NEWSLETTER

September 2023

UNISPARK

Universal Engineering College

NAAC Accredited institution
Approved by AICTE, Affiliated to APJ Abdul Kalam Technological University
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VISION

Provide excellent engineering education, imparting skill development and innovation ecosystem to create engineers that cater to the needs of the society with strong ethical values

MISSION

- Qualified faculty and intact infrastructure, bestow creative and innovative engineering education.
- Equip the students with competent and cutting edge technologies.
- Mould the students to meet the changing challenges with global outlook.
- Inculcate moral and ethical values among students so as to serve the needs of the society.

V.K Shamsudeen
Chairman

Message - Chairman

As we navigate the ever-evolving journey of life, I am reminded of a timeless wisdom often attributed to Albert Einstein: "Life is like riding a bicycle. To keep your balance, you must keep moving." These words encapsulate a profound truth that holds more relevance than ever in today's dynamic world.

To maintain balance in the complex dance of life, we must keep moving forward. The quest for a better future should always be at the forefront of our minds. With every step we take, it's essential to approach each challenge and opportunity with a positive attitude.

Undoubtedly, our path will be spread with obstacles and setbacks that may seek to demotivate us. Yet, it is in facing these challenges head-on that we find the seeds of success. It's through hard work and unwavering perseverance that we transform obstacles into stepping stones toward our goals.

In the pursuit of excellence, we must embrace a spirit of growth and continuous learning. The world is ever-changing, and to stay relevant, we must adapt, grow, and evolve. As we gain knowledge and experience, we not only empower ourselves but also contribute to the betterment of our community and society as a whole.

Let us remember that our college is not just a place of education; it is a platform for personal and intellectual growth. It is a place where we cultivate the values of dedication, perseverance, and a positive mindset that will serve as our guiding stars throughout life's journey.
Together, let us continue to strive for excellence and make our college community proud.

Dr. Jose k Jacob
Principal

Message - Principal

"Many of life's failures are the result of people who did not realize how close they were to success when they gave up."
- Thomas A. Edison

As we navigate through the twists and turns of our academic journey, it's essential to pause and reflect on a profound truth: "Having no option is the best option." In a world where choices abound, this paradoxical statement carries profound wisdom.

Think about the lives of great people who have shaped history forever. They differ from other people because they did not have the luxury of having many options. Whatever challenges life dealt them, they accepted them with unwavering dedication and relentless effort. This is an essential success idea that has stood the test of time.

Work ethic continues to be a key component of success in today's dynamic environment. But it is no longer sufficient. The idea of "smart work" has become incredibly important in today's environment, when opportunities and problems are emerging at an unprecedented rate. Strategy, adaptability, and innovation skills are now just as important as raw willpower.

Failure, which is frequently feared and misunderstood, is not the conclusion of a process but rather the start of a new one. The amazing life of Thomas Alva Edison serves as a powerful example of this principle. He made more than 2000 attempts before coming up with the tungsten filament for the incandescent light bulb. Not because he was successful on his first attempt but rather because he persisted despite constant failure is why his name is remembered by people all over the world. The unbelievable power of tenacity and perseverance is demonstrated by Edison's unwavering pursuit of innovation.

Beyond all else, it is imperative that we believe in our innate talents and capacities. Each one of us possesses unique abilities waiting to be unleashed. By nurturing these talents and maintaining an unwavering faith in ourselves, we can aspire to greatness. Moreover, always maintain a forward-looking perspective and a positive attitude. The power of positivity is a force that propels us forward, helping us overcome obstacles and turn setbacks into stepping stones towards our goals.

Dear staff and students, let us write our own stories of success and inspire future generations with our unwavering commitment to excellence.

Innovations for Sustainable Development

Dr. Mohan B Menon
Former UN Diplomat, Chief and Director,
UNESCO Education Programme for Palestine Refugees, Jordan

Introduction:

We are aware that the G20 country representatives during 2023 under the Indian Presidency had been deliberating through a series of Ministerial Meetings, Working Groups, and Engagement Groups on the theme, 'One Earth, One Family, One Future', thereby affirming the value of human, animal, plant, and microorganisms and their interconnectedness on planet Earth and in the wider universe. As we would have expected a very ambitious, comprehensive and forward looking summit declaration was formulated in the Heads of State and Government Summit of G20 that took place in early September 2023 in New Delhi. Through the G20 New Delhi Leaders' Declaration (2023) the members affirm that as Leaders of G20, the premier global forum for international economic cooperation, 'we resolve to act in concrete ways through partnerships and through these actions today, we are building towards a system that better empowers countries to address global challenges, is human-centric, and brings prosperity and well-being to humanity.' It will be expected that the long list of commitments and action points identified by the Declaration will be followed up by all nations in the coming months and followed up with all seriousness and policy and financial commitment for implementation in the coming years. However, the real problem considering the complexity of this area is to what extent the world nations take the recommendation seriously and formulate their policies and implementation strategies and practices leading to sustainable global development.

