



Academic
Staff College

A Faculty Induction programme conducted by the Academic staff College of KL University from 22nd December to 25th November 2021, ASc planned to conduct similar induction programmes with inputs on Outcome Based Education periodically for the newly joined faculty members. The training programme was conducted with the following schedule..

A Report on the four day faculty development training programme conducted by the Academic Staff College of KL University

A Four day FDP on **Outcome Based Education** for Heads of the Departments and Faculty members involved in curriculum design, evaluation and assessment- Reg. Ref: Letter dated 16.11.2021 from Dr.A. Srinath, Principal, Academic Staff College and Dean (Skill Development).

This is to inform that Academic Staff College and IQAC Divisions are jointly organizing **Four Days FDP on Outcome Based Education for Heads of the Departments and Faculty members involved in curriculum design, evaluation and assessment, from 22nd to 25th November 2021 (Monday to Thursday).**

This program is mandate as per NBA, ABET Requirements, and all the Heads of the Departments along with their faculty who are all involved in curriculum design, evaluation and assessment must attend this program without fail.

Schedule:

Sl.No.	Date	Time	Session	Resource Person
1.	22.11.2021	2:00 PM to 2:30 PM	Inauguration and Inaugural address	Vice Chancellor
		2:30 PM to 4:45 PM	Effective Teaching – Learning Pedagogies	Prof.Y.V.S.S.V. Prasada Rao, Registrar
2.	23.11.2021	2:00 PM to 3:30 PM	Deriving the Curriculum frame work from: Vision, Mission, PEOs	Dr A Srinath, Professor ME and Dean Skill Development
		3: 45 PM to 4:45 PM	Hands on Session	Associate Dean Academics team.
3.	24.11.2021	2:00 PM to 3:30 PM	Developing Program Articulation Matrix by effective design and	Dr K. Ramakrishna, Professor ME and

			development of POs, PSOs and best BTLs for delivery and evaluation	Dean Quality
		3:45 PM to 4:45 PM	Hands on Session	Associate Dean Academics team.
4.	25.11.2021	2:00 PM TO 3:30 PM	Effective Assessment of COs, POs, PEOs and Documentation	Dr. Ch. Hanumantha Rao, Professor & HoD-CE
		3:45 PM to 4:30 PM	Hands on Session	Associate Dean Academics team.
		4.30 PM onwards	Valedictory Session	Presided over by Prof. N. Venkatram, Professor ECM

PART A: THE ROAD MAP FOR OUTCOME BASED EDUCATION

The following points need to be implemented so as to ensure the achievement of outcome based education:

- It is essential to provide the flexibility and freedom to the Course Coordinators, in designing the best suited teaching pattern, evaluation model specific to their respective course. This is perhaps the most crucial parameter for effective implementation of the Outcome Based Education system.
- To the level extent possible, Simulations, Design of Prototype models, Virtual Experimentations must be supplemented in all Laboratories.
- Student teaching other student peers: This approach must be developed in as many courses as possible, where faculty changes their role from a Teacher to a FACILITATOR.

Every Department must gear up with the following additional facilities, manpower and amenities:

- Discussion rooms, with a capacity of 20 / 30 per room: 8 to 10 such rooms must be provided per department.
- Specialization wise, planning of faculty is needed for each Program, and it is essential to ensure that there are at least TWO faculty of similar specializations, in each Class where Seminars / Group Discussions etc type of active learning/ evaluation procedures are adopted. Both qualifications and the numbers commensurate to the students (ensuring at least two similar specialization qualification faculty are allocated for each course) must be planned and implemented.
- Staff-Strength and qualifications both, needs to be strengthened, commensurate to the students, courses and laboratories.

- Course Blogs must be created and brought into practice, for effective faculty-student interactions, which can be perused by all students of the course.
- Simulation tools, Design and analysis solvers: Must be loaded on Super computers and made accessible to all students through wi-fi.
- Communication Intensive courses in writing must be developed specific to each department domain.
- Dedicated Team of 5 to 8 faculty, having immense knowledge and exposure to various Professional domain of the program must be made available for providing professional exposure to students right from their II year, this team must be complementing the Training & Placements division and must give all needful inputs to the placements division on Nature and type of companies needed for each specific batch of students depending on the level of skills existing in that particular batch, which they will have to undertake w.e.f. Even semester of III year.
- Every faculty must be made to spend two weeks per annum at relevant industries, for gaining industrial exposure and bringing back open ended, Industrial problems to be used in his/ her course.
- Professional Societies like IEEE, ASME, ASCE etc must be very actively developed in each department and students must be engaged in each of the relevant societies fully.
- University must subscribe to unlimited user license of TURNITIN- Anti Plagiarism Software, and the same must be made available through the central server. This enables in making checks on various assignment reports, project reports, case study reports and other such reports submitted by student (s) as part of their evaluation components.

