



UNIVERSITY VISVESVARAYA COLLEGE OF ENGINEERING 2.0

JULY 2020

Report by the Expert Committee constituted to deliberate on upgradation of  
University Visvesvaraya College of Engineering (UVCE), Bangalore,  
into autonomous institution of eminence akin to IIT  
– as per Government Order No. ED/59/UBV/2020, Dated: 19.05.2020

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## List of Abbreviations

AI	Artificial Intelligence
B.E.	Bachelor of Engineering
BoG	Board of Governors
B. Tech	Bachelor of Technology
Cap.ex	Capital Expenditure
CoE	Centre of Excellence
CoEP	College of Engineering Pune
Dy.C.M	Deputy Chief Minister
EDP	Executive Development Program
ERP	Enterprise Resource Planning
FAO	Food and Agriculture Organization
FSR	Faculty Student Ratio
FY	Financial Year
GIAN	Global Initiative of Academic Networks
GoM	Government of Maharashtra
HEI	Higher Education Institution
HKUST	Hong Kong University of Science and Technology
IIMA	Indian Institute of Management Ahmedabad
IISc	Indian Institute of Science
IIT	Indian Institute of Technology
IITB	Indian Institute of Technology Bombay
IITH	Indian Institute of Technology Hyderabad
IITMRP	Indian Institute of Technology Madras Research Park
IITR	Indian Institute of Technology Roorkee
IoE	Institution of Eminence
IP	Intellectual Property
ISB	Indian School of Business
LMS	Learning Management System
M.E.	Master of Engineering
MHRD	Ministry of Human Resources Development
MIT	Massachusetts Institute of Technology
MOOC	Massive Open Online Courses
MoU	Memorandum of Understanding
M. Tech	Master of Technology
NEP	National Education Policy
NIRF	National Institutional Ranking Framework
NPTEL	National Program on Technology Enhanced Learning
NTU	Nanyang Technological University
NUS	National University of Singapore
ODL	Online Distance Learning
Op.ex	Operational Expenditure
PG	Post-graduate
QS	Quacquarelli Symonds World University Rankings
R&D	Research and Development

TCS	Tata Consultancy Services
TEQIP	Technical Education Quality Improvement Program
THE	Times Higher Education World University Rankings
UC Berkeley	University of California, Berkeley
UG	Under-graduate
UMich	University of Michigan
UVCE	University Visvesvaraya College of Engineering
WCU	World Class Universities

## EXECUTIVE SUMMARY

1. University Visvesvaraya College of Engineering (UVCE), Bangalore, was established in 1917 by Bharat Ratna Sir M. Visvesvaraya, and is currently a constituent college of Bangalore University. UVCE completed 100 years of academic excellence in 2016-17.
2. In cognizance of the rich legacy of UVCE and its dedication and contribution to the pursuit of excellence in technical education for more than ten decades, Govt. of Karnataka is desirous of upgrading UVCE into an autonomous institution of excellence akin to Indian Institute of Technology (IIT).
3. In pursuit of the above stated objective, Govt. of Karnataka constituted a committee, under the chairmanship of Prof. S. Sadagopan, to “deliberate on upgrading University Visvesvaraya College of Engineering, Bangalore into autonomous institution of excellence akin to IIT and recommend to the State Government the operative modalities and planning framework for execution thereof.”
4. The Committee was given a detailed, twelve (12) point Terms of Reference (ToR). (Refer **Annexure 1** titled ‘Government order constituting the committee’).
5. The Committee decided, given the limited time of two months available and that too amidst the trying times of COVID-19, to focus on the more critical items of the ToR and recommend to the Govt. the vision, strategies and key action points, governance structure, funding model, the proposed UVCE Act and other broad parameters relevant for the Govt. to set the direction, so that the journey of transforming UVCE into an institution of excellence can be started expeditiously. Other details that support these broad parameters can be dealt with by the executive and operating teams.
6. The vision, strategies and action plans for an institutional transformation must start with consultation with all relevant stakeholders keeping in mind that the stakeholders should feel part of the process in terms of the vision being stretched but attainable, it being understood by all, it being comprehensive enough and generating a feeling of participative leadership. In line with this, the Expert Committee, apart from holding its own meetings (12 in number), consulted with faculty, students, alumni and experts who have served in the earlier committees on UVCE. In addition, a study was done on published sources of relevant information on universities in the United States of America (USA), China and on IITs, College of Engineering, Pune and other institutes of higher technical education in India. Further, a detailed study and analysis was undertaken of the reports submitted by all the earlier committees set up, to make recommendations to upgrade UVCE. The Committee’s Report is an outcome of these meetings, consultations and study.
7. The Committee recommends that UVCE’s vision for 2030 be as follows:

***“TO BE AMONG THE BEST IN CLASS FOR HIGHER TECHNICAL EDUCATION”***

The Committee believes that this vision is stretched & aspirational and yet can be achieved by the year 2030.

8. The Committee has identified the following five strategies (key recommendations are mentioned in the next section) which UVCE needs to pursue to realize its vision:
  - Complete autonomy in financial, academic and administrative matters
  - Faculty of outstanding quality and caliber



- A redesigned and continuously upgraded curriculum
  - Infrastructure that enables and fosters learning and innovation
  - Partnerships with world class academia and with local industry.
9. The committee also studied the funding models that exist in the US universities, Chinese Universities, at IITs and other comparable universities in India and has recommended a funding model for UVCE aimed at making UVCE financially less dependent on the Govt. over time and finding other avenues of sourcing funds.
1. The annual budget, gradually, reaches levels prevailing at IITs
  2. There is a gradual reduction in the proportion of grants from the Govt
  3. There is a gradual increase in the revenues from sources like alumni contribution, endowments, research grants etc.
10. The committee recommends that UVCE be declared as a “State Institution of Eminence” along the lines of IITs and a new UVCE Act to enable the same should be passed in the Karnataka Legislative Assembly.

The key Recommendations of the committee with respect to the strategies to achieve the vision and funding model are summarised in the next section.

## KEY RECOMMENDATIONS

1. The Committee firmly believes that UVCE needs a “transformational” change rather than an “incremental” change in order to achieve the vision. It is this conviction that has led to the recommendations being bold, fundamental and far reaching.
2. The vision is primarily supported by the following five strategies:
  - i) Complete autonomy in financial, academic and administrative matters
    - a) Financial autonomy:
      - To decide on the appropriate financial model and sources of revenues with the aim of continuously reducing proportion of Govt’s support and finding external sources of revenue
      - To be able to collect endowments, grants, alumni contribution
      - To be able to fix salaries and tuition fees
      - To be able to provide scholarships and other forms of financial assistance to deserving students (need-blind admission).
    - b) Academic autonomy:
      - Freedom to design and change curriculum and to create new branches
      - Freedom to select faculty
      - Freedom to choose teaching methods, infrastructure, facilities.
    - c) Administrative autonomy:
      - UVCE to be a self-governing, independent entity
      - “Ownership” be with the State Govt. and Governor to be the Visitor
      - Visitor to appoint the Chairperson and the other members of the first Board of Governors (BoG). The 11-member BoG to have equal representation from the Govt., academia and industry (three members from each category) and two members from alumni
      - The BoG will appoint the Director through a defined selection process. The Director to appoint all other executives, faculty and staff. Director to have full executive powers.
  - ii) Faculty of outstanding quality and caliber
    - High quality faculty from India and overseas
    - Provide faculty with appropriate ambience and compensation
    - Provide faculty with research & consultancy opportunities
    - Involve alumni and industry experts to teach.
  - iii) Redesigned curriculum
    - Curriculum to be decided by a committee comprising academia, alumni and industry
    - Focus on balanced development: functional, contextual, personal with liberal arts as an integral part
    - Curriculum and pedagogy suiting the evolving digital world
    - Multi-disciplinary approach with focus on innovation and research.
  - iv) Infrastructure that fosters learning and innovation
    - UVCE will consist of two campuses, one at K R circle, and another at Jnana Bharathi, with emphasis on the campus at K R circle. Bangalore University should allocate 100 acres of land to UVCE at Jnana Bharathi Campus

- Bangalore University should complete the ongoing civil works and improve basic infrastructure urgently. Govt. to provide Rs. 500 crores over the next 2-3 years for infrastructure improvement
- Provide 'digital' infrastructure
- Provide for online & distant learning.

v) Partnerships with world class academia and with local industry

- Develop partnerships with globally reputed technical education institutions
- Use Bengaluru's location to forge partnerships with industry
- Use alumni experience and expertise to build partnerships.

3. The funding model recommended for UVCE aims at UVCE becoming financially less dependent on the Govt. over time and finding other avenues of sourcing funds. The salient features of the recommended financial model are:

- Starting with Rs. 100 crores per annum in year 1 (currently Rs. 50 crores), UVCE's annual budget to go up to Rs. 400 crores per annum in year 5. The estimated figure in year 10 is Rs. 700-1000 crores per annum. These are in line with the budgets prevailing at IITs
- In order to improve the existing poor infrastructure, a grant of Rs 500 crore is sought from the Govt. over the next 2-3 years
- Tuition fee which is currently at Rs. 25,000 per year, to be increased to match 50% of IIT fee in year 1 and gradually increased to 100% of IIT fee by year 5. The fee increases will be commensurate with the improvement effected, over time
- To ensure that fee is not a deterrent for any deserving student to join UVCE, the institution will follow a "need-blind" admission process as followed in many leading institutions across the world and make available supporting mechanisms such as scholarships, income share agreements, students loans etc., to achieve the same. In order to support students, a bank loan scheme will be evolved
- By building relationship with alumni, UVCE will raise INR 100 crores in 5 to 7 years
- The sources of income would be Govt. grants, tuition fees, alumni contribution, endowments and from research grants, in the following proportion (as given in Table 1).

Year	Budget	Govt.	Tuition	Alumni/ Endowment/ Research
<b>Current</b>	50	40 (80%)	10 (20%)	-
<b>Year 1</b>	100	50 (50%)	40 (40%)	10 (10%)
<b>Year 5</b>	400	220 (55%)	120 (30%)	60 (15%)
<b>Year 10</b>	700	233 (33%)	233 (33%)	233 (33%)

Student strength taken as 4000 at present; 6000 in 5 years and 10,000 in 10 years (all figures in Rs. crores)

*Table 1: Targeted sources of income over the years*

4. To achieve the vision and financial structure, the committee recommends declaring UVCE as a “State Institution of Eminence”, modelled along the lines of the Indian Institute of Technology (IIT) with a robust governing structure and an enabling Act.
5. In light of this, a new draft of the UVCE Act has been prepared for the Government’s approval.
6. With respect to the governance structure, UVCE will be a self-governing body with the following features:
  - The Governor of the State of Karnataka will be the Visitor of UVCE
  - The Visitor will nominate the first Chairperson and members of the first Board of Governors
  - UVCE will have a 11-member BoG with equal number of representatives from the Govt., academia and industry (three members from each category) and two members from alumni
  - The Board of Governors will have a term of five (5) years, with provision for one-third of the members to step down / re-elected after three (3) years to maintain continuity of part of the board
  - The Board of Governors will appoint the Director, through a defined selection process. The Director will appoint all other executives, faculty and staff through appropriate committees and processes.
7. For a seamless transformation, mentorship has been identified as a critical aspect and it is recommended that UVCE be mentored by either IIT Madras or IISc, Bangalore.

The above recommendations are a result of a current state assessment through stakeholder and expert consultations, along with a detailed study and analysis of successful models in Higher Education. The details of methodology and findings are presented in this report.

## CHAPTER I – CONTEXT AND BACKGROUND

Incorporated in 1917 by the then Diwan of Mysore State, Sir M. Visvesvaraya, University Visvesvaraya College of Engineering (UVCE) was the fifth engineering college in India. UVCE started its life as School of Engineering with civil engineering and mechanical engineering wings. Starting with 20 students in civil and mechanical engineering wings, today UVCE has carved out a name for itself and attained a pre-eminent position in engineering education. It has 4,000 students in undergraduate, post graduate and research streams in 7 different engineering branches and spread across two sprawling campuses in Bengaluru.

Over the last decade, calls to develop UVCE as an autonomous institution have been strongly growing. Since the attainment of Technical Education Quality Improvement Program (TEQIP) I and TEQIP II World Bank grant in 2004, experts have opined that UVCE should be developed independently along the lines of Indian Institutes of Technology (IITs) as an autonomous institution.

To recall the recommendations of various committees - in 2011, Dr. V. K. Aatre and Prof. R Natarajan, in their capacity as TEQIP mentors and during 2013-14, various committee experts including Prof. N. Rudraiah, Prof. N.R. Shetty, Dr. M.R. Srinivasan, Prof. K.R.S.Murthy, Prof. K.Narahari, Prof.N. Jayadev, Shri. Mohandas Pai, Dr. Chidananda Gowda, Dr. Roddam Narasimha have stressed the need for autonomous status to UVCE.

In 2016, Prof. B.S Sonde Committee explored modalities of developing UVCE into an autonomous institution. And subsequently the 2017 Shri S.V. Ranganath committee determined that the trifurcation of Bangalore University will have no bearing on development of UVCE into an autonomous institution.

In due consideration of indispensability of upgradation of UVCE into an autonomous institution of excellence akin to IIT, the Government of Karnataka constituted a new expert committee.

1	Prof. S. Sadagopan	Chairman
2	Shri B Muthuraman	Member
3	Shri Prashanth Prakash	Member
4	Shri B V Jagadeesh	Member
5	Shri Naganand Doraswamy	Member
6	Prof. K.R. Venugopal Vice-Chancellor, Bangalore University	Member Convener

*Table 2: Expert Committee members*

The current Committee chaired by Prof. S. Sadagopan has additionally engaged KPMG India and Samvad Partners for support and put together definitive plans and budget estimates for developing UVCE into an autonomous institution akin to IIT.

## CHAPTER 2 – APPROACH AND METHODOLOGY

A multi-pronged approach was adopted to understand the key focus areas that would help in developing the vision, defining a strategic roadmap for UVCE in its transition to an autonomous institution. The following sources were explored, and information assimilated to develop this report.

Figure 1: Approach adopted to prepare the project report



- **Expert committee member meetings** – The expert committee held regular internal meetings (12 meetings) to discuss and finalize the future state positioning, vision, objectives, governance and financial model, among others (Refer [Annexure 3](#) for summary of key points discussed in each of these meetings).
- **There was also an interim meeting with Hon. Dy. C.M of Karnataka on 18<sup>th</sup> June 2020 wherein the vision and governance structure were presented and his inputs on the progress were sought** (Refer [Annexure 4](#) for summary of key points discussed in the meeting with Dy. C.M. of Karnataka).
- **Consultation with experts and alumni** - Expert opinion from distinguished higher education leaders and past committee members with similar experience was sought to understand the key trends and challenges, priority intervention areas, relevant short-term and long-term objectives, and an effective action plan. Distinguished alumni who have been associated with the growth of UVCE were also consulted to understand current needs and expected future direction for UVCE (Refer [Annexure 5](#) for summary of key points discussed with experts, [Annexure 8](#) with alumni).
- **Consultation with faculty, staff and students** – The current heads of the institution and students were consulted to clearly identify strengths and weaknesses with respect to internal capabilities, resources, infrastructure, governance, teaching and research standards, student and faculty experience, among others for an assessment of the current state (Refer [Annexure 6](#) for summary of feedback received from faculty, [Annexure 7](#) with current students).

All the above have helped in understanding the current strengths and areas of improvements for UVCE, crystallizing the concept of UVCE 2.0 (some key outputs are enlisted below) and in preparing this project report which consists of the following:

- Vision and positioning for UVCE 2.0
- Strategies and action items to realize the vision
- Clear view of ownership and governance structure
- Knowledge of best practices adopted by world class institutions in India and abroad and knowledge of successful models in higher education
- Short-term and long-term financial plan.

## CHAPTER 3 – DETAILED STRATEGIC ROADMAP AND ACTION POINTS

The primary objective of this exercise is to establish UVCE as an autonomous, degree conferring institution, focused on achieving global standards to compete with leading institutions in the world.

### 3.1 Vision

In order to achieve this objective, it is important for UVCE to start with a bold vision. The committee strongly feels that UVCE should aim

#### **To be among the best in class for Higher Technical Education**

The committee also highlighted that this Vision must have four key components

1. Leader-led
2. Stretched, but achievable
3. Shared and understood
4. Comprehensive and detailed

#### 1. Leader-led

The invitation for the committee members to serve on this Committee came from the Hon'ble Deputy Chief Minister's office indicating his visionary leadership and commitment to the cause. We expect UVCE in the next several decades to be led by visionary leaders as Chairpersons of the Board of Governors so as to maintain a sustained leadership. The underlying governance structure – systems and processes – must be conducive for such sustained excellence (will be elaborated in subsequent chapters).

#### 2. Stretched, but achievable

When UVCE was set up way back in 1917, the concept of an engineering college itself was aspirational. Today with several IITs doing trail-blazing work and the Indian institutes competing both nationally (National Institutional Ranking Framework rankings) and internationally (QS, THE), it is important to re-strategize the goals of UVCE. In terms of aspiration, it must be on the lines of IITs and yet deeply connected to its heritage. Due to very limited funding and being a mere constituent college of Bangalore University, UVCE has not benefited from due investment in key resources – faculty, staff and infrastructure – as well as freedom to chase excellence. That is one reason why UVCE's vision must be bold and stretched; yet, it should not be mere ideal such as “No 1 in the World” as it is nearly unachievable in the near future due to many years of lag that UVCE has suffered. The vision articulated is stretched, yet achievable with due support (elaborated in subsequent sections).

#### 3. Shared and understood

It is important for any organization - and more so for a higher technical institution – that the vision is shared with all stakeholders and communicated to all stakeholders on a continual basis. Even within the limited time of just two months this committee has met with select current faculty, staff, students and alumni as well as key persons associated with previous committees that talked of the future of UVCE. We expect the future Board of Governors of UVCE to keep engaging with the stakeholders on an ongoing basis and get their “buy-in” for sustained excellence of UVCE.

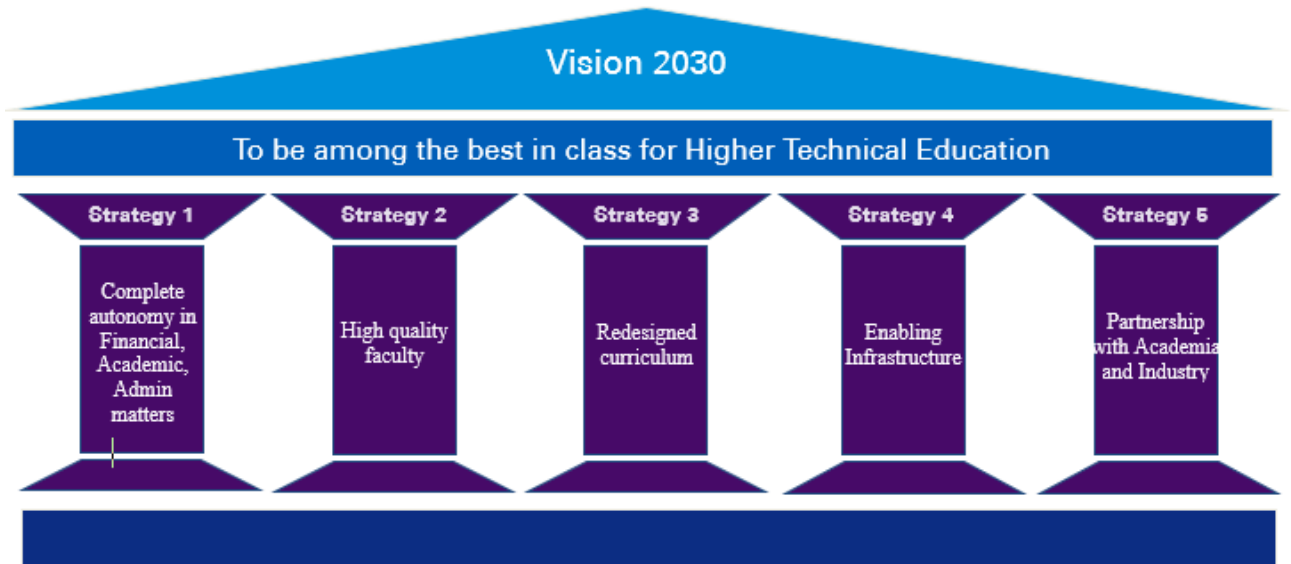
#### 4. Comprehensive and detailed

The vision should strike a balance between getting into excessive details and yet not remain too brief leaving things to multiple incoherent interpretations. Having a very tight deadline makes it impossible for this

committee to detail all the elements of the vision, yet, this document (in other sections) outlines the key elements. Not detailing it too much ensures there is no “micro-management” of the institution.

The committee is also convinced that the vision should not remain an esoteric statement, but an actionable road map for the next 10/ 25 years and hence the vision has been translated into strategies and action plans as represented below.

Figure 2: UVCE Vision Architecture



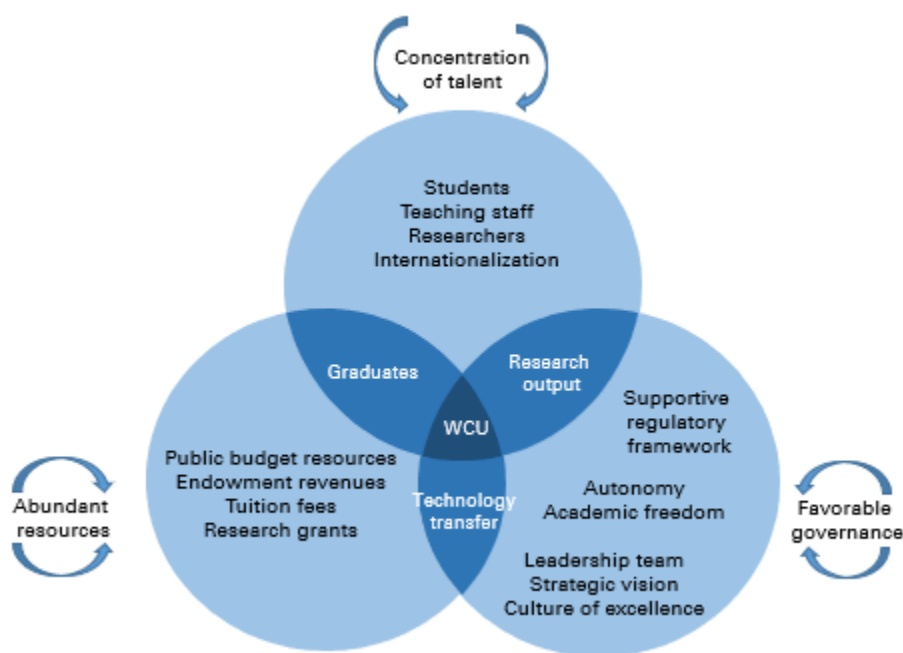
## 3.2 Strategic Roadmap

### 3.2.1 Complete autonomy in financial, academic, and administrative matters

One of the key elements that characterizes a globally successful higher education system is autonomy. It is one of the three key characteristics of a world class university according to Dr. Jamil Salmi in his publication – The Challenge of Establishing World Class Universities, with concentration of talent and abundance of resources being the other two characteristics.




Figure 3: Characteristics of a world class university



Source: *The Challenge of establishing World Class Universities* by Dr. Jamil Salmi

Autonomy allows institutions to respond more directly to the needs of students and the skills market. Thus, complete autonomy is perhaps the most important part of UVCE 2.0. This includes

### 3.2.1.1 Autonomy: Financial

	Action points
	<ul style="list-style-type: none"> <li>• Raising donations/endowments from alumni and others</li> <li>• Raising research and other grants</li> <li>• Freedom to charge appropriate tuition fees</li> <li>• Move towards 33:33:33 model of financing (Government grants: Tuitions fees: Alumni donations/ endowment fund)</li> <li>• To accept government(s) grants</li> <li>• Freedom to fix salaries of faculty and other staff</li> </ul>

### *Strategies to achieve financial autonomy*

**Diversified revenue sources to meet the expenditure:** To sustain the increasing cost of education, top public universities globally have diversified sources of revenue and are not heavily reliant on tuition fee/ student income (this makes up for 33% of revenue at the maximum), whereas the non-tuition fee revenue sources account for more than 60% of the total income. These revenue sources include investment income, income from endowment funds, research grants (federal/ central and state), sponsored support and gifts or donations.

University	Endowment Value (million USD)	Endowment/ donations and gifts	Tuition fee/ student income	Government grants	Private grants	Other <sup>1</sup>
UC Berkeley	2,500	12%	32%	29%	7%	20%
University of Michigan	12,400	7%	15%	11%	3%	64%
Cambridge	4,340	12%	15%	35%		38%
NUS	4,243	3%	15%	49%	8%	26%
HKUST	210	1%	27%	51%	NA	21%
IIT Kharagpur	50	3%	10%	81%	NA	6%
CoEP	10	5%	44%	25%	NA	26%

Source: Analysis of Annual & Financial Reports of corresponding Universities for 2018-2019  
Table 3: Revenue sources of few institutions across the world

NUS – Endowment fund
<ul style="list-style-type: none"> <li>Established in 1906, the endowment fund supports the strategic initiatives of the university</li> <li>The earnings from endowment investments support scholarships, professorships, fellowships, basic research, academic and public service programs</li> <li>The NUS endowment fund is invested primarily based on the Yale model, which advocates an optimized long-term, multi-asset, multi-currency, diversified, global portfolio</li> <li>The portfolio was structured to deliver sufficient returns to cover a percentage of NUS' expenditure every year.</li> </ul>

**Alumni contribution:** Significant contributions to the endowment funds of leading universities have been made by alumni. The US higher education system which has universities with the largest endowment fund values sees more than 25% contribution from alumni<sup>2</sup>.

