
MSc. Telecommunications Engineering	2 years
MSc. Renewable Energy	2 years
MSc. in Computer and Communications System Engineering	2 years
MSc. Mechanical Engineering	2 years
MSc. Technological Innovation and Industrial Development	2 years
Master of Arts in Fine Art	2 years
MSc. in Sanitation	2 years

2.2. Student enrolment as of December 2024

CEDAT registered a total enrollment of 2,833 students, 1,910 of whom were males and 923 of whom were females, both at the undergraduate and graduate levels. The table below details this.

Table 3. 2024/2025 undergraduate student enrolment as of 31st December 2024

No.	Programme	Male	Female	Enrolled
1	**Bachelor of Industrial and Fine Arts**			
	Year 3	9	12	21
2	**Bachelor of Fine Art**			
	Year 1	23	15	38
	Year 2	31	22	53
	Year 3	13	5	18
3	**Bachelor of Industrial and Applied Design**			
	Year 1	34	20	54
	Year 2	32	36	68
4	**Bachelor of Visual Communication, Design and Multi-Media**			
	Year 1	25	27	52
	Year 2	19	24	43
	Year 3	20	10	30
5	**Bachelor of Architecture**			
	Year 1	16	12	28
	Year 2	15	11	26
	Year 3	11	9	20
	Year 4	17	12	29
	Year 5	28	9	37
6.	**Bachelor of Urban and Regional Planning**			
	Year 1	19	10	29
	Year 2	13	20	33
	Year 3	5	3	8
	Year 4	20	25	45

No.	Programme	Male	Female	Enrolled
7.	**Bachelor of Science in Land Economics**			
	Year 2	16	25	41
	Year 3	20	7	27
	Year 4	26	21	47
8.	**Bachelor of Science In Quantity Surveying**			
	Year 1	25	24	49
	Year 2	15	32	47
	Year 3	23	11	34
	Year 4	35	18	53
9.	**Bachelor of Science in Valuation**			
	Year 1	29	15	44
10.	**Bachelor of Science in Land Surveying and Geomatics**			
	Year 1	21	14	35
	Year 2	31	14	45
	Year 3	25	8	33
	Year 4	24	14	38
11.	**Bachelor of Science in Civil Engineering**			
	Year 1	84	24	108
	Year 2	83	22	105
	Year 3	62	17	79
	Year 4	84	36	120
12.	**Bachelor of Science In Electrical Engineering**			
	Year 1	60	32	92
	Year 2	65	27	92
	Year 3	47	16	63
	Year 4	62	36	98
13.	**Bachelor of Science in Computer Engineering**			
	Year 1	1	0	1

No.	Programme	Male	Female	Enrolled
	Year 2	1	0	1
	Year 4	9	0	9
14.	**Bachelor of Science In Telecommunication Engineering**			
	Year 4	5	4	9
15.	**Bachelor of Science in Mechanical Engineering**			
	Year 1	48	23	71
	Year 2	46	21	67
	Year 3	39	9	48
	Year 4	60	29	89
	TOTAL	**1,396**	**781**	**2,177**

Table 4. 2024/2025 Postgraduate student enrolment as of 31st December 2024

No.	Program	Male	Female	Enrolled
1.	**Postgraduate Diploma In Construction & Project Management**			
	Year 1	32	5	37
2.	**Master of Science in Construction Management**			
	Year 1	35	7	42
	Year 2	31	13	44
3.	**Master of Science in Urban Planning and Design**			
	Year 1	11	3	14
	Year 2	9	5	14
4.	**Master of Architecture**			
	Year 1	2	3	5
	Year 2	0	1	1
5.	**Master of Science in Land Management**			
	Year 1	25	11	36
	Year 2	39	10	49

No.	Program	Male	Female	Enrolled
6.	**Master of Science in Geo-Information Science &Technology**			
	Year 1	28	11	39
	Year 2	15	8	23
7.	**Master of Science in Civil Engineering**			
	Year 1	41	6	47
	Year 2	49	6	55
8.	**Master of Science in Power Systems Engineering**			
	Year 1	43	11	54
	Year 2	21	4	25
9.	**Master of Science in Renewable Energy**			
	Year 1	25	12	37
	Year 2	13	5	18
10.	**Master of Science in Telecommunication Engineering**			
	Year 2	2	1	3
11.	**Master of Science in Mechanical Engineering**			
	Year 1	28	2	30
	Year 2	16	1	17
12.	**Master of Engineering**			
	Year 2	1	0	1
13.	**Master of Science In Technology Innovation and Industrial Development**			
	Year 1	17	0	17
	Year 2	9	4	13
14	**Master of Arts in Fine Art**			
	Year 2	2	5	7
15	**MA Fine Art (Year 1)**			
	Ma (Fine Art)	2	1	3
	Ma (IAAD)	5	0	5
	Ma (VCM)	6	1	7

No.	Program	Male	Female	Enrolled
16	**Doctor of Philosophy**			
	School of Built Environment – Year 1	0	1	1
	School of Built Environment – Year 2	1	1	2
	School of Engineering – Year 1	2	2	4
	School of Engineering – Year 2	1	1	2
	School Of Engineering – Year 3	1	0	1
	Margaret Trowel School of Industrial And Fine Arts – Year 1	1	0	1
	Margaret Trowel School of Industrial And Fine Arts – Year 2	1	1	2
	TOTAL	**514**	**142**	**656**

Competence based learning

03

TEACHING AND LEARNING ACHIEVEMENTS

Prof. John Baptist Kirabira (Extreme right) was among the best researchers recognised

CEDAT Graduands
2024

PhDs - 3 female
4 male

MSc - 29 female
96 male

BSc - 219 female
446 male

Postgraduate
5 female
12 male

3.0 TEACHING AND LEARNING ACHIEVEMENTS

3.1 The 74th Graduation Statistics

CEDAT presented Graduands, Female and Male, at the 74th graduation ceremony held on 2nd February 2024. Of these, 7 graduated with PhDs (3 female, 4 male), 125 with MSc (29 female, 96 male), 665 with BSc (219 female, 446 male), and 17 postgraduate (5 females and 12 males).

3.1.1. Table 5. CEDAT's 74th Graduation Statistics

Table 5. CEDAT's 74th Graduation statistics

No	Program	Female	Male	Total
	PhD	3	4	7
Master's Program				
1	Master of Science in Telecommunication Engineering	1	1	2
2	Master of Science in Construction Management	4	25	29
3	Master of Science in Technology, Innovation, and Industrial Development	6	9	15
4	Master of Science in Renewable Energy	2	5	7
5	Bachelor of Science in Mechanical Engineering	0	11	11
6	Bachelor of Science in Power Systems Engineering	1	6	7
7	Master of Science in Civil Engineering	2	14	16
8	Master of Science in Electrical Engineering	0	1	1
9	Master of Arts in Fine Art	7	10	17
10	Master of Science in Geoformation Science and Technology	6	7	13
11	Master of Science in Architecture	0	1	1
12	Master of Science in Urban Planning & Design	0	6	6

No.	Post Graduate Diploma	Female	Male	Total
1	Post Graduate Diploma in Construction and Project Management	2	8	10
2	Post Graduate Diploma in Urban Planning and Design	3	4	7

No.	Bachelors Program	Female	Male	Total
1	Bachelor of Industrial and Fine Arts	58	77	135
2	Bachelor of Fine Art			
3	Bachelor of Industrial and Applied Design			
4	Bachelor of Visual Communication, Design and Multi-Media			
5	Bachelor of Architecture	4	26	30
6.	Bachelor of Urban and Regional Planning	20	14	34
7.	Bachelor of Science in Land Economics	23	28	51
8.	Bachelor of Science in Quantity Surveying	27	19	46
9.	Bachelor of Science in Valuation			
10.	Bachelor of Science in Land Surveying and Geomatics	8	36	44
11.	Bachelor of Science in Civil Engineering	22	70	92
12.	Bachelor of Science in Electrical Engineering	14	52	66
13.	Bachelor of Science in Computer Engineering	7	20	27
14.	Bachelor of Science in Telecommunication Engineering	12	28	40
15.	Bachelor of Science in Mechanical Engineering	7	44	51
16.	Bachelor of Science in Construction Management	15	33	48

3.1.2. Best graduating students

The following table showcases the outstanding students who achieved first-class degrees. Their hard work, dedication, and academic excellence deserve recognition and celebration.

HoD CEM congratulates staff that graduated 2024

Table 6. Students with First-Class Degrees

STUDENT NAME	SEX	CGPA	DEGREE CLASS	PROGRAMME
SSENGENDO Michael	M	4.81	First Class Honours	Bachelor of Science in Electrical Engineering
NAMIRIMO Roselock	F	4.66	First Class Honours	Bachelor of Industrial And Fine Arts
SSEKIDDE Musa	M	4.64	First Class Honours	Bachelor of Industrial And Fine Arts
MAGAMBO Moris	M	4.64	First Class Honours	Bachelor of Science in Electrical Engineering
ATUJUNA Gilbert Gonzaga	M	4.64	First Class Honours	Bachelor of Science in Mechanical Engineering
KANYESIGYE Samuel	M	4.61	First Class Honours	Bachelor of Science in Computer Engineering
MAHAD Uzairu Magala	M	4.61	First Class Honours	Bachelor of Science in Civil Engineering
NYENDE Alex	M	4.60	First Class Honours	Bachelor of Industrial And Fine Arts
MASSOOTO Maurice	M	4.60	First Class Honours	Bachelor of Science in Mechanical Engineering
RWOTHOMIO Malcolm Spencer	M	4.59	First Class Honours	Bachelor of Science in Quantity Surveying
AANYU Mary Goretti	F	4.57	First Class Honours	Bachelor of Industrial and Fine Arts
NYANGOMA Emmaheart	F	4.57	First Class Honours	Bachelor of Science in Land Economics
SSEMAGANDA Remon	M	4.57	First Class Honours	Bachelor of Science in Electrical Engineering
MUGIZI Bruce	M	4.57	First Class Honours	Bachelor of Science in Computer Engineering

STUDENT NAME	SEX	CGPA	DEGREE CLASS	PROGRAMME
KIGOZI Keneth	M	4.55	First Class Honours	Bachelor of Industrial and Fine Arts
MUHAIRWE Comrade Rodgers	M	4.54	First Class Honours	Bachelor of Science in Electrical Engineering
M Mahad Nsereko	M	4.54	First Class Honours	Bachelor of Science in Mechanical Engineering
TWONGIRWE Collins	M	4.52	First Class Honours	Bachelor of Science in Mechanical Engineering
YIGA Rhyon Richard	M	4.51	First Class Honours	Bachelor of Science in Land Surveying & Geomatics
NANSUBUGA Margaret Tendo	F	4.51	First Class Honours	Bachelor of Science in Civil Engineering
NTALE Jordan Trevor	M	4.50	First Class Honours	Bachelor of Science in Quantity Surveying
SSEMAKULA Musa	M	4.50	First Class Honours	Bachelor of Science in Telecommunication Engineering
AMANYA Henry	M	4.50	First Class Honours	Bachelor of Science in Civil Engineering
AKOL Daphne	F	4.48	First Class Honours	Bachelor of Science in Quantity Surveying
MWEBAZA Dennis	M	4.48	First Class Honours	Bachelor of Science in Civil Engineering
NIWENSIIMA Rinah	F	4.46	First Class Honours	Bachelor of Science in Electrical Engineering
KIGOBE Jethro Basa Mukisa	M	4.45	First Class Honours	Bachelor of Science in Electrical Engineering
SSENABULYA David	M	4.42	First Class Honours	Bachelor of Science in Telecommunication Engineering
AHEREZA Racheal	F	4.39	Second Class Honours (Upper Division)	Bachelor of Science in Quantity Surveying
ELWOR Gillian Otim	F	4.38	Second Class Honours (Upper Division)	Bachelor of Science in Mechanical Engineering
MUSIIMENTA Alfred Marvin	M	4.38	Second Class Honours (Upper Division)	Bachelor Of Science In Mechanical Engineering

3.2. Table 8: PhD Defenses During the year 2024

The year 2024 marked a significant milestone in academic excellence, with numerous PhD candidates presenting groundbreaking research across diverse fields. These defenses showcased the dedication, innovation, and perseverance of scholars pushing the boundaries of knowledge and contributing to global progress.