Sustainability of Global Development:

At the outset it is essential to understand some of the concepts related to this broad theme including what is an innovation, what is sustainable world, what is sustainable development and what is a sustainable innovation? A sustainable world refers to the ability of world to sustain itself over time. This would require major factors including human population size, biosphere robustness, resource stock, food supply, and environmental quality to remain in balance, on a global scale. This state of balance must last long enough so that it will not be merely 'a blip on the curve of unsustainable growth' (Zen, 2000a). Even though we might not actually attain that balance, it is very critical that we must move in that direction if humanity and the ecosystem are to survive. This would necessitate concerted efforts on the part of the global community in all facets of human activities, requiring all of us to learn to live within our means. Far beyond being a slogan and a principle and practice by a few individuals this should become a way of life globally and should be reflected in all sectors of human endeavour in order to attain societal development. Al Bartlett (1997) in his article on population growth writes that a sincere concern for building future is certainly the factor that motivates many when they mention the word "sustainable." But one would legitimately suspect that often the word is used casually, perhaps as though the frequent use of the adjective "sustainable" is all that is needed to create a sustainable world. The Brundtland Commission's Report (1987) stated that critical global environmental problems were primarily the result of the enormous poverty of the South (developing world) and the non-sustainable patterns of consumption and production in the North (the developed world). It called for a strategy that united development and the environment – described by the now-common term sustainable development. The Report says that sustainable development, the processes used to pursue sustainability, means "meeting the needs of the present without compromising the ability of future generations to meet their needs."

Considering the present complex state of humanity, achieving even some degree of sustainability is not an easy task. To do so, we should understand the implicit wisdom behind mainly six factors of sustainability, viz. climate change, environment, people, ethics, innovation and technology. An interplay of these factors makes the process extremely complex. The concept of sustainability is better explained by interdependent and mutually reinforcing three pillars defined as environmental protection, economic viability, and social equality (World Summit Outcome Document, 2005). A fourth pillar 'cultural diversity' is as necessary for human kind as biodiversity is for nature (Universal Declaration on Cultural Diversity, 2001) is also included in the concept.

The Rio+20 conference (the United Nations Conference on Sustainable Development) in Rio de Janeiro, June 2012, stimulated a process to develop a new set of Sustainable Development Goals (SDGs) which will carry on the momentum generated by the Millennium Development Goals (MDGs) and fit into a global development framework beyond 2015. In 2014, the UN General Assembly Open Working Group (OWG) proposed a document containing 17 goals for the General Assembly which was approved in September 2015. This document set the ground for the new SDGs and the global development agenda spanning from 2015-2030.

This article attempts to examine two major instruments of desired change leading to sustainable development viz. 'education' and 'technology'. Their potential and possibilities are immense and they interact each other and can be of mutual benefit increasing their impact. However, they can usefully be mobilised only with the support of a few forces operating in the larger social environment like the political commitment, economic policies and strength of the societal ethics. These factors are highly controlled by power and money in the socio-economic and political scenario. Hence, the journey towards a sustainable world is slow and complex.

Education for Sustainable Development (ESD):

Education equips a person with different knowledge, skills and other personality attributes for ones all round development. Educational environment is mainly the organised formal sector of education where the larger socio-political system enforces great control deciding the structure and content of the curriculum. But educational experiences can also be less structured operating at non-formal level implemented by non-governmental agencies and civil society. Even informal learning through the exposure to and interaction with the natural and social environment also comes within the purview of education.

