

# UNIVERSAL ENGINEERING COLLEGE

NAAC Accredited Institution ISO 9001:2015 | Approved by: AICTE | Affiliated to KTU

# INSTITUTIONAL DEVELOPMENT PLAN

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#### **1. PREAMBLE**

Higher Education Institutions (HEIs) -colleges, universities, and institutes, are complex enterprises given its scale, size & complexities. The college or university strategic plan provides guidance for institutional decisions, both long-term and day-to-day, to ensure that decisions and operations are: aligned to the institution's, vision, mission and values; complies with global development goals and rules and regulations of the government, accrediting bodies etc; ensures that the institution is effectively functioning and is financially healthy, and is a sustaining one. It helps an institution to focus on its future success by responding to the changes and are future-ready. The success of a higher education institution ranging from improving graduation rates to creating a more inclusive environment, requires expertise, time, and work from multiple units. By building relationships across departments; integrated strategic planning prevents duplicate or contradicting activities, creates opportunities for collaboration, and makes sure that time, effort and resources are optimally spent to realize the institution's mission. While formulating the Institutional Development Plan which is the integrated strategic plan of action, we need to contextualise the rationale and the larger macropicture.

#### 1.1 Overview and Background- National Education Policy 2020

The development of an Institutional Development Plan (IDP) is central to the implementation of the transformative reforms of the National Education Policy 2020, within the Higher Education Institutions (HEIs). An IDP is a well-designed action plan which will enable HEIs to charter their institutional growth and trajectory over an evolving period that can stretch up to 10 years. The Policy visualizes an important instrument of the Institutional Development Plan (IDP) that will serve as a vision document to guide the institutional transformation. The IDP will guide the academic programmes, human resource management, infrastructural requirements, ensure transparent and responsible governance, upgradation of quality, equity by ensuring the participation of Socially and Economically Disadvantaged Groups, and help in resource mobilisation, financial stability and sustainability.

#### 1.2 Technical Education scenario in Kerala

Engineering Education was mainly confined to State owned or Govt. aided or Govt. controlled institutions with limited seats. The rapid developments in the field of technology opened manifold opportunities for engineering graduates which could not be catered by the government-controlled institutions alone and led to the larger role by the private sector. This resulted in the establishment of private self-financing engineering colleges on a large scale across the country, including Kerala.

The APJ Abdul Kalam Technological University (initially Kerala Technological University), a State Government University, came into existence on May 21, 2014 with an aim to give leadership to the technology related policy formulation and Engineering Education Planning for the State. It also emphasizes to improve the academic standards of the Graduate, Post Graduate and Research Programmes in Engineering Science, Technology and Management and regulate the academic standards of all colleges affiliated to the University. The main thrust areas of the University are Research, Development, and Innovation. APJ Abdul Kalam Technological University is both a teaching and an affiliating university, with more than 170 affiliated colleges and over 160,000 students enrolled, having jurisdiction over the 14 districts of Kerala.

NEP 2020, Para 19.5 reads "Each institution will make a strategic Institutional Development Plan on the basis of which institutions will develop initiatives, assess their own progress, and reach the goals set therein, which could then become the basis for further public funding. The IDP shall be prepared with the joint participation of Board members, institutional leaders, faculty, students, and staff"

#### 1.3 Global Goals for sustainable development

The Sustainable Development Goals (SDGs), commonly referred as the Global Goals, are a clarion call for universal action to end poverty, protect the people and the planet and ensure inclusive human development and peaceful societies. In all, 17 SDGs have been adopted by the United Nations General Assembly in 2015. The significant role of education in attaining sustainable development was evident in the UNESCO documents wherein it reads: *"Universities must function as places of research and learning for sustainable development... Higher education should also provide leadership by* 

practicing what they teach through sustainable purchasing, investments and facilities that are integrated with teaching and learning.... Higher education should emphasize experimental, inquiry based, problem solving, interdisciplinary systems approach and critical thinking (UNESCO, 2004, pp.22-23)".

SDG 4 stipulates "Ensure inclusive and equitable quality education and promote lifelong learning opportunities for all" in all 10 sub-targets. The UEC is committed to achieving these goals and targets.

#### 2. UEC STATUS, PROFILE AND ITS ROLE IN CONTEMPORANEITY

#### 2.1 Institutional Profile

The Universal Engineering College (UEC) is a private engineering college functioning under the management of the Universal Educational Trust. The college was started in 2011 by a group of successful industrialists and business personalities to contribute to the society and its development realising that only Education can transform the society for a better living. UEC is situated in Irinjalakuda, Thrissur District of Kerala, India. The college is situated in a beautiful landscape of 10 acres owned by the trust with provision for future expansion surrounded by lush greenery and serene topography merged into a calm and healthy atmosphere at the confluence point of Thrissur, Ernakulam districts.

The college is approved by All India Council for Technical Education (AICTE), and affiliated with APJ Abdul Kalam Technological University, Kerala (APJAKTU). UEC is registered under the trust for the purpose of conducting various programmes in engineering courses and related research activities. The campus is known for its discipline, well equipped laboratories, well qualified and experienced faculty members with the best administration and governance. Other salient features of UEC are providing quality academic programmes, healthy teacher – student ratios, syllabus supplements/addons, good teaching learning facilities, platforms for skills and academic gap-bridging, student mentoring, excellent infrastructure and its upkeep, good and transparent administration, forums for social outreach and community involvement and a vibrant campus full of activities. In a very short time span UEC has carved a niche among the student community by its excellent results in university examinations, student friendly campus with a perfect blend of innovation and research.

	General Ir	nstitutional Profile			
1.	Name and Address of the college	Universal Engineering College Irinjalakuda , Vellangallur Road Thrissur - 680 123			
2.	Website	https://uec.ac.in			
3.	Year of Establishment	2011			
4.	Institutional Status	Private Affiliated to APJ Abdul Kalam Technological University, Kerala			
5.	Land area	10.13 Acres			
6.	Built up area	13068 sq ft.			
7.	Award, Recognition, Accreditation	AICTE approved. NAAC accredited with B grade. (Efforts on for NBA accreditation)			
8.	Number of Programmes offered	Seven: UG- 5 and PG-2			
9.	Number of laboratories	42			
10.	Number of computers	Workstation- 468 Printer & Photocopier 54			
11.	Details of programmes offered	<ul> <li>B.Tech in Civil Engineering</li> <li>B.Tech in Computer Science and Engineering</li> <li>B.Tech in Electrical and Electronics engineering</li> <li>B.Tech in Electronics and Communication Engineering</li> <li>Btech in Mechanical Engineering</li> <li>M.Tech in Structural Engineering</li> <li>M.Tech in Thermal Engineering</li> </ul>			
12.	Total No. of faculty	75.			
13.	Total No. of technical staff	18			
14.	Total No. of students	1065. Boys: 674 Girls: 391			
15.	Number of hostels and students	Two. Total Number of Hostelites-19 Girls: 12 and Boys: 07			

16.	No. of non-teaching staff	<ul><li>115:</li><li>Female staff members -63</li><li>Male staff members -52</li></ul>
17.	Number of library books	19000
18.	Outdoor sports facilities	One court each for Badminton, Ball Badminton, Basketball, Volleyball, Throwball, & kabaddi. One Football field, one Cricket Ground and one Cricket Practice net
19.	Indoor Sports facilities	Ten Chess Boards, four Carrom Boards and one Table-tennis Board