No.	Name of Candidate	Department	Thesis title	Supervisors & Opponent	Date of Defense
1.	Ivan Bamweyana	Geomatics and Land Management	Geostatistical modeling of spatial-temporal patterns of wet and dry conditions at a local scale in Uganda	Prof. Moses Musinguzi Dr. Mazzi Lydia Kayondo	18th September 2024
2	Christopher Kanyesigye	Civil Engineering	Evaluation of the Effectiveness of Water Safety Plans Implementation in Small Towns in Uganda		25th November 2024
3	Kaconco James	Mechanical Engineering	Master Production Scheduling, Total Quality Management and Blood Production Towards Blood Transfusion Sustainability in Uganda".	Dr. Betty Nabuuma Dr. Jude Thadeus Mugarura	15th August 2024
4	Nakiwala Margaret	Architecture and Physical Planning	Enhancing access to Mortgage Financing services for House Developers in GKMA Uganda: A study of awareness, attitudes, Challenges, and models	Assoc. Prof. Stephen Mukiibi Dr. Tamale Amin Kiggundu	30th May 2024

3.3 Curricular Changes, program reviews, Internship initiatives

3.3.1 Revision of masters of Land Management

The Masters in Land Management program under the Ministry of Lands, Housing and Urban Development has made significant strides since its launch in the 2022/2023 academic year, and this is attributed to the collaborative efforts with the World Bank-supported Competitive Enterprise Development Program (CEDP). This partnership enabled funding for 21 students in the program, contributing to capacity-building in land management which is a vital field for sustainable development. Notably, 6 of these students successfully graduated in January 2025, marking an important achievement for the initiative.

In a bid to further enhance the program's quality, a write shop was held at the Source of the Nile Hotel in Namanve from October 31st to November 2nd, 2024. The event brought together staff and graduating students, who worked collaboratively to review and refine the curriculum. This process reflects a commitment to inclusivity and continuous improvement, ensuring the program remains aligned with industry needs and academic standards. The Masters in Land Management program continues to grow as a beacon of progress in higher education and professional development, fostering skilled experts for the future.

The technician explains the use of some of the equipment in one of the labs

04

RESEARCH AND INNOVATION

4.0. RESEARCH AND INNOVATION

The research agenda for CEDAT is derived from Makerere University's stand on increased research output as the university gets more responsive to the needs and challenges faced in society in the areas of Engineering, Design, Art, and Technology. The staff and students, in partnership with various stakeholders, took great steps in finding appropriate, sustainable solutions. This is in line with the Research-led agenda of the University.

4.1. Ongoing Research Activities

There were several projects research activities in the different Schools and Departments. There are several research centers running projects alongside the teaching of students, as shown in Table 9 below, which illustrates some of the ongoing research activity at the college.

4.1.2. Table 9. Ongoing Research Projects

No.	Title	PI
1.	Improving Tenure Security of Small Holder Farmers In Uganda- UN-Habitat	Prof. Moses Musinguzi
2.	Beyond the Networked City: Building Innovative Delivery Systems for Water, Sanitation, and Energy in Urban Africa (off-grid project)	Dr. Robinah Nakawunde Kulabako
3.	Collaborative Research Between KCCA and Makerere University, College of Engineering, Design, Art and Technology (CEDAT) –KCCA-MAK-CWIS project	
4.	Urban Expansion –Cities Alliance /UNOPS	Dr. Tamaleale Kiggundu Amin
5.	Volkswagen Foundation Grant No. 96659	Assoc. Prof. Peter Wilberforce Olupot
6.	IMEU-Inclusive Markets for Energy Efficiency	Prof. J. B Kirabira
7.	APPEAR	
8.	LEAPRE	Dr. Hillary Kasedde
9.	Volkswagen Foundation Grant No. 96655	Dr. Michael Lubwama
10.	KTH Plastic	
11.	GCRF Africa Catalyst- Sustainable Infrastructure	Dr. Dorothy Okello
12.	UNESCO CFIT-Higher Technical Education	
13.	Campus Africa	
14.	CAMA Project	Dr. Jotham Sempewo Ivan
15.	03PLUS-Our Rights, Our Lives, Our Future	Ms. Ampaire Lydia Namanya
16.	TUMSEED Centre	Dr. Betty Nabuuma
17.	Transfer of Delft based MSc/GPDP/OLC/OCC Program on Non-Sewered Sanitation	Dr. Swaib Semiyaga
18.	Intra-Africa Mobility Scheme –MIRET	Dr. Jonathan Serugunda
19.	Master Project	Dr. Venny Nakazibwe
20.	Volkswagen Foundation Grant No. 96659-1	Dr. Peter W. Olupot
21.	1.Wabes Integrate	Prof. Niwagaba Charles
22.	2. Pathogen	
23.	The Meridian Institute Project	Dr. Karumba Andrew
24.	Higher Education Partnerships in Sub Saharan Africa	Dr. Abubaker Waswa Matovu

25.	Energy Trust Limited Project- Students ' Prototypes	Dr. Andrew Semakula Ayor
26.	World Universities Network	Dr. Swaib Semiyaga
27.	LIRA-U 21	Dr. Miyingo Emmanuel Wokulira
28.	ACP-EU Culture Program East Africa	Prof. Kyeyune George

4.2. Selected Research outputs

4.2.1. The Higher Education Partnerships for Sub-Saharan Africa (HEPSSA) program review

The Department of Electrical and Computer Engineering hosted the Higher Education Partnership for Sub-Saharan Africa (HEPSSA) program review workshop from 25th to 26th July 2024. The initiative supported by the Royal Academy of Sciences held deliberations focused on the University-Industry Partnerships on Enhancing Power Skilling in East Africa. Participating HEPSSA member universities included Strathmore University and Technical University of Kenya, University of Dar-es-Salaam, Busitema University, and the host, Makerere University. The industry was represented by agencies including the Ministry of Energy and Mineral Development, Uganda Electricity Transmission Company Ltd, Umeme Ltd, the Electricity Regulatory Authority (ERA), and Uganda Electricity Generation Company (UEGCL). The Head of the Electrical and Computer Engineering

Department at CEDAT, Dr. Abubaker Waswa Matovu said the deliberations focused on skills in the power sector, given the evolving technology, such as the smart systems, which require skilled staff to push it forward. An innovation challenge was opened up to students, and it was during this interaction that the best amongst the competing students from the participating universities were announced.

4.2.2. Makerere University to Establish a Regional Centre for Urban Research and Innovation

Makerere University is set to establish the Makerere University Regional Centre for Urban Research, Governance, and Innovation (MURCURGI) with support from the Ministry of Lands, Housing, and Urban Development. The commitment was expressed by Hon. Judith Nabakooba, the designated Minister, during a public dialogue on urban development and greening Uganda's cities at the CEDAT Conference Hall, Makerere University, on June 6, 2024. The center, to be hosted at the College of Engineering, Design, Art, and Technology (CEDAT), aims to address challenges in urban governance, planning, and management. Nabakooba commended the efforts of the Department of Architecture and Physical Planning and development partners, including the European Union and the Global Green Growth Institute (GGGI).

Hon. Judith Nabakooba presided over the launch of the proposed center for Urban Research, Governance, and Innovation (MURCURGI) on 6th June 2024 at CEDAT

The emerging urban development scenario in Uganda has made governance challenging, necessitating knowledge and skills to address these concerns. Uganda's urbanization rate stands at 27%, with many new cities facing financial and situational weaknesses and inadequate staff capacity. The center will provide training and research to shape urban development strategies. To date, public dialogues have been organized in Jinja, Mbale, Gulu, and Arua, with nine research papers produced and training modules prepared for urban managers. The center aims to ensure social equity and equal access to opportunities, aligning with the agenda of 2030.

Dr. Kiggundu Amin Tamale, Head of the Department of Architecture and Physical Planning, highlighted the achievements, including the training of urban managers on city planning and urban management. The MURCURGI initiative underscores the commitment to sustainable urban development in Uganda, ensuring inclusive growth and prosperity.

4.2.3. Launch of the Makerere Engineering Society (MES) Incubation Program

Some of the participants who attended the Launch on 28th August 2024 at CEDAT

On August 28th, 2024, the MES Incubation program was launched at the College of Engineering, Design, Art and Technology (CEDAT) at Makerere University. The event, presided over by the SDG Secretariat from the Office of the Prime Minister, focused on the theme of Sustainable Development Goals (SDGs) and featured presentations on the Internet of Things, problem identification, and definition.

The MES Incubation program ran over two semesters culminating into the CEDAT Open Day in the second semester of 2024/25. Discussions at the event included topics such as Artificial Intelligence and Machine Learning innovations or startups, Intellectual Property, ideation and prototyping, and grants for innovation research.

The Projects Coordinator, Bageya Henry, a fourth-year BSc Civil Engineering student, emphasized the program's aim to bridge the gap between classroom theory and practical application by empowering students. A total of 150 participants received mentorship and financial support, with beneficiaries drawn from various colleges, including CEDAT, COBAMS, CAES, COCIS, the School of Law, and CoVAB.

Some of the participants in the MES Innovation Launch

Travis Mutala, the Chairperson of MES, highlighted the historical significance of the MES incubation program, stating that CEDAT has always been known as a hub of innovation. He encouraged participants to fully engage in the program from ideation to prototyping and pitching. The MES incubation program has previously equipped students with the knowledge to develop top-ranking innovations and entrepreneurial projects, leading to international competition successes such as the UNESCO India Africa Hackathon and the World Engineering Day Hackathon 2024.