Accomplishing significantly inclusive and quality primary education for all as envisaged in the MDGs reaffirms the belief that education is one of the most powerful and proven vehicles for sustainable development. The total enrolment rate in developing regions reached 91 per cent in 2015, and the worldwide number of children out of school has dropped by almost half. There has also been a dramatic increase in literacy rates, and many more girls are in school than ever before. These are all remarkable successes. ESD empowers learners with knowledge, skills, values and attitudes to take informed decisions and make responsible actions for environmental integrity, economic viability and a just society. It is a lifelong learning process and an integral part of quality education. It enhances the cognitive, social, emotional and behavioural dimensions of learning. It is holistic and transformational, and encompasses learning content and outcomes, pedagogy and the learning environment itself. ESD aims to empower and equip current and future generations to meet their needs using a balanced and integrated approach to the economic, social and environmental dimensions of sustainable development. ESD is recognized as an integral element of Sustainable Development Goal (SDG) 4 in order to ensure that all girls and boys complete free primary and secondary schooling by 2030 and also aims to provide equal access to affordable vocational training, to eliminate gender and wealth disparities, and achieve universal access to a quality higher education.It is also seen as a key enabler of all SDGs and achieves its purpose by transforming society. ESD empowers people of all genders, ages, present and future generations, while respecting cultural diversity. Education being a human right and a force for sustainable development and peace, every goal in the 2030 Agenda requires education to empower people with the knowledge, skills and values to live in dignity, build their lives and contribute to their communities.

Technology for Sustainable Development:

Science and technology have had a major impact on society, and their influence is growing. Technological applications usher in fundamental structural changes that can be integral to achieving significant improvements in all dimensions of our life. By making life easier, science has given man the chance to pursue societal concerns such as ethics, aesthetics, education, and justice; to create cultures; and to improve human conditions.

Technology however is a double edged weapon. Having polluted the earth, air, and water for more than a century, technology is now showing promise in environmental clean-up. On one hand if properly used it could help minimize inequality by providing access to basic services, such as e-health or online education, sharing valuable information across networks, machines, and devices. Technology enables the development of new products and services that use less energy, chemicals and water, and reduce waste from operations — all of which can improve both environmental sustainability and operational efficiency. At the same time, rapid technological change poses new challenges for policymaking. It can outpace the capacity of Governments and society to adapt to the changes that new technologies bring about, as they can affect labour markets, perpetuate inequalities and raise ethical questions.

Information and communication technology has changed our life substantially. Online and off-line digital technologies have changed our ways of personal and professional engagements globally. Social media has made sweeping impact in our life in recent times. It allows people to have access to a level of communication that the older generation never had. It has been a tool in raising voice, awareness, and call for social change. Through social media, people can now communicate and interact with global community and easily express views on wrong practices, injustices, and have a voice in different situations. As opposed to mass media, in social media, the public can be both the audience and content creators.

Technology and Education:

Technology facilitated education is making a major breakthrough in today's society. Technology is changing educational environment in various ways, starting with the way students are able to learn and also changing the way teachers teach. Generally, education is being transformed in different learning contexts by new digital technologies. One would argue that education mediated with appropriate technology is the key to future quality of human life and the sustainability of the world. Technology integrated teaching and learning strategies involving the use of computers, smart phones and other digital learning tools help in expanding course offerings, experiences, and learning materials; supports learning 24/7; builds 21st century skills; increases student engagement and motivation; and accelerates learning. Technology also has the power to transform teaching by ushering in a new model of networked teaching and learning. This model connects teachers and students as a group and to learning resources, and systems facilitating student learning and also teacher development. Online learning opportunities and the use of open educational resources (OERs) and other technologies can increase educational productivity by accelerating the rate of learning; reducing costs associated with instructional materials or program delivery; and better utilizing teacher time.

An article by Edudemic, "The Four Negative Sides of Technology," indicates that technology is not always for the better. The four negative sides highlighted are technology changes the way children think, technology changes the way children feel, technology can put privacy and safety at risk and more use of technology with less physical activity leads to obesity and other health problems. This is certainly not advocating cutting out all technology, but, as with most things, moderation is required. Policy makers, administrators, teachers and parents who want their students and children to experience the benefits of technology—without the negatives—should of course consider these ideas.

Promises and Impediments on the way forward:

Business sector and governmental commitments to sustainability are increasingly common, though these efforts encounter scepticism over corporate "green washing," providing a false impression to make a business seem more environmentally friendly than it is. Evidence are also accruing that investors are actively embracing green investments. The scenario is becoming more and more complex. The process of maintaining environmental sustainability is getting influenced by several factors. Exponential population growth has led to increased farming and industrial development. This in turn leads to greater greenhouse gas emissions and deforestation. Industrial and technological growth means we need more power (energy) than ever. Our planet is reaching a breaking point. We are beginning to see the consequences of global warming on ecosystems and communities. That's why now more than ever businesses need to invest in environmentally sustainable and socially responsible practices, like using clean energy and paying living wages, to secure a liveable future.