#### 2.2 Pedagogical approach: Teaching -learning and Evaluation

#### 2.2.1 Outcome Based Education (OBE)

OBE is followed to improve the quality of education and also to improve the knowledge level of students and to quantify it. Academic teaching learning process is followed for achieving basic level planning. Based on the university academic calendar, IQAC prepares the institution academic calendar by including all the academic and nonacademic activities. Add-on courses are offered by the institution to fill the gap in the syllabus and also to make the students updated about the latest technologies. All the students have to study common courses during the first year & branch – specific courses including elective courses from the second year onwards. Some of the curriculum implementation strategies are: course plan preparation, formation of course & class committee, identification of group tutors & mentors, Students' Performance Enhancement and Assessment Cell – for result improvement and monitoring, arranging industry visits & internships, identifying and offering Add-on courses and minor courses. Through the various committees formed in UEC, students are able to sensitize the issues related to gender, environmental sustainability, professional ethics, human values for the development of students. Curriculum enrichment is attained by offering add-on courses, value added courses and training on soft skills, placement training, Industrial Visits, Internships and Industrial Trainings. UEC has an Academic Management System (AMS) for uploading all the day to day activities of the course such as, course plan, timetable, online attendance marking, internal assessment mark entry and report generation. Students are encouraged to select the elective courses as per their wish, do online courses, undergo industry visits/internship, attend intercollegiate seminars, attend hands-on workshops and presentations. UEC has a curriculum based feedback system, collected from students, faculty members, alumni and employers. SPEAC focuses the attention on the continuous evaluation process of the students &

takes/suggests measures to improve in weak areas. Department Advisory Board meets once in a semester to suggest the measures to improve the teaching-learning-evaluation process (if any) and other activities focussed on the growth of the department as well as the measures to make the students industry ready equipped with latest technologies.

#### 2.2.2 Teaching-learning and Evaluation

IQAC prepares the college academic calendar in line with the University academic calendar by incorporating co-curricular and extra- curricular activities. Subject allocation is done by the respective HoDs at the beginning of the semester by considering the faculty specialization, experience and workload. Teaching plan for each course is prepared by the respective faculty ensuring the minimum contact hours in the syllabus and the same is verified by the Head of the Department. Feedback on the course delivery is taken from all the students and through the class committee twice in a semester and the same is communicated to the respective faculty for the corrective measures. PO's and PSO's are developed at the department level. Course plans and CO's are prepared by the respective faculty handling the course, approved by the committee consisting of HOD, course coordinator and module coordinator. For the smooth progress and to ensure the timely completion of the course, UEC has constituted the class / course committees, including senior faculty & student representatives. At the end of each semester, DAB(Department Advisory Board) evaluates the performance of all the academic and non-academic activities of the department to find out the deficiency & areas for improvement. Student feedback based on the course delivery is taken twice in a semester and prepares a plan that is to be worked out in the upcoming semester. Student feedback based on the course delivery is taken twice in a semester & course wise performance analysis is carried out based on the student feedback & are communicated with respective faculty handling the course. Corrective measures for improvement are suggested to those who had performed lower than the set benchmark.

Internal examinations are conducted by the institution as per the frequency and schedule prescribed by the University. For each test two sets of question papers are prepared by the concerned faculty, which are further scrutinized and verified by a committee composed of module expert, subject expert and HoD to ensure the standard of the question paper. After scrutiny IQAC selects one of them and forwards it to the examination cell for the conduct of exam as per schedule. Students are allowed to see their evaluated answer scripts along with a scheme of evaluation. Students can also view the marks on AMS-Linways(Learning Management System). Based on the marks secured by the students in internal examination, assignments, continuous assessment in

labs., practical examinations and viva voce internal marks are awarded. After finalizing the internal marks, the same will be published in the notice board and will be shared to the students.

Academic Management System (AMS) software is in place to share all the academic activities among students, staff and parents. For the internal evaluation of theory and practical courses, an internal committee is constituted of module expert, subject expert & Head of the Department. As per the guidelines of the University, to complete their degree, apart from securing minimum pass marks in the University examination, students have to obtain activity points through participating in various co-curricular and extracurricular programmes.

The institute has taken various initiatives to integrate the issues in relation to gender, environment and sustainability, human values and professional ethics. In order to create awareness among students on professional ethics and environment & sustainability related subjects were introduced by the University. Anti- ragging cell, women cell and student grievance redressal committee take care of the gender issues if any. The College students both boys and girls, helped flood affected people during the year 2018-2019.

It is significant to note that some of the faculty members of the College are members of the Board of Studies of various other institutions & Doctoral Committee Members in various other universities. Some of the faculty members are involved in question papers setting for the university examination and as observers for monitoring the conduct of university examination in other engineering colleges affiliated to KTU. Few of the faculty are resource persons for various FDP's/Workshops conducted by other institutions, while few have been invited for submitting the journal papers by some publishers.

UEC has taken measures to increase the usage of ICT enabled teaching - learning and to maximize the use of learning management system software. In order to encourage and motivate self and participative learning, students are directed to do the assignments and presentations to learn the specific topics from the syllabus. The institution motivates the students to do internships /industrial visits/ training related to their area of study. UEC staff and students are always encouraged to participate in workshops/short term trainings/seminars/ national or international conferences. The faculty members are always encouraged to prepare & organize conferences, seminars and workshops and also

to undertake research and consultancy works. They are also encouraged to publish their research works in reputed journals approved by UGC.

#### 2.3 Research, Innovations and Extension

UEC aims at promoting research & development among the staff and students. Undergraduate students having aptitude towards doing research are identified and proper training is provided to make them capable of undertaking small research works as their B Tech projects. Innovation and Entrepreneurship Development Centre (IEDC) encourages the students to develop their projects into products. IEDC creates an innovation ecosystem by coordinating with agencies like Kerala start-up mission and other funding agencies. UEC always tries to associate with the local authorities government agencies, public utility services to undertake consultancy works or to conduct outreach programmes. This enables the students to identify the issues faced by the public and to find solutions for it. This could help the students to become socially committed engineers with problem solving skills. IEDC conducts an idea pitching competition every year for identifying the students. IEDC club members of the Institute are encouraged to attend Yuva boot camps. Members of IEDC developed a smart pen that helps people with writing disabilities and writing problems. This product got presented in the Manorama YUVA Mastermind contest. Another product developed was LIMPO ROBO, a robotic technology to reduce man effort by using waste materials. The members of IEDC developed a smart cart to help the customers to shop easily. The AI Based surveillance system developed by the IEDC members got 2nd prize from "Malayala Manorama Yuva" Mastermind contest and later on, it turned out to be a startup. Institution also had implemented National Innovation and start-up policy (NISP) to create an innovation ecosystem among the students and faculty, thereby promoting them to emerge as entrepreneurs.

The NSS unit got appreciation from the various parts of the society for the support and involvement in flood rescue, and relief activities during 2018-2019 floods. The Institute volunteers collected and distributed the clothes and food items to flood victims. NSS volunteers of the Institute have also undertaken many cleaning programmes in nearby localities. Student committee adopted nearby villages and done electrical wiring for the poor people and distributed CFL lamps.