In India, the IITs which have been given the Institute of Eminence (IoE) tag recently have made ambitious plans to raise funds from alumni while reducing the dependence on grants from MHRD (Government grants account for more than 70% of the revenue in the case of most IITs<sup>3</sup>) and move towards being financially stronger.

<sup>1</sup> Includes Assessment and publishing services for Cambridge, hospital/ patient care revenue for UMich; Research and TEQIP Phase I and II income for CoEP

<sup>2</sup> Voluntary Support of Education: Trends in Alumni Giving (2018)  
Retrieved from: <https://www.case.org/resources/voluntary-support-education-trends-alumni-giving>

<sup>3</sup> Analysis of Annual and Financial Reports of top five IITs for 2018-19

### Indian Institutes of Technology – Alumni contribution

An established concept in premier western universities, endowment funds only made a debut in India recently. IIT-Delhi, after it was given the Institute of Eminence (IoE) tag, formally launched its global alumni endowment fund with an initial commitment of Rs 250 crore by over 10 founder alumni and aims to achieve a target corpus of \$1 billion over a period of 7 years<sup>4</sup>.

IIT Madras too has been increasingly looking at raising money from its distinguished alumni spread across the world. With about 3,500 donors and an addition of 200-250 new donors last year the institute aims to raise more than Rs.1,000 crore from alumni by 2022<sup>5</sup>.

From setting up alumni development offices in India and abroad, forming teams and alumni boards with professionals to advise on fundraising, to launching proactive alumni outreach activities, and engaging the alumni in investment decisions, IITs are going all out to attract their well-placed former students to give back to their respective almae matres.

**Research revenue:** Another major source of revenue for world class institutions has been from research. Top global institutions in the world have been leveraging the talent of faculty members to raise increased sponsored research grants from private and public organizations and these grants have been major contributors to the revenue sources of these institutions. By doing this, the institutions have improved their financial sustainability by removing major dependencies on tuition fees and other academic charges.

University	Research revenue (million USD)	% revenue from research
UC Berkeley	670	23%
University of Michigan	1266	14%
Cambridge	748	27%
NUS	612	28%
IIT Kharagpur	22	31%
CoEP	2	16%

Source: Analysis of Annual & Financial Reports of corresponding Universities for 2018-2019

Table 4: Research revenue across few institutions

**Government grants:** As observed across top public universities across the world, grants from Government (research, capital and other grants) constitute an integral part of the overall revenue. In India too, the top public institutions receive enormous support from the Government by means of grants. An analysis of the actual expenditure and budget outlays for the Department of Higher Education over the period FY16-FY20 indicates that the Grants and support to institutes of national importance and autonomous colleges continue to account for largest share of the pie, however the percentage allocation has seen a minor decrease over time (68 per cent in FY 18 to 56 per cent in FY 20)<sup>6</sup>.

<sup>4</sup> IIT Delhi Alumni Association website. Retrieved from: <https://www.iitdalumni.com/f/iit-delhi-launches-global-alumni-endowment-fund-targets-1-billion-over-7-years-3216?source=view>

<sup>5</sup> IIT Madras' fund-raising platform 'Joy of Giving'. Retrieved from: <https://joyofgiving.alumni.iitm.ac.in/why-donate>

<sup>6</sup> Union Budget. (FY16-FY20). MHRD Demand No. 58 Department of Higher Education. Retrieved from [https://indiabudget.gov.in/budget2019-20\(I\)/ub2019-20/eb/sbe58.pdf](https://indiabudget.gov.in/budget2019-20(I)/ub2019-20/eb/sbe58.pdf); <https://indiabudget.gov.in/budget2017-2018/ub2017-18/eb/sbe58.pdf>;

### College of Engineering, Pune – Government funding

The TEQIP program funded CoEP to the extent of Rs 25 crore, covering different sets of requirements – Rs 12.5 crore for equipment, Rs 1.5 crore for faculty development, and the remaining for infrastructure, library, development and networking activities<sup>7</sup>. This infusion of funds was critical to getting a head start at post-autonomy activities in CoEP. The State Government also contributed generous funds to the implementation of this plan.

Along these lines, in the long run, UVCE shall strive to move towards a 33:33:33 model with 33% coming from Government grants, 33% coming from tuition fees and 33% coming from donations from alumni or endowment fund. UVCE will aim to create diversified revenue sources to be truly autonomous and to improve its financial sustainability.

Though UVCE will have complete autonomy in operations, the institution shall adopt a proper system of checks and balances and control in respect of finance, accounts and audit. Besides, the State Government may conduct the test audit or full audit of the accounts of the institution by the auditors appointed by the State Government, when it requires to do so.

#### 3.2.1.2 Autonomy: Administrative



#### Action points

- The Government will continue to be the “owner” of UVCE
- The Government will appoint the first 11-member Board of Governors with equal representation from the Government, industry, and academia (three from each) and two members from alumni
- The Board of Governors will be the “board” of UVCE and will have full autonomy in all operational matters
- BoG to appoint Director who will have full executive powers
- Draw up a year wise implementation plan
- Act/Statutes to be modified/changed

UVCE will achieve administrative autonomy by becoming a self-governing independent entity, with an independent Board at the apex. This Board will appoint the Director, govern and decide on all matters of the institution, while being accountable to its stakeholders and the general public through transparent disclosures. This will include freedom for appointment and management (including compensation - while decreases will not be permitted) of all its employees, including faculty; setting up of its internal governance and management structures; and control over its own growth and development trajectory.

### College of Engineering, Pune – Excellence through Autonomy

The Government Resolution (GR) granting approval for autonomy to CoEP contained the following administrative and managerial permissions<sup>8</sup>:

- change of nomenclature of the degrees awarded by CoEP to B. Tech and M. Tech instead of B.E. and M.E. respectively;

<sup>7</sup> ResearchGate (2020). Excellence through Autonomy: Transformation of College of Engineering Pune into an IIT-like institution

<sup>8</sup> ResearchGate (2020). Excellence through Autonomy: Transformation of College of Engineering Pune into an IIT-like institution

- permission to formulate their own rules and regulations with respect to recruitment and service conditions of new faculty and non-teaching staff;
- permission to recruit and fill sanctioned faculty positions (paid for by the State Government) that were still vacant and to create new positions as required (to be paid for by the college);
- autonomy to conduct research, procure equipment, refurbish laboratories, build new infrastructure, engage in consultancy and continuing education programs and take up maintenance of buildings and equipment;
- power to levy increased tuition fees subject to Government approval and the permission to retain the fees collected to cover expenses by the college.
- On the matter of admission of students, the GR states that Centralised Admission Processes would continue to apply and that all benefits available to socially backward classes must continue.

The excellence of CoEP is largely attributed to the impact made by its Board of Governors and this can be attributed to the following main factors:

**Constitution of Board:** The government resolution granting autonomy to CoEP prescribed a 12-13 member Board as per the guiding principles of MHRD for TEQIP institutions. The first CoEP Board was accordingly constituted by the Government of Maharashtra, in consultation with Dr Kohli (Chairman of BoG). It had representation from illustrious members of academia, industry and civil society as well as from the Department of Higher & Technical Education and the Department of Finance of the GoM.

### 3.2.1.3 Autonomy: Academic



#### Action points

- Freedom to set curriculum and to start new branches
- Freedom to select faculty and fix salaries
- Freedom to decide on teaching/learning methods, infrastructure etc.
- Draw up a year wise implementation plan
- Act/Statutes to be modified/changed

UVCE will achieve academic autonomy that will include freedom to start programs across fields (including professional) and disciplines, devise and decide the curricula, decide the educational resources required including faculty and their qualifications, develop research programs and pursue them, decide the criteria and number for student admission, open and run multiple campuses, run ODL programs, and on all other academic and educational matters.

#### College of Engineering, Pune – Excellence through Autonomy

Prior to autonomy, being a Government college affiliated to the University of Pune, CoEP faced several challenges that are associated with the governance of affiliated colleges with respect to faculty recruitment, fixing tuition fees, and starting new courses, among others.

Staff recruitment was completely under the purview of the Maharashtra State Public Service Commission (MPSC), and due to lack of focused effort, only 100 positions out of the 233 sanctioned

posts were filled. However, in 2004, CoEP was granted full autonomy: i.e., academic, administrative, managerial and financial

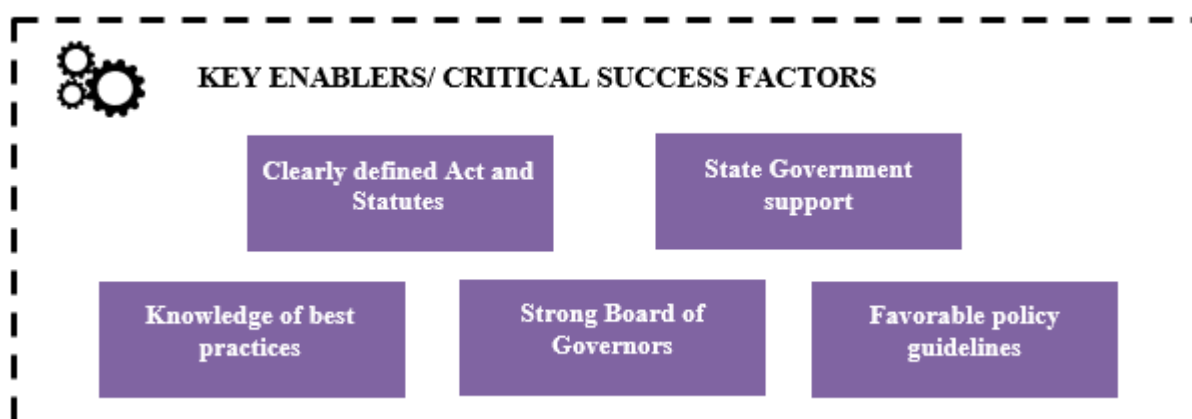
**Several initiatives were taken after being granted autonomy:**

**Faculty recruitment<sup>9</sup>**

The recruitment process at CoEP got a fillip under autonomy, because the college got complete charge of recruiting its own faculty. Through determined efforts by the management and faculty of the college, the faculty strength improved to 207. The FSR improved to 1:14.5. Industry experts, emeritus professors, and experts from other colleges in India and abroad were also invited to lecture in the college to make up for the shortfall and to introduce special courses.

**CoEP Curriculum Revision<sup>10</sup>**

The curriculum of CoEP has been upgraded three times during the last 9 years. Thus, CoEP curricula are now along the lines of the best institutes in the world. It is interesting to note that CoEP was perhaps the first institute in the country to introduce a mandatory biology course in the UG engineering curriculum way back in 2007 on the lines of MIT in the USA.



### 3.2.2 High quality faculty

The presence of experts and a diversified faculty base is a prerequisite for any world-class educational institute. Also, the hall mark of any great academic institution is its ability to attract and retain high quality faculty and create an enabling environment for the faculty in turn to attract high quality students who, under the guidance of the competent faculty perform at their best.

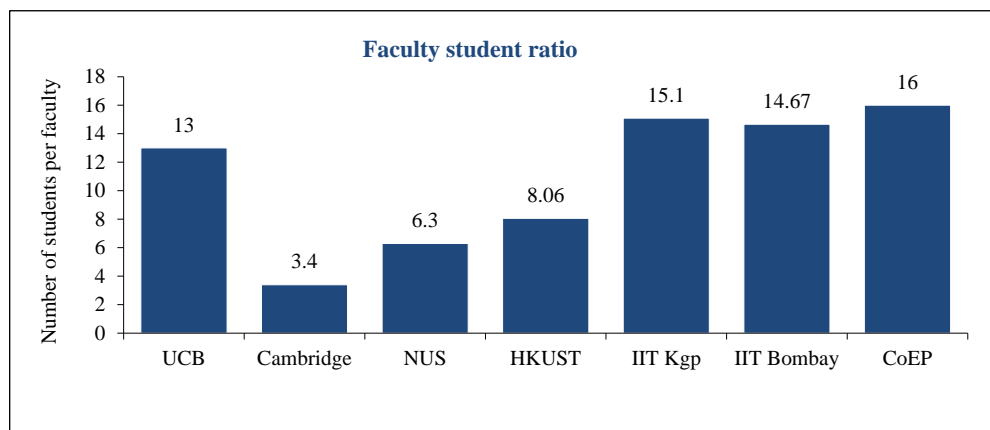
In many cases, teaching faculty are not exclusively from the country where the university operates. For example, the proportion of international faculty at University of California, Berkeley, is approximately 39 percent. Top Asian universities such as NTU and NUS have a very high proportion of international faculty (70% and 68% respectively). This further helps universities to attract talented people from across the globe who are experts in their field, encourages cross-cultural exchange of ideas, and enhances the institute's knowledge-networking capacity.

<sup>9</sup> ResearchGate (2020). Excellence through Autonomy: Transformation of College of Engineering Pune into an IIT-like institution

<sup>10</sup> TEQIP Good Governance website. CoEP story of transformation through autonomy (2014). Retrieved from: [https://teqipgoodgovernance.in/pdf/3.%20COEP%20Story%20of%20Transformation%20through%20Autonomy%2010%20July%202014%20\(FINAL\).pdf](https://teqipgoodgovernance.in/pdf/3.%20COEP%20Story%20of%20Transformation%20through%20Autonomy%2010%20July%202014%20(FINAL).pdf)

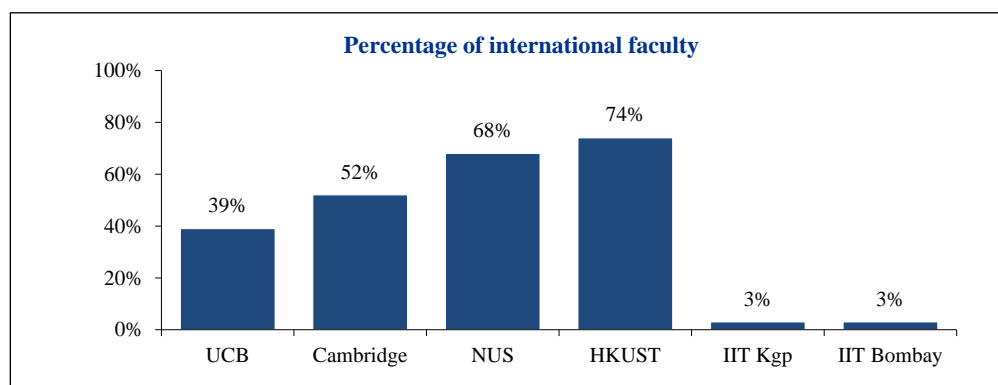
Further, it is equally important to maintain an appropriate faculty student ratio as prescribed by the UGC at the minimum. UGC norms mention a minimum faculty student ratio of 1:12 for PG programs and 1:15 for UG programs. However, a world-class institute ought to have a faculty student ratio even better than this.

Figure 4: Faculty Student Ratio across few institutions




Source: QS World Rankings 2020, NIRF report for CoEP

Figure 5: International faculty across few institutions



Source: QS World Rankings 2020

#### Proposed Action points:

	Action points
	<ul style="list-style-type: none"> <li>• Draw up a year wise implementation plan</li> <li>• Recruit high quality faculty from India &amp; overseas</li> <li>• Provide faculty with appropriate compensation&amp; ambience</li> <li>• Provide faculty with research &amp; consultancy opportunity</li> <li>• Empanel industry experts and reputed faculty from other academic institutions as adjunct faculty</li> </ul>

#### Strategies to attract good quality faculty

**Attracting expats as star faculty:** Among international faculty, attracting expats is seen to be more effective and this approach has been adopted across a few top universities.

### Star faculty recruitment strategy at POSTECH

In 2012, The Republic of Korea's Pohang University of Science and Technology topped the first *Times Higher Education* ranking of the 100 best universities under the age of 50. The role of "academic diasporas" has been crucial in the success of East Asian universities.

- POSTECH filled 60-70% of its full-time faculty positions with renowned Korean scientists living abroad. Some of the pull factors which attracted the scholars are :
  - a) Excellent research environment
  - b) Teaching load of only 2 -3 courses per year
  - c) A sabbatical year every 6 years
  - d) Salary that was highest within Korea
  - e) Excellent infrastructure like faculty apartment in campus

The university asked all of the star faculty to initiate a search for promising young scholars in their disciplines, which has successfully attracted a large number of talented young scholars.

**Appropriate compensation and benefits:** In order to attract good quality faculty from premier Indian and global institutes, UVCE can look at paying a premium compared to what is offered in comparable Indian institutes. Without paying a higher salary or providing them with facilities like faculty apartments, it will be difficult to attract and retain good quality faculty. It is also necessary to build a culture that drives excellence and rewards high performers.

### Compensation and benefits

- **Non-monetary Incentives-** Better infrastructure facilities, foreign depositions, extended research time-offs, more autonomy, involvement with corporates, easier promotions
- **Monetary incentives-** Globally competitive salaries, increased spend on training & development, variable pay
- **International alliances** to boost faculty exchange, opportunity of overseas collaborations
- Investing in top **leadership**; presence of world-class leaders can serve as an attractive trait for would-be faculty
- Transport allowance, school fee reimbursement, annual conference travel, faculty development allowance, incentives for research/training, opportunities for consulting assignments/off-campus trainings, research grants, research/teaching awards, summer and winter leave policies etc.

**Sponsored research and consulting revenue sharing opportunities:** Indian faculty members of renowned institutes such as IIMs earn more from consulting than their fixed remuneration. The faculty shares 45 percent of the consulting fees with the institute. This practice has been adopted from the universities in western countries. Sharing of research/consulting/EDP income with the faculty members will help improve their salary structure and retain good quality staff.



Institute of Chemical Technology	IIT Bombay	NUS
ICT faculty earn one-third share of the consultation fees paid to the institute. This encourages faculty to take up more consultation projects and deliver quality results	IIT Bombay recognizes the inventor(s) as a key component and thus the revenues earned from technology licensing is shared with the inventor in a 70:30 ratio in favor of the inventor team	NUS faculty are encouraged to engage in invention through favorable revenue sharing policy that gives faculty members a share of 30% of the revenue generated from IP

Source: Institution website

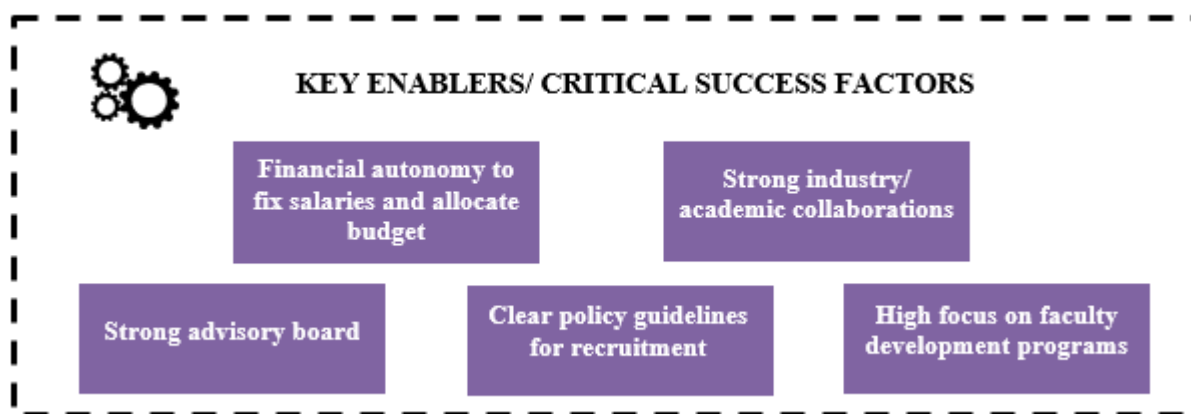
**Faculty Chairs to get good quality faculty:** In order to attract and retain the finest staff both nationally and internationally, UVCE can institute Faculty Chairs. Faculty Chair honors outstanding, high performing teachers and scholars who are leaders in their field. They also provide them with the support and resources needed to achieve their goal as researchers and educators. This has been implemented successfully in the Indian School of Business.

**Young Professor Assistantship:** Assistantships can be offered to young or untenured professors/Ph.D. students to attract highly motivated young researchers to the university. This will help in onboarding good talent at relatively lower costs on account of their limited experience.

Nanyang Technological University – Nanyang Assistant Professorship
NTU's Assistant Professorship scheme invites outstanding young researchers and exceptional scholars to apply for appointment as Nanyang Assistant Professors <sup>11</sup>
Successful candidates <ul style="list-style-type: none"> <li>• Receive start-up research grants of up to S\$ 1 million (US\$ 720K; €635K; £566K)</li> <li>• Enjoy attractive remuneration package and other benefits including assistance with accommodation</li> <li>• Hold tenure-track appointments and play lead roles in the university's multi-disciplinary, integrative research</li> </ul> The University provides excellent R&D infrastructure with well-equipped state-of-the-art laboratories and opportunities for research funding

**Attracting academic/industry experts as adjunct/visiting faculty:** Tapping into corporates – leading recruiters from UVCE to conduct modules will help in ensuring high quality education rich in industry-specific content (IIT Hyderabad has adjunct faculty coming from TCS, Microsoft, etc.). For academic faculty, equally effective strategies are tapping into foreign faculty during their summer break – June/ July (done by ISB) or tapping into retiring faculty from top national institutions (New IITs recruit adjunct faculty from old IITs).

<sup>11</sup> NTU website. Retrieved from: <https://www.ntu.edu.sg/tracs/nap/Pages/home.aspx>



### 3.2.3 Redesigned curriculum

UVCE today is an engineering focused institution. However, world class institutions are seen to have a strong multi-disciplinary focus with strong foundation in 1-2 disciplines while offering the students the academic flexibility to pursue courses from other disciplines.

In order to evolve into a State Institution of Eminence matching global standards, UVCE can focus on building a strong foundation in engineering while providing students with varied options and flexibility to pursue courses from other domains. UVCE can try to achieve this by either establishing other disciplines (in the medium to long term) or partnering with other institutions to offer programs (in the short term).

This is also in line with the National Education Policy 2019 that stresses on the importance of moving towards a more liberal education and claims that all Higher Education Institutions in the country should become multidisciplinary institutions, with teaching programs across disciplines and fields, which is essential for high quality education. Further, the National Education Policy suggests that an HEI will be called multidisciplinary if it offers at least two programs or majors in arts and humanities, at least two in science and mathematics, and at least one in social sciences.

	Engg.	Sciences	Humanities/ Arts/ SS	Mgmt.	Medicine	Law	Others
<b>UC Berkeley</b>	18%	23%	26%	8%	-	4%	21%
<b>UMich</b>	21%	9%	37%	9%	3%	2%	19%
<b>Cambridge</b>	14%	29%	39%	3%	5%	4%	6%
<b>NUS</b>	28%	14%	21%	12%	8%	3%	14%
<b>HKUST</b>	41%	17%	5%	37%	-	-	-
<b>IIT KGP</b>	92%	-	-	4%	-	1%	3%

Source: University websites; NIRF report for IIT Kgp

Table 5: Domain concentration by student enrollments across top international institutes

Besides, the rise of online education has resulted in policy level interventions, Government initiatives/ investment in digital learning and a need to move beyond the traditional form of learning with the introduction of blended-learning courses and programs.

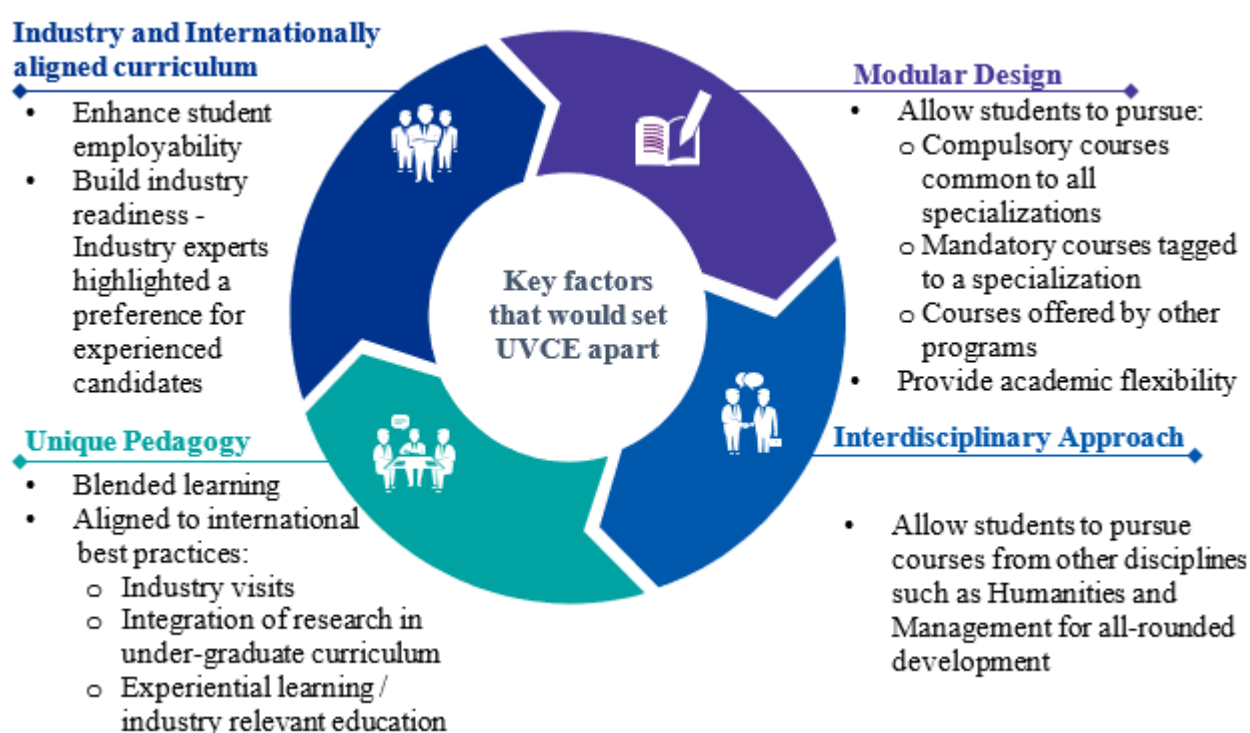
### Policy level interventions and Government initiatives/ investment

- UGC – students allowed to meet 20% of their credit requirements through online courses<sup>12</sup>
- The top 100 institutions in India’s National Institutional Ranking Framework can apply to offer fully online degrees<sup>13</sup>
- NEP - Indian higher education institutions to develop their own online programs, recognize and award credit for online programs offered by foreign institutions.