Suggested learning tools, in most of the courses under outcome based education are:

- Self Learning initiatives
- Group Based Learning Modules
 - i. Seminar Based Learning
 - ii. Group Discussion Based Learning
 - iii. Problem Based Learning
 - iv. Project Based Learning
- Quizzes and Puzzles approach
- Field Visits
- Survey Reports
- Design of models / prototypes

Dr K. Ramakrishna, Professor ME and Dean Quality addressed the participants and invited the participants to Developing Program Articulation Matrix by effective design and development of POs, PSOs and best BTLs for delivery and evaluation

Suggested Evaluation Tools in Outcome based Courses are:

- a) Open- Book Examinations (preferably for terminal courses, of each fundamental domain course stream)
- b) Group Based- Library Oriented Assignments
- c) Open-Ended Problems
- d) Teasers from real-world, to ignite problem framing and solving skills
- e) Project reports
- f) Simulation models
- g) Prototype-Designs
- h) Working Models
- i) Technical reports

Every program, must have a Finishing School – which caters to the enhancement of employability prospects, higher education pursuits of the students of the program, as well as takes special care and puts in efforts to provide remedial measures for those Program Outcomes (POs) which were marginally attained / unable to be attained by the students from various courses taken in their program. Finishing Schools must necessarily consist of the following divisions:

- a) Training & Placement Division,
- b) Industry Internship Division,
- c) Communication Skills Division,
- d) Humanities & Social Sciences Division,
- e) NCC/ NSS,
- f) Student Clubs

Course Coordinators must device the following learning and evaluation procedures:

- a) Innovative learning patterns specific to their courses.
 - b) **The Course Coordinators must adopt to various types of learning procedures that engage students into active, Self learning process** like Group Discussions, Seminars, Presentations, Debates, Project Based learning, Problem Based Learning (which are the heart of any Adult Education system- Andragogy).
 - c) All these must be used to evaluate the students levels of performance of their course, rather than traditional question paper based evaluation, which of-course will be one of the evaluation part, but not the ONLY evaluation part. (Refer PO vs POIs vs Assessment table in the earlier portion of this report for gaining idea on assessment tools which are suitable for this purpose)
- Faculty must be abreast of the process and thus regular trainings, orientations and learning pattern awareness sessions are needed for the faculty.
 - Students must be given full-length exposure to the system, right through the entry until exit, on the pros and cons of this system including essentially about their changed roles from passive – learners to active learners and methods to undertake from their end so as to cope up with this change.

PART B: IMPLEMENTATION PROCESS FOR OUTCOME BASED EDUCATION

A step by step procedure on what needs to be done sequentially so as to ensure the effective implementation of Outcome Based Education for the Under Graduate Programs being offered by various Engineering departments of K L University is proposed below. However the first few steps are suggested to be executed w.e.f. current III Year batch of students, and the later part of this report which gives a clear idea on what needs to be undertaken on priority to ensure that the on-going undergraduate programs are brought effectively under the umbrella of outcome based education.

Outcome Based Education must be planned by framing: Institution Vision & Mission, from which the Mission of each department must be brought out. Mission of each department in turn will converge into Program Educational Objectives (PEOs) for each Program being offered by the department, which in turn enable in generating Program Outcomes (POs) for each program offered by the department.

Sample of Mission, Program Educational Objectives and Program Outcomes (Mechanical Engineering as an example)

Mission: *Training the Leaders, Innovators and outstanding Career Professionals of tomorrow; and conducting fundamental research to address major technological roadblocks*

Program Educational Objectives: *Within a few years of graduation, a majority of our graduates will have completed or be progressing through top graduate programs; advancing in leadership tracks in industry, non-profit organizations, or the public sector; or pursuing entrepreneurial ventures. In these roles they will:*

- 1. Apply a deep working knowledge of technical fundamentals in areas related to mechanical, electromechanical, and thermal systems to address needs of the customer and society;*
- 2. Develop innovative technologies and find solutions to engineering problems.*
- 3. Communicate effectively as members of multidisciplinary teams;*
- 4. Be sensitive to professional and societal contexts and committed to ethical action;*
- 5. Lead in the conception, design, and implementation of new products, processes, services, and systems.*

Program Outcomes:

- 1. Demonstrated knowledge and ability in applications of fundamental principles in mechanical engineering.*
- 2. Demonstrated ability in application of mathematics and science to an engineering problem.*
- 3. Demonstrated ability in conducting, analyzing, and interpretation of experiments.*
- 4. Demonstrated ability in identifying, formulating, and solving engineering problems.*
- 5. Demonstrated ability in functioning as part of a team.*
- 6. Demonstrated ability in effective written communication of reports.*
- 7. Demonstrated ability in effective communication through public speaking.*
- 8. Demonstrated ability in communicating through visual media.*
- 9. Students will be aware of the impact of engineering solutions in a global and societal context.*