# 2.3.1 Research and Development Cell (R&D Cell)

The College has a research and development cell in order to promote the activities of staff and students in the research domain. It plays a crucial role in promoting innovation, creativity, and intellectual curiosity among students, faculty, and staff. R&D Cell is taking steps to start IEEE students' chapters with students' initiative. Some of the key roles and responsibilities of the cell are:

- Encouraging research: Provides a platform for students and faculty to engage in research activities. It encourages students to develop a research-oriented mindset and guides them in identifying research topics, conducting literature surveys, and developing research proposals. Encourages taking up funded projects from CERD, KGSTE, DoE and DST and facilitates the process of getting projects.
- **Promoting innovation**: Fosters a culture of innovation by organizing workshops, seminars, and guest lectures on the latest technologies and research trends. It also promotes collaborative research among faculty and students and encourages them to develop innovative projects and prototypes.
- **Building industry-academia partnerships**: Facilitates collaboration between the industry and academia by organizing joint research projects, internships, industrial visits. It helps students to get exposure to the latest technologies and industry practices and facilitates the knowledge transfer from academia to the industry.
- **Disseminating research findings**: Promotes the dissemination of research findings by organizing conferences, symposiums, and publishing research papers in reputed journals. It helps students to apply for patents and commercialize their research projects.

# 2.3.2 Research Policy:

- To develop infrastructure for conducting research activities.
- The target is to have at least 3 doctoral candidates in each department.
- High quality research output measured in terms of number of quality publications per faculty and from each department. The goal is to achieve a minimum 2 publications per faculty member in an academic year.
- The college also aims to focus more on creation of patents and intellectual properties in all departments.
- Serving people with special educational needs.
- The college also aims to focus more on creation of patents and intellectual properties in the science, and Engineering departments.
- Encourage and depute faculty members to attend induction programme/ orientation programme/ refresher course/short term course and other training programme

#### 2.4 Infrastructure and Learning Resources

The College campus is spread over 10.13 acres of land with 5 academic and 1 nonacademic block. All the faculty rooms and class rooms of CSE, ECE and EEE are located in academic block A; Civil and Mechanical Engg. are located in block B; all 1st year class rooms and administrative areas are located in the main block. For laboratories there is a separate laboratory Block & lab. Annex. Non-academic block consists of facilities like physical education, canteen, Pradhan Mantri Kaushal Vikas Yojana (PMKVY), placement cell, rooms for various clubs. There is a digital library, project lab. and conference hall. Apart from the laboratory facilities as per the curriculum, there is a separate Skill Development Platform facility sponsored by the Govt. and some additional facilities in Civil Engg. Lab. to do some testing and consultancy activities.

The College Labs are equipped with around 244 personal computers with internet connectivity. Entire campus is internet/Wi-Fi enabled with 20 access points. Few class rooms and seminar halls are provided with LCD projectors. There is a skill development platform with required hardware and software.

The Institute has initiated library automation with an open source ILMS "KOHA version 3.12" with a collection of 19000 books, e-journals and reputed journals. Previous university question papers, Technical magazines, and newspapers are also available in the library. Photocopying facilities are also provided. The library is located in the main block with seating capacity of 50 along with a digital library facility consisting of 21 desktop computer systems with internet access speed of 100 mbps.

There is a separate physical education department of the College which guides and monitors all the sports activities. The Institute has a Kabaddi court, Shuttle & Badminton court, Volleyball & Football court. The tournaments like zonal & inter zone volleyball, cricket, football, basketball and badminton are being conducted through the physical education department. The Institute conducts cultural fest every year by including various forms of arts to showcase the talents of students.

There is a hostel facility for girls. For maintaining reliable power supply, the Institute has an 80 KVA diesel generator set for campus load & girls hostel. Water filters & coolers are also available & bottled drinking water is also made available in all the floors in every block. There are 13 buses owned by the Institute for transportation. There is a system administrator for addressing internet & networking problems. Workshop superintendent also coordinates all the day to day and maintenance activities of the

laboratories.

UEC has sufficient infrastructure facilities of buildings and classrooms, separate hostel facilities for men and women, auditorium, laboratories, Wi-Fi connectivity, computer centre, training and placement cell, sports facilities, roads, garden & greenery lawns inside the campus, a fleet of buses and cars for students & staff.

The two internet service providers of UEC are K-phone 10 Mbps, and Jio 100 Mbps. The college has the facility of Wi-Fi for the entire campus. UEC has an official domain website. For the quick communication among staff and students, UEC has G-suit and maintains Facebook & Instagram pages along with WhatsApp groups for the instant communication with staff and students.

# 2.5 Student Support and Progression

Institution has framed student support & progression system aiming at their holistic development, lead program, SPEAC, mentoring, counselling, activities of ITT, activities of placement & training team, mock interviews(Reflections), remedial classes activities of ICC, IEDC, incubation centre & various activities of other clubs are planned accordingly to achieve them. SPEAC was implemented in 2020 aiming at improving the result of the first-year students. Gradually it is adapted in higher semesters also along with the progression of the first-year students. SPEAC also honours the toppers in the series exams and university exams for motivating the students. Amidst these initiatives we give equal importance to the slow learners as well. They are identified and special attention is provided by the faculty handling each course through mentoring, motivating and remedial classes. This will help the slow learners to pick up slowly to become competent among their peers.

Lead programmes help the students to build self-confidence, improve communication skills & to overcome stage fright. All these will assist the students in developing a good personality. In order to boost the self-confidence of students & to reduce their stress and anxiety about interviewing, the Institution conducts mock interviews (reflections). The corrective measures, if any , related to academics are implemented based on the continuous evaluation of student's progression that are obtained from series tests, projects, assignments and seminars. The welfare measures like scholarships and e-grants from government and non-government bodies are also available in UEC. The training and placement cell offers career counselling to students to help them explore various career options. Those who opt for higher studies, proper guidance for competitive exams like GATE are given. The institute has a well-defined student mentoring system to help the students decision making related to their personal & academic growth. To get relief

from academic stress students are encouraged to take part in extracurricular activities like games / sports and arts.

Students are part of the anti-ragging cell, Internal Complaints Cell, Student Grievance and Appeal Committee, student's welfare committee. The representation of students in administration starts with class representative, course committees in which they play an important role for the smooth conduct of academic activities. The tech fest, arts fest, sports, outreach programmes, technical talks, training and other socially related activities are planned & organized by the student union with the support of the institution. Necessary funding if required are provided by the institution. "Leadership Enhancement and Development" (LEAD) programme has been designed by IQAC to improve communication and soft skills among students.

ENCON Club Activities encompass energy awareness Program, training to students and development of Botanical Gardens. ENCON club received best club awards for five consecutive years in Kerala. Alumni association was formed in 2019 and at present there are more than 300 active members. However, formal registration of the Alumni Association is yet to be done.

#### 2.6 Governance, Leadership and Management

The highest Management body of the Institution is the Board of Directors. The institute's activities are governed by the organization's hierarchy, which includes Director Board, Principal, Advisory Board, Academic Council & IQAC. In regular intervals the Governing body and the academic council meets to update the matters. All academic decisions are taken care of by the Principal. All academic staff, Heads of the Departments, faculty, technical staff, non-teaching staff and students involved in academics.

All the other administrative, functional and maintenance staff are reporting to the administrative officer. Institute has developed a strategic plan of establishing IQAC in 2018 for ensuring quality in teaching and learning through various initiatives taken by the IQAC. Some of the major initiatives taken by the IQAC are: formation of an advisory committee by name "Learning Evaluation and Planning" (LEAP) to discuss various areas that needs more focus and Formation of "Students Performance Enhancement and Assessment Cell" (SPEAC) to identify slow and advanced learners, "Leadership Enhancement and Development" (LEAD) programme has been designed by IQAC to improve communication and soft skills among students. IQAC encourages both faculty and students to register for online courses to widen their knowledge base. As part of the

preparation of a five-year plan for the period 2022-27, a programme "UEC 2k27 – Journey towards Excellence" was organized by IQAC on 25th March 2022.