Conclusion:

The question is not whether educational systems and processes and appropriate use of sustainable technologies have the potential to expedite the progression towards building a sustainable world. We have enough evidences to show that this is possible. However wider and more intensive transformation of our educational system with appropriate technology integration is inevitable. Our instructional designs and processes have to be focussed on developing critical thinking, creativity and positive attitude in our learners equipping them to question and change the policies and practices preventing sustainable development. The critical question is will the vested interests of the corporate sector with economic gain as the main motive and the lopsided policies of contemporary governments influenced by large corporate interests be supportive of making the positive decisions regarding mobilising the potential of education and technology for effective sustainable development.

UEC Management

V.K Shamsudeen, Chairman & Managing Trustee

P.B. Abdul Jabbar, Chief Patron

P.K. Salim, Vice Chairman

C.K. Mukundan, Vice Chairman

Jayraj B. Pillai, Secretary

V.K. Abdul Gafoor, Treasurer

V.K. Abdul Salam, Joint Secretary

Jabir K. Mohmmed, Executive Director

P.B. Anvar, Executive Member

P.B. Zainudeen, Executive Member

Academic Heads

Dr. Jose K Jacob, Principal

Dr. K K Narayanan, Vice Principal & Head of the Department, Applied Science & Humanities

Dr. Jobin M V, College Dean

Dr. Sreeraj R, Head of the Department, Computer Science & Engineering

Dr. Premshankar, Head of the Department, Mechanical Engineering

Dr. Harinarayan N H, Head of the Department, Civil Engineering

Dr. Joly, Head of the Department, Electrical & Electronics Engineering

Dr. Arun Pradeep, Head of the Department, Electronics & Communication Engineering

Teacher's Day Celebration

INCEPTION 2K23

The Inception 2023 was inaugurated by the honourable District Collector Mr. Krishna Teja, IAS. We are graced with the presence of Mr. V K Shamsudeen(Chairman, UEC), Dr. Bhasi A B(Academic Council Member, UEC & Professor, Dept of ME, CUSAT) and Dr. Jose K Jacob(Principal, UEC)

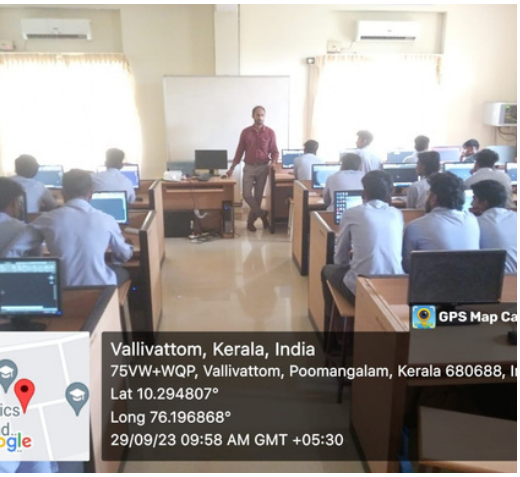
Placement Training

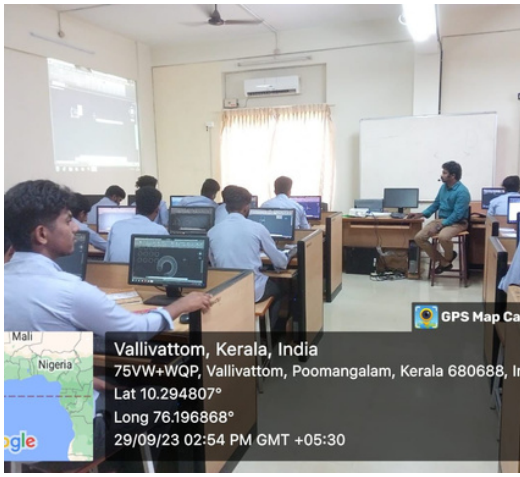
Placement and training cell of Universal Engineering College conducted two days campus recruitment training program in association with JAY's Academy for 7th semester Mechanical and Civil Engineering students on 29/09/23 and 30/09/23. The session was quite informative and interactive. Mr Sreekesh and Mr Ronny Jacob (Trainer's of JAY's Academy) handled the training programme.

Technical Talk

Mechanical Engineering Department Association 'ARMS' conducted a technical talk on "Cryogenic treatment on materials" on 29/9/2023 from 10 a.m. to 1 p.m. The session was quite informative and interactive. We are grateful to Dr. R. Sri siva (Professor Mechanical Department) handled the session.