10. *Demonstrated knowledge and ability in specifying standard manufacturing and fabrication techniques.*
11. *Demonstrated knowledge and ability in implementing computer and simulation tools to mechanical engineering practice.*
12. *Students will recognize the need and will develop the ability to engage in life-long learning.*
13. *Students will have an understanding of ethical and professional responsibility.*

Program Outcomes (POs) are to be used in deciding the structure of the curriculum vis.a.vis. number and type of Science courses, Humanities courses, Social Science courses, Mathematics courses, core Engineering courses, elective courses, University / Institute electives, communication intensive courses – in Humanities and in technical writing, major project works, industry internships, sports and games, NCC/NSS etc.

Each Program Outcome (PO) must be divided into Program Outcome Indicators (POIs), and based on these POIs, the justification of nature and type of courses decided as in Step.2 must be correlated and moderated. (A sample of the Program Outcome and their Indicators, in regard to Mechanical Engineering are illustrated below, for better understanding):

Program Outcome	Intended Learning Outcome (Program Outcome Indicators)	Teaching & Learning Methods	Assessment Tools
Demonstrated knowledge and ability in applications of fundamental principles in mechanical engineering	a) Knowledge, b) Understanding, and c) Application of Fundamental Principles	Teaching Methods: Lecture, tutorials, project supervision Learning Methods: Seminars, Practicals, Guided Reading, Self-learning, Problem Based Learning, Cooperative Learning/ Collaborative Learning.	Comprehension Examinations, Practical Reports, Problem based exercises, written and verbal presentations, group discussions and Individual projects

Demonstrated ability in application of mathematics and science to an engineering problem	a) Application b) Analysis	Teaching Methods: Project supervision, Practical experimentation Learning Methods: Group assignments, undergraduate projects, industrial internships, seminars, research based problem solving	Undergraduate Project reports, verbal presentations, practical reports, industrial reports, assignment sheets, and Practical results like: Simulated models, prototypes, working models etc.
Demonstrated ability in conducting, analyzing, and interpretation of experiments	a) Analysis b) Synthesis c) Evaluation	Teaching Methods: Lecture, undergraduate project supervision, framing of open ended problems Learning Methods: Undergraduate project team work, group assignments, practicals, Problem Based learning, Collaborative/ Cooperative learning	Verbal Presentations, written assignments, undergraduate project reports, undergraduate project presentation seminars, practical reports, problem based learning project reports.
Demonstrated ability in identifying, formulating, and solving engineering problems	a) Problem Solving b) Critical thinking	Teaching Methods: Problem based learning assignments, Field visits, Industry internships Learning Methods: Problem defining and solving in groups, field visit presentations, industry internship reports and seminars on identified problems and solutions proposed thereof.	Undergraduate project reports, verbal presentations, assignment reports, industry internship reports, field visit reports, problem solving based assignment reports.
Demonstrated ability in functioning as part of a team	a) Team working b) Leadership skills	Teaching Methods: Practical group assignments, industry internships, seminars, group discussions, brain storming sessions, Quizzes, Sports and Games	Team participation event outcomes, sports and games prizes, inter university event prizes, Seminar presentations, group assignment reports, industry internship reports, college fest participation metrics.

		Learning methods: Group based problem solving, College Fests, Intra-University competitions, sports and games events etc.	
Demonstrated ability in effective written communication of reports	Written Communication skills	Teaching as well as Learning methods: Assignments and Project reports, Final Year Projects	Project reports, Assignment reports, practical reports.
Demonstrated ability in effective communication through public speaking	a) Oral Communication skills b) Leadership skills	Teaching as well as Learning methods: Seminars, Group Discussions, debates, elocutions	Seminar Presentations, Group Discussion performances, debate performances, elocution performances.
Demonstrated ability in communicating through visual media	Media Communication skills	Teaching as well as Learning Methods: Course Blogs, E-Learning interactions, usage of ICT tools, animation, simulation tools, virtual experimentation	Simulated models, e-learning based reports, email interactions with faculty as well as within group, seminar using ICT tools and animations.
Students will be aware of the impact of engineering solutions in a global and societal context	Social responsiveness	Teaching and Learning Methods: NCC/ NSS, Conferences, Workshops, Social awareness camps, adult education programs, computer literacy programs	Participation and interactions during conferences, workshops, reports on NCC, reports on NSS, effective participation in social awareness camps, adult education programs, computer literacy programs
Demonstrated knowledge and ability in specifying standard manufacturing and fabrication techniques, applying simulation tools to mechanical engineering practice (a cumulative PO Blending PO 10 and 11)	Standardization Simulation Prototyping Modeling	Teaching Methods: Simulation of experiments, design modeling Learning Methods: Simulation of practical results, specifying manufacturing process and materials, design modeling, prototyping	Prototype models, Manufacturing process reports, Materials selection reports, Design Procedures, Modeling Procedures, Simulation process and results.
Students will recognize the need and will develop the ability to engage in life-long learning	Life-long learning skills	Teaching Methods: Giving Research problems, Open ended problems	Case study reports, Capstone Design Seminars, Research Papers produced at Conferences / Journals