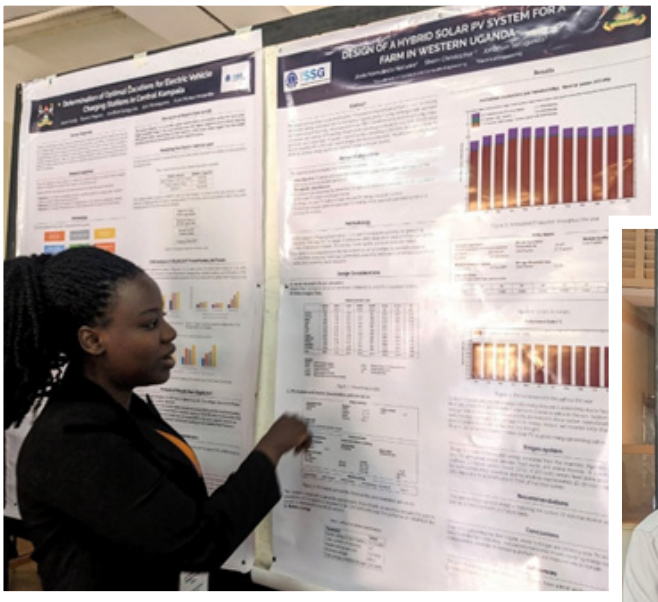
4.2.4. CEDAT joins efforts towards affordable houses in Sub-Saharan Africa

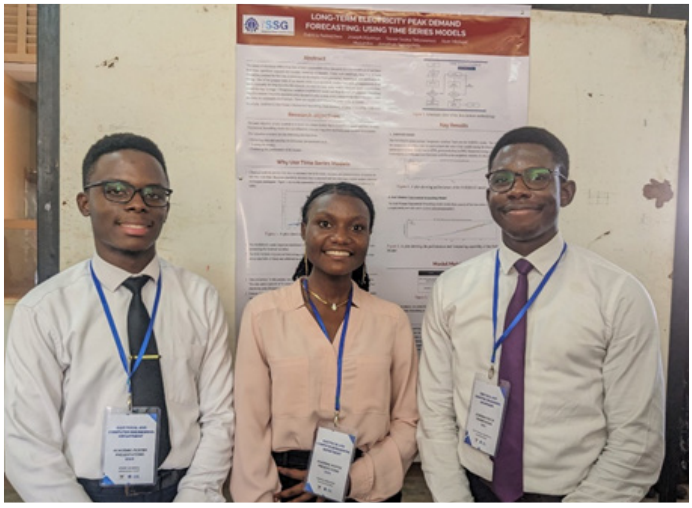
The Department of Architecture and Physical Planning embarked on research and training in Cloud –Cloud-based Building Information Modelling, 3D-Printing, and modular construction technologies that can enhance the rate of delivery of affordable houses. Associate Prof. Stephen Mukiibi a senior researcher is the Principal Investigator of the project, '***Innovation and Digitalization Pathways for more affordable housing in Sub-Saharan Africa***'.

The P.I Prof. Stephen Mukiibi, together with the VC, Prof. Barnabas Nawangwe, and the College Principal Prof. Moses Musinguzi inspected the ongoing work at CEDAT

The innovation targets the mounting need for affordable housing in sub-Saharan Africa, driven by rapid urbanization, economic hardships, high unemployment rates, poverty, and the adverse impacts of climate change. Although these challenges persist, progress in sustainable design techniques, new materials, and innovative construction methods present potential solutions for creating sustainable, innovative, and affordable housing. Research and training play critical roles in examining how innovation and digitization can enhance construction delivery. However, the costs associated with training and skepticism from industry professionals indicate a need for further research into the impacts of innovation and digitization on construction efficiency.

4.2.5. The 2024 Poster Presentations by Electrical & Computer Engineering Students





Some of the students who took part in the poster student presentations

Electrical and Computer Engineering students under the Integrated Smart Systems group presented their research work and innovation projects on 17th April 2024, with the best three of the projects and innovations awarded. The students were part of the Integrated Smart Systems (ISST) research group at Makerere University that focused on Power systems, Electronics, Communication, and Clean Energy. The research work tried to address problems faced in Uganda in the energy-related industry. While speaking on behalf of the industry, Eng. Sylver Hategekimana from UMEME said he was impressed with the new development at the college, more specifically, the work done by the students. 'Your role is to give us solutions to the problems we face. ' He said the industry needed to collaborate with academia in identifying and finding solutions to the very many problems faced by the country, also noting that the work by the students offers a promising starting point and will help address the big gaps between what students study at the university and the reality in the field.

4.2.6. The Study on Renewable Energy Systems Integration

The Dissemination meeting held on November 15th, 2024

The Department of Electrical and Computer Engineering at Makerere University conducted a pivotal study on the Integration of On-Grid and Off-Grid Decentralized Renewable Energy Systems in Uganda. The findings and recommendations of the research were presented at a seminar held on Friday, November 15, 2024, supported by the Government of Uganda through the Makerere University Research and Innovations Fund (Mak-RIF) and other partners.

The study unveiled a Smart Energy Meter prototype, aimed at helping customers understand their energy consumption patterns. Collaborating with Power for All and Energro, Makerere University developed a customized monitoring and data collection package suited for rural settings. The project utilized Beitutu Smart Plugs and Amazon Cloud services to monitor power consumption patterns of appliances.

A key objective of the study was to conduct a Techno-Economic Analysis of the integration of centralized grid and decentralized renewable energy systems. The project developed a model for integrating these systems and recommended policies to enable grid feed-in and cost-effective tariffs for off-grid developers. It also suggested collaborative planning and installation of mini-grids ready for grid integration, operating concurrently as part of the Utilities 2.0 framework.

Dr. Abubaker Waswa Matovu, Head of the Department of Electrical and Computer Engineering, emphasized the educational aspect of the project, which included training students in solar systems from design to maintenance and troubleshooting. The study also proposed the establishment of a solar test bed to further support renewable energy development in Uganda.

The research highlights the potential of integrated electrification approaches to accelerate electricity access and enhance its impact on society, marking a significant step towards sustainable energy solutions in Uganda.

4.2.7. Innovation of Translating Luganda Text into Speech

Dr. Ronald Kizito, the Principal Investigator, presented a brief about the novel innovation

Through the use of Artificial Intelligence, Researchers at CEDAT developed an innovation to aid in translating written text into speech in the Luganda language. Principal Investigator Dr. Ronald Kizito from the Electrical and Computer Engineering Department said the study, 'A Luganda Neural Text-To-Speech System for Health Promotion and Accessibility for Health Promotion and Accessibility', was made possible with the support from MakRIF. It was intended to come up with an innovation that would help the dissemination of health messages to a wide Luganda-speaking audience that may not be in a position to read written text due to factors like visual impairment, illiteracy, and a physical disability. At the dissemination seminar held at the college on January 23rd, 2024, Dr. Ronald Kizito said the study was one way of ensuring that messages reach the intended users by putting in place such mechanisms to address what normally leads to communication breakdown. The team on this multi-year research project includes Dr. Andrew Karumba, Dr. Jonathan Serugunda, Dr. Samai Namyalo from Linguistics, and Dr. Deo Kawalya from the Literature Department in CHUSS.

4.2.8. Staff benefit from the Durban University of Technology/ Mak Research Collaboration

Dr. Semanda Julius (CEM Department) was one of the beneficiaries of the partnership

Over ten people, inclusive of CEDAT staff, benefited from the Durban University of Technology/ Makerere University Research Collaboration. DUT's Prof. Samuel Kikafalimani, the Principal Investigator, was at CEDAT for a face-to-face interaction with the current students on September 25th, 2024, during which meeting he gave an update on the progress of the collaboration. He said Ph.D. training was a move in the right direction since people get trained in undertaking research, thinking, and analytical skills. The Department of Construction Economics and Management (CEM), which had hitherto been severely understaffed, was a big beneficiary of the collaboration. According to Dr. Nathan Kibwami, the Head CEM, who is also the Co-PI activities in the collaboration included sharing research papers and student exchange programs from which the CEM had benefited a lot, citing the attainment of two PhDs amongst the staff.

4.2.9. Makerere University won the HEP SSA 22/24 Innovation Challenge

A photo moment by the winning team (L-R) Dr. Eng. Dr. Julius Butime, Ms. Kisaaka Elizabeth, Amanya Henry, Eng. Sylver Hategekimana (UMEME) and Dr. Abubaker Waswa Matovu

Makerere University won the Higher Education Partnership for Sub-Saharan Africa (HEP SSA) 22/24 Innovation Challenge. The winners were announced during the HEP SSA 22/24 program review workshop convened at the CEDAT from Thursday, 25th to Friday, 26th of July 2024. The winning team comprised Ms. Kisaaka Elizabeth and Mr. Amanya Henry, both final year BSc Civil engineering students, and their project was titled 'Production of Biohydrogen from Agri-Food Markets in Kampala. A case of Kalerwe Market. Strathmore University was the first runner-up, while Busitema University came third. The winning teams were given certificates of recognition and cash prizes. Other Participating HEP SSA member universities included the Technical University of Kenya, the University of Dar es Salaam, and the University of Oxford. The host of the event and Co-PI, Dr. Abubaker Waswa Matovu, the Head of the Electrical and Computer Engineering Department at CEDAT**,** said the challenge set up by academia in partnership with the industry was opened up to have students identify local challenges and come up with solutions. The deliberations in the review workshop were focused on skills in the power sector given the evolving technology such as smart systems which require skilled staff. We need to find ways of ensuring energy is available and used efficiently given the low electrical concentration in East Africa, he observed.

4.2.10. Partnership with Uganda Electricity Transmission Company Ltd (UETCL)

Participants take off time for a group picture at the training

The College of Engineering, Design, Art, and Technology (CEDAT) joined forces with Uganda Electricity Transmission Company Ltd (UETCL) to strengthen Industry-Academia collaboration. The partnership's first major event, a two-day strategy workshop kickstarted activities under a new Memorandum of Understanding (MoU). This MoU aims to promote collaborative research based on real-world industry challenges.

Dr. Dorothy Okello emphasized the mutual support between academia and industry, highlighting that each side can benefit by identifying and addressing each other's needs. Deputy CEO of UETCL, Matsiko Richard, welcomed the knowledge-sharing from Makerere University to enhance the growth of the energy sector. He mentioned UETCL's five licenses for exporting and importing power with neighboring countries, underscoring the importance of efficiency and the role of academic collaboration in minimizing losses.

4.2.11. The 2024 CEDAT Open Day Championed Green Skills and Sustainable Futures

The College of Engineering, Design, Art, and Technology (CEDAT) held its 2024 Open Day embracing the theme "Green Horizons: Cultivating Sustainable Futures through Green Skills for Green Jobs." The event saw enthusiastic participation from students, faculty, and industry professionals, who showcased innovative projects focused on renewable energy, energy efficiency, and sustainable transportation.

The three-day event featured a series of panel discussions, exhibitions, and student innovation pitches, all designed to address global challenges with cutting-edge solutions. The primary objective was to promote a comprehensive understanding of green skills for green jobs, fostering innovation, collaboration, and sustainable thinking among students, professionals, and private sector companies, while aligning student initiatives with the Sustainable Development Goals (SDGs).