The Government’s e learning platforms such as SWAYAM and NPTEL have more than 2,200 and 400 courses respectively and have seen significant increase in enrollments<sup>14</sup>

In line with the changing trends, UVCE 2.0 should have curriculum that is “best in class”, inter-disciplinary and in line with the latest developments such as providing online courses and being industry-relevant.

Figure 6: Key curriculum aspects that would set UVCE apart



### Action points

- Appoint a committee of academics, alumni, industry to decide on curriculum
- Focus on balanced development – functional, contextual, personal
- Liberal arts as an integral part
- Courses and programs suiting the digital world
- Atmosphere of innovation and research – innovation labs and research labs
- Multi-disciplinary study/ Hybrid education
- Draw up a year wise implementation plan

<sup>12</sup> UGC website. Retrieved from: [https://www.ugc.ac.in/pdfnews/3501421\\_Step-by-step-procedure-involved-in-adoption-of-MOOCs.pdf](https://www.ugc.ac.in/pdfnews/3501421_Step-by-step-procedure-involved-in-adoption-of-MOOCs.pdf)

<sup>13</sup> Distance Education Bureau website. Retrieved from: <https://deb.ugc.ac.in/DEB/OnlineLearning>

<sup>14</sup> SWAYAM and NPTEL websites

### *Strategies to achieve a redesigned curriculum*

**Multi-disciplinary education:** UVCE will strive to promote inter-disciplinary learning in a big way. To ensure the necessary capabilities for ‘product thinking’, UVCE will incorporate cross-disciplinary studies and societal context through liberal arts programs. Courses which are at the intersection of different disciplines will be targeted to be launched. UVCE will also aim to offer the option to students to pursue a minor in the chosen field of interest to give them a career edge.

#### **Singapore University of Technology and Design (SUTD)**

- SUTD was born out of the Singaporean government’s vision to establish a new university that would be an engine for national economic growth, fostering talent and applied research in engineering, architecture and design.
- Established in 2009, the university’s educational approach and structure are distinctive in a number of respects<sup>15</sup>:
  - SUTD offers a multidisciplinary education built on a rigorous grounding in the fundamental engineering sciences
  - The curriculum is immersed in design-centered active learning that allows students to connect and integrate their learning between both courses and years of study
  - Many of the design projects have a hands-on component that connects with real world
  - By the end of program, every SUTD student works on 20 to 30 intensive design projects

SUTD also offers a breadth of experience not traditionally associated with engineering undergraduate study, including research opportunities, industry internships, undergraduate teaching opportunities and courses in humanities and social sciences.

**Collaborating with top national institutions such as IITs and IISc and global institutions as knowledge partners for the institute to produce graduate outcomes of a global standard:** The partner institutions will assist in curriculum planning and development of programs and courses, defining learning approaches and outcomes. They will also assist in creating an integrated learning environment encompassing technology; content; labs and spaces.

**Innovative teaching and research** are crucial to the successful implementation of the multi-disciplinary academic plan. There would be a shift from the traditional learning methodologies followed today to more contemporary learning approaches embracing experiential learning (learning through doing) and technology-enabled active learning.

- Hybrid learning (combination of online and offline), active learning and flipped classroom techniques would be employed to make learning more experiential and student centric
- Active Learning Classrooms (ALCs) can be established to promote more collaborative approaches to learning
- Curriculum can be redesigned to include **components of research and resign experience such as Undergraduate Research Opportunities Program (UROP), internships, capstone project or thesis**. This will ensure students graduate with better employability skills.

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<sup>15</sup> SUTD Website

### **BITS Pilani – Practice School Program (Industrial skills in curriculum)**

The Practice School (PS) Program is a controlled simulation of real-life where the student relates & applies his classroom knowledge & skills to real-life situations faced by industry. It is an educational innovation seeking to link industry experience with university instruction<sup>16</sup>. Applied learning has been gaining significance in undergraduate programs. BITS Pilani is leading the way by offering the Practice School program.

- Practice School creates the required setting for experiential and cooperative learning and education, by providing students with an opportunity to work on relevant assignments, under the guidance of professional experts and under the supervision of faculty.
- Consequently, Practice School serves as a platform that facilitates and promotes partnership and intellectual exchange between academia and industry.
- Practice School-I (PS-I) is of eight weeks duration. It is offered during the summer after the students have completed two years of course work. PS-I is primarily exposure-oriented program which is graded for five units as it is an integral part of the curriculum.
- PS-II, of five and a half months duration, carrying twenty units' credit, is operated round the year, July to December and January to June. This is done principally to make available a continuous stream of well-prepared students to work on developmental projects in industry

Since the students participate in, and contribute to live projects, they are supported by a stipend and/or other facilities such as accommodation, travel reimbursement, etc.

### **MIT – Undergraduate Research Opportunities Program (UROP)**

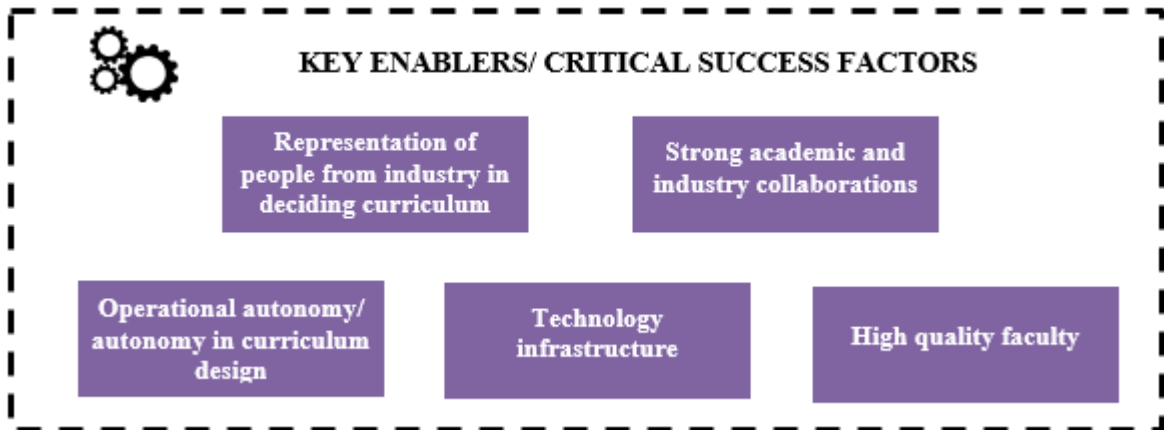
- UROP makes research and applied learning part of graduate courses<sup>17</sup>:
- Benefits of UROP
  - Enables undergraduates to collaborate directly with faculty members and researchers
  - Students obtain research projects through online postings or by directly getting in touch with faculty members
  - In return students get credits or get paid depending on the work done
  - Over 2800 students participate per year
  - More than 3500 researchers work with faculty and students on projects

2460 graduate students are appointed as research assistants, 570 as teaching assistants and 1780 granted fellowships.

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<sup>16</sup> BITS Pilani website

<sup>17</sup> MIT UROP website



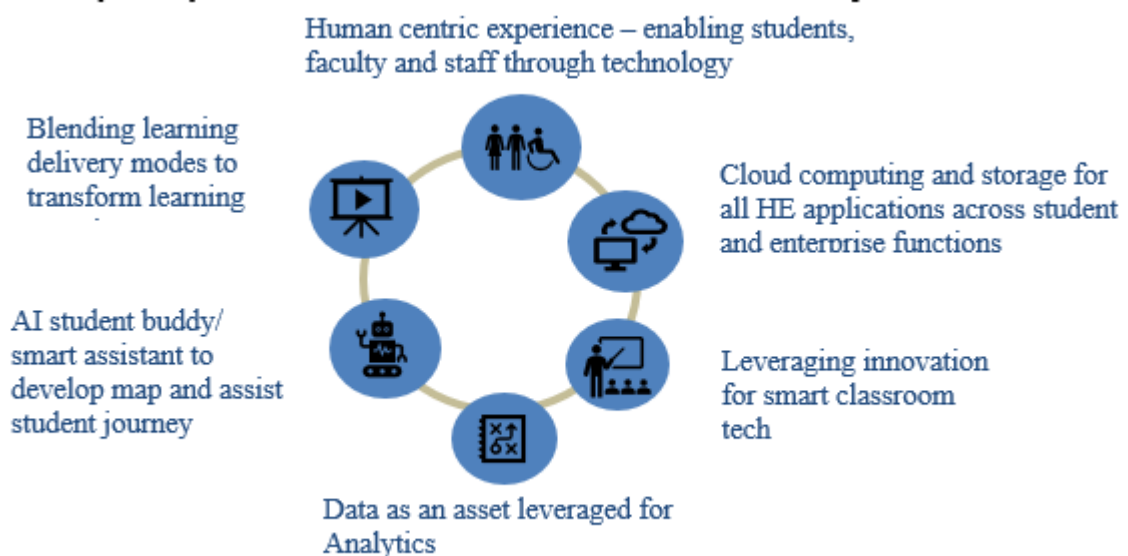
### 3.2.4 Enabling infrastructure

All world-class universities are known for their overarching infrastructure among other things. Enabling infrastructure enhances an institution's attractiveness and consequently aids in attracting better talent to the University.

UVCE will consist of two campuses, one at K R circle, and another at Jnana Bharathi, with emphasis on the campus at K R circle. Bangalore University should allocate 100 acres of land to UVCE. Bangalore University should complete the ongoing civil works and improve basic infrastructure urgently. Being located in KR circle, a central location in the city of Bengaluru, UVCE's existing infrastructure will be modelled to support the vision of a central City-based Institution. This will also ensure design and optimal space utilization.

Breaking the traditional frames of learning, institutions today are investing in digital infrastructure which is seen as an ally for any institution's academic as well as administrative development.

Figure 7: Key trends in digitization of learning and administrative technology in HE institutes



*Proposed Action points:*



**Action points**

- Improve ‘basic’ facilities urgently
- Maximize online/ distant learning
- Provide “space” and “time” for reflection/ introspection/ conversation
- Provide digital infrastructure

*Strategies for establishing enabling infrastructure:*

A dynamic learning environment will need infrastructure that supports the innovative teaching and learning environment:

**Infrastructure to promote inter-disciplinary learning and experience:** Colleges and universities are essential environments which bring together faculty, staff, researchers, and students both formally, in traditional learning environments, and informally, outside of the classroom. The academic infrastructure in UVCE should be redesigned in such a manner that not only facilitates formal collaboration but also allows for informal casual engagement in dynamic, flexible, and effective “non-classroom” environments across the campus, both inside and outside. An area, the knowledge hub should be conceptualized and developed which will be the center for inter-disciplinary activity.

**Hive: NTU’s learning hub**

In 2015, NTU unveiled an advanced educational hub to support collaborative learning and the “flipped classroom” teaching method

**Key Features<sup>18</sup>**

- Its 56 latest generation smart classrooms are fully equipped for collaborative learning and student interaction, which is the hallmark of the university’s blueprint for preparing students with skills needed in the 21<sup>st</sup> century workplace
- The futuristic building also acts as a hive of student initiatives and programs to foster the spirit of entrepreneurship, innovation and social awareness among students
- The building houses a library outpost offering a broad based discovery collection that comprises a treasure trove of 11,000 video titles and 1,200 books
- The walls of the inner corridor and staircases are embedded with 700 specially commissioned drawings designed to be ambiguous though triggers to spark students’ imagination. The drawings take reference from diverse disciplines, ranging from science and technology to art and literature

The new classrooms support ‘flipped classroom’ pedagogy where knowledge transfer from teachers to students takes place before class through various online materials which students can access in their own time.

**Research Infrastructure-** UVCE will target establishing Centers of Excellence (CoEs) over a period of next five to ten years. These CoEs will have state of the art equipment to enable world class research and innovation. The COEs will have to be setup in areas where UVCE will be known to spearhead research in the country. The

<sup>18</sup> NTU website. Retrieved from <http://media.ntu.edu.sg/NewsReleases/Pages/newsdetail.aspx?news=a161986e-ddb6-47de-8cf6-25264cefd934>



research areas should be chosen based on UVCE's strengths, national and local priorities, availability of industry partners, locational advantages offered by Bangalore and availability of funding. The CoEs will be highly dynamic and responsive to the evolving demands.

### IIT Madras Research Park

IIT Madras Research Park was set up to catalyse collaborative research between industry and academia, enable technological innovation and nurture entrepreneurship.

#### The Innovation Ecosystem:

India's first university-based research park, IIT Madras Research epitomises what can be achieved by a confluence of bringing unlike minds together. Today, it has become a paradigm for innovation ecosystems across geographical boundaries. Courted by 5 individual towers interconnected by skywalks, it is spread across 11.42 acres. IITMRP provides over 1.2 million square feet of workspace with several formal, informal, theme-based meeting and networking lounges to nurture, promote and sustain innovation through industry-academia collaboration.

IITMRP represents the commercially successful, scalable and innovative solutions that IIT Madras produces. It is a vital extension of IIT Madras by driving creativity, innovation advancement and growth and entrepreneurship.

#### Key figures of the innovation ecosystem<sup>19</sup>:

- 70+ R&D Partners across 17 sectors
- 200+ startups incubated across 13 sectors
- 200+ labs and test facilities
- 1300+ patents filed

#### Centers of Excellence

Instituted to offer guidance and resources to R&D centers, startups and to propel path-breaking research, the Centers of Excellence (about 20 in number) at IITMRP:

- Partner with companies to perform specific research
- Partner with startups
- Share their lab resources with partners and startups

**Technology in Infrastructure:** Innovation and technology should cut across academic, research, talent recruitment strategy or global networking and collaborations. UVCE will aim to leverage technology to enable effective implementation of its long-term strategy.

- **Inter disciplinary communication:** Enhancing communication between various stakeholders in the institution to build an inter-disciplinary ecosystem. Students and faculty of various disciplines should be brought together on a single platform. This platform should allow all faculty and students to know the current research areas, prospective areas of interest of all individuals to promote collaboration. All students, irrespective of the degree they are pursuing, should be brought together on an online platform to promote interaction between them.
- **Pedagogy:** UVCE will aim to build tech powered classrooms allowing for innovative pedagogical approaches like (i) flipped classrooms, (ii) MOOCs, (iii) collaborative learning, etc. This will push

<sup>19</sup> IIT Madras Research Park website



education delivery towards global standards. Capabilities will also be targeted to be built for the institution to develop their own digital content and eventually launch MOOCs themselves.

- **Administrative ease:** Operational efficiency will be enhanced through the targeted deployment of a host of tech enabled management systems.
- **Technology-enabled learning:** UVCE could target professionals looking to up skill themselves through certification programs which may be delivered in online / blended mode. For this UVCE may partner with an external vendor for supporting LMS platform or may offer these programs on external platforms such as SWAYAM, Coursera, or edX. These courses may be made available for internal students as well.
  - Target Channels: B2B (customised programs for corporate organisations)  
B2C (open programs for working professionals and students)  
B2E (collaborative programs in association with other institutions)

### IIT Roorkee – Enterprise Resource Planning Project

The Enterprise Resource Planning Project is a business transformation that is set to efficiently transform its processes & systems for operational efficiency, transparency and a better user experience in day-to-day functionalities for the students & administration alike<sup>20</sup>.

The comprehensive solution will help in mapping of assets, their life cycles, data analytics of budgeting and resourceful financial forecasting techniques, augmentation of organizational scalability for future growth plans, data uniformity and integrity across various IITR units. It will enable a paperless work culture, assistance with real time decision support mechanism, automation for management controls and approval systems, which in turn will improve the efficiency of existing processes with seamless integration of student information across IITR.

#### Objectives:

- **Exceptional service. Modern technology. A better IITR experience:** At its core, the Enterprise Project will change the way the institution. By tracking the students from time of application to graduation and beyond, and by integrating hostel functions and academics of every student, the project aims at providing a better overall experience for the students.
- **Administrative ease:** With improved tools and resources and simple easy-to-use interfaces, the ERP system would empower the IITR workforce leading to eventual devolution of decision making to ease the operational administrative procedures.

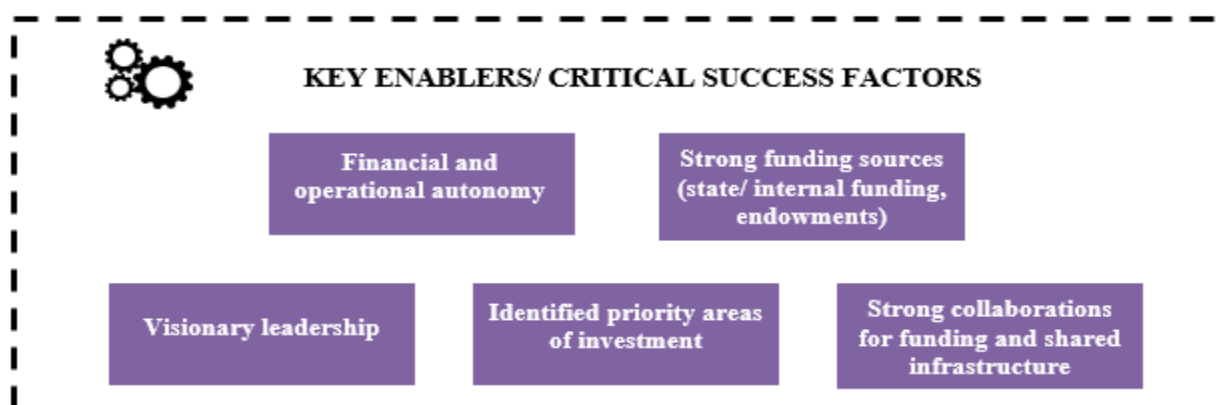
**A single system for all campuses:** The project which will be implemented in multiple phases would cover the end-to-end life cycle management of all the processes and functions of all 3 campuses of the Institute thereby integrating the campuses at Roorkee, Saharanpur, and Greater Noida.

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<sup>20</sup> IIT Roorkee website

UVCE – MODEL INFRASTRUCTURE	
<b>Academic Infrastructure</b>	<ul style="list-style-type: none"> <li>• Discipline-wise state of the art classrooms</li> <li>• Library</li> <li>• Auditorium</li> </ul>
<b>Research Infrastructure</b>	<ul style="list-style-type: none"> <li>• Research labs and Centers of Excellence</li> </ul>
<b>Residential Infrastructure</b>	<ul style="list-style-type: none"> <li>• Hostels – Student on campus accommodation</li> <li>• Faculty Quarters – Faculty accommodation</li> <li>• Staff Quarters – Partial staff accommodation on-campus</li> <li>• Leadership Quarters – Leadership on-campus accommodation</li> </ul>
<b>Enabling Infrastructure</b>	<ul style="list-style-type: none"> <li>• Dining facilities/ mess</li> <li>• IT               <ul style="list-style-type: none"> <li>• Hardware – WIFI enabled campus, smart classrooms</li> <li>• Software: ERP for ease of administration</li> <li>• Learning Management System</li> <li>• Student Information System</li> <li>• Technology infra for online learning and MOOCs</li> </ul> </li> <li>• Support/ Recreational - sports complex, canteen/ cafeteria, retail outlets – pharmacy</li> </ul>

Table 6: UVCE model infrastructure




### 3.2.5 Partnerships with Academia and Industry

In today's globalized world, in order to excel it is crucial to forge partnerships and develop network and alliances. For an institution aspiring to be world-class it has to partner with the best for knowledge development, exchange and talent management. Increased engagement with community, industry and universities locally and globally would help UVCE in providing a holistic learning and research experience for its students and faculty.

- **Engaging with community** to enhance experiential learning for the students and helping alleviate communities that need help will enable shaping holistic learning for students.
- **Industry alliances** would ensure their inputs would help in designing a market-relevant curriculum and help in placements.
- **Collaboration with world-class universities/ research institutes** will help UVCE with knowledge development which can happen through students and faculty exchange programs and research collaboration, besides helping them build their reputation and brand value.

*Proposed Action points:*

	Action points
	<ul style="list-style-type: none"> <li>• Create partnership with leading technical education institutions</li> <li>• Forge partnership with Indian industry for collaborative teaching and research</li> <li>• Draw on alumni experience and expertise</li> <li>• Draw up a year wise implementation plan</li> </ul>

*Strategies for establishing strong partnerships:*

**Identifying a mentor institution:** An important aspect that would help UVCE transition into a world class institution is identifying and choosing a mentor institution. Several institutions across the world have done remarkably well with experienced mentorship in the early days. The National Education Policy draft 2019 also addresses this fact by stating that institutions require concentrated support and mentoring to be able to get started on the path to multidisciplinary capacity, accreditation, and autonomy, as well as for inputs on making the best use of their autonomy.

#### IIT Bombay providing mentorship to College of Engineering Pune

The involvement of IIT Bombay has been indispensable to the successful transformation of the quality of academics at CoEP. IIT Bombay did not just share its curriculum – their faculty put in many hours to assist CoEP with capacity building of their faculty, for delivering the IIT Bombay curriculum, and with revamping their various laboratories<sup>21</sup>.

#### **Twinning arrangement for Curriculum delivery and training of faculty:**

Having adopted IIT Bombay curriculum, CoEP recognized that their faculty would require considerable assistance in adopting and delivering the new curriculum, and so a twinning arrangement with IITB was done to share all aspects of knowhow on quality engineering education delivery. An MoU with IIT Bombay was signed covering adoption of the IITB curriculum, assistance with teacher training and setting up of laboratories and sharing of live online lectures. Several faculty members from CoEP chose to spend one semester at IITB as part of this twinning arrangement. In a role reversal, they became students and took courses that they would eventually be teaching at CoEP, so that they could get first-hand experience with the methods of teaching and evaluation practised at IITB.

#### **Sharing of live lectures from IIT Bombay**

The use of videoconferencing equipment to share courses between IIT Bombay and CoEP through live lectures, beginning in 2007, was an early experiment in mentoring by the IITs that helped to establish some critical value propositions with regard to this model of online learning.

Given the important role that IIT Bombay played in mentoring CoEP and also given that the first of the IITs were mentored by international institutions, the importance of mentoring is quite evident and UVCE can look to one of the country's top institutions – IIT Madras/ IISc Bangalore for providing mentorship.

<sup>21</sup> ResearchGate (2020). Excellence through Autonomy: Transformation of College of Engineering Pune into an IIT-like institution

**Academic Collaborations:** UVCE will strive to connect to the world by establishing links for students, staff, faculty and program with partner universities around the world. This can be done at 3 different levels depending on their intensity of relationship:

- **Strategic Partnerships:** This can be on relationship building with UVCE in areas of curriculum planning and development of programs and courses, defining learning approaches, help in resource management including technology, laboratories, design labs, and spaces. Collaborative research which will ensure setting cluster of research labs and centers that will be multi-disciplinary in nature in UVCE to promote joint research and offer joint PhD programs
- **Mobility Programs:** Student exchange programs to facilitate short-term visits (typically of 1 or 2 week) of exchange students and research scholars in between semesters. Faculty exchange programs to teach or conduct research for one semester or an academic year at other university. Faculty members of the foreign universities could be nominated to be Area Leaders of the different departments with a view to assist in the development of curriculum and content at UVCE
- **Future Market Programs:** These will focus on knowledge transfer between both the institutions through conferences, guest lectures.

#### Academic Collaborations - Examples

##### Student Exchange

- IIT Madras has signed MoU with more than 60 institutions across the globe for student exchange programs. The student exchange program permits students of IIT Madras to visit Institutions in Germany, Switzerland and a few other countries.<sup>22</sup>

##### Faculty Exchange

Japan-IIT Hyderabad collaboration program 'FRIENDSHIP' encourages academic exchange among faculties of IITH and 11 Japanese leading universities through<sup>23</sup>:

- Supporting researchers of Japanese universities to give lectures at IITH
- Dispatching IITH faculties to Japan for short-term research visit
- Assisting workshop participated by IITH faculties and Japanese researchers on each academic field
- Assisting symposium participated by but not limited to IITH faculties, Japanese researchers applying achievements of a series of the above workshop
- Holding special lecture and other ad-hoc events depend on the occasions
- Exchanging "teaching methodology" through practical events

##### Joint degree programs

- **HKUST and Princeton:** The Hong Kong University of Science and Technology (HKUST) School of Engineering and Princeton University School of Engineering and Applied Science have formed a partnership to launch a research-based undergraduate summer exchange program, which aims to provide engineering students with an international research experience of the highest standard, a global outlook, and an all-round education<sup>24</sup>.