		Learning Methods: Framing Problems by self from available situations, case study, capstone design projects	
Students will have an understanding of ethical and professional responsibility	Ethics Responsiveness	NCC/ NSS Field Visits, Project work Industry Internships	NCC participation NSS contributions Internship reports

Each course will have to be first defined with the "Course Objective" which gives idea and direction on deciding the depth and breadth of the course and the contents of delivery in the course (Syllabus). Thus Course Outcomes (COs) must be framed for each course, these COs must not be more than 3 to 5 in number for each course.

Each CO must be divided into Course Outcome Indicators (COIs) which again have to be not more than 3 per each CO.

The COIs must be mapped with Program Outcome Indicators (POIs) and their corresponding POs, which enables the course delivery team to come to an understanding, idea on what aspects have to be explored in the course and to what depth, breadth levels, and in deciding the delivery mechanism / **Andragogy** (a word used in place of Pedagogy in case of Adult students being taught with) and also based on this mapping the course delivery team will be able to finalize the evaluation tools needed for the course based on this mapping.

However suggested learning tools, in most of the courses under outcome based education are:

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After going through the above steps, the evaluation and assessment for each Course and the Course Outcomes must be conducted as per following steps: (Course Entry & Exit Survey)

a) Course Expectations based on Course Outcome Proposed: To be collected from all students at the time of commencement of each course.- COURSE ENTRY

b) Course Delivery Feedback and attainment of course expectations must be collected from all students at the end of each course- COURSE EXIT

Semester wise Assessment of Outcomes (included as a summation of POs and COs of "n" number of courses offered in that semester) must be conducted as below: (Semester Entry and Exit Survey)

a) Semester expectations based on the Program and Course outcomes, being planned to be covered in that particular semester must be collected from each student in every semester- SEMESTER ENTRY

b) Semester expectations attainment must be assessed by taking summative reports from each student at the end of each semester- SEMESTER EXIT

Program wise assessment of POs must be conducted after giving widespread overview of the Program, its expectations in regard to the department and Institution both at the time of ENTRY into the program and at the time of EXIT from the Program.

PEOs (Program Educational Objectives) Must be assessed by means of survey from Students - after minimum of 3 years of their graduation from the program.

The results of the PEOs attainment based on Survey as indicated in Step.10 above must be correlated with Survey conducted on the PEOs attainment from Employers - Industry as well as Higher Education Institutions where our students are placed / pursued higher education during the 3 years period after their graduation.

Based on the end- results of above step, course delivery and evaluation process must be modified and updated regularly (semester wise)

Based on end- results of above step, semester procedure and operational process must be modified and stream lined (annually)

Based on end-results of above step, program curriculum, delivery mechanism and process of implementation must be modified, updated / up-kept / stream lined once in every 4 years in case of UG and once in every 2 years in case of PG, and once in every 5 years in case of Doctoral Programs.

Based on end-results of all of the above steps, the Program and its Credentials must be reviewed and modified / up-kept once in every 8 years for all UG programs and once in every 5 years for all PG programs, and once in every 9 years for doctoral programs.

There are various **departmental administrative re-organization needed**, which are put up below:

Every Department must have the following team, for supporting the Head and effectively implementing the aforesaid process of Outcome Based Education:

A) Head of the Department

B) Program Coordinator / Program Chair*: A Senior professor, having immense knowledge on outcome based education- for the level of program being executed, preferably other than the HoD, and the one who must not be utilized for any other administrative responsibility in the department.

C) Program Assessment Group (Headed by Program Coordinator / Chair and consisting of Year Coordinators and all the Course Coordinators)*

Year Coordinators, Course Coordinators must not be given any other administrative duty/ responsibility other than this.

D) Program Advisory Group (Headed by the HoD and consisting of 3 / 4 senior Professors of the program-department)*

**Students of various levels must be actively engaged in all of the committees enlisted above.*

Every program, must have a Finishing School – which caters to the enhancement of employability prospects, higher education pursuits of the students of the program, as well as takes special care and puts in efforts to provide remedial measures for those Program Outcomes (POs) which were marginally attained / unable to be attained by the students from various courses taken in their program. **Finishing Schools must necessarily consist of the following divisions:**

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c) All these must be used to evaluate the students levels of performance of their course, rather than traditional question paper based evaluation, which of-course will be one of the evaluation part, but not the ONLY evaluation part. (Refer PO vs POIs vs Assessment table in the earlier portion of this report for gaining idea on assessment tools which are suitable for this purpose)

However it is essential to provide the flexibility and freedom to the Course Coordinators, in designing the best suited teaching pattern, evaluation model specific to their respective course. This is perhaps the most crucial parameter for effective implementation of the Outcome Based Education system. This perhaps is very rarely provided in the existing scenario at this University, which is foreseen as a major roadblock in effectively implementing the Outcome based Education.