There is a performance appraisal system for teaching and non-teaching staff and a feedback system from all the stakeholders with appropriate corrective mechanisms. The Institute provides welfare schemes like provident fund, ESI and gratuity for some teaching and all non-teaching, transportation facility, organizing staff tours during festive days, maternity leave for female staff, casual, medical and on duty leaves for all staff as per Institute rules, External Audit is conducted for verifying compliance of authorities like University, AICTE, Government, local authorities, income tax department.

Various programmes and initiatives of the institution are planned/organised by various departments, associations / clubs and the same is approved by the head of the institution and is evaluated by IQAC/Academic Council and timely suggestions are provided for improvement. UEC hires qualified and devoted faculty members and offers them all the support to make their career flourish with the growth of UEC.UEC prepares a budget for the upcoming fiscal year before the previous year ends.

#### **2.6.1 Governance Policy:**

To outline the college's academic programmes and the requirements for graduation. It will include guidelines for developing and evaluating academic programmes, as well as procedures for academic advising and student registration.

Develop procedures for recruiting the faculty and staff, their evaluation, promotion, and termination. It should also address aspects such as workload, compensation, and professional development.

To cover a range of student services, such as admissions, financial aid, academic support, career services, and student life.

To provide guidelines for budgeting, accounting, and financial reporting. It will address issues such as tuition and fees, scholarships and grants, and fundraising.

To address issues such as maintenance, safety and security, and capital improvements. It is to provide guidelines for managing the college's physical assets and ensuring that they are safe and well-maintained.

#### 2.7 Institutional Values and Best Practices

This is a co-education Institution and maintains gender equity. All female staff and students in the College are free to lodge complaints, if any, with regard to any kind of misbehavior / ill treatment/ discrimination by anyone, lack of facilities, etc., and the

concerned authority will take the appropriate action or measures. For girl students, separate washrooms, toilets, common rooms, facilities for doing prayer and ladies' hostels are available. The Institute has established a separate women cell to conduct any women related functions and take care of any of their grievances.

The College is full of greenery and is neat and clean. The Institute celebrates all commemorative days of National importance like Independence Day, Republic Day and other important days like Engineer's Day, Teacher's Day, Women's Day etc. with appropriate cultural and social activities. As a part of the curriculum a non- credit course is offered to the students on the Constitution of India to create awareness among the students about the values, responsibilities and rights as citizens of the country.

The Institute's acclaimed best practices is the starting of a programme called "Rural Economic Value-added Mentoring programme (REVAMP)" with a motto of uplifting the community of rural areas. Under this programme the Institute has conducted workshops / seminars / orientation classes in association with the nearby Gram Panchayats on LED bulb assembling workshop, supply of LED bulbs at free of cost by the Institute to nearby community to replace CFL and incandescent lamps, Cancer awareness programme and Cancer detection survey, energy audit and conservation awareness program, rendering the service by the Institute for electrification of house for the poor, land survey, provision of building plan etc. Another initiative by the Institute is establishment of "Students' Performance Enhancement and Assessment Cell (SPEAC)" for identifying slow and advanced learners through monitoring of performance of students in internal and external assessments and also for arranging industry visits & internships. Remedial measures are suggested for slow learners while, add-on courses, minor programmes, entrepreneurship related activities. guidance/support for attending competitive exams or support to go for higher studies are provided for advanced learners.

REVAMP & SPEAC are such initiatives that can also be considered as two best practices of the institute. Being in a rural area, most of our students are from the underprivileged section of the society. increasing the confidence level of students and to make them attain good knowledge in their field of study is the ultimate aim of these best practices. Improved 100% placement even during the pandemic is a sign of changes that could be made in the students by 'Reflections'. SPEAC consists of a team who monitor their students from their first year till the end of course. This cell sets a benchmark for all the students based on the criteria of their plus two marks. To follow uniformity in the planning and preparation level, this cell helps to maintain transparency in all the procedures.

Through REVAMP, UEC provides basic services in nearby villages and contributes to the economic development of the local community and society in order to improve their quality of life as part of its responsibility to the environment and society and to provide innovative solutions for social and environmental challenges.

# 2.8 Technology Policy:

- To develop smart classrooms.
- To strengthen library, e-Resource and Reading room facility
- Enhancement of ICT in teaching and learning process to Create modern teaching environment
- To strengthen automation of administration and examination process.
- EDUSAT based learning.

#### 2.9 Community Service Policy and Social Responsibility

The envisaged community service policy for an engineering college should align with the college's mission and goals, and should prioritize creating meaningful connections between students and the communities they serve. These are:

- Enable private public partnership by inviting and collaborating with NGOs and other agencies. Establish partnerships with local community organizations, such as non-profits, schools, or government agencies. These partnerships could provide opportunities for students to engage in meaningful service projects that address community needs.
- Aim to encourage students to use their engineering knowledge and skills to benefit the wider community.
- various activities, such as volunteering at local organizations, participating in service projects or engaging in research or development projects that benefit the community are undertaken & encouraged.
- Encourage or require faculty to integrate community service into their courses. For example, students might work on a project for a community partner as part of a course assignment. As a community service ,students can help a palliative care unit or doing electrification work for houses of a poor family etc.
- The college could provide funding and logistical support for community service activities, such as transportation, supplies, and training.

- Instil ethical values and a sense of social responsibility in their students by incorporating courses on ethics, social responsibility, and sustainability into the curriculum, and encouraging students to participate in community service activities.
- be environmentally responsible in promoting sustainable practices, such as, minimizing waste and pollution, adopting green technologies.

#### 2.10 Financial Reports and budgeting

#### **Admission Fees**

- The College has a Tuition Fees collection of Rs.3.60 Cr. and Misc. Fees Rs.1.53 Cr. Considering that the institution is located in a rural backward and the commitment of the management to promote education in the area, the average TF is Rs.35k and MF is Rs.15k (per annum per student) with an the intake of 300 Nos. Now we are facing a deficit of Rs.1.50Cr.
- It may please be noted that from AY 2023-2024 AICTE increased the maximum intake for non-NBA programmes from 300 to 360 nos.
- Accordingly our aim is to raise the TF Rs.50k x 360 Nos x 4 years = Rs.7.20 Cr. and MF is Rs.15k x 360 Nos x 4 years = 2.16 Cr. Total fee = Rs.9.36Cr.
- This current deficit is planned to be gradually converted as surplus in the year of 2028.

# **3. VISION, MISSION & STRATEGIC STATEMENT**

#### 3.1 Vision

#### Vision Statement of the College

To develop as a world class educational institution by providing excellent higher education, in the field of engineering, and to create productive and socially committed individuals, with emphasis on holistic development, innovation, entrepreneurship and skilling to achieve sustainable growth with strong ethical values.

To achieve this vision, the college will align its curriculum with the National Education Policy's goals of promoting multidisciplinary education and providing a more holistic approach to learning. The institution will prioritize the development of critical thinking, problem-solving, and communication skills, in addition to technical knowledge. The college will ensure that its graduates are equipped with the skills necessary to address the challenges of the 21st century, including emerging technologies, sustainable development, and social responsibility.