<sup>22</sup> IIT Madras website. Retrieved from: <https://oir.iitm.ac.in/opportunities-abroad-exchange-programs/>

<sup>23</sup> IIT Hyderabad website. Retrieved from: <http://friendship.iith.ac.in/>

<sup>24</sup> HKUST website. Retrieved from: <https://www.ust.hk/news/news/hkust-and-princeton-university-launch-joint-undergraduate-research-exchange-program>

**Joint research**

**IIT & IISc collaborate on Climate Change initiative:** Indian Institutes of Technology (IITs)-Guwahati and Mandi and Indian Institute of Science Bengaluru have collaborated to develop a Climate Change Vulnerability Assessment for the Indian Himalayan Region Using a Common Framework<sup>25</sup>.

**Industry collaborations:** Engagement with industry is crucial to understand the needs of industry, leverage their expertise, access their data, and attract funding to build solutions that cater to the needs of the market. With dynamic technological changes the role of industry in curriculum development and research, among others, becomes crucial. UVCE will aim to establish strong industry collaborations for the following:

Figure 8: Types of industry collaborations



### Industry Collaborations – Examples

#### Research

- MoU between NTPC and IISc for Research<sup>26</sup>:
  - In 2013, NTPC signed MoU with IISc, Bangalore for collaborative research and mutual cooperation between , the R&D wing of NTPC and IISc
  - The research cooperation aimed to bring synergy to their efforts, expertise and knowledge to offer effective technological solutions to power industry
  - CFD modeling of power plant processes, robotics, environment, water chemistry, waste heat recovery, etc. were jointly identified areas for further technology development.

#### Consulting Projects<sup>27</sup>

- On an average, IIMA faculty members undertake about 60 new consultancy projects on varied themes a year. Some involve giving advice to clients on specific problems; others involve training interventions, and some require evaluation of specific projects or programs.
- IIMA faculty caters to a wide range of clients including public and private sector corporations, financial institutions, government agencies/ departments, co-op societies, not-for-profit institutions, and international agencies like the World Bank and FAO.

#### Joint programs

- To encourage its employees to acquire higher qualification, develop research skills and enable them to accomplish scientific studies for the development in energy sector, NTPC Limited,

<sup>25</sup> IIT Mandi website. Retrieved from: [http://iitmandi.ac.in/pressreleases/pressrel/PR\\_ccc.pdf](http://iitmandi.ac.in/pressreleases/pressrel/PR_ccc.pdf)

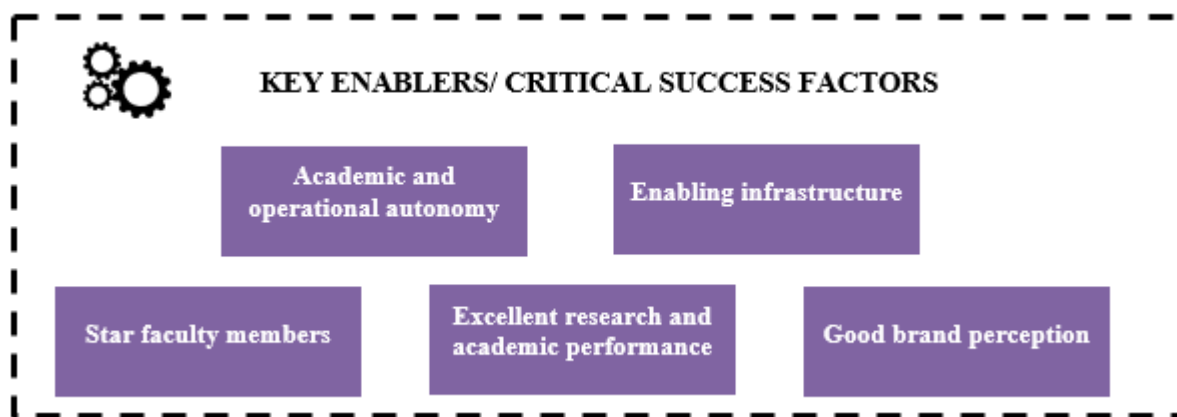
<sup>26</sup> NTPC website. Retrieved from: <https://www.ntpc.co.in/en/media/press-releases/details/ntpc-inks-mou-iisc-bangalore-research-collaboration>

<sup>27</sup> IIM Ahmedabad website. Retrieved from: <https://www.iima.ac.in/web/iima/consulting/>

inked MoU with IIT Delhi in 2012. Since launch, 255 NTPC Engineers have already been awarded M. Tech. from IIT Delhi through this initiative<sup>28</sup>.

#### Visiting faculty

- GIAN initiative by BITS Pilani, to arrange Guest Lectures by international renowned experts



### 3.3 Funding Model

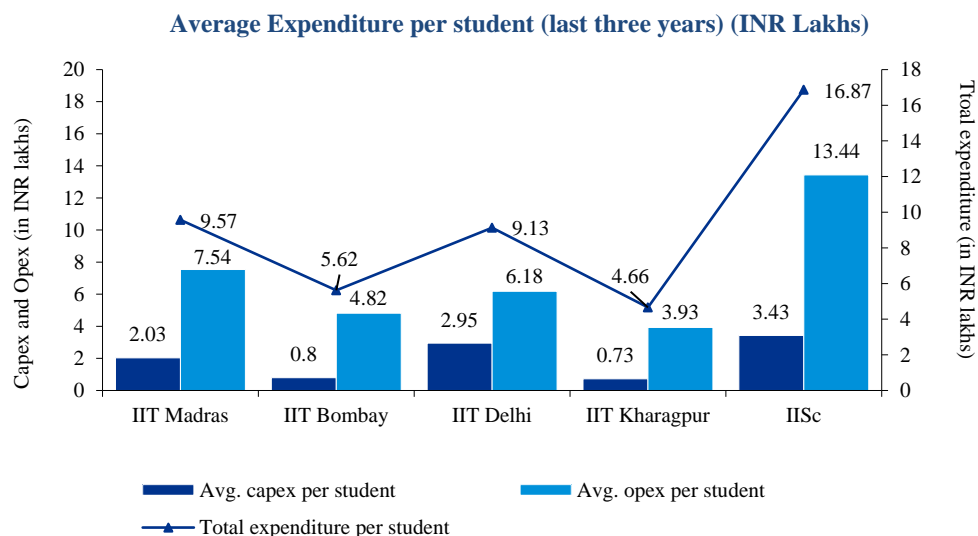
The funding model took into account some of the best practises prevalent in Indian and international educational institutions – particularly with a view of being self-reliant as an autonomous institution. In this section, some of the details of the proposed funding model are discussed.

#### 3.3.1 Rationale for funding model

- Expenditure / Annual Budget
  - Since the vision for UVCE is to become 'IIT like' and 'to be among the best in class for Higher Technical education', the annual expenditure / budget of UVCE needs to be in line with that of the IITs.
  - A good, universally accepted, measure of expenditure on education is amount spent per student per year which is also a relevant measure for inter institutional comparisons.
  - Well established IITs like IIT Madras, IIT Bombay and IIT Delhi have an annual expenditure of about Rs. 10 lakhs per student per year. (This figure is slightly lower in the case of IIT Kharagpur). This is derived from the annual expenditure of about Rs. 800- 1,000 crores a year for about 8,000 – 10,000 students. This includes both operating expenditure and capital expenditure put together. In the newer IITs, this figure is about half to one third of this, depending on their state of development and maturity.

<sup>28</sup> NTPC website. Retrieved from: <https://www.ntpc.co.in/en/media/press-releases/details/ntpc-continues-promote-higher-education-signs-mou-iit-m-tech-programme-employees>

Figure 9: Expenditure trends across IITs and IISc



- In comparison, the annual budget/ expenditures of top universities in the US and even in China are substantially higher. In the top US universities, the expenditure is about Rs. 40-50 lakhs per student per year. In China it is in the range Rs. 25 - 40 lakhs per student per year.
- Taking all the above into account, the committee is of the view that, given UVCE's vision 2030, the budget of UVCE needs to be substantially increased to levels being incurred at the IITs. (The current budget of UVCE is approximately Rs. 1 lakh per student per year as compared to Rs. 10 lakh per student per year in the IITs).
- Sources of Funds
  - When IITs were created several years ago, the funding was almost entirely by the Central Govt. Gradually, over a period of 60-70 years, the dependence on Govt. has been brought down, and it is, currently, about 60-70% of the total annual expenditure. Especially in the last 10-15 years, this journey of decreasing dependency on the Govt. has been accelerating with continuously increasing funding coming from alumni contributions, endowments and research revenues. The Govt. is also desirous of further decreasing its contribution and urging the IITs to generate their own income.
  - In the top US universities, there is practically no direct funding from the Federal Govt.; it is being limited to only research grants. About 15 % comes from tuition fees (after adjusting for fee waivers), about 30-40% from alumni contributions/ endowments and the rest from research programs/real estate etc. This has evolved over a period of more than hundred years. The key point to note here is that there is no direct Govt. funding.
  - In the top Chinese universities, Govt. contribution has been coming down from about 95% in the seventies to about 40-50% currently.

### 3.3.2 Recommendations

- Stemming from the above mentioned rationale, the Committee's recommendations are as follows:
  - Expenditure/ Budget to be Rs. 400 crores per year by year 5, starting from Rs. 100 crore per year in the first year. This works out to Rs. 10 lakhs per student per year, similar to what is prevalent, currently, in the IITs.



- While this budget is both for opex and capex, considering the poor state of current infrastructure at UVCE, it is recommended that Govt., grant Rs. 500 crore as a one-time grant to urgently improve the basic infrastructure over the next 2-3 years.
- Expenditure / budget beyond the 5th year will depend on growth of the institute and firming up sources of funds. It is estimated that in the year 2030, the likely budget would be Rs. 700 -1000 crores, similar to that of IITs current budget.
- In terms of sources of funds, the Committee's recommendations are based on the following rationale :
  - Gradual reduction of dependence on Govt.
  - New / Increasing sourcing of funds from alumni, endowment, research
  - Increasing tuition fees in line with IITs coupled with loan financing for students
- To ensure that fee is not a deterrent for any deserving student to join UVCE, the institution will follow a "need-blind" admission process as followed in many leading institutions across the world and make available supporting mechanisms such as scholarships, income share agreements, students loans etc., to achieve the same. In order to support students, a bank loan scheme will also be evolved.

The recommended sourcing of funds, year on year, is shown below:

Year	Budget	Govt.	Tuition	Alumni/ Endowment/ Research
<b>Current</b>	50	40 (80%)	10 (20%)	-
<b>Year 1</b>	100	50 (50%)	40 (40%)	10 (10%)
<b>Year 5</b>	400	220 (55%)	120 (30%)	60 (15%)
<b>Year 10</b>	700	233 (33%)	233 (33%)	233 (33%)

(all figures in Rs. Crores)

Table 7: Recommended sourcing of funds

The Committee is of the view that sourcing of funds, as suggested above is eminently possible given the large number of alumni that UVCE is bestowed with and due to the unique nature of Bengaluru, it being an industrial city with research and innovation orientation. The Committee believes that what has been recommended is a viable financial model.

### 3.4 Proposed Implementation Plan

The recommendations were made keeping in mind the future direction for UVCE. It was also felt an implementation plan which takes into account immediate (1 year), medium term (5 years) and long term (10 years and beyond) should be included to take care of the practical aspects of implementing the recommendations. Accordingly, an implementation plan for the recommendations is proposed in the following table.



Strategic area	Immediate/ 1-year	5 years	10 years
Autonomy	<ul style="list-style-type: none"> <li>○ Draft Act to be passed</li> <li>○ First statutes to be framed</li> <li>○ One-time grant from the Government to be obtained</li> <li>○ Board of Governors and Senate to be constituted</li> <li>○ Director to be appointed by the Board</li> <li>○ Fee to be fixed and fee revision to be ensured every five years</li> </ul>	<ul style="list-style-type: none"> <li>○ Move towards more diversified sources of revenue (through research, donations, etc.)</li> <li>○ Fee to be equal to IIT fee structure</li> <li>○ Endowment fund of INR 60 crores to be achieved</li> </ul>	<ul style="list-style-type: none"> <li>○ Achieve 33:33:33 financial model</li> <li>○ Endowment fund of INR 233 crores to be raised</li> </ul>
High Quality Faculty	<p><b>Favorable policies and guidelines</b></p> <ul style="list-style-type: none"> <li>○ Framing robust faculty recruitment policies with respect to faculty sourcing, performance management, rewards and recognition</li> <li>○ Institutionalizing faculty chair in collaboration with the industry</li> <li>○ Institutionalizing Young Assistant Professorship schemes</li> </ul> <p>Proposed targets:</p> <ul style="list-style-type: none"> <li>○ 20% visiting faculty from industry and academia</li> <li>○ 5% international faculty</li> </ul>	<p><b>Robust faculty development programs</b></p> <ul style="list-style-type: none"> <li>○ Implementing number of faculty development programs (faculty exchange, industry immersion, etc.)</li> <li>○ Faculty chair in every department in collaboration with the industry</li> <li>○ Providing good academic and research infrastructure</li> <li>○ Institutionalizing research track</li> </ul> <p>Proposed targets:</p> <ul style="list-style-type: none"> <li>○ 10% international faculty</li> </ul>	<p><b>Enabling environment resulting in a high-performance culture</b></p> <ul style="list-style-type: none"> <li>○ Building a positive and supportive culture that drives excellence and rewards performance</li> </ul> <p>Proposed targets:</p> <ul style="list-style-type: none"> <li>○ 15% international faculty</li> <li>○ FSR – 1:10</li> </ul>

Strategic area	Immediate/ 1-year	5 years	10 years
Redesigning curriculum	<b>Strengthening technical education:</b> <ul style="list-style-type: none"> <li>○ Involving industry experts in developing the curriculum</li> <li>○ Introducing new-age technical programs with focus on industry relevance and experiential learning</li> <li>○ Conceptualizing Undergraduate research</li> <li>○ Pedagogical innovations and changes in curriculum to promote more inter-disciplinary learning</li> </ul>	<b>Focusing on multi-disciplinary education</b> <ul style="list-style-type: none"> <li>○ Developing partnerships to provide academic flexibility</li> <li>○ Launching new programs which are inter-disciplinary</li> </ul>	<b>Becoming truly multi-disciplinary while being a leader in technical education</b> <ul style="list-style-type: none"> <li>○ Launching new programs and schools</li> <li>○ Establish multiple disciplines to offer at least few majors in arts and humanities, basic sciences, and management</li> </ul>
Enabling Infrastructure	<b>Strengthening existing infrastructure and investing in state-of-the-art laboratories and in digital infrastructure</b> Focus on improving basic facilities for students and faculty <ul style="list-style-type: none"> <li>○ Classrooms</li> <li>○ Accommodation</li> <li>○ Libraries</li> <li>○ Medical facilities</li> <li>○ Administrative building</li> <li>○ Academic departments</li> <li>○ Laboratories</li> </ul>	<b>Expanding infrastructure capabilities</b> Invest in robust infrastructure for administrative ease and to promote: <ul style="list-style-type: none"> <li>○ <b>Innovative pedagogy:</b> Technology enabled learning, flipped classroom, active learning classrooms</li> <li>○ <b>Online education:</b> Learning management systems, digital studio</li> <li>○ <b>Administrative ease:</b> ERP, CRM</li> <li>○ <b>Cutting-edge scientific research:</b> Research labs, Centers of Excellence</li> </ul>	<b>Moving towards building high-end infrastructure</b> <ul style="list-style-type: none"> <li>○ <b>Innovation ecosystem: City university model</b> bringing together faculty, students, industry, entrepreneurs, and community at large to produce academic and research work of distinctive class</li> <li>○ <b>Digital technology:</b> Virtual and remote laboratories, use of AI and IoT based tools</li> </ul>

Strategic area	Immediate/ 1-year	5 years	10 years
Partnerships with academia and industry	<b>Strengthening core areas</b> <ul style="list-style-type: none"> <li>○ Constitute Industry advisory board</li> <li>○ Identify a mentor institution as a strategic partner</li> <li>○ Identify and prioritize collaboration areas (research, faculty development, etc.) and type of collaborations (academic/ industry) in line with the vision</li> <li>○ Partnerships focused on mobility, internships, and placements, joint projects, industry faculty</li> </ul>	<b>Setting up dedicated centers to improve collaborations</b> <ul style="list-style-type: none"> <li>○ Centers of Excellence to be set up with industry</li> <li>○ Increase partnerships in the technical education space by 20-30 % with institutions in the top 500 rankings in QS/ THE World Rankings</li> <li>○ Partnerships focused on getting industry investment in building labs, research collaborations for joint Ph. D programs, and twinning programs</li> <li>○ Partnerships for online courses</li> </ul>	<b>Build a highly reputed collaboration ecosystem</b> <ul style="list-style-type: none"> <li>○ Improve quality of partnerships in the technical education space by collaborating with 20-30 institutions in the top 100 in QS/ THE World Rankings</li> <li>○ Partnerships focused on multidisciplinary program delivery, research, and innovation</li> <li>○ Act as mentor to growing institutions in the field of technical education</li> </ul>

Table 8: Proposed Implementation plan

### 3.5 Governance Structure

**Guiding Principles:** As detailed in the above sections, a robust governance structure is essential for the implementation of various strategies to achieve the vision of UVCE. The guiding principles of the proposed governance structure are as below:

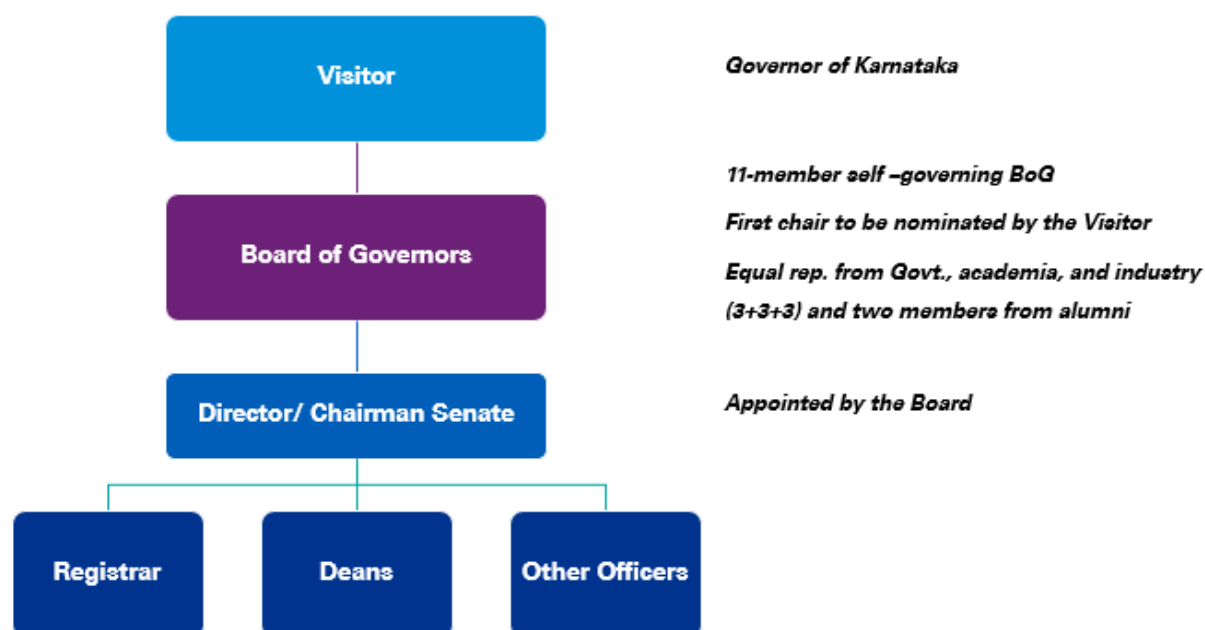
- Academic, financial, and administrative autonomy
- Degree conferring power for the institute
- Continued ownership and patronage by the State Government
- Vision TO BE AMONG THE BEST IN CLASS FOR HIGHER TECHNICAL EDUCATION
- Strive to achieve global standards and be globally competitive

The following options were explored

1. State Public University – Eg. Bangalore University, BR Ambedkar School of Economics University
2. State Private University – Eg. Reva University, Alliance University
3. Institute along the lines of IITs, NITs, IIITs

After deliberating the pros and cons of each of the models, and taking into consideration the legacy of UVCE, the committee has proposed a future state that would establish UVCE as a ‘**State Institution of Eminence (SIOE)**’ which would be modeled along the lines of IITs.

Figure 10: Proposed governance structure for the State Institution of Eminence



## CHAPTER 4 – CONCLUSION AND WAY FORWARD

In line with the 12-point Terms of Reference given to the Expert Committee, the committee had chosen to make transformative and bold recommendations as it believes that mere incremental changes will not yield the envisioned results.

The extensive consultations that the committee had with various stakeholders, experts and all internal committee deliberations can be concluded in the following recommendations:

- 1 The proposed vision of UVCE is  
**“TO BE AMONG THE BEST IN CLASS FOR HIGHER TECHNICAL EDUCATION”**
- 2 The Committee firmly believes that UVCE needs a “transformational” change rather than an “incremental” change. It is this conviction that has led to the recommendations being bold, fundamental and far reaching.
- 3 UVCE to be a “State Institution of Eminence”, modelled along the lines of the Indian Institute of Technology (IIT).
- 4 In light of this, a new draft of the UVCE Act has been prepared for the Government’s approval.
- 5 This vision is supported by the following five (5) strategies:
  - i. Complete autonomy in financial, academic and administrative matters
  - ii. Faculty of outstanding quality and caliber
  - iii. A redesigned and continuously upgraded curriculum
  - iv. Infrastructure that enables and fosters learning and innovation
  - v. Partnerships with world class academia and with local industry.
- 6 UVCE will be mentored by IIT Madras or IISc, Bangalore.
- 7 The Governor of the State of Karnataka will be the Visitor of UVCE. The Visitor will nominate the first Chairperson and members of the first Board of Governors. The 11-member Board of Governors constituted will comprise equal number of representatives from the Govt., academia and industry (three from each) and two members from alumni. Board of Governors will have a term of five (5) years, with provision for one-third of the members to step down / re-elected after three (3) years to maintain continuity of part of the board.
- 8 The Board of Governors will appoint the Director, through a defined selection process. The Director will appoint all other executives, faculty and staff through appropriate committees and processes.
- 9 The funding model recommended for UVCE aims at UVCE becoming financially less dependent on the Govt. over time and finding other avenues of sourcing funds. In the next 10 years, UVCE will diversify its sources of revenue to attain a 33:33:33 model of financing where 33% of revenue will come from Government grants, 33% from tuition fee and other student income and 33% from alumni contribution or endowment fund.

In order to implement the above recommendations, the next immediate step would be to pass the proposed UVCE Act (the draft Act is detailed in the next section) in the State Assembly and receive the assent of the Governor for it to be enacted by Karnataka State Legislature.

## PROPOSED UVCE ACT

### KARNATAKA ACT NO. XX OF 20XX (first published in the Karnataka Gazette on [ ])

#### UNIVERSITY VISVESVARAYA COLLEGE OF ENGINEERING ACT, [2020] (Received the assent of the Governor on [ ])

An Act to declare the University Visvesvaraya College of Engineering to be a state institution of eminence and to grant autonomy with a view to empower the Institute to attain standards of global excellence in engineering and allied areas of knowledge and to provide for certain matters connected with, or incidental to, the Institute.

Be it enacted by Karnataka State Legislature in the seventy-first year of the Republic of India as follows:

#### Chapter I – Preliminary

- |                                      |  |
|--------------------------------------|--|
| Short title, extent and commencement | <p>1. (1) This Act may be called the University Visvesvaraya College of Engineering Act, [2020].</p> <p>(2) It extends to the whole of the State of Karnataka.</p> <p>(3) This Act shall come into force on such date as the State Government may, by notification in the <i>Official Gazette</i>, appoint; and different dates may be appointed for different provisions of this Act and any reference in any provision to the date of commencement of this Act shall be construed as a reference to the date of coming into force of that provision.</p> |
| State Institution of Eminence        | <p>2. Whereas the objects of the University Visvesvaraya College of Engineering are such as to make it a State institution of eminence, it is hereby declared that the University Visvesvaraya College of Engineering is a State institution of eminence.</p>  |
| Definitions                          | <p>3. In this Act, unless the context otherwise requires -</p> <p>(1) “<i>Board of Governors</i>” means the Board of Governors of the Institute constituted in accordance with Section 11;</p> <p>(2) “<i>Chairperson</i>” means Chairperson of the Board of Governors appointed pursuant to sub-clause (i) of Section 11(1);</p> <p>(3) “<i>Dean</i>” means the Deans of Faculty appointed pursuant to Section 19 of this Act;</p> <p>(4) “<i>Director</i>” means the Director of the Institute appointed in pursuant to Section 17(2);</p>               |

- (5) “*Institute*” means the University Visvesvaraya College of Engineering (UVCE);
- (6) “*Ordinance*” means an ordinance made by the Senate under this Act;
- (7) “*Registrar*” means the Registrar of the Institute appointed pursuant to Section 18 of this Act;
- (8) “*Senate*” means the Senate referred to in Section 14 of this Act;
- (9) “*Statutes*” means the statutes made by the Institute under Section 33 of this Act; and
- (10) “*UGC*” means the University Grants Commission.