Problem Solving does not mean Solving, “n” number of problems on a topic of the course derived from various books, rather Problem solving means, conceptualizing a problem relevant to the course, from various societal and environmental , industrial issues. Then being able to define the problem perfectly and later providing feasible sequential procedure of solution (s) for the problem using concepts learnt from the course.

To the level extent possible, Simulations, Design of Prototype models, Virtual Experimentations must be supplemented in all Laboratories.

All Courses must consist of Open-Ended Assignments, which should be made to be solved by a group of students collectively.

Team work and Leader ship skills, Life-long learning, and Designing skills: are the most needed Program Outcomes, and majority of the Courses, Programs and their delivery, evaluation must ensure that these are brought out from each student with utmost efficiency. These must be tested and assessed during Seminars, Presentations, Sports & Games activities, University level / department level events, Cultural fests / technical fests etc.

Concluding suggestions:

A) Outcome based Education, is very easy to visualize, but quite tedious journey to execute, and most faculty start considering it as a burden, this must be strategically planned to be tackled, and faculty must be provided with as many orientations, trainings and pedagogical workshops as possible, so that their zeal and potential is remaining on the track of Outcome based education and they do not get demoralized and start re-thinking on this process.

B) The main objective behind Outcome Based Education, is to imbibe self-learning methods and engage students (learners) into actively-engaged learning rather than passive learning. This approach involves students to analyze, evaluate and apply the thoughts and actions that they inherit by means of various courses and modules undertaken as part of the curriculum under Outcome based education, into solving the roadblocks of the societal, industrial and real-world problems by critical thinking and sequential design patterns through the skills acquired. **Thus enlightening the students on the importance of such process**, what their role is going to be under such process, how such a process is being planned to be implemented and what is needed from their end to ensure the success of this process

is very essential. **This must be done as frequently as possible right from the entry into I year until the III Year.**

C) In India, since all the students primarily depend on their parents for financial assistance and supporting their education unlike in first world nations, it is also essential to educate the parents on the process and how this is going to bring change in the learning styles and education process of their wards, and how such an approach enables their wards to become self-sustained and innovative thinkers, which is the main need of present society in India and which is main characteristic essential for prospective employers.

Developing Program Articulation Matrix by effective design and development of POs, PSOs and best BTLs for delivery and evaluation.

Dr. Hanumantha Rao, HoD of Civil Engineering spoke about the Successful Use of Performance Indicators to Assess Student Outcomes

Performance Indicators (PIs) provide more specific actions that may be used for direct measurement of the SOs, It helps in judging how well the Course outcomes and course objectives are met. and they are useful tools for assessing the degree to which students successfully achieve subsets of each SO. During a recent reaccreditation by ETAC/ABET, several engineering technology programs demonstrated successful use of PIs for outcomes assessment and improvement processes. Rubrics have been developed as tools to provide direct measurement of student performance in each of the SOs.

The rubrics are to be designed well for most courses and the methods of measuring the success should be engaging, creative and not very subjective in nature.

Typically the faculty members should include items such as oral presentations, written lab reports, or problem solutions from exams, quizzes, or homework assignments. It was most effective to complete rubric scores for student work while grading or as soon as possible afterward. Development of Performance Indicators Most of the work in this paper builds upon the fundamentals presented at ABET Program Assessment Workshops [1][2]. The general concepts presented here are not new; similar work has been done in multiple programs at other universities [3]. What makes this work unique is that each Performance Indicator (PI) has been w