To create engineers that cater to the needs of society, the college will foster an innovation ecosystem that encourages creativity, experimentation, and entrepreneurship. It would provide opportunities for students to collaborate across disciplines and work on real-world projects that have a tangible impact on society.

Further, we will work on instilling strong ethical values in the students while also promoting a culture of ethical behaviour among the students, faculty, staff and leadership. We need to create social awareness and a sense of responsibility in the stakeholders and ensure that the students approach their work with integrity, honesty, and a sense of social justice. By embracing a multidisciplinary approach, fostering innovation, and promoting ethical behaviour, our college will produce graduates who can contribute positively to society, meet the demands of a rapidly changing world, and make a meaningful difference in the world.

#### 3.2 Mission:

• Equip students with appropriate generic and field related knowledge, skills, and competencies to become productive individuals contributing to their self-growth, social and economic development that promotes national growth and evolve as future-ready global citizens;

- Ensure availability of good qualified faculty and empower them with effective teaching-learning skills and resources and opportunities for their career progression through continuous professional development, leadership training and conduct research;
- Develop high quality infrastructure, appropriate learning strategies, academic resources, collaboration linkages and facilities for a conducive ecosystem that promotes excellence in education;
- Become a humane educational institution that transforms the local habitations by focusing on local community needs, creating sustainable communities and inculcating sound moral and ethical values among its stakeholders.

Universal Engineering College envisions a future where it continues to be a leading institution in providing creative and innovative engineering education to its students. The college aims to achieve this vision by ensuring that it has a highly qualified faculty and an intact infrastructure that supports the teaching and learning process.

To equip its students with competent and cutting-edge technologies, the college plans to invest in state-of-the-art equipment and facilities that will enable students to gain practical experience and stay abreast of the latest developments in their field of study. The institution also plans to collaborate with industry partners and research institutions to provide students with exposure to emerging technologies and research opportunities.

In line with its vision to mould students to meet the changing challenges with a global outlook, Universal Engineering College plans to provide opportunities for students to engage in international exchange programmes and internships. The college also intends to incorporate a multidisciplinary approach to its curriculum, enabling students to develop a broader perspective and a deeper understanding of the interconnectedness of different fields of study.

Moreover, Universal Engineering College recognizes the importance of inculcating moral and ethical values among its students. To achieve this, the institution plans to promote a culture of ethical behavior and social awareness, ensuring that graduates approach their work with integrity, honesty, and a sense of social responsibility. The college will also provide opportunities for students to engage in community service and other social activities that will help them understand the needs of society and contribute positively to their communities.

#### 3.3 Strategic Statement

All efforts shall be focussed on student enrolment growth, faculty professional quality, student achievement, community improvement and development and sustainability of a business model directed at achieving self-financing stature in the shortest possible time frame via expansion of revenue streams and promoting a culture of cost consciousness throughout the college.

#### 4.0 PRESENT SWOT/SWOC ANALYSIS (2023)

#### 4.1 Strengths

- It is a self-financing private college having substantial functional autonomy with AICTE approval and ISO Certification
- Committed management, qualified and experienced faculty and dynamic staff to ensure the quality in all aspects
- UEC provides excellent infrastructure and ICT facilities including classrooms, library, transportation system and Wi-Fi etc.
- ✤ Maintains a good student-faculty ratio and essential staff retention ratio
- ◆ Has a very active and vibrant internal training team & placement cell.
- ◆ Implements value added programmes, such as NSS, ENCON club and IEDC.
- CCTV monitoring system for safe and secure campus.
- Faculty members are encouraged to organize and participate in workshops, seminars, FDP and STTPs for quality improvement
- Scholarship schemes are provided to meritorious/economically weak students.
- Effective committees/cells for student grievance redressal.
- Physical Education Department creating a constructive physical learning environment
- Innovative practices like SPEAC, REVAMP is implemented for student performance enhancement and to develop social responsibility.
- Senior academicians are serving as members of the Academic Council.
- Institution has tied up with nearby hospitals for medical emergencies.
- Induction/ orientation/UHV programmes are conducted.
- Institution promotes experiential learning.
- ✤ ICT enabled teaching-learning process is practised.
- MoUs with various national/international organizations.
- Student activities , such as fests are conducted and students are encouraged to participate in various competitions and tournaments

# 4.2 Weaknesses

- Very limited Industry- academy interaction for projects, consultancy works and extension activities
- Lack of funded projects and patents.
- o Limited subscription to Quality journals and publications

- Limited Interdisciplinary and collaborative Research
- o Alumni Association not functional
- Lack of student/faculty exchange programmes.
- Insufficient Smart classrooms and ICT enabled learning
- o Inadequate institutional branding
- Need to improve basic amenities such as Gym, canteen, auditorium, and waste management

# 4.3 **Opportunities**

- Located in a rural area, near the coastal belt of Kerala, there is a great scope to provide quality education to the rural students
- Availability of land for expansion of academic programmes and building new infrastructure for teaching, training and other facilities incubation centres etc.
- Improving access through road connectivity to highway
- NRI management provides scope for placements in MNCs
- Enhancing green initiatives for sustainable development of society.
- Potential to create awareness among youth for competitive examinations such as UPSC, GATE, CAT, GMAT, TOFEL, GRE.
- Leverage Alumni for collaboration, network building and funding.
- Increase regional recognition through socially relevant regional projects
- Develop entrepreneurial skills through internships, hands on training and practical experience
- Possibility of forging linkages with international organizations and industries.
- More candidates showing interest in opting for emerging fields in engineering, there by scope to offer new courses in demand driven areas.
- More platforms are opened by government/universities to promote research activities, which offers more convenient places for research.
- Environmental challenges need more engineering based studies, which seems to be an opportunity for the budding engineers.

# 4.4 Challenges

- Maintaining good rank among engineering colleges and to scale greater heights.
- Attract and retain expert faculty at all levels.
- Media and peer-group influence negatively affecting the academic orientation of students.
- Changing admission scenario in the field of Engineering and technology

- Updating in teaching-learning process with rapid change in technology
- Non-availability of visiting and adjunct faculty from industry
- Remoteness of the college from the major cities and facilities such as airport, railway station.

#### 5. STRATEGIC APPROACH AND GOALS

#### **5.1 Strategic Approach adopted:**

- UEC would need to adopt quick and short term (2 years) tactical plans to achieve its immediate goals whilst long term strategic goals are being incubated.
- It is recognized that whilst the strategic plan emphasizes on analyzing and mapping the longer-term objectives of UEC, a speedy tactical plan should be established to address immediate concerns and achieve current goals (i.e. better income cost ratio eventually leading to breakeven).
- In formulating this approach, it is evident that the short-term tactical plan can be spelt with facts and details, as they are based on known circumstances that exist within the ecosystem; whilst the long-term strategic plan can be formulated based on predictions that are usually more difficult to gather and there is heavy reliance on assumptions and future conditions of the ecosystem.
- Nevertheless, the tactical and strategic approaches complement each other and form a continuum as the tactical planning focuses on what to do in the short term to help the College achieve the long term objectives determined by strategic planning.
- Adopting a Zero-based budgeting (ZBB) which is a budgeting approach that involves developing a new budget from scratch every time (i.e., starting from "zero"), versus starting with the previous period's budget and adjusting it as needed.