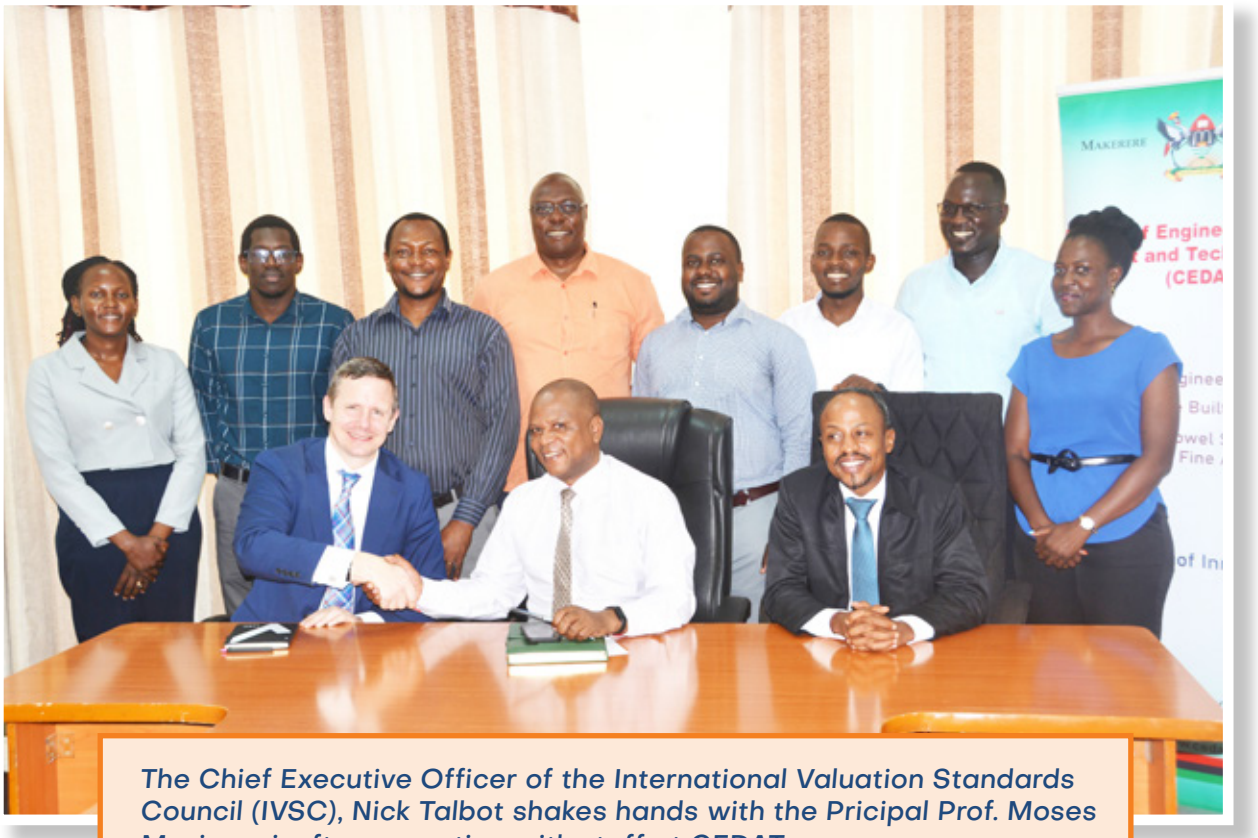
Day 1: The event commenced with a panel discussion titled "Navigating the Green Jobs Landscape," which explored the preparation of students for the industry under the overarching theme of Green Skills for Green Jobs.

Day 2: The spotlight shifted to student ingenuity with the "Igniting Green Ideas: Student Innovation for a Sustainable Future" pitching competition. Students presented their eco-friendly innovations to a panel of expert judges from academia and industry.

Day 3: The final day featured an exhibition and networking session under the theme "Connecting Ideas, Shaping the Future." The interactive exhibition showcased student-pitched ideas and included booths from private sector companies and various organizations. Highlights of the day included live demonstrations, networking opportunities, career guidance sessions, and industry insights on green career paths.

Throughout the Open Day, students had the chance to demonstrate their creativity, receive valuable feedback from industry experts, and build confidence in their ability to drive change. The event also served to raise public awareness of the SDGs and illustrate how technological innovation can lead to a more sustainable and equitable future.

4.2.12. IVSC CEO Nick Talbot Visit to CEDAT to Discuss Valuation Industry and The African Desk Initiative



The Chief Executive Officer of the International Valuation Standards Council (IVSC), Nick Talbot shakes hands with the Pricipal Prof. Moses Musinguzi, after a meeting with staff at CEDAT

On March 26, 2024, Nick Talbot, the Chief Executive Officer of the International Valuation Standards Council (IVSC), visited the College of Engineering, Design, Art, and Technology (CEDAT). During his visit, Talbot engaged with staff and students to address key issues affecting the valuation industry. The primary goal of Talbot's visit was to champion the global recognition of the IVSC and explore the possibility of establishing an African desk in Uganda. He emphasized the critical role of local partners who understand their specific environments, highlighting IVSC's commitment to working closely with these partners to maintain high valuation standards. Talbot's visit to Makerere University aimed to create linkages with academia for research and knowledge transfer. The discussions also focused on how Makerere University could connect with other universities across Africa and enhance engagement with IVSC by enrolling as a member.

4.2.13 Launch of the OctoStudio App, Empowering Uganda's Youth

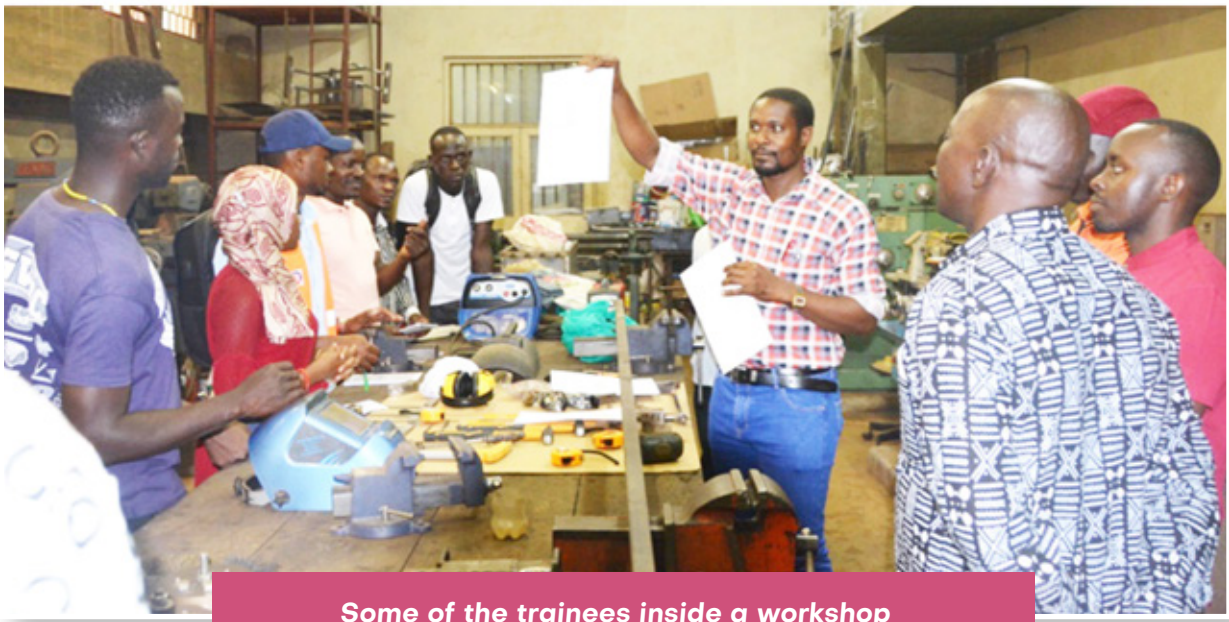
(R-L) HoD ECE Dr. Abubaker Wasswa Matovu (L) children leaders, and the Minister of State for Labour, Gender and Social Development Hon. Balaam Barugahara

On International Youth Day, the Creative Child Foundation proudly celebrated young innovators with the launch of the OctoStudio app in Uganda. Spearheaded by Hon. Balaam Barugahara Ateenyi, the State Minister for Gender, Labor, and Social Development in charge of children and youth affairs, the event highlighted the collaborative efforts of Makerere Engineering Students (MES) and the Makerere Innovation Society (MIS) at CEDAT.

OctoStudio is a transformative coding app designed to empower young people to channel their creativity into tangible projects. As Uganda embraces the digital age, this initiative aims to equip the next

generation with essential 21st-century skills, fostering innovation and nurturing future leaders. Hon. Barugahara remarked, "This app is a tesTamaleent to the boundless potential of our youth. By providing them with the tools to innovate, we are investing in a brighter, more prosperous future for Uganda." The launch event underscored the importance of nurturing young talent and promoting technological advancement. As we continue to inspire and innovate, we pave the way for a brighter tomorrow for Uganda's youth.

4.2.14. CEDAT Hosts 3rd Annual Fundis and Technicians Sensitization Event



Some of the trainees inside a workshop

The Department of Architecture and Physical Planning at the College of Engineering, Design, Art and Technology (CEDAT), Makerere University, concluded its 3rd annual Fundis and Technicians sensitization event and exhibition. Held from October 24th to 25th, 2024, the event saw participation from 200 masons, fundis, painters, builders, and metal and electrical fabricators. The event received support from stakeholders, including Habitat for Humanity Uganda, Green Building Council Uganda, The National Building Board, Uganda Clays Limited, Centenary Bank, Steel and Tube Industries Ltd, Simba Cement, Plascon, Goodwill, and Crest Tanks. It featured training sessions and a materials exhibition.

Prof. Henry Alinaitwe, Deputy Vice Chancellor of Finance and Administration, represented Vice Chancellor Prof. Barnabas Nawangwe at the opening. He emphasized continuous learning and the need for quality in the construction industry. Prof. Alinaitwe also noted the forthcoming engineering Registration Bill, which includes provisions for artisan registration, and highlighted the importance of involving more women.

Dr. Amin Tamale Kiggundu, head of the Department, stated that the Fundi training program, which began in 2022, aims to bridge the knowledge gap between training institutions and the community. The program has grown significantly, with participants increasing from 60 in its first year to 200 in 2024. The event underscored the importance of community engagement and continuous improvement in the construction sector, aiming to enhance the skills and quality of work among Uganda's artisans and technicians

4.2.15 Innovative Hybrid Micro Grid Project in Mubende District

The Department of Computer and Electrical Engineering, under the leadership of Principal Investigator Emmanuel Wokulira Miyingo successfully implemented a cutting-edge Hybrid Micro Grid project. This initiative, which integrates biogas and solar energy, was conducted in partnership with Biogas Solutions Uganda, Powernet Electrical Installations Limited, the local community, and the Local Government of Mubende. The project received financial backing from the Government of Uganda through the Makerere Research and Innovations Fund (MakRIF).

Miyingo highlighted the community's positive reception to the project and stressed the importance of scaling it up to benefit a larger population. The project aims to create a financially sustainable renewable energy solution for the community by harnessing solar photovoltaic systems and biogas.

David Tusubira, CEO and Founder of Dojo Hub, and the project's commercial investigator, stated that the initiative seeks to determine if biogas can serve as a cost-effective alternative to large battery banks over time.

Kalungi B was selected for the project due to its agricultural nature, with residents who are farmers possessing ample cow dung necessary for biogas production. This initiative underscores the potential for sustainable energy solutions in rural areas and serves as a template for future renewable energy projects in Uganda.