## **Chapter II – Institute**

Incorporation of  
Institute, effects of  
Incorporation

- 4. (1) On and from the date of commencement of this Act, the college known as University Visvesvaraya College of Engineering and currently part of Bangalore University shall be established as an autonomous State institution of eminence in accordance with the provisions of this Act. The Institute will continue to be called as University Visvesvaraya College of Engineering.
- (2) The Institute shall have perpetual succession and a common seal, with powers, subject to the provisions of this Act, to acquire, hold and dispose of property, both movable and immovable, to enter into contracts and to sue and be sued by the said name.
- (3) The headquarters of the Institute shall be in KR Circle, Bengaluru, Karnataka.
- (4) On and from the date of commencement of this Act –
  - (i) any reference to the University Visvesvaraya College of Engineering or UVCE in any contract or other instrument shall be deemed as a reference to the Institute;
  - (ii) all properties, movable and immovable, including the two campuses of the Institute situated at KR Circle, Dr. Ambedkar Veedhi, Bengaluru, Karnataka 560001 and Jnanabarathi Campus, Bangalore University, Bengaluru of or belonging to University Visvesvaraya College of Engineering (UVCE) shall vest in the Institute;
  - (iii) all rights, debts and other liabilities of University Visvesvaraya College of Engineering (UVCE) shall be transferred to, and be the rights and liabilities of, the Institute;

(iv) all officers and employees employed in the existing University Visvesvaraya College of Engineering immediately before the date of commencement of this Act shall, subject to the provisions of this Act, be given an option to transfer their services and shall exercise such power and perform such duties as are conferred upon them by or under this Act;

(v) all such officers and employees shall receive salaries and allowances and be subject to the same conditions of service to which they were entitled or subject to immediately before the commencement of this Act until any other provisions are made in accordance with this Act;

*provided* that the conditions of service applicable immediately before the date of this Act to any officer or employee shall not be varied to his/her disadvantage;

(vi) the teachers, officers and employees of the Institute referred to in sub-clause (iv) who are covered under the pensions and provident fund scheme of the State Government shall be deemed to be continued to be governed by the said scheme of the State Government.

- Objects of the Institute
5. The objects of the Institute shall be to conduct education and training (including tertiary and continuous education) using all forms including face-to-face and online/ digital format, at all levels (undergraduate, postgraduate and doctoral levels), and conduct research, including consultancy, and outreach activities. Without prejudice to the generality of the foregoing, the objects of the Institute shall include the following, namely: -
- (1) To impart high quality education in all areas of engineering and technology, allied arts and sciences (physical, social and biological sciences), interdisciplinary studies as well as emerging areas of core interest to the Institute as and when they evolve;
  - (2) To carry out research, publication and consultancy activities to advance new knowledge and provide global leadership in all areas of engineering and technology, allied arts and sciences (physical, social and biological sciences), as well as emerging areas of core interest to the Institute as and when they evolve;
  - (3) To attract best talent in terms of students and faculty, nationally and internationally;
  - (4) To establish close linkages with industry;
  - (5) To develop collaborative programmes with industry and other educational institutions, nationally and internationally;
  - (6) To emphasise on distance learning and online/digital education;
  - (7) To establish campuses and centres for engineering studies and allied areas;



- (8) To develop educational programmes and faculties that advance the cause of education, teaching and learning, across disciplines; and
- (9) To devise newer forms of student, faculty, partner engagement, and explore newer areas of knowledge as and when necessary.

**Powers and Functions  
of the Institute**

- 6.** Subject to the provisions of this Act, the Institute shall have the following powers and perform the following functions, namely:
  - (1) to provide for instruction and research in such branches of engineering and technology, sciences and arts, as the Institute may think fit, including through distance learning and digital learning platforms, and for the advancement of learning and dissemination of knowledge in such branches;
  - (2) to establish the criteria for admission of candidates for various courses of studies;
  - (3) to hold examinations, conduct processes for assessment through fair and transparent system and grant degrees [(including degrees not covered by the UGC)], diplomas and other academic distinctions or titles;
  - (4) to confer honorary degrees or other distinctions;
  - (5) to fix, demand and receive fees and other charges as the Institute may deem fit, from students and any other person, institution or body corporate for instruction and other services, including training, consultancy and advisory services, provided by the Institute;
  - (6) to establish, maintain and manage halls and hostels for the residence of students;
  - (7) to supervise and control the residence and regulate the discipline of students of the Institute and to make arrangements for promoting their health, general welfare and cultural and corporate life;
  - (8) to institute academic and other posts and to make appointments thereto;
  - (9) to frame Statutes and to alter, modify or rescind the same;
  - (10) to deal with any property belonging to or vested in the Institute in such manner as the Institute may deem fit for advancing the objects of the Institute, provided however that any sale or disposal of immovable property belonging to the Institute will require prior approval of the State Government;
  - (11) to receive gifts, grants, donations or benefactions from the Governments and to raise and receive bequests, donations and transfers of movable or immovable properties from testators, donors or transferors, as the case may be, and to have custody of all such funds;

- (12) to co-operate with educational or other institutions and industry in any part of the world having objects wholly or partly similar to those of the Institute by exchange of teachers and scholars and generally in such manner as may be conducive to their common objects;
- (13) to institute and award fellowships, scholarships, exhibitions, prizes, medals, academic distinctions or titles;
- (14) to borrow monies from banks and financial institutions;
- (15) to lower the cost of education and to enhance the reach of education by use of information and communication technology and other innovative methods;
- (16) to appoint committees to carry out functions of the Institute; and
- (17) to do all such things as may be necessary, incidental or conducive to the attainment of all or any of the objects of the Institute.
- Open to all regardless of sex, caste, creed, etc.      7. (1) The Institute shall be open to all persons irrespective of sex, race, creed, caste or class, and no test or condition shall be imposed as to religious belief or profession in admitting or appointing members, students, teachers or workers or in any other connection whatsoever.
- (2) No bequest, donation or transfer of any property shall be accepted by the Institute which in the opinion of the Board of Governors involves conditions or obligations opposed to the spirit and object of this section.
- Institute to be not-for-profit legal entity      8. (1) The Institute shall be a not-for-profit legal entity and no part of the surplus, if any, in revenue of the Institute, after meeting all expenditures in regard to its operations under this Act, shall be invested for any purpose other than for the growth and development of the Institute or for conducting research therein.
- (2) The Institute shall strive to raise funds for self-sufficiency and sustainability.

### **Chapter III – Authorities of the Institute**

- Visitor      9. (1) The Visitor of the Institute shall be the Governor of the State of Karnataka.
- (2) The Visitor shall nominate the Chairperson and other members of the first Board of Governors of the Institute.
- Authorities of the Institute      10. The following shall constitute the authorities of the Institute, namely:-
- (i) Board of Governors;
- (ii) Senate; and
- (iii) Such other authorities that may be constituted from time to time by Statute.

Board of Governors -  
Composition

**11.** (1) The Board of Governors shall be the principal executive authority of the Institute and shall consist of the following members, namely:-

- (i) a Chairperson, to be from amongst eminent persons distinguished in the field of industry or engineering or science or technology or management;
- (ii) The Director of the Institute, in his/her *ex officio* capacity;
- (iii) three (3) eminent persons nominated by the State Government distinguished in the field of education, industry, engineering or science and technology having such experience and other qualifications as may be specified by Statutes;
- (iv) two (2) eminent persons from industry who have distinguished themselves in the field of engineering, science or technology, having such experience and other qualifications as may be specified by Statutes;
- (v) one (1) eminent person from academia from another premier educational institution, who has distinguished himself/ herself in the field of engineering, science or technology, having such experience and other qualifications as may be specified by Statutes;

provided that at least three (3) of the persons nominated under sub-clauses (iii), (iv) and (v) shall be women and at least two of the persons shall be from the Scheduled Castes or Scheduled Tribes or Other Backward Castes.

- (vi) one member of the Senate who is a professor at the Institute in his/her *ex officio capacity*, to be nominated by the Director; and
- (vii) two (2) eminent individuals from among the alumni of the existing University Visvesvaraya College of Engineering or the Institute who have distinguished themselves in the field of engineering, science, technology or management.

The Chairperson shall have the power to invite any number of experts, not being members of the Board of Governors, to attend meetings of the Board of Governors and assist the Board of Governors with specific issues of their expertise, but such invitees shall not be entitled to vote at the meeting.

(2) The Chairperson and other members of the first Board of Governors constituted after the date of this Act shall be nominated by the Visitor; *provided* that half of the number of such persons shall be appointed for a period of two years and the remaining members of the first Board of Governors shall be appointed for a period of five (5) years.

Thereafter, the Chairperson shall be elected by the Board of Governors for a 5 (five) year term and other members of the Board of Governors shall, to the extent

not prescribed in section 11(1) of this Act, be appointed by a nomination committee of the then existing Board of Governors in the manner prescribed by the Statutes.

(3) The Chairperson shall ordinarily preside at the meetings of the Board of Governors and at the Convocations of the Institute.

(4) It shall be the duty of the Chairperson to ensure that the decisions taken by the Board of Governors are implemented.

(5) The Chairperson shall exercise such other powers and perform such other duties as may be assigned to him by this Act, the rules made hereunder, the Statutes and Ordinances.

**Board of Governors  
Powers and Functions**

**12.** (1) Subject to the provisions of this Act, the Board of Governors shall:

(i) be responsible for the overall superintendence, direction and control of the affairs of the Institute;

(ii) exercise all powers of the Institute not otherwise provided for in this Act, the rules made hereunder, the Statutes or Ordinances; and

(iii) have the power to review acts of the Senate and may delegate such power to a standing committee of the Board of Governors for more efficient management of the Institute.

(2) Without prejudice to sub-section (1), the Board of Governors shall also have the following powers and functions:

(i) take decisions on questions of policy relating to the administration and working of the Institute, and review the achievement of policy objectives;

(ii) consider and pass resolutions on the annual report, the annual accounts and the budget estimate of the Institute for the next financial year as it sees fit;

(iii) examine the development plans for the Institute and the sources of financing to implement such plans, and approve such of them as are considered necessary;

(iv) constitute the Senate and, by Statute, other authorities and committees of the Institute;

(v) advise the Visitor, if so required, in respect of any function to be performed by him under this Act;

(vi) institute centres, departments, programmes, and courses of study at the Institute;

- (vii) frame, amend, or rescind the Statutes governing the affairs of the Institute;
  - (viii) create academic, administrative, technical and other posts and appoint persons to such posts in the Institute, and determine terms of service and numbers for such posts and set salary scales for academic and non-academic staff;
  - (ix) to invest moneys and funds of the Institute and raise funds for the Institute;
  - (x) to delegate certain of its functions to the Senate, Registrar, Director or to any other authority or officers of the Institute;
  - (xi) to confer honorary degrees in such manner as may be specified by the Statutes;
  - (xii) to grant honorary awards and other distinctions; and
  - (xiii) to exercise such other powers and perform such other duties as may be conferred or imposed upon it by this Act or the rules made hereunder or the Statutes or Ordinances.
- (3) The Board of Governors shall meet at least once in 4 (four) months and no less than four (4) times a year.

Term of office,  
vacancies

**13.** (1) Save as otherwise provided in this section, the term of office of a member of the Board of Governors shall be five (5) years from the date of their nomination or election;

*provided* that the term of office of a member appointed under clause (vi) of Section 11(1) shall be for two (2) years from the date of his/her nomination.

*provided* further that the Chairperson, or any other member of the Board of Governors, other than an *ex officio* member, may be appointed or nominated for a second term; and

- (2) The term of office of an *ex officio* member shall continue so long as he/she holds the office by virtue of which he / she is a member.
- (3) The term of office of a member nominated or elected to fill a casual vacancy shall continue for the remainder of the term of the member in whose place he / she has been nominated or elected.
- (4) Other than as otherwise prescribed in this Act, any vacancy in the Board of Governors shall be filled based on the nominations of the nomination committee of the Board of Governors in the manner prescribed by the Statutes.

- (5) Notwithstanding anything contained in this section, an outgoing member shall continue in office until another person is nominated as a member in his/her place.
- (6) The members of the Board of Governors shall be entitled to such allowances, if any, from the Institute as may be provided for in the Statutes but no member other than the persons referred to in clauses (ii) and (vi) of section 11(1) shall be entitled to any salary by reason of this sub-section.
- (7) A member of the Board of Governors shall cease to be a member if they:
  - (i) Tender their resignation and such resignation is accepted; or
  - (ii) Become of unsound mind and stand so declared by a competent court; or
  - (iii) Become undischarged insolvent; or
  - (iv) Have been convicted of an offence involving moral turpitude.Any such cessation shall constitute a casual vacancy.
- (8) Any member of the Board of Governors may, by writing addressed to the Chairperson, resign his / her office and such resignation shall take effect on the date it is accepted by the Chairperson, which shall be no later than two (2) weeks from the date of the intimation of resignation written by such member to the Chairperson.

Senate

- 14.** (1) The Senate shall be the principal academic body of the Institute, and shall consist of the following members:
- (i) the Director of the Institute, who shall be the chairperson of the Senate;
  - (ii) the Deans;
  - (iii) all full-time faculty at the level of professors of the Institute;
  - (iv) one or more young faculty members to be nominated by the Director;
  - (v) one or more eminent academicians or industry leaders invited by the Senate; and
  - (vi) up to three persons, by invitation of the Senate on the recommendation of the Director, who are eminent in the fields of industry, finance, management, public administration and academics.
- (2) The term of office of the nominated members shall be two (2) years from the date of their appointment.
- (3) The term of office of an *ex-officio* member shall continue as long he / she holds the office by virtue of which he / she is a member.

Powers and Functions  
of Senate

- 15.** (1) The Senate shall have powers and perform functions, as follows:

- (i) to specify the criteria and process for admission to courses or programmes of study offered by the Institute;
- (ii) to design and develop curriculum and academic content of programmes and courses of study and undertake modifications thereof;
- (iii) to specify the academic calendar, guidelines for evaluation and conduct of examination and recommend grant of degrees, diplomas and other academic distinctions or titles;
- (iv) to approve new programmes and to approve changes or modifications to existing programmes;
- (v) to recommend to the Deans and persons in charge of academic programmes, suitable changes to methods of assessment; and
- (vi) such other powers and functions as may be conferred upon it by this Act, or Statutes or Ordinances, or the Board of Governors.

Other Authorities

- 16.** The constitution, powers and duties of authorities other than those specified in this Act, shall be as prescribed by Statutes.

**Chapter IV – Officers of Institute**

Director

- 17.** (1) The Director shall be the principal academic and executive officer of the Institute and shall be responsible for the proper administration of the Institute and for the imparting of instruction and maintenance of discipline therein.
- (2) The Director shall be appointed by the Board of Governors in the manner prescribed by the Statutes.
- (3) The term of office of the Director shall be for a period of five (5) years.
- (4) The Director may, by notice in writing under his hand addressed to the Board of Governors, through the Chairperson, resign his office at any time.
- (5) The Director may be appointed by the Board of Governors on such terms and conditions of service of the Director shall be such as may be prescribed by rules or the Statutes or as may be delegated to him / her by the Board of Governors.
- (6) The Director shall:
- (i) exercise general supervision of the management and control the affairs of the Institute;
  - (ii) ensure implementation of the decisions of the authorities of the Institute;

- (iii) be the chairperson of the Senate;
- (iv) be responsible for imparting of instructions and maintenance of discipline in the Institute; and
- (v) exercise such other powers and perform such other duties as may be assigned to him/her under this Act, the rules made hereunder or the Statutes or Ordinances or as may be delegated to him/her by the Board of Governors or the Chairperson, as the case may be.

**Registrar**

- 18.** (1) The Registrar shall be appointed by the Director, in such manner and on such terms and conditions as may be prescribed by Statutes.
- (2) The Registrar shall be a whole-time officer of the Institute and shall be the custodian of records, common seal, funds of the Institute and other property of the Institute.
- (3) The Registrar shall:
- (i) act as Secretary to the Board of Governors, the Senate and of such other committees as may be prescribed by the Statutes;
  - (ii) be responsible to the Director for the proper discharge of his/her functions;
  - (iii) place before the Board of Governors, any committees thereof, and other authorities all such information as may be necessary for transaction of their business;
  - (iv) subject to the superintendence of the Director, be responsible for the administration and services of the Institute, and shall exercise such other powers and perform such other duties as may be assigned to him / her under this Act, the Statutes or as may be delegated to him / her by the Board of Governors or the Director.

**Dean of Faculties**

- 19.** The Deans shall be appointed by the Director in such manner and on such terms and conditions and with such responsibilities as may be prescribed by the Statutes.

**Other Officers**

- 20.** Other officers may be appointed with respect to the Institute, and their designations, powers and duties shall be as determined by the Statutes.

**Chapter V – Finance and Audit**

**Grant of Funds by  
State Government**

- 21.** For the purpose of enabling the Institute to discharge its functions efficiently under this Act, the State Government may, after due appropriation made by the State Legislature by law in this behalf, pay to the Institute in each financial year such sums of money and in such manner as it may think fit.

**Institute Fund**

- 22.** (1) The Institute shall establish a fund to be termed the Institute Fund.



- (2) The following shall form part of, or be paid to, the Institute Fund:
- (i) income of the Institute from all sources, including income from fees and charges;
  - (ii) all contributions or grants received from the State Government, the Central Government, the University Grants Commission or any other agency;
  - (iii) all moneys received by the Institute in the form of gifts, donations, endowments, benefactions, bequests or transfers;
  - (iv) all moneys received by the Institute from collaboration arrangements with industries or other parties, including for establishment of sponsored chairs, fellowships and infrastructure facilities of the Institute;
  - (v) all moneys received by the Institute from utilisation of intellectual property arising from research conducted or rendering advisory or consultancy services by it;
  - (vi) all moneys received by the Institute in any other manner or from any other source; and
  - (vii) any sum borrowed from the banks.
- (3) All funds of the Institute shall be deposited in such banks or invested in such manner as the Board of Governors may decide.
- (4) The Institute may create a corpus fund for long term sustainability of the Institute, to which shall be credited such per cent of the net income of the Institute and donations made specifically towards such corpus fund as the Central Government may in accordance with the provisions of the Income tax Act, 1961, notify; *provided* that the Board of Governors may also create endowment funds for specific purposes to which donations may be specifically made.
- (5) The funds of the Institute shall be applied towards the expenses of the Institute including expenses incurred in the exercise of its powers and discharge of its functions in such manner, as may be prescribed by Statute.

Accounts,  
Appointment of  
Auditor, Audit

- 23.** (1) The Institute shall maintain proper accounts and other relevant records, and prepare an annual statement of accounts, including the income and expenditure of account and the balance sheet, in such form and in such manner as may be prescribed by the Statutes.
- (2) The accounts of the Institute shall be audited every year and in any case within six months from the date of closing of the financial year by the auditor who shall be a Chartered Accountant as defined in the Chartered Accountant Act, 1949 or a firm of Chartered Accountants appointed by the Board of Governors;

*provided*, that the Board of Governors shall change the auditor after every four years.

- (3) The Board of the Institute shall constitute an Audit Committee to provide expert advice on effectiveness of internal control system, risk management and audit report to the Board of Governors.
- (4) The auditor appointed under sub-section (2) or any person employed by him shall not have any direct or indirect interest, whether pecuniary or otherwise, in any matter concerning or related to the administration or functions of the Institute.
- (5) The accounts of the Institute certified by the auditor or the firm so appointed or any other person authorised in this behalf together with the audit report thereon shall be placed before the Board of Governors and the Board of Governors may issue such instructions to such authority of the Institute in respect thereof as it deems fit and the authority shall comply with such instructions.
- (6) The Institute shall adopt a proper system of internal checks and balances and control in respect of finance, accounts and audit as may be prescribed by the Statutes.
- (7) The accounts relating to grant-in-aid instituting together with the audit report shall be placed before the Board of Governors and shall also be submitted to the State Government.
- (8) The State Government may conduct a test audit or full audit of the accounts of the Institute by the auditors appointed by the State Government, at such times and intervals as it deems fit.

**Maintenance of Books and Records**

- 24.** (1) The Institute shall keep proper updated books of account with respect to:
- (i) all sums of money received and expended by it and the matters in respect of which receipt and expenditure takes place; the assets and liabilities of the Institute; and
  - (ii) the properties, movable and immovable of the Institute.

Explanation. — For the purposes of this section, if books of account give a true and fair view of the state of affairs of the Institute and its transactions, it shall be deemed as proper books of account with respect to the matters specified therein.

**Annual Report**

- 25.** (1) The Director shall each year prepare the annual report for the financial year containing such particulars as the Board of Governors may specify and the Annual Report shall be submitted to the Board of Governors on or before such date as may

be prescribed by the Statutes. The Board of Governors shall consider such report and may pass resolutions thereon.

- (2) The copy of the annual report along with the resolution of the Board of Governors thereon shall be submitted to the State Government and shall be placed on the website of the Institute.

## **Chapter VI – Miscellaneous Provisions**

Service Terms,  
Removals

**26.** (1) The terms of service of the teaching and non-teaching staff (including academic staff in non-teaching positions) shall be as set out in the Statutes.

- (2) No member of the teaching or non-teaching staff of the Institute shall be dismissed or removed or reduced in rank except after an inquiry in which he has been informed of the charges against him and given a reasonable opportunity of being heard in respect of those charges.

- (3) An appeal from an order of dismissal, removal or reduction under sub-section (2) or of termination shall lie to the [Director] within ninety days from the date of the communication of such order and the decision of the [Director] in such appeal shall be final.

Pension and provident  
funds

**27.** The Institute shall constitute for the benefit of its employees, including the Director, in such manner and subject to such conditions as may be prescribed by the Statutes, such pension, insurance and provident funds as it may deem fit.

Returns and  
Information

**28.** The Institute shall furnish to the State and Central Government and other statutory bodies such reports, returns, statements and other information as may be required by them from time to time.

Acts and proceedings  
not to be Invalidated

**29.** No act or proceeding of the Board of Governors, or any authority of the Institute or any committee constituted under the Statutes shall be invalidated merely by reason of

- (i) any vacancy in its membership or any defect in the constitution thereof, or

- (ii) any irregularities in its procedure not affecting merits of the case.

Appointments of staff

**30.** All appointments on the staff of any Institute, except that of the Director, shall be made in accordance with the procedure laid down in the Statutes, by –

- (1) the Board of Governors, if the appointment is made on the academic staff in the post of lecturer or above or if the appointment is made on the non-academic staff in any cadre the maximum of the pay scale for which exceeds [•] per month; and

- (2) by the Director, in any other case.

Protection of actions done in good faith	<b>31.</b> No suit or other legal proceedings shall be instituted against or no damages or compensation shall be claimed from, the Statutes, the Director, the authorities or officers of the Institute or any other person in respect of anything which is done in good faith or purporting to be done in pursuance of this Act or Statutes .
Filling up of casual Vacancies	<b>32.</b> Save as otherwise provided in this Act, when any vacancy occurs in the office of a member (other than an <i>ex-officio</i> member) of any authority or other body of the Institute before the expiry of the term of office of such member, the vacancy shall be filled up, as soon conveniently as may be, by nomination, appointment or, as the case may be, co-option of a member who shall hold office so long only as the member in whose place he has been nominated, appointed or co-opted, would have held it, if the vacancy had not occurred.
Power to Frame Statutes	<b>33.</b> (1) The first Statutes of the Institute shall be framed by the Board of Governors with the prior approval of the Visitor and a copy of the same shall be laid as soon as may be before the State Legislature.  (2) Subject to the provisions of this Act, the Board of Governors shall have power to make Statutes consistent with the provisions of this Act to provide for the administration and management of the affairs of the Institute.  (3) In particular and without prejudice to the generality of the foregoing powers, such Statutes may provide for all or any of the following matters, namely: -  (i) the degrees, diplomas, certificates and other academic distinctions and titles, including honorary degrees, which may be conferred or granted by the Institute and withdrawal or cancellation of any such degrees, diplomas, certificates and other academic distinctions and titles and the requirements thereof;  (ii) the formation of departments of teaching;  (iii) the fees to be charged for courses of study in the Institute and for admission to the examinations of degrees and diplomas of the Institute;  (iv) the institution of fellowships, scholarship, exhibitions, medals and prizes;  (v) the term of office and the method of appointment of officers of the Institute;  (vi) the qualifications for appointment to the Board of Governors;  (vii) guidelines for the constitution and functioning of the nomination committee of the Board of Governors;  (viii) the constitution, powers and duties of the authorities, bodies and other committees of the Institute established under this Act, the qualifications and disqualifications for membership of such authorities, bodies and

other committees, term of office of the membership thereof and other matters connected therewith;

- (ix) the creation of posts of Professors, Associate Professors, Assistant Professors, Readers, Lecturers, Researchers or equivalent academic designations or posts, officers and employees of the Institute, and the appointment of persons to such posts including the qualifications requisite therefore;
- (x) the classification, the method of appointment and the determination of the terms and conditions of service of teachers and other staff of the Institute;
- (xi) the constitution of pension, insurance and provident funds, for the benefit of the officers, teachers and other staff of the Institute;
- (xii) the establishment and maintenance of halls and hostels;
- (xiii) matters relating to the discipline of students, the conditions of residence of students of the Institute and the levying of fees for residence in the halls and hostels and of other charges;
- (xiv) the manner of filling vacancies among members of the Board of Governors;
- (xv) the allowances to be paid to the Chairman and members of the Board of Governors;
- (xvi) the authentication of the orders and decisions of the Board of Governors;
- (xvii) the meetings of the Board of governors, the Senate, or any committee thereof, the quorum at such meetings and the procedure to be followed in the conduct of their business;
- (xviii) the preparation of budget estimates and maintenance of accounts; and
- (xix) any other matter which by this Act is to be or may be prescribed by the Statutes.