Workshop





TechnoCAD Club of Mechanical Engineering Department in association ARMS conducted the two day wokshop on Introduction to CADD for S3 Mechanical Engineering Students of UEC on 29th & 30th September 2023. Mr. Vimal N A and Mr. Denny C D handled the session.

IGBC STUDENTSCHAPTER INAUGURATION

On the occasion of Engineers Day & World Green Building Week, Department of Civil Engineering started IGBC Student Chapter. The function was inaugurated by Mr. Vasudevan Suresh (Immediate past chairman IGBS, National Building Code of India). Ms. Bindumol V G (Associate Professor, CE) and Mr. Krishnanunni U (AP, CE) are the faculty coordinators of the student chapter.

MoU Signed

Departments of Civil Engineering, Mechanical Engineering and Electrical and Electronics Engineering signed the Memorandum of Understanding (MOU) between UEC and ARCITE, Institute of Technical Education. This collaborative partnership holds immense potential for students, providing them with a wide range of opportunities to develop their skills through internship programs, expert lectures, and workshops.

Department of Civil Engineering signed the Memorandum of Understanding (MOU) between UEC and PROJEXCEL37, Project Management Company PVT. LTD.. This collaborative partnership holds immense potential for students, providing them with a wide range of opportunities to develop their skills through internship programs, expert lectures, and workshops.

INAUGURATION OF IEDC PROGRAMS FOR THE ACADEMIC YEAR 2023-24 AND INAUGURATION OF THE TALK SERIES – "IT'S HER STORY"

The inauguration of the Innovation and Entrepreneurship Development Cell (IEDC) programs for the academic year 2023-24 was held on 26th September 2023 at Seminar Hall B Block. Along with that launched the Talk series- Ít's Her Story". The event started at 10.00 am with a Silent prayer. Followed by welcome speech by Mr. Ramsin Rassal P G,Student Lead, IEDC. Dr. Jose K Jacob Principal, UEC Delivered welcome speech. He motivated the students to start their own ventures and provide employment for others also.The felicitation address was given by Dr. Narayanan K K, Vice-Principal and Dr. Jobin M V,Dean UEC. Mr. Antonio Joseph V K, IEDC Nodal Officer, introduced the new execution committee of IEDC. The Introduction about the talk series – "It's her story" was given by Ms. Sahla Parwin, Woman Lead..A keynote address was by Aaliya C S, Entrepreneur, Zak_attire who shared her personal journey and experiences in the entrepreneurial world. The keynote address served as an inspiration for the students and motivated them to explore their own entrepreneurial endeavors. Around 100 students participated in the event.The event concluded with a vote of thanks delivered by Mr. Diya El Fadhil,Quality and Operations Lead, IEDC, expressing gratitude to the speakers, guests, and attendees for their presence and support.

ENCON CLUB

Faculties from ASH Dept join hands with ENCON CLUB campus fruits garden phase 2 project.

NSS

Railway station cleaning campaign at Chalakudi railway station by NSS 590 volunteers

Industrial Visit

Industrial Visit by Students of 7th Semester, Department of Civil Engineering, to Irinjalakuda Water Treatment Plant.

Tourism Club

The UEC Tourism Club, established in response to the Department of Tourism's directive in Kerala, aims to groom future professionals in the tourism industry. They seek to provide students with skills, a global perspective, and opportunities to explore tourism destinations while balancing academic commitments with part-time employment. The club emphasizes practical application and a love for tourism. Seven UEC students have been selected as volunteers for the Kottappuram Boat Race 2023, organized by the Department of Tourism, showcasing their enthusiasm and commitment.

FACULTY ACHIEVEMENTS

Department of Electrical and Electronics Engineering celebrated the remarkable achievement of Dr. Vishnu Gopan K, who completed his Ph.D. in Electrical and Electronics Engineering at Anna University.

Er.Sajan Jose (AP- Civil Department) selected as the Thrissur District Co-Ordinator in ICEC (Integrated Civil Engineers Council)

TECHNICAL TALKS

On September 15, 2023, Mr. V. Suresh, Chairman of the National Building Code of India, delivered a compelling technical talk on "Thrust on Sustainability and Resilience for Climate Change Goals." In his presentation, Mr. Suresh emphasized the urgent need for integrating sustainability and resilience into building practices to address climate change challenges.

On September 25, 2023, Keywords Technologies hosted a technical talk on "Career Opportunities in Steel Structures using TEKLA Software." The session highlighted the advanced capabilities of TEKLA software in designing and managing steel structures and explored various career paths and opportunities in the field of steel structure engineering