4.2.16 Guest Lectures

On 12th November 2024, Dr. Marios Valavanidis Professor of Hydraulics and Flow in Porous Media from the University of West Attica Greece, gave a comprehensive guest lecture on advanced fluid mechanics at small scales, with a focus on saturated flow in porous media which was part of the guest lecture series titled "Fluid Mechanics at Small Scales: Dynamic Relative Permeability in Two-Phase Flows in Porous Media – Recent Progress and Open Research Problems." The theoretical principles of hydraulic flows are applicable in groundwater engineering, remediation of conTamalealeinated soils, and petroleum exploration. The session was a fantastic foundation, offering undergraduate, and postgraduate students of Civil, Mechanical, Agricultural, and Petroleum Engineering and Geophysics a fresh perspective on core principles and their applications based on recent research.

4.2.17. Electric Mobility Skilling Program

Makerere University, in collaboration with Kiira Motors Corporation, and UNDP launched the Electric Mobility Skilling Program. This innovative initiative aims to equip students with foundational knowledge and practical skills in electric mobility, driving Uganda's transition to clean energy. "The E-Mobility Skilling Program encompasses theoretical classes, practical hands-on sessions, and field tours. "We want to equip students with the necessary foundational knowledge and skills so they can contribute to Uganda's e-mobility industry." Said Eng. Fred Matovu Senior Manager (Powertrain, EE Systems & Information Systems) the lead Coordinator. 25 students (12 F and 13 M) were selected from Electrical, Biomedical, Software, Mechanical, and Computer Engineering programs, and Bachelor of Science in Physics courses. With the guidance of industry experts and academics, they will shape the future of electric mobility in Uganda.

4.2.18 CEDAT students Explore Uganda Oil Frontiers in Hoima and Kikuube

On August 30, 2024, a group of Quantity Surveying and Valuation Surveying students from the Department of Construction Economics and Management, accompanied by the Field Tour Coordinator Mr. Ronald Kaweesi visited the Oil Project in Hoima District. The tour to the Kingfisher Development Area and the Kabalega International Airport was aimed at enabling the students to gain a deeper understanding of the roles and responsibilities of Quantity and Valuation Surveyors in the energy and mineral development sector. The team explored how these professionals contribute to cost planning, procurement, and cost control in complex industrial settings, such as the Oil Project and Kabalega International Airport.

The students gained an understanding of the roles and responsibilities of Quantity and Valuation Surveyors in the energy and mineral development sector, learned the best practices and industry standards, and acquired knowledge of the safety protocols and environmental measures implemented in such complex industrial settings. They used the opportunity to network with experienced professionals in the field, gaining valuable insights into career opportunities and industry expectations. At the Kingfisher Development Area, the students were exposed to the oil and gas project in Uganda located in Buhuka, Kyangwali, in Kikuube District. The Uganda National Oil Company (UNOC) team led by Mr. Robert Mukodo gave them an overview of the petroleum value chain, which is the sequence of processes involved in oil production characterized as upstream, midstream, and downstream.

4.2.19 Engineering students benefit from the CFIIT Internship grant

A section of students listen to the presentations

Beneficiaries of the Innovation and Creativity internship grant under the CFIT III project presented their proposals before a committee of staff and students on 30th September 2024 at CEDAT. The successful students showcased their research projects before a panel of staff who in turn gave constructive feedback. The purpose was to ensure that their work not only addressed real-world challenges but also strengthened the relationship between academia and industry. The beneficiary students were competitively selected following calls sent out to students in the Departments of Civil & Environmental Engineering, Electrical & Computer Engineering, and Mechanical Engineering doing their industrial placement internship to apply for funding in three categories namely Professional Development (UGX 300,000), Community Impact (UGX 500,000) and Innovation and Creativity (UGX 750,000).

Assoc. Prof. Dorothy Okello, the Dean of the School of Engineering and Principal Investigator of the UNESCO-China Funds-in-Trust (CFIT III) project

Assoc. Prof. Dorothy Okello, the Dean of the School of Engineering and Principal Investigator of the UNESCO-China Funds-in-Trust (CFIT III) project, highlighted the importance of the grants in bridging the gap between classroom learning and practical industry experience. This category required students to come up with ideas on how to translate the benefits of their training to positively impact communities. This was supported by the UNESCO CFIT III project, which aims to help the unit to produce better-trained, skilled, knowledgeable, and highly employable engineering graduates that fit into the needs of the industry.

4.2.20 Architecture Students make designs for Mary Stewart Hall

On 18th July 2024, students from the Department of Architecture and Physical Planning at Makerere University presented their technical drawings for the renovation of Mary Stuart Hall of Residence to Vice Chancellor Prof. Barnabas Nawangwe. The proposals, aimed at improving the hall's facilities, were met with applause from Prof. Nawangwe, who praised the students for their innovative ideas.

The proposals were supervised by Arch. Dr. Kenneth Semwogerere, who was commended for his role in guiding the students. Prof. Nawangwe encouraged the students to collaborate with the contractor to incorporate their suggestions during the construction phase. He also urged them to utilize the space behind the hall to enhance the living environment for students.

4.2.21 Competence-Based Learning and Green skilling for better graduates

Participants in the competence-based learning and green skilling workshop at CEDAT on June 26th, 2024

The School of Engineering, in collaboration with industry stakeholders, is making concerted efforts to improve the quality of engineering education. On June 26th, 2024, a stakeholder engagement was held at the College of Engineering, Design, Art, and Technology (CEDAT) to discuss green skilling and competence-based assessment frameworks for engineering programs. Key participants included the National Curriculum Development Centre and the Directorate of Research and Graduate Training.

The initiative to review teaching and learning methodologies was prompted by findings from the 2023 UNESCO China Funds in Trust-supported studies, a Labor Market Analysis, and a Tracer Study for engineering graduates. These studies highlighted the need for better preparation of engineering graduates to meet job market demands. The findings revealed gaps in the internal readiness of the college and the alignment of graduates' skills with market needs.

Assoc. Prof. Dorothy Okello, Dean of the School of Engineering, emphasized that the school embarked on a self-assessment initiative to address these challenges. The initiative is driven by the need to adapt to new educational trends, such as the new O-level curriculum and evolving training modes. It also aims to enhance pedagogical competencies among teachers. Feedback from internships and industrial training underscored the necessity of shifting from knowledge-based to practical-based training and incorporating soft skills. The collaborative efforts aim to produce well-prepared and trainable engineers, ultimately improving the quality of engineering education at Makerere University.

4.2.22 Exhibition by Finalist Bachelor of Fine Art students 2021-2024

From June 14th to 30th, 2024, the Makerere Art Gallery/Institute of Heritage Conservation and Restoration hosted the "Best of Me" exhibition, showcasing the work of the 2021-2024 Bachelor of Fine Art students. This exhibition marked the culmination of their academic journey in the Bachelor of Industrial and Fine Arts program at Makerere University.

The exhibition featured a diverse collection of work spanning various disciplines, including photography, painting, structural and applied textiles, sculpture, ceramics, drawing, fashion design, illustration, communication design, advertising design, and weaving. Each piece was a testament to the students' dedication, talent, and the diverse skills they developed during their studies.

The "Best of Me" exhibition not only marked the end of their academic endeavors but also the beginning of their professional artistic careers. It was a narrative of passion, resilience, and the transformative power of art, celebrating the students' growth and exceptional creativity. The final showcase highlighted the lasting impact of the Industrial and Fine Arts program and celebrated the legacy it leaves behind at Makerere University.

4.3 Other research initiatives in the college in 2024

4.3.1 Supported by Research and Innovation Fund (MAkRIF); Assessing the Feasibility of Utilizing Nano Sugarcane Bagasse Ash as a Supplementary Cementitious Material in Cement-Based Materials.

4.3.2 Carbon Offsetting Measures for Traditional Fired Clay Brick and Mudbrick Production in Uganda. Funded by Research and Innovation Fund (MakRIF) Makerere University.

4.3.3 In 2024, a new grant of US$ 130,000 for the project, *Estimation of Pathogen Hazards from Sanitation Technologies in Africa*, was signed. This project is funded by the Bill and Melinda Gates Foundation through the University of North Carolina at Chapel Hill (USA). The project started in January 2024 and is expected to end on 31 December 2025.

4.3.4 The project, The Water, Behavior Change and Environmental Sanitation: Sustainable Solutions to Research, Knowledge and Professionalization (WABES) – Integrated Water, Sanitation and Solid Waste Services (INTEGRATE) received further support and the activities were implemented through 2024, which marked the transition from the second year to the third year of the project.

4.3.5 Dr. Dorah Kasozi from DIIAD Applied for MAKRIF funding Round 6: 2024 on a research project, "Revitalizing Indigenous Knowledge and Sustainable Design: Enhancing Karamojong Artisanship through Academic-Community Collaboration in Product Design Innovations for Uganda's Industrial Development.

4.3.6 Estimation of Pathogen Hazards from Sanitation Technologies in Africa. This project funded by the Bill and Melinda Gates Foundation through the University of North Carolina at Chapel Hill (USA). The project started in January 2024 and is expected to end on 31 December 2025. Beyond the networked city: Building innovative delivery systems for water, sanitation and energy in urban Africa, supported by the UK Economic and Social Research Council awarded under the Global Challenges Research Fund. The project started in April 2020 and ended on 28 June 2024.

4.3.8 Collaborative Research between Makerere University-CEDAT and Kampala Capital City Authority (KCCA) to establish and share scalable models and Technologies for enhancing city wide integration sanitation. The project started in February 2020 and is expected to end in December 2025. The project supported by the City-Wide Integration Sanitation Project under KCCA.

4.3.9 Development of Technology for Application of Iron Oxide Nanoparticles in Wastewater and Drinking Water Treatment. The project is funded by the Government of Uganda through the Science, Technology, and Innovation Secretariat, Office of the President. The project started on 2 January 2024 and ended 31st December 2024.

4.3.10 CEDAT is undertaking a 4-year R&D project that started in June 2021 on "Collaboration for Active Mobility in Africa CAMA" under the program "Partnerships for sustainable solutions in sub-Sahara Africa" and ends in May 2025. The consortium constitutes the Karlsruhe University of Applied Sciences (HKA) and Universität-Kassel (Germany), Makerere University (MAK) (Kampala Uganda), University of Nairobi (UoN) (Nairobi Kenya), and Mekelle University (MU) (Mekelle Ethiopia) and is funded by both the German Academic Exchange Service (DAAD) and the Federal Ministry of Education and Research (BMBF). Among others, the project aims to provide tailor-made exchange and training programs between the partner universities in addition to capturing the requirements of the pedestrians and cyclists, facilitating the development and uptake of tailor-made solutions, promoting active mobility, utilising learning alliances and preparing real-life experiments (living labs) and test innovative solutions.

4.3.11 Reconstruction of an Extreme Flooding Event on River Katonga bridge crossing, 2023 – 2024 Makerere University Research and Innovation Fund (MakRIF) Award. Facilitating early adoption of blue-green infrastructure for urban water system adaptation in East Africa, Lund University, Sweden, Makerere University and University of Rwanda. ARUA-U21 Early Career Research Collaboration Award. The project budget is USD 15,000.

4.3.12 Green hydrogen production from regional resources in Low and Middle-Income Countries. This project was carried out in collaboration with Leeds University (UK) and funded by the World University Network (WUN). The project started in June 2023 and ended in March 2024.