Senate to Frame  
Ordinances

**33.** (1) Subject to the provisions of this Act and the Statutes, the Ordinance, of the Institute may provide for all or any of the following matters namely: -

- (i) the admission of the students to the Institute;
- (ii) the courses of study to be laid down for all degrees and diplomas of the Institute;

- (iii) the conditions under which students shall be admitted to the degree or diploma courses and to the examinations of the Institute, and shall be eligible for degrees and diplomas;
- (iv) the conditions of award of the fellowships, Scholarships, exhibitions, medals and prizes;
- (v) the conditions and mode of appointment and duties of examining bodies, examiners and moderators;
- (vi) the conduct of examinations;
- (vii) the maintenance of discipline among the students of the Institute; and
- (viii) any other matter which by this Act or the Statutes is to be or may be provided for by the Ordinances.

(2) Save as otherwise provided in this section, Ordinances shall be made by the Senate.

(3) All ordinances made by the Senate shall have effect from such date as it may direct, but every Ordinance so made shall be submitted, as soon as may be, to the Board of Governors and shall be considered by the Board of Governors at its next succeeding meeting.

(4) The Board of Governors shall have power by resolution to modify or cancel any such Ordinance and such Ordinance shall from the date of such resolution stand modified accordingly or cancelled, as the case may be.

State Government to  
Frame Rules

**34.** The State Government may, by notification, make rules, for giving effect to this Act.

Rules and Statutes to  
be laid before State  
Legislature

**35.** All rules made by the State Government and Statutes made by the Board of Governors shall be laid for not less than thirty days before the State Legislature as soon as possible after they are made and shall be subject to the rescission by the State Legislature or to such modification as the State Legislature may make during the session in which they are so laid or the session immediately following.

Right to Information  
Act

**36.** The provisions of the Right to Information Act, 2005 shall apply to each Institute, including Institutes established in public-private partnership, as if it were a public authority established by notification issued or order made under clause (h) of section 2 of the Right to Information Act, 2005.

Power to remove  
difficulties

**37.** (1) If any difficulty arises in giving effect to the provisions of this Act, the State Government may, by order published in the Official Gazette, make such provisions not inconsistent with the provisions of this Act, as may appear to it to be necessary or expedient for removing the difficulty; *provided* that no such order

shall be made under this section after the expiry of the period of three years from the date of commencement of this Act.

- (2) Every order made under this section shall, as soon as may be after it is made, be laid before the State Legislature

**Transitional Provisions**     **38.** The State Government may, without prejudice to the provisions of this Act, if it considers it so necessary and expedient, by notification, take such measures, which may be necessary for the smooth transfer of the existing University Visvesaraya College of Engineering (UVCE) to the Institute.

**Tribunal of Arbitration**     **39.** (1) Any dispute arising out of a contract between the Institute and any of its employees shall, at the request of the employee concerned or at the instance of the Institute, be referred to a Tribunal of Arbitration consisting of one member appointed by the Institute, one member nominated by the employee, and an umpire appointed by the Chairperson.

- (2) The decision of the Tribunal of Arbitration shall be final and shall not be questioned in any court.

- (3) No Suit or proceeding shall lie in any court in respect of any matter which is required by sub section (1) to be referred to the Tribunal of Arbitration.

- (4) The Tribunal of Arbitration shall have power to regulate its own procedure.

- (5) Nothing in any law for the time being in force relating to arbitration shall apply to arbitrations under this section.

## ANNEXURES

### *Annexure 1: Government order constituting committee*



#### PROCEEDINGS OF GOVERNMENT OF KARNATAKA

Subject: Constitution of Expert Committee to deliberate on up gradation of University Visvesvaraya College of Engineering, Bangalore into autonomous institution in line with I.I.T and recommend the operative modalities.

#### Preamble:-

University Visvesvaraya College of Engineering, Bangalore which was established in 1917 by Bharat Ratna Sir M. Visvesvaraya and is presently a Constituent College of Bangalore University, has completed 100 years of academic excellence in 2016-17

Government of Karnataka is cognizant of the rich legacy of University Visvesvaraya College of Engineering, Bangalore in offering unique learning experience and its dedication to the pursuit of excellence in technical education. In due consideration of indispensability of up gradation of University Visvesvaraya College of Engineering, Bangalore into autonomous institution of excellence akin to I.I.T., budgetary pronouncement has been made in this regard and Rs 10 crore has been allotted in the Budget of 2020-21 F.Y., for this purpose.

It has thus been decided to constitute committee of experts to deliberate on up gradation University Visvesvaraya College of Engineering, Bangalore

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into autonomous institution of excellence akin to I.I.T and recommend the operative modalities and planning framework to execute it. Hence the following Order.

**GOVERNMENT ORDER NO:ED/59/UBV/2020, Dated:19.05.2020**

In view of the circumstance briefed hereinabove, Government of Karnataka hereby constitutes the Committee consisting of following experts to deliberate on up-gradation University Visvesvaraya College of Engineering, Bangalore into autonomous institution of excellence akin to I.I.T and recommend the State Government with operative modalities and planning framework for execution thereof.

1	Prof.S.Sadagopan	Chairman
2	Shri Mutturaman,	Member
3	Shri Prashant Prakash	Member
4	Shri B V Jagadish	Member
5	Shri Nagananda Doraiswamy	Member
6	Prof. K.R.Venugopal Vice-Chancellor, Bangalore University	Member Convener

2. The Karnataka State Higher Education Council shall determinate the Terms of Reference for the Committee in consultation with Member Convener and communicate the same to the Committee within two days from issuance of this order

3. The Committee may co-opt other experts for their specific inputs

4. The Committee has a direct reporting line to Higher Education Department and the Committee shall endeavor to submit its report before Additional Chief Secretary to Government, Higher Education Department within an outer limit of two months unfailingly.

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5. All expenditure in connection with the meetings of the Committee including that towards TA/DA and sitting fees of the members shall be borne by the Bangalore University as per University rules.
6. Secretarial assistance for the Committee shall be provided by the Bangalore University as per requirements

By Order and in the name of  
Governor of Karnataka

*Mahesh.R*  
(Mahesh.R)

Under Secretary to Government  
Higher Education (Universities-2)

To.

24/12/2020

- 1) Additional Chief Secretary to Government, Finance Department, Vidhana Soudha, Bangalore.
- 2) Vice-Chairman, Karnataka State Higher Education Council, Bangalore
- 3) Vice Chancellor, Bangalore University, Bangalore.
- 4) The Executive Director, Karnataka Higher Education Council, Bangalore.
- 5) Members of the Committee (through Karnataka Higher Education Council)
- 6) The Registrar, Bangalore University, Bangalore.
- 7) The Finance Officer, Bangalore University, Bangalore
- 8) SGF/Spare Copies

Copy to:

- 1) P.S. to Hon'ble Deputy Chief Minister (Higher Education), Vikas Soudha, Bangalore.
- 2) P.S to Additional Chief Secretary to Government, Higher Education Department, M.S Building, Bangalore.
- 3) P.A to Deputy Secretary to Government, Higher Education Department (Universities), M.S Building, Bangalore.

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ಕರ್ನಾಟಕ ಸರ್ಕಾರ

## ಕರ್ನಾಟಕ ರಾಜ್ಯ ಉನ್ನತ ಶಿಕ್ಷಣ ಪರಿಷತ್

ಸಂ.ಕರಾಉಶಿಪ/109/ UVCE/2019-20

ದಿನಾಂಕ:20.05.2020

282

ಗೆ,  
ಪ್ರೊ.ಕೆ.ಆರ್.ವೇಣುಗೋಪಾಲ್  
ಕುಲಪತಿಗಳು, ಬೆಂಗಳೂರು ವಿಶ್ವವಿದ್ಯಾಲಯ ಹಾಗೂ  
ಯುನಿಸಿಇ ತಜ್ಞರ ಸಮಿತಿಯ ಸದಸ್ಯ ಸಂಚಾಲಕರು  
ಹೌನ ಭಾರತಿ, ಬೆಂಗಳೂರು

ಮಾನ್ಯರೇ,

ವಿಷಯ: Constitution of Expert committee to deliberate on Up Gradation of  
University Visvesvaraya College of Engineering, Bangalore into  
Autonomous institution in line with IIT and recommended the operative  
modalities.

ಉಲ್ಲೇಖ: ಸರ್ಕಾರದ ಆದೇಶ ಸಂಖ್ಯೆ. ಇಡಿ/59/ಯುಜಿವಿ/2020 ದಿನಾಂಕ:19.05.2020

ಮೇಲ್ಕಂಡ ವಿಷಯಕ್ಕೆ ಸಂಬಂಧಿಸಿದಂತೆ, ಸದರಿ ವಿಷಯದ ಕುರಿತು ಉಲ್ಲೇಖಿತ ಸರ್ಕಾರದ ಆದೇಶದಲ್ಲಿ  
ಪ್ರೊ.ಎಸ್.ಸಡಗೋಪನ್, ನಿರ್ದೇಶಕರು, IIITB ಇವರ ಅಧ್ಯಕ್ಷತೆಯಲ್ಲಿ ತಜ್ಞರ ಸಮಿತಿಯನ್ನು ರಚಿಸಿ ಆದೇಶಿಸಲಾಗಿದೆ.  
ಸದರಿ ಆದೇಶದ ಕಂಡಿಕೆ-2 ರಲ್ಲಿ Terms of Reference ನ್ನು ತಜ್ಞರ ಸಮಿತಿಯ ಸಂಚಾಲಕರಿಗೆ ನೀಡಲು ಕೋರಿದೆ.  
ಅದರಂತೆ Terms of Reference ನ್ನು ಪರಿಷತ್ತಿನ ಕಡೆ ಸಂ.ಕರಾಉಶಿಪ/109/ UVCE/2019-20 -Task Group for  
Restructuring of UVCE to become an 'Institution of Excellence'- ಸಂಬಂಧಿಸಿದ ಕಡತವನ್ನು ಈಗಾಗಲೇ  
ಸರ್ಕಾರಕ್ಕೆ ಸಲ್ಲಿಸಿದ್ದು, ಸದರಿ ಕಡತದಲ್ಲಿ Terms of Reference ನ್ನು ಸಹ ಸದರಿ ಕಡತದಲ್ಲಿ ಇರಿಸಲಾಗಿತ್ತು. ಆದಾಗ್ಯೂ  
ಸದರಿ Terms of Reference ನ ಪ್ರತಿಯನ್ನು ಇದರೊಂದಿಗೆ ಲಗತ್ತಿಸಿ ಕಳುಹಿಸಲಾಗಿದೆ.

ಮುಂದುವರಿದು, UVCE ಗೆ ಸಂಬಂಧಪಟ್ಟಂತೆ ಶ್ರೀ ಎಸ್.ವಿ.ರಂಗನಾಥ್, ಭಾ.ಆ.ಸೇ (ನಿ) ಇವರ ಅಧ್ಯಕ್ಷತೆಯಲ್ಲಿ  
ಸರ್ಕಾರವು ರಚಿಸಿದ ಸಮಿತಿಯ ವರದಿಯ ಪ್ರತಿಯನ್ನು ಇದರೊಂದಿಗೆ ಲಗತ್ತಿಸಿ ಕಳುಹಿಸಲಾಗಿದೆ.

ವಂದನೆಗಳೊಂದಿಗೆ,

ತಮ್ಮ ವಿಶ್ವಾಸಿ,

  
20/5/20

ಕಾರ್ಯನಿರ್ವಾಹಕ ನಿರ್ದೇಶಕರು

ಪ್ರತಿಗಳು ಮಾಹಿತಿಗಾಗಿ:

1. ಉಪಾಧ್ಯಕ್ಷರ ಆಪ್ತಕಾರ್ಯದರ್ಶಿಗಳು, ಕರ್ನಾಟಕ ರಾಜ್ಯ ಉನ್ನತ ಶಿಕ್ಷಣ ಪರಿಷತ್, ಬೆಂಗಳೂರು
2. ಸರ್ಕಾರದ ಅಪರ ಮುಖ್ಯ ಕಾರ್ಯದರ್ಶಿಗಳ ಆಪ್ತ ಕಾರ್ಯದರ್ಶಿಗಳು, ಉನ್ನತ ಶಿಕ್ಷಣ ಇಲಾಖೆ, ಬಹುಮಹಡಿ  
ಕಟ್ಟಡ, ಬೆಂಗಳೂರು-01
3. ಕಛೇರಿ ಪ್ರತಿ

Terms of Reference for the Expert Committee constituted to deliberate on up-gradation of University Visvesvaraya College of Engineering (UVCE), Bangalore into autonomous institution of excellence akin to IIT- as per Government Order No. ED/59/UBV/2020, Dated:19.05.2020.

Terms of Reference	
<b>Nature</b>	<ol style="list-style-type: none"> <li>1. University Visvesvaraya College of Engineering (UVCE) is a premier engineering and technology institution that has a rich legacy of training undergraduate and postgraduate engineers. It was the fifth engineering college established in India, the first in the state of Karnataka and has an illustrious alumnus who have excelled in various walks of life. Today, UVCE is in need of urgent reforms to become an institute of excellence for the state of Karnataka.</li> <li>2. The Expert Committee is constituted by the Government to help identify, plan and implement necessary changes to enable UVCE to become an institute of global excellence.</li> <li>3. The Expert Committee shall help address matters relating to all facets of the institute's functioning starting from the institution type, governance, infrastructure, funding, curriculum and its delivery, faculty, laboratories, library, hostels, equipment, the computer labs, the evaluation system, industry interaction, research work, branding and the like;</li> </ol>
<b>Terms of Reference</b>	<ol style="list-style-type: none"> <li>1. recommending the type of institution UVCE should be established as based on a role model institution and including any necessary drafts of act, statutes and/or regulations;</li> <li>2. identify the chairman of the Board of Governors or Governing Council along with recommended list of names for the role of Director or Vice Chancellor.</li> <li>3. Identify a role mode institute and conduct a Gap Analysis between a Role Model Institute and UVCE;</li> <li>4. develop a five-year strategic plan for UVCE including an implementation plan and budgets for the 1<sup>st</sup> year;</li> <li>5. develop a funding plan for UVCE encompassing government support, national grants, alumni contributions, CSR funding, etc either as endowments or general contributions;</li> <li>6. define roles and responsibilities including commitments from all stakeholders;</li> <li>7. develop a faculty development plan based on national and international best practices with due exposure to practices through institution visits by faculty;</li> <li>8. develop a curriculum framework that will enable both research and employability;</li> <li>9. help create an academic ambience and research culture as part of UVCE's DNA from the day of the starting of its new avatar;</li> </ol>

- 
10. establish necessary committees or engage external expertise needed for the establishment and smooth functioning of the new UVCE;
  11. establish strong industry linkages through knowledge partner programs, workshops, seminars, conferences, etc.;
  12. establish monitoring mechanisms enabling academic integrity and maintaining of academic standards, and to assure the quality of teaching, research and training
- 



Executive Director

Karnataka State Higher Education Council

Annexure 2: Previous committee documents



ಕರ್ನಾಟಕ ಸರ್ಕಾರ

ಕರ್ನಾಟಕ ರಾಜ್ಯ ಉನ್ನತ ಶಿಕ್ಷಣ ಪರಿಷತ್

ಸಂ.ಕರಾಉಶಿಪ/67/ಸಮಿತಿ/2018-19

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ದಿನಾಂಕ: 28.06.2019

ಗೆ,  
ಸರ್ಕಾರದ ಅಪರ ಮುಖ್ಯ ಕಾರ್ಯದರ್ಶಿಗಳು  
ಉನ್ನತ ಶಿಕ್ಷಣ ಇಲಾಖೆ  
ಬಹುಮಹಡಿ ಕಟ್ಟಡ  
ಬೆಂಗಳೂರು-01

ವಿಷಯ: ವಿಶ್ವವಿದ್ಯಾಲಯ ವಿಶ್ವೇಶ್ವರಯ್ಯ ಇಂಜಿನಿಯರಿಂಗ್ ಕಾಲೇಜಿನ ಹಸ್ತಾಂತರ ಹಾಗೂ  
ಆಡಳಿತ ನಿಯಂತ್ರಣಕ್ಕೆ ಸಂಬಂಧಿಸಿದಂತೆ ಪರ್ಯಾಯೋಜಿಸಿ ಕ್ರಿಯಾಯೋಜಿಸಿ,  
ಕಾರ್ಯವಿಧಾನ, ಪರಿಗಣಿತ ಅಭಿಪ್ರಾಯ/ಸಲಹೆ ಹಾಗೂ ರೂಪ - ರೇಷೆಗಳೊಂದಿಗೆ  
ಸಂಬಂಧಿಸಿದಂತೆ ತಜ್ಞರ ಸಮಿತಿಯ ವರದಿ ಸಲ್ಲಿಸುವ ಬಗ್ಗೆ.  
ಉಲ್ಲೇಖ: ಸರ್ಕಾರದ ಆದೇಶ ಸಂಖ್ಯೆ. ಇಡಿ 192 ಯುಜವಿ 2017, ದಿನಾಂಕ:08.01.2019


ಮೇಲ್ಕಂಡ ವಿಷಯಕ್ಕೆ ಸಂಬಂಧಿಸಿದಂತೆ ಸರ್ಕಾರಿ ಆದೇಶ ದಿನಾಂಕ:08.01.2019 (ಉಲ್ಲೇಖ ಪತ್ರ) ರಲ್ಲಿ ವಿಶ್ವವಿದ್ಯಾಲಯ  
ವಿಶ್ವೇಶ್ವರಯ್ಯ ಇಂಜಿನಿಯರಿಂಗ್ ಕಾಲೇಜಿನ ಹಸ್ತಾಂತರ ಹಾಗೂ ಆಡಳಿತ ನಿಯಂತ್ರಣಕ್ಕೆ ಸಂಬಂಧಿಸಿದಂತೆ ಪರ್ಯಾಯೋಜಿಸಿ  
ಕ್ರಿಯಾಯೋಜಿಸಿ, ಕಾರ್ಯವಿಧಾನ, ಪರಿಗಣಿತ ಅಭಿಪ್ರಾಯ/ಸಲಹೆ ಹಾಗೂ ರೂಪ - ರೇಷೆಗಳೊಂದಿಗೆ ವರದಿ ಸಲ್ಲಿಸುವ ಕುರಿತಾಗಿ  
ಶಿಕ್ಷಣ ಮತ್ತು ಆಡಳಿತ ತಜ್ಞರನ್ನೊಳಗೊಂಡ ಸಮಿತಿಯನ್ನು ಕರ್ನಾಟಕ ರಾಜ್ಯ ಉನ್ನತ ಶಿಕ್ಷಣ ಪರಿಷತ್ತಿನ ಉಪಾಧ್ಯಕ್ಷರಾದ ಶ್ರೀ  
ಎಸ್.ವಿ.ರಂಗನಾಥ್, ಭಾ.ಆ.ಸೇ (ನಿ) ರವರ ಅಧ್ಯಕ್ಷತೆಯಲ್ಲಿ ಸಮಿತಿಯನ್ನು ರಚಿಸಿ ಈ ಕುರಿತಾಗಿ ವರದಿಯನ್ನು ಸಲ್ಲಿಸಲು  
ಸೂಚಿಸಲಾಗಿತ್ತು.

ಸದರಿ ತಜ್ಞರ ಸಮಿತಿಯು ದಿನಾಂಕ:22.03.2019, 04.06.2019, 14.06.2019 ಮತ್ತು 21.06.2019 ರಂದು ಸಭೆ  
ನಡೆಸಿ ಸುದೀರ್ಘವಾಗಿ ಚರ್ಚಿಸಲಾಯಿತು. ಸದರಿ ಸಭೆಯಲ್ಲಿ ಮಾನ್ಯ ಸದಸ್ಯರ ಅಭಿಪ್ರಾಯಗಳನ್ನು ಪಡೆಯಲಾಯಿತು.

ಮುಂದುವರೆದು, ತಜ್ಞರ ಸಮಿತಿಯು ಸರ್ಕಾರದ ಆದೇಶ, ಯುಜಸಿ/ಎಐಸಿಟಿ ಮತ್ತು ಕೇಂದ್ರ ಸರ್ಕಾರದ  
ಅಧಿಸೂಚನೆ/ನಿಯಮಗಳನ್ವಯ ಸಮಿತಿಯು ಪರಾಮರ್ಶಿಸಿ ವರದಿಯನ್ನು ತಯಾರು ಮಾಡಿದ್ದು, ಸದರಿ ವರದಿಯನ್ನು ಇದರೊಂದಿಗೆ  
ಲಗತ್ತಿಸಿ ಸರ್ಕಾರಕ್ಕೆ ಸಲ್ಲಿಸಲಾಗಿದೆ.

ವಂದನೆಗಳೊಂದಿಗೆ,

ತಮ್ಮ ವಿಶ್ವಾಸಿ,

  
(ಡಾ.ಎಸ್.ಎ.ಕೋರಿ)  
ಕಾರ್ಯನಿರ್ವಾಹಕ ನಿರ್ದೇಶಕರು

ಪ್ರತಿ ಮಾಹಿತಿಗಾಗಿ:

- 1) ಮಾನ್ಯ ಉನ್ನತ ಶಿಕ್ಷಣ ಸಚಿವರ ಆಪ್ತಕಾರ್ಯದರ್ಶಿಗಳು, ವಿಧಾನಸೌಧ, ಬೆಂಗಳೂರು
- 2) ಉಪಾಧ್ಯಕ್ಷರ ಆಪ್ತಕಾರ್ಯದರ್ಶಿಗಳು, ಕರ್ನಾಟಕ ರಾಜ್ಯ ಉನ್ನತ ಶಿಕ್ಷಣ ಪರಿಷತ್, ಬೆಂಗಳೂರು
- 3) ಕಛೇರಿ ಪ್ರತಿ

Report of the Committee Constituted under the Chairmanship of Sri S V Ranganath, IAS (Rtd.), Vice Chairman, Karnataka State Higher Education Council (KSHEC), Bengaluru regarding University Visvesvaraya College of Engineering (UVCE) issues. (GO No. ED 192 UBV 2017, Dated: 08-01-2019)

Members of the Committee:

- |  |                    |
|--|--------------------|
| 1. Sri S. V. Ranganath, IAS (Rtd.)<br>Vice Chairman, KSHEC, Bengaluru          | - Chairman         |
| 2. Prof. Karisiddappa<br>Vice Chancellor, VTU, Belagavi                        | - Member           |
| 3. Prof. H. P. Khincha<br>Former Vice Chancellor, VTU, Belagavi                | - Member           |
| 4. Prof. K. R. Venugopal<br>Vice Chancellor, Bangalore University, Bengaluru   | - Member           |
| 5. Prof. S. Japhet<br>Vice Chancellor, Bengaluru Central University, Bengaluru | - Member           |
| 6. Sri H. U. Talawar<br>Director, DTE, Bengaluru                               | - Member           |
| 7. Deputy Secretary (Universities)<br>Dept. of Higher Education, GoK           | - Member           |
| 8. Registrar, Bangalore University, Bengaluru                                  | - Member           |
| 9. Registrar, Bengaluru Central University, Bengaluru                          | - Member           |
| 10. Principal, UVCE, Bengaluru   | - Member           |
| 11. Dr. S. A. Kori<br>Executive Director, KSHEC, Bengaluru                     | - Member Secretary |

The Committee met four times (22.03.2019, 04.06.2019, 14.06.2019, 21.06.2019) and deliberated the matter in detail and submitted the report as below.

1. Government of Karnataka vide its Notification dated 13.8.2015 Sec.2 (2)(IF) has trifurcated the Bengaluru University into three independent Universities viz. Bengaluru University, Bengaluru Central University and Bengaluru North University demarcating therein their clear jurisdiction and area of operation. Bengaluru Central University's territorial jurisdiction comprises of areas of Karnataka Legislative Assembly, constituencies of Shanthinagar, Byatarayanapura, Yelahanka, Malleshwaram, Hebbal, Shivajinagar, Gandhinagar, Chamarajpet, Chickpet, Basavanagudi, BTM Layout, Jayanagar and Rajajinagar in Bengaluru district. According to this Gazette Notification



University Visweswaraiyah College of Engineering (UVCE) comes under the jurisdiction of Bengaluru Central University. As on the date of this Notification (i.e. 13.8.2015), UVCE was running four Engineering courses viz. Computer Science and Engineering, Electrical Engineering, Electronics & Communication Engineering and Mechanical Engineer at Central college campus of erstwhile Bengaluru University (which now falls under the jurisdiction of Bengaluru Central University) and two courses viz. B.E. in Architecture and Civil Engineering at its Jnanabharathi campus of erstwhile Bengaluru University (which now falls under the jurisdiction of Bengaluru University). A copy of the Notification is attached herewith as Annexure-1.