# 5.2 SHORT-TERM AND LONG-TERM GOALS AND ACTIONS

The detailed table provides the short-term and long-term actions based on the identified Strategic Goals. It may be noted that some targets are universally critical, ongoing and non-negotiable- such as 100% admissions in all streams, improving examination results, getting 100% student placement in reputed companies.

However, it may be pragmatic to stipulate **some immediate actions** that can be initiated in the **coming academic year 2023-24**.

These may spill -over and run into the short-term actions that are expected to be done by 2025.

1. NBA accreditation

- 2. NAAC re-accreditation
- 3. Acquire NIRF ranking
- 4. More focused promotional activities to substantially increased student enrolment
- 5. Faculty capacity building workshop on a continuous pattern; qualification enhancement by faculty
- 6. Student mentorship activities to be improved
- 7. Rework on departmental allocation of classrooms to provide/optimize space for new add-on value based courses
- 8. Obtain at least one industrial consultancy, GOI or State govt. funded project
- 9. Develop preparedness to compete for international funding projects
- 10. Enlist subscription for a couple of good journals
- 11.Conduct educational fair for institutional marketing and branding
- 12.Construct a 30-seater guest house building of good standards
- 13.Appoint a development cum Liaison officer for collaboration, projects etc. and obtain CSR funds

SL.NO	STRATEGIC GOALS	SHORT TERM ACTIONS	LONG TERM ACTION AREAS
•			
1	To become one among the best ranked Engineering colleges in Kerala/India with high quality Teaching Learning and Research	2024-26 with budget estimates (These actions have to be carefully and realistically identified by UEC considering the context and estimated cost involved)	2026-2030 (These action areas are to be logically linked with to the short term actions and have to be carefully and realistically identified by UEC considering the context and
	KPI-1: Improved ranking of UEC with regard to teaching, learning and	<ul> <li>Offer new programmes like diploma, PG in all the subjects.</li> </ul>	projected cost involved)
	research as indicated by a state/national ranking list annually leading to becoming one among the best 100 colleges by 2030	• Undertake courses (diploma/certificate) on different engineering tools like CADD, MATLAB, MEP.	greater flexibility in curriculum design and development to suit global as well as local needs
	<ul> <li>Strategic actions to enhance the academic excellence</li> <li>More incentives and rewards to faculty and staff to improve their evalifientions and their</li> </ul>	• Offer more multidisciplinary cross- cutting Courses like, Value Education, Human Rights, Web Designing, Knowledge of Self, Vedic Mathematics, etc to encourage	2. As recommended in NEP, enter into academic collaborative arrangements with other higher education institutions to offer programmes in other non- engineering disciplines
	education programmes to improve their quality	<ul> <li>multidisciplinary and holistic education.</li> <li>enhance the quality of courses currently offered by making them more relevant</li> </ul>	3. Starting new engineering streams such as architecture, and other related advance, innovative relevant and career-oriented courses with focus on quality and
	• Offer more PG and research	skill focused and responsive to the	excellence

SL.NO	STRATEGIC GOALS	SHORT TERM ACTIONS	LONG TERM ACTION AREAS
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	<ul> <li>programmes</li> <li>Develop a policy of sanctioning seed money to promote research culture among faculty and students</li> <li>Promote interactive teaching- learning process</li> <li>Enhance Industry-academia interaction</li> <li>Enrichment of Library with</li> </ul>	<ul> <li>demands of the employment industry and to introduce improved employability of the students.</li> <li>promote interactive teaching-learning process</li> <li>Filling vacant posts, creation of new posts and recruitment plan, optimal FSR,</li> <li>Basic infrastructure and facilities,</li> <li>Internship and apprenticeship,</li> </ul>	<ol> <li>Setting up a Centre of Interdisciplinary and Multidisciplinary Studies with potential for interdisciplinary, advanced learning catering to the needs of the students for discourse and discussion</li> <li>Reinforcing and modernize the library with latest trends of library upgradation and creating more space for display areas and multimedia-based information</li> <li>Adopt curricular changes aligned to National Higher Education Qualifications Framework (NHEQF), onboarding</li> </ol>
	<ul> <li>books of latest editions and journals is required</li> <li>Improve the ICT facilities</li> <li>Modernization of laboratories is needed in pace with technology developments and also in line with industry needs</li> </ul>	<ul> <li>entrepreneurial facilities, enhancing employability</li> <li>Join library networks National Digital Library, INFLINET, INDEST</li> <li>Encourage students and faculty to join subject- based networks in different disciplines</li> </ul>	<ul> <li>Academic Bank of Credit(ABC), multiple entry and exit etc.</li> <li>7. To work for autonomous status enabling greater flexibility in curriculum design and development to suit global as well as local needs</li> <li>8. As recommended in NEP, enter into academic collaborative arrangements with other higher education institutions to offer programmes in other non-</li> </ul>

SL.NO	STRATEGIC GOALS	SHORT TERM ACTIONS	LONG TERM ACTION AREAS
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			engineering disciplines
			9. Starting new engineering streams such as architecture, and other related advance, innovative relevant and career-oriented courses with focus on quality and excellence
			<ul> <li>10. Setting up a Centre of Interdisciplinary and Multidisciplinary Studies with potential for interdisciplinary, advanced learning catering to the needs of the students for discourse and discussion</li> <li>11. Reinforcing and modernize the library with latest trends of library upgradation and creating more space for display areas and multimedia based information</li> </ul>
			<ul> <li>12. Adopt curricular changes aligned to National Higher Education Qualifications Framework (NHEQF),</li> <li>13. Onboarding Academic Bank of Credit(ABC), multiple entry and exit etc.</li> </ul>

SL.NO	STRATEGIC GOALS	SHORT TERM ACTIONS	LONG TERM ACTION AREAS
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2	Sustain and Enhance Excellence in Faculty Scholarship, Research outputs and quality, and Social Impact KPI-2: Improved capacity and output among faculty as indicated by increased number of highly qualified/trained new faculty inducted, increased number upgrading skills and qualifications and increased number receiving external recognition, award of research grants, research projects, external consultancies, etc., annually. Strategic actions to enhance research excellence • foster a culture of collaboration and innovation, where interdisciplinary research and partnerships with external	<ul> <li>Invest in faculty members who are both outstanding researchers and committed educators, providing them with the necessary resources and support to conduct cutting-edge research</li> <li>Get Faculty to explore getting research grants for GOI bodies, CSIR labs and other sources of government funding</li> <li>Research grants through international bodies like Spencer, GLG must be explored for grants</li> </ul>	<ol> <li>Develop an action Plan for socio-economic research projects</li> <li>Set up Incubation centres</li> <li>Participate in Hackathons</li> </ol>

SL.NO	STRATEGIC GOALS	SHORT TERM ACTIONS	LONG TERM ACTION AREAS
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	<ul> <li>stakeholders are encouraged</li> <li>Must be responsive to the changing needs of society, leveraging research to address pressing social and environmental challenges</li> </ul>		
3	Promote global/international linkages and networking of UEC programmes and courses KPI-3: Increased number of linkages with international institutions, universities and agencies as indicated by number of MOUs signed for joint offer of courses, twinning arrangements and collaborative research projects initially (by a year or two) within South Asia and Middle East and outside in other regions by 2030	<ul> <li>Explore joint degrees, dual degrees and twinning programmes with Universities in the Middle East region.</li> <li>Start collaborative research projects with foreign Universities</li> </ul>	<ol> <li>Over time expand collaborations to other nations in South Asia, Europe, Africa and US</li> <li>Set up an International Students Office to attract foreign students</li> </ol>