4.3.13 Mobility of African Scholars for Transformative Engineering Training (MASTET) programme. To foster collaborative and harmonized higher education engineering training (HEET) that

delivers quality graduates to research and develop technologies in the overlapping engineering areas of renewable energy, water, the environment and agricultural engineering, that are appropriate to addressing Africa's challenges of poverty, access to energy, food security, climate resilience, jobs and inclusive economic growth. Funded with support from the European Commission. This project started in June 2023 and ended in March 2024.

4.3.14 Transfer of the Delft-based programs and courses in Sanitation as part of the project "Transfer of the New MSc Program in Sanitation to South Asia and Sub-Saharan Africa – Global Sanitation Graduate School (GSGS), funded by the Bill & Melinda Gates Foundation. The project ran from June 2023 to March 2024.

Research Dissemination

05

COLLABORATION AND NETWORKING

The Vice-Chancellor Prof. Barnabas Nawangwe, and EACOP Managing Director Martin Tiffen signed the MoU at Makerere University on July 16,2024.

5.0. COLLABORATION AND NETWORKING

5.1 Makerere University and East African Crude Oil Company Sign MoU for Student Internships

Makerere University formalized a partnership with the East African Crude Oil Company (EACOP) Ltd to offer internships and industrial training for finalist and recently graduated students. The Memorandum of Understanding (MoU) was signed by Vice-Chancellor Prof. Barnabas Nawangwe and EACOP Managing Director Martin Tiffen at Makerere University on July 16, 2024.

The agreement focuses on capacity building through internships, graduate training, and the trainer of trainers programs. Prof. Nawangwe highlighted the benefits for students from the College of Engineering, Design, Art and Technology, and the College of Natural Sciences, particularly given the relevance of the oil and gas industry in Uganda.

Prof. Moses Musinguzi, Principal of CEDAT, expressed the college's readiness to support the MoU's implementation. He emphasized that various engineering programs can significantly contribute to the oil pipeline project. The EACOP project involves developing, building, and operating a pipeline to transport crude oil from Kabaale, Uganda, to the port of Tanga, Tanzania.This collaboration aims to enhance student training and support the growth of Uganda's oil and gas sector.

5.2. The MTSIFA and Shankar Bark-Cloth Collaborative Training Engagement

Mr. Donald Nantagya, welcomed the team to MTSIFA on behalf of the Principal Investigator Dr. Venny Nakazibwe, and introduced the students to bark cloth

Students and faculty from Makerere University's Margaret Trowel School of Industrial and Fine Art (MTSIFA) and Israel's Shankar College of Design, Technology, and Engineering conducted a collaborative Bark-Cloth training workshop from September 23 to 30, 2024. The event aimed to expose students to the traditional bark cloth fabric through an art academy exchange organized by Cocudi.

Tamalear Dekel, Founder and Co-Director of Cocudi, noted that this interaction, the third since 2021, brought together students from different backgrounds to explore innovative textile design methods. For many Shankar students, this was their first experience in Africa, and the workshop provided an opportunity to engage with indigenous traditional knowledge.

Donald Nantagya, representing MTSIFA's Principal Investigator Dr. Venny Nakazibwe, explained that bark cloth is harvested from the Mutuba tree (Ficus Natalensis) and comes in various colors. The workshop aimed to popularize bark cloth by demonstrating its applications in textile work and its interaction with other materials. Nantagya expressed optimism about the future use of barkcloth, envisioning it as a versatile fabric accessible to all. The partnership with Shankar College is seen as a valuable step in reviving and promoting the traditional craft.

5.3 CEDAT and EACREEE Discuss Potential Collaboration in Renewable Energy

The College of Engineering, Design, Art, and Technology (CEDAT) and the East African Centre for Renewable Energy and Energy Efficiency (EACREEE) are in discussions to identify key areas for collaboration. A meeting held on September 19, 2024, focused on establishing a partnership for innovative research, capacity building, and knowledge-sharing initiatives.

Dr. Dorothy Okello, Dean of the School of Engineering, represented the Principal of CEDAT and highlighted Makerere University's dedication to renewable energy and energy efficiency. She emphasized the university's energy-related research across electrical, mechanical, and civil engineering departments and expressed eagerness to work with EACREEE to advance research and academic programs. The partnership aims to promote research collaborations, enhance industry-academia ties through guest lectures, internships, and project attachments, and organize joint events. EACREEE will provide industry expertise, while Makerere University will contribute academic rigor and research capabilities. Additionally, there are plans to develop academic research-based projects in renewable energy and energy efficiency and equip labs with modern technology.

EACREEE's Executive Director Canon Goddy Muhanguzi underscored the potential value of the collaboration, stating, "By working together, we can achieve greater impact and drive growth in the renewable energy and energy efficiency sector." This collaboration is poised to foster innovation and drive growth in Uganda's renewable energy sector.

5.4 Advancing Academic Synergy: DUT and Makerere University Strengthen Research Collaboration

A team from Durban University of Technology (DUT) was at CEDAT for a face-to-face interaction with the students on the research collaboration between Makerere University and DUT on September 25th, 2024, DUT's Prof. Samuel Kikafalimani, the Principal Investigator held an interaction with the staff at CEDAT and the beneficiaries to give an update the college principal on the progress. Dr. Nathan Kibwami, the Head of the Department of Construction Economics and Management who is also the Co-PI of the DUT/ Makerere Research

Collaboration said the partnership has been in existed since 2018. He highlighted other activities as outlined in the collaboration including sharing research papers and student exchange programs from which the CEM department had benefited a lot citing the attainment of two PhDs amongst the staff. He mentioned that students from South Africa were expected to come to CEDAT in December to interact with their counterparts.

DUTs Prof. Samuel Kikafalimani (extreme right) interacted with CEDAT management

5.5 Skilling Youth Emphasized at the Campus Africa Kampala Workshop

Makerere University, in collaboration with UNESCO hosted a two-day Campus Africa workshop focused on addressing key challenges in youth education, skills development, and entrepreneurship across Africa. It brought together representatives from six different universities, which included Makerere University, Mbarara University of Science and Technology, Busitema University, Kisii University, University of Toliana, and University of Dar es Salaam. The event aimed to craft innovative solutions and pilot programs to equip young people with skills that are relevant to the employment market. The workshop held from 11–12 November 2024 served as a collaborative think tank, providing a platform for exchanging ideas and building actionable plans. This demonstrated the strength of regional partnerships and the ability to adapt to challenges while focusing on long-term goals for youth empowerment. Day one started with two presentations on studies that were conducted on youth skills development and research mapping. The participants delved deep into the outcomes of the study and shared

recommendations. Based on the outcome of the two studies, participants were tasked to propose two key pilot programs of certificate-level courses that would address critical needs in Africa and develop a harmonized Implementation Strategy for universities in Eastern Africa. The two identified priority areas for intervention included water resources and Artificial Intelligence. The pilot programs will focus on practical, hands-on education, including mentorship, internships, and partnerships with industry to ensure relevance and impact. The participants reconvened for a half-day session on the second day to finalize recommendations for the pilot programs.

5.6 The Gambian Delegation Visit to Makerere University

The Gambian Delegation and their hosts take a group picture at CEDAT

In a notable effort to enhance international cooperation, a delegation from Gambia, led by Ms. Saffie Sankareh-Farage, the Permanent Secretary of the Ministry of Lands, Regional Government and Religious Affairs visited Makerere University's College of Engineering, Design, Art and Technology. They aimed to gain insights from Uganda's experiences in land administration and policy formulation and engaged with faculty members from the Department of Geomatics and Land Management. Gambia, a small West African nation, is in the process of developing its first-ever land policy, which will involve institutional reforms and legal changes. Uganda's land policy, formulated in 2013, served as a model for Gambia due to similarities in government structures, laws, and history. During their two-week study tour in Uganda, the Gambian delegation engaged with various government institutions, agencies, and civil society organizations involved in land

Administration. They visited communities where projects were initiated to register customary land, drawing parallels with Gambia's own tribal-type land tenure system. Some key objectives of the visit included exploring partnerships with Makerere University to build capacity in land management, leveraging the university's academic excellence and research expertise, capacity Building, and Land Management Innovations. The team was interested in learning about innovative technologies and approaches used by Makerere University's Department of Geomatics and Land Management and School of Built Environment. The delegation visited labs and saw a demonstration of surveyors and GIS professionals' training equipment.

Students demonstrated the use of equipment in the GIS center

5.7 Revised Engineers' Registration Requirements in the Academia

Engineers in Academia can now easily get registered following a revision of the criteria by the Engineers Registration Board (ERB). The registration is now based on the unique contribution of academia, which is teaching, and therefore, ERB revised the requirement for academia to include what they do, such as research, training, and practice. During an outreach by ERB engineers at Makerere University on 18th April 2024, it was observed that academia's contribution to the engineering sector was unique, and the way they are assessed ought to be unique. As teachers, they train the best and put in effort to convert them to make the best contribution to developing the country. Eng. Christopher Tumusiime a board member, said ERB introduced the registration procedure because all the professionals were products of the institutions of learning, which have been instrumental in nurturing them. Although for one to be called an engineer, one should have a degree in engineering, many in academia were not registered engineers because the procedure was not favorable. He said the procedure clearly shows that engineers who are not in construction, the factory, or telecommunications can also register with ease.

5.8 Makerere University and partners to address Urban Expansion Planning

The National Dialogue and Launch of the process to establish the proposed MURCURGI

Makerere University, in collaboration with the Ministry of Lands, Housing, and Urban Development and the Urban Authorities Association of Uganda (UAAU), has embarked on a comprehensive urban expansion planning initiative aimed at developing better-planned cities and urban areas in Uganda. The project is supported by the Cities Alliance. A national workshop on Urban Extension Planning in Uganda was held at the CEDAT Conference Hall on April 25th, 2024, where stakeholders discussed the principles and significance of urban expansion. The workshop also explored the best practices for implementing Urban Expansion Plans and financial strategies to support these efforts.

The workshop facilitated the formation of a network comprising 100 change agents from the public service, private sector, and academia. This network is tasked with providing technical support for physical planning initiatives in selected urban centers, mobilizing community support, and serving as a liaison between city leadership and communities. Additionally, the change agents will help initiate relevant policies and mobilize resources from city authorities and development partners. Francis Barabanawe from UAAU highlighted the network's role in establishing a business model to secure funding for physical planning functions. He identified urban councils, grants from the central government, the private sector, and landlords as potential sources of funding.

Dr. Amin Tamale Kigundu, Head of the Architecture and Physical Planning department at Makerere University, emphasized the importance of collaboration in the 21st century. He noted that a dedicated fund has been established to support the training of city leaders and provide internship opportunities for students. This initiative marks a significant step towards improving urban development in Uganda, with a focus on collaboration, technical support, and resource mobilization.