ఫ్యాకల్టీ డెవలప్ మెంట్ ప్రారంభం

కెఎల్ వర్మిటీలో ప్రారంభించిన ఉప కులపతి డాక్టర్ సారథి వర్మ



మాట్లాడుతున్న ఉప కులపతి డాక్టర్ సారథి వర్మ

తాడేపల్లి కూకల్ నవంబర్ 22 (ప్రభ న్యూస్) కె.ఎల్.విశ్వవిద్యాలయంలో ఇంజనీరింగ్ కాలేజ్ విభాగం ఆధ్వర్యంలో ఫలితాల ఆధారిత విద్య పేరిట నాలుగు రోజుల ఫ్యాకల్టీ డెవలప్ మెంట్ ప్రోగ్రాం ఘనంగా ప్రారంభమైంది. ఈ కార్యక్రమాన్ని ఉపకులపతి డాక్టర్ సారథి వర్మ ప్రారంభించారు. ఆయన మాట్లాడుతూ ఫలితాల ఆధారిత విద్య అనేది విద్యా వ్యవస్థలోని ప్రతి భాగాన్ని లక్ష్యాల చుట్టూ ఆధారం చేసుకునే విద్యా సిద్ధాంతమని అన్నారు. విద్యా ముగిసే సమయానికి, ప్రతి విద్యార్థి లక్ష్యాన్ని సాధించాలని స్పష్టం చేశారు. విద్యార్థులకు వారు ఏమి చదవాలనుకుంటున్నారు, వారు దానిని ఎలా అధ్యయనం చేయాలనుకుంటున్నారు. అనేదాన్ని ఎంచుకోవడానికి ఫలిత ఆధారిత విద్య ఉపయోగపడు

తుందని అన్నారు. విద్యార్థి బలాలు, బలహీనతలకు అనుగుణంగా ఉండటమే కాకుండా సజ్జిత విషయంలో నైపుణ్యం, పట్టు సాధించడానికి తగిన సమయాన్ని కూడా అందిస్తుందని పేర్కొన్నారు. అవుట్ కమ్-బేస్డ్ ఎడ్యుకేషన్ (ఔఐఐ) అనేది పాఠ్యాంశాల పునర్నిర్మాణం, బోధనాశామూల్యాంకన పద్ధతుల యొక్క పునర్నిర్మాణాన్ని కలిగి ఉంటుందని స్పష్టం చేశారు. ఇది హై-ఆర్డర్ యొక్క సాఫల్యతను ప్రతిబింబిస్తుందని అన్నారు. ఇంజనీరింగ్ విద్య యొక్క ప్రాథమిక లక్ష్యం సంపద మరియు సామాజిక పురోగతి అని చెప్పారు. వృత్తి పరమైన ఔన్నత్యాన్ని పొందేందుకు, సానుకూల మనస్తత్వాన్ని పెంపొందించుకోవాలని కోరారు. ఒక ఇంజనీరింగ్ అధ్యాపకులు అధునిక సాంకేతిక పరిజ్ఞానంలో వివిధ అభివృద్ధి

చెందుతున్న పోకడలు, అభివృద్ధి గురించి తెలుసుకునేలా అభ్యాసకులలో మేధో ఉత్సాహాన్ని ఉత్సాహకరం పెంపొందించాలని పేర్కొన్నారు. ప్రగతిని సాధించడంలో అంకిత భావం, నిబద్ధత కీలక పాత్ర పోషిస్తాయని అన్నారు. కోర్సు, సెమిస్టర్, విద్యా సంవత్సరం, గ్రాడ్యుయేషన్ తర్వాత ఫలితాల సాధనను సులభంగా అంచనా వేయవచ్చని తెలిపారు. బేట్ కమ్ బేస్డ్ లెర్నింగ్ ద్వారా సంస్త తన విద్యార్థుల సాధన స్థాయిని అంచనా వేయడానికి, మూల్యాంకనం సమయంలో గుర్తించబడిన అంతరాలను ప్రత్యామ్నాయ అభ్యాస పద్ధతులతో, మూల్యాంకనం

చేయడం ద్వారా ముందుకు సాగడానికి ప్లాన్ చేస్తుందని ఆయన వెల్లడించారు. కార్యక్రమంలో రిజిస్ట్రార్ డాక్టర్ వై.వి.ఎస్.ఎస్.వి. ప్రసాద్రావు, స్కిల్ డెవలప్ మెంట్ డీన్ డాక్టర్ ఎ.శ్రీనాథ్, డాక్టర్ కృష్ణ రెడ్డి, వివిధ విభాగాల తులు, అధ్యాపకులు పాల్గొన్నారు.



విద్యార్థి తన లక్ష్యాన్ని సాధించాలి

తాడేపల్లికూకల్: విద్యార్థులకు తాము అనుకున్న లక్ష్యాన్ని సాధించాలని కేఎల్ యూ ఉపకులపతి డాక్టర్ సారథి వర్మ అన్నారు. సోమవారం యూనివర్సిటీ ఆవరణలో జరిగిన ఫ్యాకల్టీ డెవలప్ మెంట్ ప్రోగ్రామ్ లో ఆయన మాట్లాడుతూ ఫలితాల ఆధారంగా విద్య కాదని, లక్ష్యం చుట్టూ చేసుకునే విద్యా సిద్ధాంతమే విద్య అని అన్నారు. విద్యాభ్యాసం ముగిసే సమయానికి విద్యార్థి తాను అనుకున్న లక్ష్యాన్ని సాధించాలని వివరించారు. ఇంజనీరింగ్ విద్యార్థి ప్రాథమిక లక్ష్యం సంపద, సామాజిక పురోగతి అని గుర్తుంచుకోవాలని అన్నారు. విద్యార్థులు ప్రగతిని సాధించడంలో అంకిత భావం, నిబద్ధత కీలక ప్రాత పోషిస్తుందని వివరించారు. కార్యక్రమంలో రిజిస్ట్రార్ డాక్టర్ వై.వి.ఎస్.ఎస్.వి. ప్రసాద్రావు, స్కిల్ డెవలప్ మెంట్ డీన్ డాక్టర్ ఎ.శ్రీనాథ్, డాక్టర్ కృష్ణ రెడ్డి, వివిధ విభాగాల అధిపతులు, అధ్యాపకులు పాల్గొన్నారు.