2. It is well known that UVCE is a premier Engineering institution in India established in the year 1917, thanks to the foresight and vision of Bharat Ratna, Sir. M. Visvesvaraiya. It has been a *constituent college* of Bangalore University from the year 1964. UVCE was imparting engineering education in three branches, Civil(CE), Mechanical(ME) and Electrical(EI) Engineering from its early years (1917, 1917 and 1921 respectively) leading to the BE Degree. Four more undergraduate Degree programmes were added in later years, viz., B.Arch. in 1967, B.E. (CS) in 1983, B.E. (EC) in 1994, B.E.(IS) in 2004. In addition, M.E. /M. Arch in various specializations were launched since the 1980s along with research work leading to M.Sc. (Engg.) and Ph.D. Degrees. Thousands of students have passed out from this prestigious institution and have occupied key positions in academia, industry, services, research and Government. Of late, in the present day competitive environment, UVCE has not been able to keep pace with the stakeholder expectations and maintain its top position among engineering colleges in the country.

3. It is appropriate to mention here that, Government vide its Order No. ED 132 UBV 2016, dated: 11.08.2016 had constituted a Committee under the Chairmanship of Dr. S. A. Kori, Executive Director, KSHEC with Prof. B. S. Sonde, Former Vice-Chancellor, Goa University, Prof. V. G. Talawar, Former Vice-Chancellor, Mysore University, Sri. R. Somashekar, Deputy Secretary to Government, Higher Education (Universities) as members of the Committee to examine and report matters of transfer of basic infrastructure facilities, land, grants, staff etc., for the establishment of two New Universities i.e., Bangalore Central University (BCU) and Bangalore North University (BNU) carved out of Bangalore University (BU) and to prepare an Action Plan and





submit the Report to the State Government. This Committee has already submitted its report to the Government.

4. Both the VCs of Bengaluru University and Bengaluru Central University were requesting that the UVCE be attached to their respective University. In this background Government by its order No. Ed 192 UBV 2017, dated: 08-01-2019 constituted another Committee under the chairmanship of the Sri S. V. Ranganath, IAS (Rtd.), Vice Chairman, KSHEC, Bengaluru to examine the issue of jurisdiction and future of UVCE. The terms of reference are as under: A copy of the Order is at Annexure-2.

ಪ್ರಸ್ತಾವನೆಯಲ್ಲಿ ವಿವರಿಸಿದ ಸನ್ನಿವೇಶಗಳ ಹಿನ್ನೆಲೆಯಲ್ಲಿ, ವಿಶ್ವವಿದ್ಯಾಲಯ ವಿಶ್ವೇಶ್ವರಯ್ಯಾಂಜನಿಯರಿಂಗ್‌ಕಾಲೇಜಿನ (ಯುವಿಸಿಇ) ಹಸ್ತಾಂತರ ಹಾಗೂ ಅಡಳಿತ ನಿಯಂತ್ರಣಕ್ಕೆ ಸಂಬಂಧಿಸಿದಂತೆ ಪರ್ಯಾಯೋಚಿಸಿ ಕ್ರಿಯಾಯೋಜನೆ, ಕಾರ್ಯವಿಧಾನ, ಪರಿಗಣಿತಅಭಿಪ್ರಾಯ/ಸಲಹೆ ಹಾಗೂ ರೂಪು-ರೇಷೆಗಳೊಂದಿಗೆ ವರದಿ ಸಲ್ಲಿಸಲು ಶಿಕ್ಷಣ ಮತ್ತು ಅಡಳಿತ ತಜ್ಞರನ್ನೊಳಗೊಂಡ ಈ ಕೆಳಕಂಡ ಸಂರಚನೆಯ ಸಮಿತಿಯನ್ನು ರಚಿಸಲಾಗಿದೆ.

5. This Committee met on 23<sup>rd</sup> March, 4<sup>th</sup> June and 14<sup>th</sup> June 2019 at Higher Education Council and held deliberations. In the second meeting of the Committee held on 4.6.2019, all the three stake holders viz. Vice Chancellors of Bengaluru University, Bengaluru Central University and VT University, participated the meeting. They were requested to submit their views on the following issues:

- (a) Whether UVCE College has to be retained in the Bangalore University (BU)?
- (b) Whether UVCE College has to be handed over to Bangalore Central University (BCU)?
- (c) Whether UVCE College has to be handed over to Visvesvaraya Technological University (VTU)?
- (d) Whether UVCE College has to be established as an independent autonomous college?

6. The Vice Chancellor, VTU informed the Committee that he had no claim on the UVCE. He also informed that there is no provision in the present VTU Act to take over UVCE and therefore UVCE cannot be handed over to VTU.



7. Both Vice Chancellors of Bengaluru University and Bengaluru Central University put forth their claim on the UVCE. The Vice Chancellor of BCU in his letter mentioned that as per the jurisdiction indicated in the Notification dated 13.8.2015, the UVCE has been allotted to the BCU. He further stated that to achieve the vision of being a city University, four key faculties are to be housed at the BCU. They are Science & Technology, Commerce, Arts and Engineering. BCU already has three faculties and UVCE will fulfill as its Engineering faculty. BCU has the partnership with CII which ensures access to other CII institutions and this partnership will enable UVCE to leverage industry practices and make it a part of their teaching and research.

8. Similarly, Vice Chancellor, Bengaluru University in his claim stated that till this day, UVCE College student admission, correspondence with the AICTE and other Authorities including financial and administrative control are maintained by the BU. Hence UVCE be allowed to continue with the BU. Prof. H.N. Ramesh, Principal of UVCE has also appealed to the Committee to submit their report early since he is facing lot of difficulties in running the college with many issues raised by the Students and Parents. The UVCE Foundation, which is run by the UVCE Alumni suggested that UVCE should be strengthened by filling up all vacant posts of lecturers and have a Board of Governors as contemplated in the UVCE Vision document. They have also suggested that UVCE be made an autonomous institution subsequently. Several other alumni of UVCE have requested for granting autonomous status to UVCE. A copy of the Written submissions of VCs of BU, BCU, Principal UVCE as well as copies of the representation of UVCE Foundation are at Annexures 3,4,5 and 6. Government in its letter no. ED 166 URC, 2019 dated: 25-05-2019 and letter No. ED 192 UBV 2017 dated: 04-06-2019 has requested the Committee and Executive Director KSHEC respectively to expedite the matter and submit the report early, since the Government have to file a report before the Hon'ble Lokayukta (as per the directions of Hon'ble Lokayukta in Case No.Compt./LOK/BCD-851/2019).

9. The Committee noted that in India, the best educational institutions in the country in almost every discipline are mostly affiliated to the Central Government. Central Government institutions are able to maintain a far higher academic standard on account of having a much higher degree of autonomy and more generous levels of funding. For example, most IITs in the country have an annual funding of around Rs.400 crores per



year or more, whereas the UVCE's annual budget is about Rs.35 crores. It is somewhat surprising that despite the success of IITs, not many State Governments have tried to recreate a similar institution of their own. The Committee observed that a substantial improvement in the functioning of UVCE would ensure that the quality of students seeking admissions in UVCE could be on par with the students of IITs and NITs.

10. The Committee noted that a successful attempt was made by the Government of Maharashtra in the year 2004 to improve the working of College of Engineering Pune (CoEP). The Maharashtra Government appointed a Governing board under the chairmanship of Dr. F.C. Kohli, (the founder chairman of TCS). In a period of 5-6 years, the Governing board presided by Dr. Kohli succeeded in completely transforming the College of Engineering Pune into an "IIT like" institution. The critical factors which contributed for the successful transformation of College of Engineering Pune are:

- a) Grant of complete autonomy and enabling support from the Government of Maharashtra;
- b) Generous funding from TEQIP and Government of Maharashtra;
- c) The vision of the Chairman of the Board of Governors Dr. FC Kohli;
- d) The hands-on involvement of all members of the Board of Governors in different aspects of institutional development;
- e) The leadership qualities of the Director CoEP Dr. A.D. Sahasrabudhe,
- f) The enthusiastic participation of the faculty and their willingness to rise to the challenge;
- g) The extensive mentorship of IIT Bombay with regard to revamping curriculum, upgrading of laboratories and training of teachers;
- h) Contribution of alumni and industry towards mentoring, funding support, research and entrepreneurship opportunities for faculty and students.

11. The Committee noted that today the UVCE is similarly placed as College of Engineering Pune was in the year 2004. The UVCE has been a good engineering college with a heritage of more than 100 years. Its alumni occupy important positions in industry, academia and governments throughout the world. As such, the Committee is of the view that what was done by the Government of Maharashtra to completely transform the College of Engineering Pune into a world class institution, needs to be replicated in so far as UVCE is concerned.



12. The transformation of UVCE will not be possible without the enthusiasm and unstinted support of all groups of stakeholders. It is important for Government of Karnataka to grant complete autonomy to the UVCE, invite a distinguished technocrat (like Dr. FC Kohli in case of CoEP) to be the Chairman of UVCE, set up a top class board in consultation with the Chairman and assure UVCE of the funding support from Government of Karnataka. Additional funds from RUSA and TEQIP programmes as well as funding from the participating industries should also be explored. The other Board members of UVCE Board should also contribute to bring about improvement in UVCE. In case of CoEP, Dr. Kohli's role of requesting each board member to contribute at least 100 hours a year to interact and motivate the faculty of CoEP was an outstanding success. The CoEP Board also involved the alumni and leveraged their position and desire to contribute. The Board of Governors of UVCE has to initiate similar activities if it seeks to transform UVCE. UVCE should also engage with IISc as the institution of excellence for mentoring, with regard to revamping curriculum, upgrading of laboratories and training of teachers.

13. There is no universal recipe for transforming a State Government engineering college to an "IIT like Institution". UVCE should teach with the most innovative curricula and pedagogical methods, make research an integral component of undergraduate training to ensure that their students stand out because of their competence in an intensely competitive environment. It is these concrete accomplishments and the international reputation associated with these sustained achievements that can make UVCE into a world class institution.

14. Moreover, improvement does not happen overnight. Granting autonomy and generous state government funding should also be accompanied by a slew of other measures to ensure that a culture of excellence is created. Achieving high quality outputs takes many years and sustained commitments on the part of all stakeholders of UVCE. The Governing Board of UVCE should try out strategies that play to its strengths and resources. The preliminary activities regarding transformation of UVCE into an "IIT like" institution can be commenced during the current academic year i.e. 2019-20 and the functioning of the autonomous board could start from academic year 2020-21.

15. The Committee was also informed about the Notification issued by Government of India i.e. University Grant Commission (Conferment of Autonomous Status Upon Colleges and Measures for Maintenance of Standards in Autonomous Colleges) Regulations, 2018 (for short "Regulations") wherein Regulation 8 provides various criteria for granting autonomy to colleges, and UVCE can be granted autonomy under Regulation 8.7 of the Regulations. Regulation 8 reads thus: (A copy is marked as Annexure-7)

**8. CRITERIA FOR GRANTING AUTONOMY TO COLLEGES:**

*8.1. Academic reputation and previous performance in university examinations and its academic / cocurricular / extension activities in the past;*

*8.2 Academic/extension/research achievements of the faculty*

*8.3 Quality and merit in the selection of students and teachers, subject to statutory requirements in this regard;*

*8.4 Adequacy of infrastructure in terms of class rooms, library books and e-resources, laboratories and equipments, sports facilities, facilities for recreation activities, residential accommodation for faculty and students, transport facilities etc.*

*8.5 Quality of institutional management;*

*8.5 Financial strength of the institution;*

*8.7 Responsiveness of administrative structure*

*8.8 Motivation and involvement of faculty in the promotion of innovative reforms.*

16. The Committee after going through all the submissions made by various stakeholders and discussing the same in detail in various meetings, suggests the following course of action for consideration of the Government.

- a) Government of Karnataka (GoK) should take a "in principle" decision to convert UVCE into an autonomous "IIT like" institution on the lines of what was attempted by Government of Maharashtra with regard to CoEP.
- b) GoK shall grant complete autonomy to the UVCE, invite a distinguished technocrat (like Dr. FC Kohli in case of CoEP) to be the Chairman of UVCE; set up a top class board in consultation with the Chairman and assure UVCE of the funding support. Additional funds from RUSA and TEQIP programmes should



also be explored. The other members of UVCE Board should also contribute atleast 100 hours a year to bring about improvements in UVCE. The UVCE Board should involve the alumni and leverage their position and desire to contribute. The Board of Governors of UVCE should prepare a 5 year action plan involving strategies which are in consonance with UVCE's strengths and resources. The UVCE should engage with Indian Institute of Science, Bengaluru as the institution of excellence for mentoring, with regard to revamping curriculum, upgrading of laboratories and training of teachers.

- c) In the interim, the four departments viz. Computer Science and Engineering, Electrical Engineering, Electronics & Communication Engineering and Mechanical Engineers (both UG and PG) which are presently run in Central College Campus be continued with BCU as other Department of BC University (as a Department and not as a College);

Bangalore Central University					
1	Computer Science & Engineering (CS)	UG 1	B.E.1	Comp. Sci. & Engg.	70
		UG 2	B.E.2	Inf. Sci. & Engg.	60
		PG1	M.E.1	Computer Science	18
		PG2	M.E.2	Information Tech.	25
		PG3	M.E.3	Computer Networking	18
		PG4	M.E.4	Web Technology	18
		PG5	M.E.5	Software Engg.	18
		PG6	M.E.6	Bio Informatics	18
2	Electrical Engineering (EE)	UG	B.E.	Elec. & Electron. Engg.	80
		PG1	M.E.1	Power & Energy Syst.	14
		PG2	M.E.2	Power Electronics	18
		PG3	M.E.3	Control & Instrum.	18
3	Electronics & Communication Engineering (EC)	UG1	B.E.	Electron. & Com. Engg.	60
		UG2	B.E.(PT)	Electron. & Com. Engg.	60
		PG	M.E.	Electron. & Com. Engg.	25
4	Mechanical Engineering (ME)	UG1	B.E.	Mech. Engg.	100
		UG2	B.E.(PT)	Mech. Engg.	60
		PG1	M.E.1	Machine Design	18
		PG2	M.E.2	Mfg. Sci. & Engg.	18
		PG3	M.E.3	Thermal Sci. & Engg.	18
		PG4	M.E.4	Adv. Materials Tech.	18

- d) The two departments viz. Civil Engineer and Architecture (both UG and PG) which are presently run in Jnanbharathi Campus be continued with Bengaluru University as independent departments;



Bangalore University					
Sl. No.	Department	Programme level	Program me title	Specialization	Annual Intake
1	Architecture (AR)	UG	B.Arch.	Architecture	40
		PG	M. Arch.	Landscape Arch	18
2	Civil Engineering (CV)	UG1	B. E.	Civil Engg.	200
		UG2	B.E.(PT)	Civil Engg.	60
		PG1	M.E.1	Environmental Engg.	10
		PG2	M.E.2	High Way Engg.	10
		PG3	M.E.3	Geotechnical Engg.	12
		PG4	M.E.4	Pre-stressed Concrete	10
		PG 5	M.E.5	Structural Engg.	14
		PG 6	M.E.6	Constr. Tech.	10
		PG7	M.E.7	Water Resources Engg	10
		PG8	M.E.8	Earthquake Engg.	18

- e) The teaching and non teaching staff shall accordingly be continued in the respective universities;
- f) The Committee recommends that, the Students who got admission in four departments namely CS, EE, EC, ME (UG & PG) from the academic year 2018-19 will come under the Jurisdiction of Bengaluru Central University, Bengaluru.
- g) Similarly, the Committee recommended that, the Students who get admission in two departments namely AR, CV (UG & PG) from the academic year 2018-19 shall come under the Jurisdiction of Bangalore University, Bengaluru.
- h) The various other issues pertaining to UVCE viz. regarding teaching and non-teaching staff, transfer of affiliation fees, examination fees, registration fees, block grant, pension contribution, development grant and pending court cases, are discussed in detail in the report submitted by the Committee headed by Dr. S.A. Kori and action may be taken as per the report of Dr. SA Kori.

  
 (S.V. RANGANATH) 27/6  
 CHAIRMAN

*Annexure 3: Summary of internal e-meets held by the committee*

**Action points from first e - meet held on Wednesday 27<sup>th</sup> May 2020**

- Among the points discussed given below, committee to choose, within 10 days, set of very important tasks to be completed within next one year
  - Identify a model institute to follow with its head as mentor (zero down from half a dozen institutes preferably IITs).
  - Think beyond IITs.
  - Define Autonomic Structure of Academy, Finance and Operation and make UVCE so from day one.
  - Governance and administration – make UVCE’s governance and administration autonomous from day one.
  - Budget requirement for each year for next 10 years with sources of fund to achieve financial autonomy.
  - Form a committee to fulfil Statutory, Regulatory and Legal requirement to draft legislation (model legislation/draft report)



**Action points from second e - meet held on Friday, the 29<sup>th</sup> May 2020:**

- Define Structure of Governance.
- Identify mandatory and Key positions and persons for the same.
- Draft University Act done to be passed in Legislative Assemble by 15<sup>th</sup> August.
- Make UVCE a Degree Granting Body (by taking it out of Bangalore University).
- A sub-committee formed (with Mr. B Muthuraman as mentor, and Mr. Prashanth Prakash, Mr. Naganand Doraswamy, Mr. B.V. Jagadeesh as members from the committee and Mr. Narayanan, a special invitee) to bring out a report of Vision and Broad Based Structure of Governance with complete autonomy before 10<sup>th</sup> June 2020
- Seek an appointment with Hon. Dy. C.M and present the report to him so that we can be sure we are on the right track

**Action points from third e - meet held on Friday, the 5<sup>th</sup> June 2020**

- It was decided that Presentation to Hon. Dy. C.M - should have minimal slides (2 to 3 slides) – and will be prepared from the following points presented by the sub-committee
    - Ownership
    - Governance
    - Autonomy
    - Financial Model
    - Infrastructure
    - Course Content/Design
    - Pedagogy
    - Partnership and
    - Selection Criteria
  - A model Structure of Governance will be prepared from Mr. Narayanan's presentation.
  - (He presented models of structures of governance of various global and domestic universities).
  - Probable date of Hon. Dy. C.M's appointment must be well before 19th July 2020, so that an interim report can be presented to him well before the monsoon session of Legislative Assembly)
  - UVCE to remain in KR Circle
-

**Action points from fourth e - meet held on Friday, the 12<sup>th</sup> June 2020**

- There will be presentation to Hon. Dy. C.M:
    - on Vision of UVCE by Mr. B Muthuraman
    - on Structure of Governance by Mr. Narayanan
  - Mr. Prashanth to get appointment from Hon. Dy. C.M (date of Meeting will be before 19<sup>th</sup> June 2020)]  
Prof. K.R. Venugopal agreed to help Mr. Prashanth in this.
-

**Action points from fifth e - meet held on Friday, the 19<sup>th</sup> June 2020**

- Final report will be presented to Hon. Dy.C.M on 20<sup>th</sup> July 2020
- Sub-committee (Mr. Narayanan and Mr. Harish Narasappa as members formed) to prepare a Draft Legislation.
- A sub-committee will be formed to identify a Panel for Chairperson of the first Board of Governors from among Industry leaders with deep commitment to Karnataka
- Another sub-committee - with Prof. KR Venugopal, Mr. B.V. Jagadeesh and Mr. Naganand Doraswamy as members - was formed to meet the existing faculty.
- A sub-committee will be formed for Aspirational Funding Model.
- A sub-committee will be formed to meet the past conveners/chairpersons of the previous committees.

**Action points of sixth e-meet held on Wednesday 24<sup>th</sup> June 2020:**

- Draft Legislation
  - Mr. Narayanan to present draft legislation by next week (3<sup>rd</sup> July 2020), Mr. Harish Narasappa will help Mr. Narayanan in this regard.
  - Draft legislation will be prepared in the format - 'UVCE– State-owned IIT model'
- Finances & funding from alumni
  - Mr. B. Muthuraman to present a model budget; Mr. Narayanan will render support with template (Mr. Muthuraman's opinion of keeping an approximate budget to start with is essential, which can be fine-tuned periodically to arrive at a near perfect budget was accepted).
  - Mr. B.V. Jagadeesh will prepare a model of raising funds from Alumni; a stretched target of Rs 100 Cr over the next 5-7 years is to be attempted.
- Stake-holders meeting(s)
  - Mr. B.V. Jagadeesh led sub-committee will meet Faculty, Students and Alumni.
  - Mr. Muthuraman agreed to talk to Prof. R Natarajan & Mr. S.V. Ranganath.
  - Mr. Prashanth led sub-committee will meet with Dr. Aatre & Dr. Roddam Narasimha.
  - Prof K.R. Venugopal to guide and assist the sub-committees.
  - Mr. B Muthuraman suggests that the same vision document be presented in all stake-holders meet, which help maintain uniformity and consistency.
- Campus visit by expert committee
  - Mr. Prashanth will organize expert committee's visit to the campus as desired by the Hon. Dy. C.M; Chairperson Prof. Sadagopan will join.

**Action points from seventh e-meet held on Friday, the 3<sup>rd</sup> July 2020**

- List out central points of discussion(each committee member to list 10 to 15 points – arrive at consensus to zero down)
  - Directional items,
  - Exact & Detailed items.
- Sub-committee (Mr. B Muthuraman, Mr. B.V. Jagadeesh, Mr. Naganand) to work on draft finance model.
- Fix mile stones in achieving 33:33:33 finance model.
- Empathize Government in bringing out financial model.
- Appointment of the first director is the key in luring funds from industry and other sources.
- Mr. Narayanan will circulate draft act to committee members latest by Wednesday the 8th July 2020.
- Will collect suggestions from committee and present the skeleton draft on Friday, the 10th July 2020.
- Committee to help him to freeze contours to proceed with consistency in thinking.
- Final draft legislation will be presented on Friday the 17th July 2020.

**Action points from eighth e-meet held on Friday, the 10th July 2020**

- Report should have blend of State run Indian Universities, Institutions and state run international universities, institutions as examples in Finance, Academic, and Administrative Autonomy
  - Partnership-Academia: Flexibility to partner with other Indian and Global Institutes and Interdisciplinary School Model - Needs a relook to have a clarity on how to go about'
  - Domain Concentration – Needs a relook to limit streams to a few
  - Adjunct of Visiting Faculty – Mention that faculty may be from Industry and other institutions as well
  - Need not touch up on 'existing faculty' while mentioning about 'appointing high-standard faculty'
  - Need to mention Mentor Institution (probable choices are IISc, IIT M)
  - Fee revision – not on a yearly basis; may be 5 year period can be considered as a period for fee revision - Once the IIT like curriculum and IIT like facilities are achieved the fee revision may not pose a problem.
  - The lump-sum Rs. 500 Cr which is to be sought from govt. need to be sought on split basis, say Rs. 100 Cr a year next five years
  - Name of the Eminent Institute – will be dealt in draft legislation discussions by sub-committee (members Prof. K.R. Venugopal, Mr. Harish Narasappa, Mr. Narayanan)
  - Territorial Jurisdiction of the Institution - will be dealt in draft legislation discussions by sub-committee (members Prof. K.R. Venugopal, Mr. Harish Narasappa, Mr. Narayanan)
-

**Action points from ninth e - meet held on Thursday, the 16<sup>th</sup> of July 2020**

- There will be presentation to Hon. Dy. C.M on Recommendation of UVCE expert committee by Mr. B Muthuraman
  - Two or three slides which have interlinks to Vision and Structure of Governance – which facilitate recall of the past meeting with Hon. Dy. C.M
  - Rearrange points of RECOMMENDATION in order of 4, 1,3,2
  - Current point 4 -“TO BE AMONGST THE BEST IN INDIA FOR HIGHER TECHNICAL EDUCATION“ will be modified as -“TO BE AMONGST THE BEST IN CLASS FOR HIGHER TECHNICAL EDUCATION“
  - Current point 1 will become 2
  - Current point 3 will be 3
  - Current point 2 will be 4 and will have diplomatic modification that it is ‘submitted to govt. for approval’
  - Sub points (ii) and (iii) of Point 5 will get interchanged(faculty first and Curriculum next)
  - Define or mention about the term of office for members of governing council in such a way that the portion of members retire and gets replaced so as to keep the governing council as a permanent body. (Eg. One third of members may retire in Nth year and are replaced by newly selected members – each member is elected for a term of years  $M > N$ ; - Ref. IIT Act point 12)
  - The sources of income would be Govt. tuition fees, alumni contribution, endowments and from research grants, in the following proportion:
    - One-time govt.’s grant Rs. 500 cr.
    - Rs. 350 cr (more than what was given to BASE) and 150 cr for infrastructure{ - Prof KRV said already Rs. 85 Cr budget is approved for constructing hostel(Rs. 30 cr) and Mechanical blocks(Rs. 55 Cr)}

(all fig. in Rs. Crores)

Year	Budget	Govt.	Tuition	Alumni/ Endowment/ Research
Current	50	40(80%)	10(20%)	NIL
Year 1	100	75(75%)	25(25%)	NIL
Year 5	400	220(55%)	120(30%)	60(15%)
Year 10	700	233(33%)	233(33%)	233(33%)

(current student strength is taken as 4000 and assumed to be 6000 in 5 years and 10000 in 10 years)  
(it is felt that alumni contribution be shown separately as 100 cr. In 5 years)



**Action points from tenth e - meet held on Friday, the 17<sup>th</sup> of July 2020**

- The order of flow of report is decided as follows:  
EXECUTIVE SUMMARY.  
KEY RECOMMENDATIONS.  
CHAPTER I – CONTEXT AND BACKGROUND.  
CHAPTER 2 – APPROACH AND METHODOLOGY FOR PREPARING THE REPORT.  
CHAPTER 3 – DETAILED STRATEGIC ROADMAP AND ACTION POINTS.....
- Mr. B Muthuraman will finetune slides to be presented to Hon. Dy. CM/Hon. CM.
- Mr. Narayanan will coordinate with Mr Harish to get the final version of UVCE ACT, and will prepare final version of Report(in both PDF format and print-publishable format).
- Prof. KR Venugopal will help Harish to bring in appropriate points of act and statutes.
- Mr. Prashanth, Mr. Naganand will get appointment with Mr. Pradeep,IAS, Commissioner of higher education, Govt. of Karnataka, to present the gist of report prior to meeting with Hon. Dy. CM/Hon. CM.
- Mr. Prashanth will confirm the date of meeting with Hon. Dy. CM/Hon. CM.
- Expert Committee will meet a day prior to the meeting with Hon. Dy. CM/Hon. CM.