SL.NO	STRATEGIC GOALS		SHORT TERM ACTIONS		LONG TERM ACTION AREAS
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4	Ensure and sustain student diversity and national footprint by enrolling students from across the country KPI-4: Increased enrolment of students from all over the country outside the region and Kerala by 5-10% annually to at least 30% by 2030.	•	<ul> <li>Participate in educational exhibitions to attract students for other States particularly Bihar, UP, Rajasthan, Odisha and the North East</li> <li>Set up grievance redressal unit, Scholarship unit, Equal opportunity Office, anti-discrimination of social groups, gender and disability</li> <li>Provide Career and psychological counselling,</li> <li>Conduct mentoring and guidance as a regular activity</li> <li>Offer freeships and scholarships and financial aid to students from underrepresented backgrounds(<i>through individual alumni sponsorship or CSR funds</i>), as well as providing cultural and language support to help them adjust to campus life.</li> <li>Conduct bridge courses for students of disadvantaged educational backgrounds.</li> </ul>	1. 2.	Increase the Gross Enrolment Ratio (GER) of students coming from weaker sections of society. Outreaching the aspirant students of the less-privileged group of society and encouraging their participation. Capacity building of students, those belonging to socio-economically backward sections of society with stress on girl students. Improving infrastructure to provide support for learning and easy access to persons with special needs.

SL.NO	STRATEGIC GOALS	SHORT TERM ACTIONS	LONG TERM ACTION AREAS
•		<ul> <li>introduce new courses to make education accessible to more women students from rural areas and less privileged sections of the society.</li> <li>Improve infrastructure to provide support for learning and easy access to persons with special needs.</li> </ul>	
5	To create and maintain a sustainable, high quality infrastructure, and laboratory facilities for effective learning. KPI-5: Increased building space and equipment as required by the curricular needs of the engineering specialisations offered presently and planned to offer during next 5 years based on KTU and UGC/AICTE guidelines	<ul> <li>Development of a robust and reliable infrastructure that meets the needs of faculty and students</li> <li>Modernise and renovate of existing Physical infrastructure; Classrooms; Laboratories &amp; Libraries;</li> <li>Assess Furniture and equipment requirements for the renovation;</li> <li>Basic amenities of electricity, water &amp; sanitation;</li> <li>Installation of green energy and renewable resources, which are energy</li> </ul>	<ol> <li>Increase accessibility to the nearby cities by constructing approach</li> <li>Enhance traveling facilities</li> <li>Invest in modern, energy-efficient buildings and facilities that are equipped with state-of-the-art technologies and equipment.</li> <li>Create a supportive and safe learning environment that promotes collaboration and creativity, with accessible and well- maintained classrooms, labs, and study spaces.</li> <li>Implement sustainable practices that reduce</li> </ol>

SL.NO	STRATEGIC GOALS	SHORT TERM ACTIONS	LONG TERM ACTION AREAS
		efficient , such as solar systems etc.	<ul> <li>its environmental impact and promote long- term sustainability through initiatives such as energy conservation, waste reduction, and the use of renewable energy sources.</li> <li>6. Create a civil works plan for expansion of capital works for new buildings , classrooms, hostels, Guest Houses; shopping and banking;</li> </ul>
6	Develop cutting edge ICT technologies on par with international standards and put in place an Internal Technology Policy KPI-6: An ITP document in place in the next one year based on authentic national/international policy formulations on ICT technologies required in a technical education institution at tertiary level and create the infrastructure by 2030	<ul> <li>Identity digital gaps and achieve digitalisation and its massification and penetration across the campus, and deeper coverage</li> <li>ICT integration, and adoption of cutting- edge technologies for teaching, experimentation, and digital learning</li> <li>MIS system and Data management,</li> <li>Reduce digital divide at individual and institutional level</li> </ul>	<ol> <li>Evolve a Technology Policy for digital infrastructure, online digital learning, development of online courses, cutting edge research</li> <li>Set up a hi-tech laboratory for cutting edge research in science and technology</li> <li>Leverage funds from National Research Foundation for major research in digital technologies</li> </ol>

SL.NO	STRATEGIC GOALS	SHORT TERM ACTIONS	LONG TERM ACTION AREAS
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		<ul> <li>Establish Technology Driven smart classrooms, for two-way live communication</li> <li>Upgrade all the class-rooms with ICT facilities</li> <li>Training of technical support staff for new technologies</li> <li>Set-up advanced laboratories for education in disruptive technologies of AI, ML, Robotics, VR, AR, and big data analytics</li> <li>Identify sponsors to provide needy students with digital access devices</li> <li>Expand the CCTV surveillance in the campus</li> <li>Conduct workshops in collaboration with industry for adoption of modern</li> </ul>	
		ICT/disruptive technologies	
7	Promote faculty enrichment through continuous capacity building, digital empowerment, and leadership development	<ul> <li>Facilitate career progression through a clear transparent system of incentives and rewards,</li> <li>Strengthen the IQAC cells and similar</li> </ul>	<ol> <li>Put in place a well-devised Faculty Development Plan</li> <li>Develop coordination mechanisms for NEP aligned multidisciplinary UG, PG education</li> </ol>

SL.NO	STRATEGIC GOALS	SHORT TERM ACTIONS	LONG TERM ACTION AREAS
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	KPI-7: Increased number of faculty acquiring individual-need based skills and competencies continually over the next 2 years leading to a	<ul> <li>cells</li> <li>Encourage faculty to join subject- based networks in different disciplines</li> </ul>	involves academic clustering , collaboration and partnerships
	sustainable and viable Faculty Development Plan by 2030	• Encourage and give opportunities for research,	
		• encourage participation in regional, national & international seminars, workshops, conferences, capacity - building and CPD so as to develop innovative pedagogical skills, new assessment methodologies, and digital teaching learning.	
		• Develop their abilities counselling, mentoring and guidance	
		Leadership Development	
		• Representation in State, National and International level faculty association	
		• Representation in internal governing bodies	

SL.NO	STRATEGIC GOALS		SHORT TERM ACTIONS	LONG TERM ACTION AREAS		
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8	Achieve holistic development of students and improve their examination results through	•	Develop a clear-cut plan for improving student's achievement, academic performance and examination results	1.	Achieve excellence through online examination by providing quality technology assistance.	
	orientation, development of cultural activities, sports and wellness KPI-8: Achieve 5-10 % increase	•	Adopt existing matrices of APJAKTU /AICTE of course outcomes, programme outcomes to improve learning outcomes of students	2.	Students joining in 2024 to achieve 100% online examination pattern through smart technology for Monthly series Test, Internal assessment test, Assignments, Foundation	
	from present baseline in the student achievement in all specialisations and courses annually as indicated by examination results and participation and rewards obtained in co-curricular activities	•	Prepare and train students systematically for online examinations by establishing an in-house online examination system through smart technology for Monthly series Test, Internal assessment test, Assignments, Foundation Course.	3.	Course. Administer online examinations for Students joining in 2024 up to 4th year exams in 2028 and other current students in the 2 <sup>nd</sup> ,3 <sup>rd</sup> &4 <sup>th</sup> year will also be trained to give online examinations.	
		•	Enhance employability skills for improving career prospects of students by equipping them with sound knowledge of their core subjects and training in communication, soft skills & interpersonal skills Setting-up a Career Advancement Centre	4. 5.	Set-up a Student Wellness Centre catering to the diverse needs of physical, mental health of students and create optimal opportunities for participation in cultural, sports and other recreational & self-development activities. Set up an Eco-Club for environment related activities in climate mitigation greening	
		-	to assist and track all students to pursue		activities in climate integation, greening	