ప్రసంగిస్తున్న ఉప కులపతి డాక్టర్ సారథి వర్మ

**Four day FDP on Outcome Based Education for Heads of the Departments and
Faculty members involved in curriculum design, evaluation and assessment Vaddeswaram campus of
KLEF on 22th November 2021 (Monday).**

S. No	ID No	Name of the faculty	Designation	ADMINISTRATION DESIGNATION	Department	Signature
1	6578	MR.VEERA BHADRA RAO KUMMARASET	ASST.PROF.	HOD	AGRICULTURE	
2	3509	DR.P.SAI KIRAN	PROFESSOR	HOD	AIDS	
3	4214	MR.GUNTAKA VIDYA SAGAR REDDY	ASSOC.PROF.	HOD	ARCHITECTURE	
4	6204	DR.VENKATESWARA RAO PODILE	PROFESSOR	HOD	BBA	
5	6494	KONDURI BHAGAVAN	ASSOC.PROF.	HOD	BCA	
6	1481	DR.D.HARITHA	PROFESSOR	HOD	BES-1	
7	2469	DR.MIRYALA SRIDHAR	PROFESSOR	HOD	BES-2	
8	4076	DR.SUNDARI DADHABAI	ASSOC.PROF.	HOD	BHM	
9	4447	DR.KANURI GIRIDHAR	ASSOC.PROF.	HOD	BT	
10	2004	DR.CHAPPIDI HANUMANTHA RAO	PROFESSOR	HOD	CE	
11	620	DR.V.SHANMUKHKUMAR JAGARLAPUDI	PROFESSOR	HOD	CHEMISTRY	
12	3412	DR.VEDANTAM VENU MADHAV	ASSOC.PROF.	HOD	COMMERCE	
13	5502	DR.M.MADHU SUDHAN RAO	ASSOC.PROF.	HOD	COMMUNICATION SKILLS	
14	4414	MR.HARI KIRAN VEGE	ASSOC.PROF.	HOD	CSE	
15	5291	DR.K AMARENDRA	PROFESSOR	HOD	CSIT	
16	841	DR.SUMAN MALOJI	PROFESSOR	HOD	ECE	
17	5808	DR.M.SIVA GANGA PRASAD	PROFESSOR	HOD	ECM	
18	2463	DR.J.SOMLAL	PROFESSOR	HOD	EEE	
19	577	DR.S.LAVANYA	ASSOC.PROF.	HOD	ENGLISH	
20	5242	DR.RAVINDRA BABU VEGURI	ASST.PROF.	HOD	FINE ARTS	
21	1779	DR.B.V.APPA RAO	PROFESSOR	HOD	MATHS	
22	1555	DR.K.S.VENKATESWARA KUMAR	ASSOC.PROF.	HOD	MBA	
23	1742	MR.DEVULAPALLI V.A.RAMA SASTRY	ASSOC.PROF.	HOD	ME	
24	6614	MRS. I SHABANA	TRAINER	HOD	QUANT&REASONING	
25	5897	DR.NANNAPANENI SIVA KUMAR	ASSOC.PROF.	HOD	SOFT SKILLS	
26	3172	DR. G SUNITHA SUNDARI	ASSOC.PROF.	HOD	PHYSICS	
27	2395	DR.M. NAGESWARARAO	Asst. Prof	BES	BES-2	
28	5865	V. Selvaraj.	Principal	ARCH	Arch	
29	4929	D. Phanindra	Asst. Prof	BES-II	BES-II	
30	4843	Nitin Kamitkar	Asst. Prof	BES-II	BES-II	
31	3203	Dr. G. Siva Reddy	Asst. Prof	BT	BT	
32	4387	Dr. B. Polaiiah	Professor	ECE	ECE	
33	6276	Dr. B. Ramakoteswar Rao	Professor	CS IT	CS IT	
34	3071	Mr. K. Hemanthakaja	Asst. Prof	Civil	Civil	