5.9 Training on Applications of Satellite-Generated Atmospheric and Climatic Datasets

Dr. Shahnawaz Shahnawaz from the University of Salzburgas was the main facilitator

A section of the participants listen attentively

The Department of Geomatics and Land Management, in collaboration with the University of Salzburg, Austria, conducted a five-day intensive workshop on "Applications of Satellite-Generated Atmospheric and Climatic Datasets. The first of the two sessions kicked off on Tuesday, April 2nd, 2024 in the Geographical Information Systems Laboratory at CEDAT with Dr. Shahnawaz Shahnawaz as the main facilitator from the University of Salzburg, Austria. He is also the Director of UNIGIS Network in South & Southeast Asia, a global network of universities that have been collaborating since 1990 to design and deliver distance learning programs in Geographical Information Systems and Science (GISc). The trainees will be able to appreciate the concepts of climate change and its effects, the diversity of atmospheric and climatic datasets, techniques, and analysis software, as well as apply GIS and Remote Sensing operations to analyze atmospheric and climatic datasets. The participants were mainly Masters and Ph.D. students as well as Geomatics and Land Management finalists. They were from the Department of Civil and Environmental Engineering, College of Engineering, Design, Art and Technology (CEDAT), the Department of Geography, Geoinformatics and Climatic Sciences, Forestry, Biodiversity and Tourism, Environment and Natural Resources, College of Agricultural and Environmental Sciences (CAES), the Department of Zoology, Entomology and Fisheries Sciences, College of Natural Sciences.

5.10. Northeastern University Staff visit CEDAT to prepare for study abroad Program

The team from Northeastern University, comprising J.J. Kappa, Khalid I. Koddi, and Swaby Meisha, visited CEDAT

A delegation from Northeastern University, comprising J.J. Kappa, Khalid I. Koddi, and Swaby Meisha, paid a courtesy visit to the Principal of the College of Engineering, Design, Art and Technology (CEDAT) at Makerere University. The visit aimed to strategize for the upcoming study abroad program. The program will see over twenty Northeastern University students spend three weeks next summer at the Margaret Trowel School of Industrial and Fine Art (MTSIFA). During their stay, students will take two courses chosen by the faculty, immerse themselves in the local culture, and visit sites such as the museum and the Nagenda International Academy of Art and Design (NIAD).

CEDAT Principal Prof. Moses Musinguzi welcomed the team and provided an overview of the college, emphasizing its openness to building lasting international partnerships. Deputy Principal Assoc. Prof. Kizito Maria Kasule highlighted the history and significance of MTSIFA, noting its origin under Margaret Trowel and its current status as home to the largest collection of modern art in Sub-Saharan Africa, excluding South Africa. J.J. Kappa, Associate Director for Global Safety, mentioned the visit's objective of ensuring adequate preparation for the student's safety, accommodation, and medical care.

5.11. The Cadence Innovation Challenge Sparks Creativity in Green Skills

On November 8th, 2024, the School of Engineering, in partnership with Cadence Design Systems and with additional support from the UNESCO CFIT III project, hosted the Cadence Innovation Challenge Pitching Event. The event aimed to position the school as a hub for innovation and showcased the incredible creativity of students from the College of Engineering, Design, Art and Technology, and the College of Computing and Information Science.

Under the theme "Green Skills for a Sustainable Future," twenty-five teams pitched their innovative projects, receiving valuable feedback and refining their ideas with guidance from special guest Nick Heaton of Cadence Design Systems and various Heads of Department.

The following day, November 9th, 2024, featured a mini boot camp with engaging sessions designed to help students navigate the professional landscape. Industry experts provided practical insights, and a hands-on workshop focused on strategic work planning to further equip students with the skills needed for success.

This initiative, supported by CFIT and Cadence Design Systems, highlights the importance of fostering innovation and sustainability in education, preparing students to tackle the challenges of the future. Twenty-five teams pitched their ideas, receiving valuable feedback, and refining their projects with guidance from special guest Nick Heaton from Cadence Design Systems and different Heads of Department. This was followed by the mini boot camp, on 09th November 2024 which featured a series of highly engaging sessions designed to guide students in navigating the professional landscape. The event provided practical insights from industry experts, as well as a hands-on workshop focused on strategic work planning.

5.12. CEDAT Students' Field Visit to Kyampisi Living Lab

On November 7th, 2024, 4th-year Mechanical Engineering students from Makerere University visited Kyampisi Living Labs in Luwero District as part of their hands-on learning experience. The visit to this innovative research and development site provided students with valuable exposure to real-world applications of various renewable energy technologies and their impact on local communities. Kyampisi Living Labs operates as a life-scale mini-grid, and it serves as a vital platform for both student research and community development. Kyampisi Living Labs exemplifies the concept of "research with impact" where academic research directly contributes to improving the lives of residents. The lab is part of the sustainable energies, entrepreneurship, and development (SEED) community initiative, which focuses on developing sustainable energy solutions that address pressing issues such as energy access, resource utilization, and environmental sustainability. At the site, students had the opportunity to observe and engage with a range of technologies that are improving the livelihoods of the surrounding communities. Among the key areas of research and activity were energy systems, remote monitoring units, and productive use of renewable energy strategies.




06
PUBLICATIONS

Innovations at CEDAT

6.0. PUBLICATIONS

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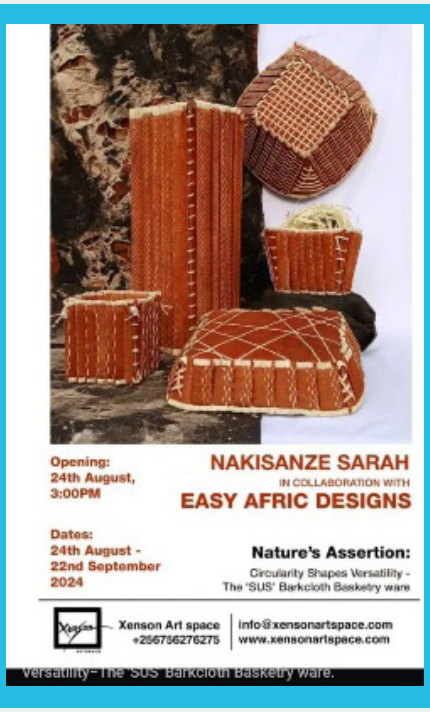
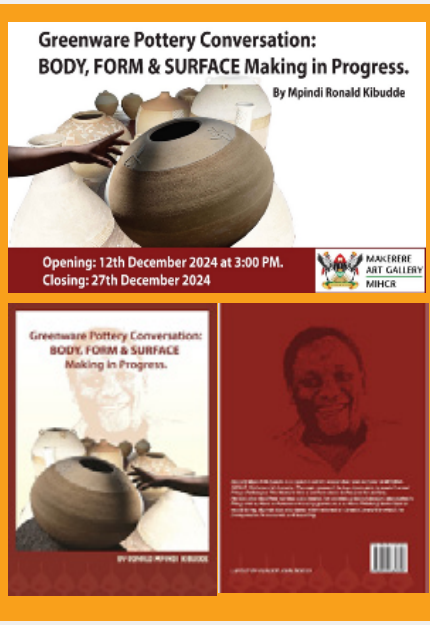
6.1. Research Dissemination and Exhibits.

6.1.1 The SUS Basketry Ware Exhibition. This was by Dr. Nakisanze Sarah in Collaboration with Easy Afric Designs at the Xenson Art Space from 24th August to 22nd Sept 2024. It showcased the versatility and beauty of bark cloth, an ancient Ugandan material, reimagined into contemporary basketry ware.



6.1.2 Green ware Pottery Conversation: BODY, Form & SURFACE Making in Progress, a publication. This exhibition by Ronald Mpindi Kibudde, ran from 12th– 27th December 2024 and later an extension to 30th January 2025.



6.1.3 The Different But One 27, Academic staff exhibition in 2024 was held at the Makerere Institute of Heritage Conservation and Restoration (IHCR) MTSIFA– Makerere University.

07 HUMAN RESOURCES

Principal Human Resource Officer, Ms. Hellen Apolot Opolot handed over office on June 18th, 2024, upon retirement

7.0. HUMAN RESOURCES

7.1. College staff establishment

Table 10. The position of staffing at CEDAT

DEPARTMENTS	POSTS ESTABLISHED					TOTAL	FILLED
	Assistant Lecturer	Lecturer	Senior Lecturer	Associate Professor	Professor		
Fine Art	4	6	6	4	4	24	10
Visual Communication Design And Multimedia Industrial Art And Applied Design	6	6	6	4	4	26	14
Civil And Environmental Engineering	17	12	9	4	4	46	24
Electrical and Computer Engineering	18	15	10	4	6	53	27
Mechanical Engineering	14	9	8	4	4	39	15
Architecture and Physical Planning	12	8	6	5	4	35	22
Construction Economics and Management	12	12	6	4	4	38	26
Geomatics and Land Management	10	8	6	4	4	32	11
Administration	–	–	–	–	–	43	15
Support	–	–	–	–	–	174	71
Stop Gap	–	–	–	–	–	0	18
TOTAL						**510**	**244**

7.3. AWARDS AND RECOGNITIONS

Prof. Henry Alinaitwe, from the Department of Architecture, was appointed Chairperson of the Engineers Registration Board (ERB).

7.3.1. The Research Excellence Awards 2024

Makerere University's Vice Chancellors Excellence Award was received by five of the best researchers from the College of Engineering, Design, Art, and Technology. These were recognized for their outstanding contribution to the body of knowledge.

Dr. Michael Lubwama had 48 publications

Olupot Wilberforce Peter 38 publications

Niwagaba Buregeya Charles, 28

Kulabako Nakawunde Robinah, 48

Serugunda Jonathan with 21

Dr. Vianney Yiga

OTHER STAFF RECOGNIZED

Dr. Swaib Semiyaga

Assoc. Prof. Peter W. Olupot

Prof. John Baptist Kirabira

Assoc. Prof. Dorothy Okello

Dr. Ayor Semakula

Dr. Abubaker Waswa Matovu

Ms. Namakula Hidaya

APPENDIX


Mechanical
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WHO WE ARE

APPENDIX

The tables below show the staff establishment and status of staffing as of the close of December 2024.

DEPARTMENT OF ARCHITECTURE AND PHYSICAL PLANNING

1.	Alinaitwe Henry	Professor
2.	Amin Tamale Kiggundu	Senior Lecturer
3.	Mukiibi Stephen	Associate Professor
4.	Nnaggenda-Musana Assumpta	Senior Lecturer
5.	Ssemwogerere Kenneth	Senior Lecturer
6.	Senkatuka Ian	Lecturer
7.	Omolo Fredrick O.	Senior Lecturer
8.	Namuganyi Lilian	Lecturer
9.	Wakuma Andrew	Lecturer
10.	Muhwezi Derek Alfred	Lecturer
11.	Karungi Doreen	Lecturer
12.	Kyosimire Doreen	Assistant Lecturer
13.	Ngabirano Amanda	Assistant Lecturer
14.	Nyakwebara Charles	Assistant Lecturer
15.	Tukacungurwa Jesse	Assistant Lecturer
16.	Were Andrew Gilbert	Assistant Lecturer
17.	Mulwana John Bosco	Assistant Lecturer
18.	Timbitwire Musa	Assistant Lecturer
19.	Arinaitwe Lynda Mutesi	Assistant Lecturer
20.	Achellam Bernard	Assistant Lecturer
21.	Buyinza Ambrose	Assistant Lecturer
22.	Pricilla Namwanje	Assistant Lecturer