SL.NO	STRATEGIC GOALS	SHORT TERM ACTIONS	LONG TERM ACTION AREAS		
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•		<ul> <li>their career goals</li> <li>Organise Placement camps and education exhibitions like existing TechFest and more such events</li> <li>Starting skill development programmes to enhance employability options</li> <li>Provide more industrial visits to students</li> <li>Develop entrepreneurial skills in students and create start ups</li> </ul>	<ul> <li>activities, waste management etc.</li> <li>6. Create, cultivate and establish a positive and health promoting environment on the campus to raise the fitness standards of all the students for their holistic development.</li> </ul>		
		<ul> <li>offer live projects to enhance the practical knowledge of students</li> <li>Encourage students to register for online courses to widen their knowledge in domain as well as interdisciplinary areas with credits weightage incentives.</li> <li>To raise the standards of physical fitness and strength.</li> <li>To provide Guidance &amp; Counselling to students for their immediate</li> </ul>			

SL.NO	STRATEGIC GOALS	SHORT TERM ACTIONS	LONG TERM ACTION AREAS
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		<ul> <li>problems</li> <li>To develop a Recreation Centre.</li> <li>Promote participation in Sports competitions at all levels</li> <li>To create more space for parking and cycle stand for students</li> </ul>	
9	Develop and create robust, transparent and professional internal governance systems KPI-9: All internal governing bodies are constituted/reconstituted and made operational and systematic and external accreditation obtained as per requirement of AICTE and KTU in the next two years	<ul> <li>Create empowered internal governing bodies:</li> <li>for academic, administrative, coordination, technical and financial processes, approvals and statutory clearances</li> <li>Quality Assurance,</li> <li>NAAC and NBA Accreditation</li> <li>NIRF ranking</li> <li>Fee Committee</li> <li>Research Committee,</li> <li>Committees for equity &amp; inclusion,</li> </ul>	

SL.NO	STRATEGIC GOALS	SHORT TERM ACTIONS	LONG TERM ACTION AREAS		
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		gender, grievance redressal			
10	<ul> <li>Evolve as a self-sustaining institution with inherent capacities for ongoing activities and future growth</li> <li>KPI-10: Achieve 5% deficit reduction annually leading to achieving breakeven by 2028 and surplus by 2030 enabling UEC to create a corpus fund</li> <li>Strategies <ul> <li>Financial projections for five - years with estimations for annual budgets,</li> <li>Internal revenue generation (IRG), Possible Sources of IRG :</li> </ul> </li> </ul>	<ul> <li>Develop industry and academia partnerships professionally which includes not only routine matters like MoUs but also create suitable business models from fruitful interaction.</li> <li>Consultancy engagements should be encouraged to generate resources</li> <li>Generate scholarship donations by corporates and individuals.</li> <li>Philanthropic donations</li> <li>Donors to fund Chairs, niche Programmes.</li> <li>Sponsorship of faculty/students for attending conferences on a sustainable basis.</li> </ul>	<ol> <li>Establish a separate office exclusively for Endowment / Alumni activity.</li> <li>Organize events to engage with alumni within India and around the world with a dedicated office headed by a Dean.</li> <li>A strong Alumni engagement and support would facilitate donations from Alumni in creating new infrastructure.</li> <li>Extend the facility of online examination to other examination of government/public- sector/private agencies on demand commensurate to the availability of physical/human resource for additional revenue generation.</li> </ol>		

SL.NO	STRATEGIC GOALS	SHORT TERM ACTIONS	LONG TERM ACTION AREAS
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	<ul> <li>Industry / Corporates through Research</li> <li>Capital Grants</li> <li>Donors</li> <li>Fees</li> <li>CSR</li> <li>Alumni and Endowment</li> <li>Other sources</li> <li>Develop self- sustainable models with avenues for resource mobilisation,</li> <li>financial models for PPP or any other, corporate/industry sector investments for research-incubation centres, innovation hubs, start-up grants, design/fab labs, skill labs etc.,</li> </ul>		

# 6. INSTITUTIONAL BUDGETING

# 6.1 Financial And Budgetary Sustainability

	Actual Amount in Cr.	Estimated Amount in Cr.	Financial Projections in Cr.				
Academic year	2022-23	2023-24	2024-25	2025-26	2026-27	2027-28	2028-29
Net Receipts	5.67	6.4	7.2	7.9	8.6	9.2	9.8
Expenditu re before Depreciati on	8.26	8.19	7.95	8.15	8.35	8.55	8.75
Surplus or deficit	-2.59	-1.73	-0.75	-0.25	0.25	0.65	1.05



Fig1: Actual and estimated amount in crores



Fig.2: Financial projection in crores

The provided data shows the actual and estimated financial figures in crores for the years 2022-23 to 2028-29. Here is a summary and interpretation of the data:

1. Net Receipts:

- The net receipts represent the amount of revenue or income received by the entity.
- The actual net receipts for 2022-23 were Rs.5.67 crores.
- The estimated net receipts gradually increase over the projection period, reaching Rs.9.8 crores in 2028-29.
- 2. Expenditure before Depreciation:
  - This figure represents the total expenses incurred by the entity before accounting for depreciation.
  - The actual expenditure before depreciation was higher than the net receipts in each year, indicating a deficit.
  - The expenditure is expected to decline slightly in the next few years before stabilizing around Rs.8.55 crores to Rs.8.75 crores in the later years.
- 3. Surplus or Deficit:
  - This figure indicates the difference between net receipts and expenditure before depreciation, representing the surplus or deficit.

- In 2022-23, there was a deficit of Rs.2.59 crores, meaning expenses exceeded the revenue.
- The deficit reduces over the projected years and turns into a surplus by 2026-27.
- The surplus is estimated to gradually increase, reaching Rs.1.05 crores in 2028-29.

Overall, the data suggests that the entity experienced a deficit initially but is projected to improve its financial position over time, with increasing net receipts and a transition from deficit to surplus. However, it is important to note that these figures are based on the provided data and financial projections, and actual results may vary.

#### 7. INTEGRATED IMPLEMENTATION, MONITORING AND REVIEW

Since the IDP is an Action Plan for 5-7 years it needs to be constantly followed up and reviewed for ensuring proper implementation. For this purpose, some internal monitoring mechanisms must be in place. Some of the mechanisms are:

- 1. Before finalising the IDP, it is desirable to seek public/stakeholder feedback. It democratises the strategic planning exercise and lends validation to this major exercise.
- 2. Regular review meetings must be taken by the Steering Committee or Task Force or Coordination committee assigned the IDP formulation & monitoring
- 3. Create a Project Monitoring Unit (PMU) to ensure integrated and coordination actions.
- 4. Develop a dashboard for online monitoring of the IDP, with a user-friendly interface for the responsibility/anchoring person /unit/ agencies must be developed. This would enable transparency and good governance and minimise risks of lack of institutional memory and also enable sustained review towards effective implementation.
- 5. Evaluation studies must feed into the implementation cycle to make midcourse corrections in the IDP.

#### **8. CONCLUSION**

The IDP is a dynamic, evolving live document that will help all HEIs transform themselves to develop a competitive advantage in the challenging global environment and meet the requirements of a competitive knowledge economy.

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