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Vaddeswaram

35	557	Dr. C. Arun	Ass. prof. v	Exam. Section Incharge	BT	Dr.
36	5428	Dr. S. Karthikeyan	Asst. Prof	Certificate Column	BT	S. Karthikeyan
37	3597	Mr. J. Venkat Das	Asst. prof	Exam. section OBE-NC	CE	J. Venkat Das
38	2137	Mr. K. Shyam Chembuli	Asst. prof.	OBE-NBA Vetting Team	CE	K. Shyam Chembuli
39	5069	Dr. A. Aravindan	Prof. v	Team	CE	Dr. A. Aravindan
40	4582	Mr. G. SRI HARSHA	Asst. Prof	PI-Academics	CE	Mr. G. SRI HARSHA
41	4313	Mrs. V. Sree Lakshmi	Asst. Prof	TLP-Incharge	CE	Mrs. V. Sree Lakshmi
42	6127	Dr. RAGHAVENDRA KUMAR	Assoc. Prof	Vetting member	PHY	Dr. RAGHAVENDRA KUMAR
43	6795	Mr. Rahul Singh	Asst. Prof	CSS/UA	CSS	Mr. Rahul Singh
44	5715	Dr. S. SHANMUKHAN	Asst. prof	OBE-NBA	Phy	Dr. S. SHANMUKHAN
45	5725	Dr. A. SUNDAR KUMAR	Asst. prof	CC	Physics	Dr. A. SUNDAR KUMAR
46	1628	Dr. S. Venk. Madhava Kumar	Assoc. Prof	Asst. HOD	CSS	Dr. S. Venk. Madhava Kumar
47	5149	G. Chandra Sekhara Naidu	Asst. Prof	Training	C.S.S (OAR)	G. Chandra Sekhara Naidu
48	6844	Devi Prasad Kollati	Asst. Prof	Training	C.S.S	Devi Prasad Kollati
49	5652	Dr. M. V. Ramana Murthy	Assoc. Prof	Training	CSS (Cm)	Dr. M. V. Ramana Murthy
50	4799	N. Ram Gopal	Asst. prof	Training	C.S.S	N. Ram Gopal
51	6702	Mrs. Sanyas Natarajan	Soft skills Trainer	Training	CSS	Mrs. Sanyas Natarajan
52	6710	Ann Dev. V. S	Soft skills Trainer	Training	CSS	Ann Dev. V. S
53	6703	Dattatreya Reddy Pedem	Soft skills Trainer	Training	CSS	Dattatreya Reddy Pedem
54	6845	S. Rajamani	Asst. Prof	Training	C.S.S	S. Rajamani
55	3205	Dr. T. Anitha	Asst. prof	Trainer	CSS	Dr. T. Anitha
56	1511	N. V. Siva Kumari	Asst. Prof	C.S. Dept	CSS	N. V. Siva Kumari
57	5727	Dr. T. Sandhya Rao	Asst. prof	CS	CS	Dr. T. Sandhya Rao
58	5464	Dr. E. Neelima	Assoc. Prof	CS	CSS	Dr. E. Neelima
59	4804	E. Sreedatta	Asst. prof	-	CSS	E. Sreedatta
60	6494	Dr. K. T. Shagavan	Assoc. Prof	HOD MCA/BA	MCA/BA	Dr. K. T. Shagavan
61	5735	Dr. K. V. D. Sagar	Assoc. prof	Prof. In	ECH	Dr. K. V. D. Sagar
62	5511	Dr. P. C. SRINIVASA RAO	ASSOC. PROF.	PROF. INCHARGE	A12 D3	Dr. P. C. SRINIVASA RAO
63	6122	M. Prasant Kumar	Asst. Prof	Training	CSS	M. Prasant Kumar
64	4419	R. Suresh Kumar	Asst. Prof	Training	Q & R	R. Suresh Kumar
65	3061	Dr. P. Kasi Visweswara Rao	Asso. Prof	Deputy HOD	ME	Dr. P. Kasi Visweswara Rao
66	3192	P. Daniel Paul	Asst. Prof	Training	Q & R	P. Daniel Paul
67	6839	D. Naga Maheswara Rao	Asst. prof	Training	Q & R	D. Naga Maheswara Rao
68	4579	P. Raja	Trainer	Training	Soft skills	P. Raja
69	3990	Dr. S. Mahamuda	Assoc. prof	Vetting Team Member	physics	Dr. S. Mahamuda
70	1919	Dr. K. Swapna	Assoc. prof	CC	physics	Dr. K. Swapna
71	3179	Dr. A. Venkateswara Rao	Asst. prof	Prof. Incharge	Chemistry	Dr. A. Venkateswara Rao
72	1968	Dr. M. Venkateswara Rao	Asst. prof	Prof. Incharge	physics	Dr. M. Venkateswara Rao
73	4351	Dr. N. Srinamanyam	Professor	Prof. Incharge	Physics	Dr. N. Srinamanyam

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