DEPARTMENT OF GEOMATICS AND LAND MANAGEMENT

1.	Moses Musinguzi	Professor
2.	Anthony Gidudu	Associate Professor
3.	Richard Otukei	Senior Lecturer
4.	Lydia Mazzi Kayondo	Senior Lecturer
5.	Vincent Mugumya	Lecturer
6.	Ronald Ssengendo	Lecturer
7.	Lilian Mono Wabineno	Senior Lecturer
8.	Dianah Rose Abeho	Assistant Lecturer
9.	Allan Mazimwe	Lecturer
10.	Brian Makabayi	Lecturer
11.	Ivan Bamweyana	Assistant Lecturer
12.	Mr. Henry Kitaka	Assistant Lecturer
13.	Ms. Hilda Nyamwiza	Assistant Lecturer
14.	Mr. Joseph Kamoga	Assistant Lecturer
15.	Ms. Lydia Letaru	Assistant Lecturer

DEPARTMENT OF CONSTRUCTION ECONOMICS AND MANAGEMENT

1	Nathan Kibwami	Senior Lecturer
2	Ronald Ekyalimpa	Lecturer
3	Dans Nshekanabo Naturinda	Lecturer
4	Musa Manga	Lecturer
5	Junior Patrick	Assistant Lecturer
6	Lubwama Ibrahim	Assistant Lecturer
7	Billy Odongkara	Assistant Lecturer
8	Mwanje Nassir	Assistant Lecturer
9	Acheng Pamela	Assistant Lecturer
10	Semanda Julius	Assistant Lecturer
11	Katongole George William	Assistant Lecturer
12	Brian Ashababehebwa	Assistant Lecturer

13	Namakula Hidaya	Assistant Lecturer
14	Francis Ssali	Assistant Lecturer
15	Rachel Wesonga	Assistant Lecturer
16	Godwin Obali	Assistant Lecturer
17	Kaweesi Ronald	Assistant Lecturer
18	Naome Bagenda Kayondo	Assistant Lecturer
19	Charity Nankunda	Assistant Lecturer
20	Arinaitwe Grace	Assistant Lecturer
21	Safiki Ainomugisha	Assistant Lecturer
22	Carolyne Tumuhimbise	Assistant Lecturer
23	Abala Nicholas	Assistant Lecturer
24	Collins Tulikuno	Assistant Lecturer
25	Andrew Bwambale	Lecturer
26	Hilda Kyeeru	Assistant Lecturer

DEPARTMENT OF CIVIL AND ENVIRONMENTAL ENGINEERING

1	Bagampadde Umaru	Professor
2	Charles Buregyeya Niwagaba	Associate Professor
3	Nakawunde Robinah Kulabako	Senior Lecturer
4	Katukiza Yasoni Alex	Lecturer
5	Matovu Moses	Lecturer
6	Kalibbala Herbert Mpagi	Lecturer
7	Nyenje Mayanja Philip	Lecturer
8	Musenze Ronald	Lecturer
9	Mugume Seith Ncwanga	Lecturer
10	Sempewo Jotham Ivan	Senior Lecturer
11	Namutebi May	Lecturer
12	Tumwesigye Emmanuel	Lecturer
13	Kigobe Max	Senior Lecturer
14	Kasangaki Gilbert Joseph	Lecturer

15	Semiyaga Swaib	Lecturer
16	Bakamwesiga Hilary	Lecturer
17	Meri Carlos Tony	Lecturer
18	Ngyero Felixson	Lecturer
20	Okodi Allan	Assistant Lecturer
21	Buregyeya Apollo	Lecturer
22	Tumutungire Martin	Assistant Lecturer
23	Kaddu David	Assistant Lecturer
24	Muyonjo Geofrey	Assistant Lecturer
25	Mr. Atukunda Michael	Assistant Lecturer

DEPARTMENT OF ELECTRICAL AND COMPUTER ENGINEERING

1	Abubaker Matovu Waswa	Lecturer
2	Peter Lating	Associate Professor
3	Dorothy K. Okello	Associate Professor
4	Jonathan Serugunda	Lecturer
5	Roseline N. Akol	Lecturer
6	Edwin Mugume	Senior Lecturer
7	Cosmas Mwikirize	Lecturer
8	Andrew Katumba	Lecturer
9	Ronald Kizito	Lecturer
10	Emmanuel Miyingo Wokulira	Lecturer
11	Geofrey Bakkabulindi	Lecturer
12	Jane Namaganda Kiyimba	Lecturer
13	Milton Edimu	Lecturer
14	Frank Ssemakula	Assistant Lecturer
15	Dativa Tizikara K	Assistant Lecturer
16	Clara Julia Batanda	Assistant Lecturer
17	Sheila Mugala Ndoboli	Assistant Lecturer
18	Paul Bogere	Assistant Lecturer

19	David Martin Amitu	Assistant Lecturer
20	Donna Lillian Namujju	Assistant Lecturer
21	Agatha Turyagyenda Amara	Assistant Lecturer
22	Peterson Mwesiga	Assistant Lecturer
23	Innocent Oketch	Assistant Lecturer
24	Paul Kyoma Asiimwe	Assistant Lecturer
25	Paul Ssejjuuko	Assistant Lecturer
26	Josephine Nakato Kakande	Assistant Lecturer
27	Geoffrey Mark Kagarura	Assistant Lecturer
28	Gordon Ariho	Assistant Lecturer

DEPARTMENT OF MECHANICAL ENGINEERING

1	Kirabira John Baptist	Professor
2	Okure Mackay A.E.	Associate Professor
3	Lubwama Michael	Associate Professor
4	Olupot Pater W.	Associate Professor
5	Kaconco James	Lecturer
6	Mukasa Nobert	Lecturer
7	Nabuuma Betty	Lecturer
8	Kasedde Hillary	Lecturer
9	Ayor Andrew Semakula	Assistant Lecturer
10	Mpagi Edmond Mark	Assistant Lecturer
11	Tumusiime Edmund	Assistant Lecturer
12	Arineitwe Ndemere J.	Assistant Lecturer
13	Kayiwa Ronald	Lecturer
14	Yiga Vianney Andrew	Lecturer
15	Mujuni Francis	Assistant Lecturer
16	Sembatya Martin	Assistant Lecturer

DEPARTMENT OF VISUAL COMMUNICATION, DESIGN AND MULTIMEDIA

1	Amanda Tumusiime	Associate Professor
2	Lubowa Paul	Lecturer
3	Kabiito Richard	Lecturer
4	Sematimba Joseph	Lecturer
5	Nakimbugwe Annette Sebba	Assistant Lecturer
6	Nsereko Joseph Raymond	Assistant Lecturer
7	Richard Kamya Lukenge	Assistant Lecturer
8	Spencer Muhiire	Assistant Lecturer

DEPARTMENT OF INDUSTRIAL ARTS AND APPLIED DESIGN

1	Kakande Angelo	Associate Professor
2	Kyeyune G.W	Associate Professor
3	Nakazibwe Venny	Senior Lecturer
4	Mwesigwa Stephen	Lecturer
5	Kanuge J.B.	Lecturer
6	Mpindi Kibude Ronald	Lecturer
7	Nakisanze Sarah	Lecturer
8	Kasozi Dorah Namutebi	Lecturer
9	Esther Ndagire Kavuma	Assistant Lecturer
10	Nantagya Donald Senyonga	Assistant Lecturer
11	Sewanyana Robert	Lecturer
12	Naluzze Winniefred	Assistant Lecturer

DEPARTMENT OF FINE ART

1	Ifee Francis Xavier	Associate Professor
2	Kizito Maria Kasule	Associate Professor
3	Kirumira Rose	Associate Professor
4	Kateete Jude	Lecturer
5	Nabuyungo Ritah Edopu	Lecturer
6	Balaba Edward	Assistant Lecturer
7	Kato Abbey	Assistant Lecturer
8	Mubiita Stephen	Assistant Lecturer
9	Nanfuka Joan	Lecturer
10	Nabukenya Fidelis	Assistant Lecturer
11	Babirye Angella Birabwa	Assistant Lecturer
12	Dr. Lilian Nabulime	Senior Lecturer

ADMINISTRATIVE STAFF

1	Ronald Sambwa	College Bursar
2	Mbabazi Rosette	College Accountant
3	Tugumisirize Joram	Assistant Accountant
4	Lillian Tukahirwa	Administrative Assistant
5	Namaganda Agnes Kanzira	College Librarian
6	Hellen Ssali Kalema	College Registrar
7	Moreen Orikiriza	Administrative Assistant
8	Kyomugisha Esther	Assistant Registrar
9	Angela Nabitaka Bizimana	Assistant Registrar
10	Shivon Atwine	Procurement Officer
11	Musinguzi Harriet	Principal Communication Officer
12	Alex Isemaghendera	Web Administrator
13	Nakasi Grace	Admin. Secretary I
14	Lovinah Atuhaire	Admin. Secretary I

SUPPORT STAFF

1	Lusweti Grace	Admin. Secretary II
2	Oliver Mutinye	Admin. Secretary III
3	Patricia Nehoba	Copy Typist
4	Wabwire Andrew	Chief Technician
5	Nakku Cissy	Cleaner
6	Christine Epodoi	Admin. Secretary III
7	Babirye Eva	Copy Typist
8	Ondo Juliet	Custodian
9	Lutaaya Hosea	Driver
10	Ssemata Lawrence	Driver
11	Nsamba Patrick	Laboratory Attendant
12	Nakazibwe Rita	Laboratory Attendant
13	Kayizzi Fred	Laboratory Attendant
14	Nabayego Teddy	Laboratory Attendant
15	Kikwaya Michael	Messenger / Cleaner
16	Koyesiga Winfred	Messenger / Cleaner
17	Nalugwa Mary	Messenger / Cleaner
18	Namutebi Annet	Messenger / Cleaner
19	Kakiza Charles	Messenger / Cleaner
20	Zzibu Godfrey	Messenger / Cleaner
21	Niyibizi Godfrey	Messenger / Cleaner
22	Nakyanzi Margaret	Messenger / Cleaner
23	Namara Lilian	Messenger / Cleaner
24	Tusiime Mathias	Messenger / Cleaner
25	Busingye Emily Ndangahweire	Messenger / Cleaner
26	Namuddu Susan	Messenger / Cleaner
27	Wataka Samuel	Cleaner
28	Mujasi Philip	Principal Technician
29	Kapasa Samuel	Principal Technician
30	Okello Morris Innocent	Principal Technician

31	Namusoke Josephine	Principal Technician
32	Atim Jane Rebbecca	Records Assistant
33	Namugga Deborah	Senior Copy Typist
34	Gitta Robert	Senior Technician
35	Basalirwa Charles	Senior Technician
36	Besigye Jimmy	Senior Technician
37	Ntege Robinson	Senior Technician
38	Mubangizi Moses	Senior Technician
39	Kabahuma Margaret	Stenographer
40	Kigonya Richard	Studio Assistant (Technician)
41	Ssemuju Richard	Technical Assistant
42	Nakimuli Grace	Technical Assistant
43	Dinyato Richard	Technical Assistant
44	Mafuma Wilson	Technician
45	Ngwicarach Pyerina	Technician I
46	Akaali Sowedi	Technician I
47	Luswa Kigongo Yunus	Technician II
48	Kanamwanje Joseph	Laboratory Attendant
49	Bagire Madia	Senior Library Assistant
50	Mundua Janat	Senior Library Assistant
51	Kyakyo Edith	Library Assistant
52	Natukunda Safrah	Library Assistant
53	Sunday Sabani	Cleaner
54	Alice Natsala	Custodian
55	Nicholas Muliisa	Custodian
56	Asiraf Kisadha	Office Assistant

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