**Action points from eleventh e - meet held on Monday, the 20<sup>th</sup> of July 2020**

- Modifications suggested in the presentation, which will be carried out by Mr. Manigandan in consultation with Mr. B. Muthuraman.
- Mr. Harish will send final version of the UVCE ACT before Tuesday, the 21st July 2020 evening.
- Mr. Harish will prepare a presentation which contains salient features of the act which are unique in nature those would contribute towards making UVCE an institute of excellence/eminence.
- A few suggestions were given to Mr. Narayanan to prepare the final version of the report – important of which is to have a topic: conclusion & way forward.
- Meeting with Mr. Pradeep, IAS, Commissioner of higher education, Govt. of Karnataka will be attended by a select few of the Expert Committee – on 21st July 2020.
- Hon. Dy. CM meeting with Expert Committee is scheduled at 6 pm on Thursday the 23rd July 2020.
- Expert Committee's next meeting to have a look at the final presentation and final version of report including the Act is on Wednesday, the 22nd July 2020.

**Action points from twelfth e - meet held on Thursday, the 23<sup>rd</sup> July 2020**

- Finer details of the presentation were discussed and noted.
- Suggestions were given for the points those need to be elaborated and stressed during the presentations (both in Vision & Structure presentation and New UVCE Act presentation).
- Finer and final check will be carried out for consistency of points across the report and presentation.
- 'Freezing' will be done before tonight.

*Annexure 4: Summary of meeting with Hon. Dy. C.M.*

**Action points from the meeting with Hon. Dy.C.M. held on Thursday, the 18<sup>th</sup> June 2020**

Vision and Structure of Governance were presented to Hon. Dy. C.M by Mr. B. Muthuraman and Mr. Narayanan respectively.

**Action Points:**

- **Hon. Dy. C.M was in general appreciative of our position**
- **Hon. Dy. C.M wanted us to focus on financial model as well**
- **Hon. Dy. C.M suggested that the final report before 20<sup>th</sup> July 2020 (no Interim Report)**

Other dignitaries present were

- The Additional Chief Secretary to Government of Karnataka Dr. E.V. Ramana Reddy, IAS)
- The Commissioner, Department of Higher Education, Government of Karnataka, Mr. P Pradeep, IAS
- Chairman Prof. S. Sadagopan, on behalf of the committee agreed to present the final report on 20<sup>th</sup> July 2020.

*Annexure 5: Summary of meetings with experts*

Mr. B. Muthuraman, member of the expert committee contacted Mr. Natarajan, Former Director, IIT M over phone on Thursday, the 25<sup>th</sup> June 2020 at 9.15 pm

Key points of the meeting with Prof R Natarajan, Former Director, IITM

- UVCE is a unique animal; no autonomy, no money, part of another university.
- No vision, lot of infighting.
- UVCE gets a name only because of good students.
- Reasonably good ranking only because of students.
- Low fees. This is the only reason why students join UVCE.
- Very poor infrastructure.
- No interaction with IISc.
- Lots and lots of legacy issues which cannot be resolved easily.
- Two campus issue is a problem
- To make UVCE into “IIT Like” is really difficult.
- His final comment “your committee should go thru all previous reports and ponder as to why none of them were implemented. What were the hurdles? How to overcome these hurdles?”

Mr. B. Muthuraman, member of the expert committee contacted Mr. S.V. Ranganath, Former Chief Secretary, GoK, over phone on Saturday, the 27<sup>th</sup> June 2020 at 11.15 am.

Key points of the meeting with Mr. S.V. Ranganath, former Chief Secretary, GoK

- He dealt with the past history to start with
- He, repeatedly, took the name of College of Engineering, Pune as a model for transformation of an educational institution. He attributed its success to Mr F.C Kohli and Mr. Sahasrabuddhe and the interest that Governing Council members took in the transformation process. Mr. Kohli had asked each council member to spend 100 hours per year on the affairs of the institute. M. Ranganath said we need a Kohli and a Sahasrabuddhe if UVCE is to be transformed.
- Mr Ranganath said the following factors are the MOST IMPORTANT for making any kind of transformation at UVCE:
  - Complete autonomy coupled with enabling support from GoK, including regulatory and financial support.
  - Adequate funding. Currently UVCE gets only 30-40 crores per year. What is needed is Rs. 350-400 crores per year. Perhaps, govt. can give about Rs. 150 crores or so.
  - Good faculty is absolutely essential. Selection of teachers on all India basis and must be left to the GC.
  - Really eminent and capable person as chairman of GC. Preferably from industry (he again referred to FC Kohli )
  - GC should appoint the Director without any interference from the govt.
  - Tie up with foreign universities
  - Mentorship by IIT (or by IISc)
  - Alumni involvement is very important - teaching, financial support, networking, to be on the GC.
  - Govt. funding to be bulk. Balance from alumni, research etc.
  - Research to be an integral part
- Even after doing all the above, it will take 5-10 years at least for the change. Work on a year wise plan.

Prof. K.R. Venugopal, Vice-Chancellor, Bangalore University, Member Convener of the Expert Committee contacted Dr. Roddam Narasimha, Padma Vibhushan Awardee, Aerospace Scientist & Fluid Dynamist over phone on Thursday, the 2<sup>nd</sup> July 2020 at 5.30 pm

Key points of the meeting with Dr. Roddam Narasimha

- Students and faculty are corner stones of any good institution.

Strategy 1 :

- Complete Autonomy (a) Financial

- It should be State funded University and attract corporate funding because private investors may not be interested to invest in already established institute.
- It should look for one-time funding from big corporates.
- Initially government funding to be similar to Central MHRD funding.
- A timeline to be followed for reduced dependency on State Govt. for funds.
- Fee structure should be subsidized by Government and also by banks.
- There should be 60 % funding state govt. and 40 % from alumni, corporate, research grants and fee.

- Complete Autonomy (b) Administrative

- It should be designed similar to an IIT model and should be administratively autonomous. The features in IIM Act should be incorporated.
- Academic autonomy and administrative autonomy to be incorporated in the Act.
- The Chairman of BoG preferably academician/industrialist/educationalist

- Complete Autonomy (c) Academic

- Academic autonomy should be based on IIIM model.
- There should be a skill imparting department for both teachers and students.
- 25 % of the admission to students from across the country through JEE.
- International students to be given opportunity.
- There should be twinning programs for students and faculty exchange program for teachers.

Strategy 2 :

- Redesigning Curriculum

- There should wide range of choice of subjects.
- New courses like Aerospace Science, Space Technology, Artificial
- Intelligence, Internet of Things and Nano Technology, Machine Learning etc.
- Projects and internship should start from the beginning in between all the semesters

Strategy 3:

- High Quality Faculty

- Faculty should have international exposure
- Faculty exchange program, faculty development programs to be initiated

Strategy 4 :

• Infrastructure

- Infrastructure should be developed in order to attract best students.
- Set up of incubation centre in the college.
- Finishing school to be established.
- Vertical growth of the buildings at K. R. Circle.

Strategy 5 :

• Partnership with Academic and Industry

- Research Programs tie up with ISRO, NAL, and DRDO etc.
- Inter university collaboration should be initiated.



Prof. K.R. Venugopal, Vice-Chancellor, Bangalore University, Member Convener of the Expert Committee contacted Prof. N. R. SHETTY, Chancellor of Central University of Karnataka, Kalaburgi, Former Member Secretary, Indira Gandhi National Centre for the Arts and Former Vice-Chancellor of Bangalore University, on Friday, the 3<sup>rd</sup> July 2020 at 1.00 pm

Key points of the meeting with Prof. N. R. SHETTY, Chancellor of Central University of Karnataka, Kalaburgi.

- Autonomy (a) Financial
  - Provision should be made in the Act for fund contribution from alumni and corporate.
  - The funding model should be similar to IIT and NIT.
  - Student tuition fee to be supported by the banks.
  - Administrative
    - It is a degree conferring institution spread on two campuses.
    - Board of Governing Council should be similar to NITs and IITs.
    - The composition of the Governing Council should be one member each from UGC, MHRD, AICTE, DST industrialist, academician, alumni, Principal Secretary to Education and Principal Secretary to Finance.
    - The Executive Council should have authority to appoint faculty.
    - The Director should be the Chairman for appointment of faculty and obtain approval from the Executive Council.
    - Appointment of faculty should be governed by the regulations of MHRD and UGC.
    - Special provision to be made in the Act for appointing international faculty.
    - The salary of the faculty to be similar to IIT / NIT and cannot exceed the salary of the Director.
- Autonomy (b) Academy
  - Academic Senate should be created on pattern similar to IIT / NIT.
  - Admission to students should be from across the country including international students.
  - Admission of students can be on separate competitive exams. Like KEA, JEE etc. 80 % of the students from the State.
  - There should be faculty and student exchange program both at UG and PG level.
  - Fellowship to be available to both teachers and students along with exchange program.
  - Special Chairs should be created for inviting professors of international repute and the contemplation to them should not exceed the Director.
  - Full fellowship to the students
- Autonomy (c) Curriculum
  - New courses like Microwave antennas, Opto Electronics and 5G technologies should be introduced.
  - Infrastructure - The vertical growth of buildings both at K.R. Circle and JB Campus.
  - The land at JB Campus should be allocated next to Civil and Architecture Department.
  - The hostel facility at both KR Circle and JB Campus
  - Land at Chikkaballapur to be acquired for skill development program.
  - Academic and Industry - Industry should be allowed to participate in Research Skill training and teaching program.
  - Provision to be made for adjunct faculty from the industry.

Sub-Committee of Expert Committee contacted Dr. Aatre,

Key points of the meeting with Dr. Aatre.

- Be very meticulous in defining Autonomy. You need minimal state interference but for that, the act has to be very clear and detailed.
- Don't let the state government pick the 1<sup>st</sup> board of governors. Have a committee that will pick it. The state govt can appoint the first Chairman.
- Have a good Industrialist or Academician as the chairperson of the board.
- Agreed that we should have a very good academician as the director.
- Don't have dependence on the state government for continued funding.
- The model of 33:33:33 is good.
- Keep the act very flexible. Anything rigid will break.
- A budget of INR 100 Cr to start with sound reasonable.
- Focus on undergrad until 2030. Once the reputation of the college is back to where it was from 50-80s, you can start focusing on post grad and research.
- 30% of the faculty should focus on research at that time. They should earn their own grants and not depend on the college.
- Ask for 100 acres. Atmosphere is very important.
- Very important to have the ability to have international faculty to participate in teaching.
- Create Adjunct Faculty for industry participation

*Annexure 6: Summary of meetings with faculty.*

**Notes of Sub-committee of UVCE expert committee's meeting with UVCE Principal, HODs, Past and Present Placement officers, held on 25<sup>th</sup> June 2020.**

- Mr. BV. Jagadeesh presented the vision document to the faculty, which was well received by the faculty and the views presented by the faculty have resonance and convergence to the vision document, close to 100%
- The Principle of UVCE Prof. H. N Ramesh conducted meetings with HODs and the teachers of all departments seeking opinions on 10.06.2020 and 24.06.2020 respectively about making UVCE a world eminent institute.
- He presented the collective opinion of the faculty to UVCE expert committee

**Background:**

- 1998 - Except UVCE, BDT College of Engineering, Manipal Institute of Technology, all other engineering colleges were affiliated to VTU (VTU act 1994).
- UVCE remained in Bangalore University.

**Feedback:**

- UVCE should become autonomous Government Institute of IIT model which will be degree conferring institute.
  - Governing Council should be constituted by the Government with representation of alumni, corporates, etc., as per MHRD guidelines. The Chairperson of GC may be Higher Education Minister like in Baba Saheb School of Economics (BASE).
  - All the service conditions of the present teachers, like, salary, retirement age, and other service conditions of appointment should remain unaltered, since it will be having a public university status.
  - The two campuses must be connected.
  - Fee structure to be like IIT and attract top most meritorious students of the state in 80:20 ratio, 20% from all India merit.
  - 100% funding from the state government, Funding from alumni, corporates etc., may be encouraged.
  - UVCE name to be retained and with probable name – UVCE-State University of Eminence.
  - All the above are possible and can be implemented only through an act (i.e. UVCE act for the Institute of Eminence of the state like IIT model).
- (The above is the presentation by the Principal Prof. H.N. Ramesh)

Before the Principal, the HOD of Department of Electrical and Electronics Prof. Harish, who represented the views of all the HODs, presented a few points like Strengths of UVCE, Autonomy of UVCE : Way forward; Why 100% Government Funding.

**Strengths of UVCE**

- Highly qualified & Experienced Faculty(85% faculty are doctorate degree holders)
- Strong placement opportunities for all the students
- 4500 students among which around 200 are research scholars

- CBSE scheme for both UG and PG with strong and best in class syllabus
- Digital valuation system for timely announcement of results
- Serves economically and socially disadvantaged students with 60% of them supported by scholarships
- AICTE – Quality Improvement Program (QIP) center in Civil Engineering
- Long list of consultancy and sponsored projects
- Well connected by road and Metro

#### Autonomy : Way forward

- UVCE Bill 2020 to be passed by State Legislature to avoid regulatory overlap in future
- UVCE to become 2 campus(KR circle campus & JB campus) State-Funded-Technical institute(SFTI) on the lines of CFTI - a state level IIT model
- UVCE to become a degree conferring institute & may be branded as ‘University Visvesvaraya College of Engineering – State Institution of Eminence’
- Allocate 50 acres of land in JB campus to support future growth in Engineering and allied domains & students amenities like sports and hostel etc.
- Organizational structure similar to IITs to foster institutional spirit with Director, BoG, Academic Senate, Registrar, Deans etc.
- The composition of BoG to be in accordance with UGC regulations 2018, headed by an eminent academician of professional or industrialist of proven accomplishments.
- Initial seed funding from the government
- 100% annual budgetary support from State Government to make it a sustainable model.
- Corporate and alumni donations are welcome
- Faculty recruitment to be round the year to attract best talent from across India & performance based promotion to faculty
- Student admission through KCET & PGCET. 10- 15% seats reserved for All India students(JEE & GATE) to acquire national character while preserving & promoting aspirations

#### Why 100% Government Funding :

- The salary bill of UVCE staff is about Rs.25 cr. Per annum even will 50% posts filled up and is likely to double when all sanctioned vacant posts are filled up
- Student fee is about Rs. 100 cr. per annum.
- UVCE Centenary Foundation with membership of 500 teacher Alumni have been requested to generously contribute to the UVCE infrastructure Fund.
- IITs receive funding from GoI to make higher education affordable and to sustain their high quality education and research – likewise UVCE also is to be 100% Government Funded

#### Opinions of HODs and Placement officers were sought individually too:

- All faculties and staff have emotional attachment to the KR Circle campus as it is started by Sir. Visvesvaraya himself. So KR Circle campus to continue (with the departments those are housed there and as the administrative block too).
- Since it is not sufficient to accommodate all the departments, labs, workshops, incubation centers etc., as UVCE aspires to be a center of excellence, it should be well connected with modalities derived for interdisciplinary interaction with JB campus.

- UVCE infrastructure fund and UVCE Centenary Fund are constituted – it is better alumni and other donors contribute to the fund.
- The faculty committee will help UVCE expert committee to find if there is any institute which is State Government funded or Central Government funded or MHRD funded or any institute which is both State Government and Central Government funded.
- If the institute is state government funded the new model's sustenance would be better.
- A firm year wise plan was sought for model of finance – which increases the confidence that the model is sustainable.
- MHRD guidelines to be followed to appoint BoG with Chairperson may be Minister of Higher Education/World class academician/Industrialist.
- Improving the infrastructure is to be taken up immediately.
- Current co-curricular activities need to be regularized and strengthened for both students and faculty (like student exchange program, internship etc. for students and Sabbatical in overseas universities\*<sup>1</sup> for faculty to mention a few as example).<sup>\*2</sup>

The sub-committee's clarification on few doubts of faculty:

- Financial Autonomy – Need to overcome dependency on government to have full financial autonomy for which a clear roadmap will be provided.
- Service Conditions of staff will be well cared for.
- A visit to both the campuses by expert committee is planned to assess requirement and suggest improvement in infrastructure.

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\*<sup>1</sup> overseas programs (happening occasionally); Budget Provisions for overseas sabbatical, adjunct faculty are there but are underutilized.

\*<sup>2</sup>From 2017 UVCE Centenary Foundation workshops, Engagement with Industries of Bangalore with UVCE-Consultancy Projects on Research, UG, PG internships with Industries of Bangalore(most of the students are from Computer Science).

**Notes of Sub-committee of UVCE expert committee's meeting with UVCE Principal, HODs, and other faculty held on 26<sup>th</sup> June 2020.**

Mr. B. Muthuraman presented the vision document to the faculty, which was well received by the faculty and the vision and action points presented were well accepted by the faculty. Department wise professors' assistant professors' opinions were collected:

Department of Electrical and Electronics

- Staff quarters inside the campus(Faculty, Staff, Research Scholars)
- Hostel for students in the same campus
- No in breeding for hiring.
- JEE students to be let in.
- Industry and institute partnership should be 50-50.
- Student exchange program.
- Not able to expand in KR Circle.
- Fee structure can be an issue for rural students; need to have existing fee structure until we achieve higher level.
- Time sharing between teaching and research activity.
- Select highly qualified teachers.
- University funding not sufficient to pay salaries, so, govt. funding is necessary

Department of Computer Science

- Make in Karnataka.
- Free education for girl candidates from rural section.
- Meritorious student admission.
- MoU with foreign universities for exchange program.
- Skill Development courses
- Rural and poor students should be encouraged.
- 100% funding from state govt.
- Incubation center for entrepreneurship with industry participation

Department of Electronics and Communication Engineering

- Welcomed the vision document

Department of Mechanical Engineering

- Basic infrastructure in Mechanical Engineering department including equipment in laboratories should be taken care of.
- Completely controlled by State govt.
- Fees as low as possible.
- Preference for local teachers.
- UVCE to be mentored by IITs professors and by industry.
- Tie up with foreign universities and have exchange program for teachers.
- Incubation cells to be started.
- Start-up from Alumni run organizations.

- Revisit mission and vision made by earlier committees.
- UGC has to give the autonomous status UVCE.
- Labs and building are very bad.
- Before autonomous coming in all open positions should be filled.
- First NIT model and then evolve to IIT model; sudden transition is hard.
- Soft skills training to be setup.
- Try for central funding.

#### Department of Civil Engineering

- Understaffed; need staff recruitment.
- Need international students to be recognized in the top 100-200 institutes in the world.
- Deserving students should get fellowship.
- Direct recruitment in state/central govt.
- Will the state govt. be able to fund all the infrastructure?
- Govt. colleges facing lot of financial problems.
- Working hour flexibility.
- Post-doctoral studies.
- More importance to skill development.
- Seen rosy pictures before; academic autonomy already exists; don't want 33/33/33 model; teacher financial stability will be a problem.
- 24 hour library facility.
- UVCE name to be retained; hostel facility should be retained.
- For interdisciplinary research, there should be connection between campuses.
- Have sister schools- school of design, school of construction management.
- Start-up incubator for aspiring students.

#### Department of Architecture

- Have two campuses

#### Other Feedback

- Getting salary from state government is also a problem; need to be careful depending on state government.
- Absolutely need to fix the building infrastructure for anything to go forward.
- Bringing down dependence from 100% to 33% of state govt. is good.
- Lab equipment needs to improve ASAP; think of virtual labs.
- Need to look at illegal promotions and illegal hiring; AG is presently investigating.

*Annexure 7: Summary of meetings with current students*

**Notes of Sub-committee of UVCE Expert committee's meeting with students of UVCE held on 29<sup>th</sup> June 2020**

Department of Architecture

- Center of excellence for sports and culture
- Sports and culture for better student interaction
- Library and labs to be available 24x7

Department of Civil Engineering

- Improvement in research and tie-ups with foreign universities
- Industrial visits can get better
- Digital library and better infrastructure, (WIFI, App to track students' performance)
- 2-3 compulsory internships
- Seats from Gate and JEE should increase
- Placement for PG students to improve
- Better focus on extracurricular activity
- Hostels should improve

Department of Computer Science

- Project oriented/career oriented learning
- More funding and participation of faculty into extracurricular clubs
- Flexible and dynamic syllabus
- Have a grand fest for better branding (instead of FEST TECH & CULTURE FEST)
- More industry interaction for better exposure
- Get better coding skills
- Big data labs, ML labs etc.
- Understand research in other premier educational institutions thru exchange program
- Support for entrepreneurship with intra/inter department interaction
- Courses on Economics/accounting
- Inter-disciplinary syllabus
- Projects from Government
- Separate cell for placement

Department of Electrical Engineering

- Govt. grants to continue



- Intellectual exchange between premier institutions.
- All round excellence; not just academics; take into accounts space, talent in students etc.,
- Better organizational structures across everything- hostel, college etc.
- Measure teacher effectiveness before hiring/continuous assessment methods.
- Better labs; access for longer time to labs; increase hostel capacity
- Clubs in the college should be given higher exposure and should include faculty
- Faculty Development Program
- Encouragement for students to participate in national level innovation competitions to improve
- Maintenance of the college is important and not happening
- Need playground
- Should not increase fees
- Faculty-student ratio should improve to enable students to take their electives
- Better interaction between lecturers and students
- Ability to interact with professors in other institutions

#### Department of Electronics

- Digitization of students records
- Build brand by more social media posts by faculty
- Have a student senate for student representation
- Humanities and other liberal arts subjects
- Better focus on entrepreneurship
- Upgradation in the syllabus to GATE(co-curricular activities help students to equip to prepare for GATE/GMAT)
- Start-up cell with the help of alumni
- Isolated campus and move away from congested city

#### Department of Mechanical Engineering

- Student to manage labs with teacher supervisors
- Sabbatical for professors
- Access to software such as MATLAB
- Fund in the college for projects
- Career based learning
- Outdated lab equipment needs to be replaced
- Online simulation labs
- UVCE email for students
- Student counsellor in the college
- R&D centers to get industry exposure to students

#### IEEE Representatives

- Platform for students to approach when they have ideas

- Soft skills development- communication
- Counselling center with a trained professional
- Voluntary participation of college in NAAC & NIRF and department in NBA and other private ranking which make college promotion and invite funds from international agencies.

Placement coordinators

- Number of PCs available for online test is an issue; no power backup in case power fails.
- Internship for 3 years.
- Self-paced learning platform for students to do internship and study to balance academics and internship.

*Annexure 8: Summary of meetings with alumni*

**Notes of UVCE Expert Committee's meeting with Distinguished Alumni of UVCE held on Tuesday, the 30<sup>th</sup> June 2020**

- 50 acres – may not be sufficient, try to get 100 acres(dream 100 acres to get it in future)
- Need Central Government funding through HRD
- Anchor in government set up to interact to get things done
- Complete change required – Infra structure, methods of teaching, training for teachers (like Bachelor of Education degree or training)
- Own infrastructure for training teachers(fresh as well as existing teachers), continuous FDPs
- Industry-connect – Industries centers set up in the institute (Eg. BITS) which should facilitate entrepreneurship, industry work experience in the centers and the industries
- Multi-disciplinary approach with inter disciplinary departments coordination.
- Incubation centers, carrier development acceleration centers
- Center for product development – faculty to get trained by the centre
- Application oriented research focus, applied research towards emerging technology
- Unique finishing school – should exist right through all the courses
- Vision document suggests conventional model-which needs a complete revamp –think ‘world class institute’, new faculty should out number existing faculty
- Industry relevant soft skill development, provision for virtual learning
- Curriculum to facilitate students themselves to envision their future, Value added curriculum
- Time frame for the missions in the vision document
- High quality research, internationalization through student exchange programs and sabbatical for faculty
- Director – an eminent academician to be identified, further selection process through promotion
- Model institute to emulate – probably IIT M
- Mechanism to measure progress with transparent reporting system
- Think GenZ(not Genx – not generation next – think beyond Generation next)
- Accomplishing each action point should be kept measurable
- Select the right leader - Right leader only can facilitate accomplishment of the vision

**Notes of UVCE committee's meeting with UVCEGA held on Wednesday the 01<sup>st</sup> July 2020**

- Large land (>100 acres; some opined 1000 acres)
- Corpus fund – which enable the institute support students with nominal fee, scholarships
- Faculty positions should be filled completely, exemplary faculty to be attracted
- Named Professorships positions, Named Labs & Workshops
- Students should be employable when graduated-bridge the gap between theory and practical
- Students & Faculty exchange programs with national and international eminent institutes
- Mentorship from eminent institute
- Technology education should have a connect to all walks of life and industries including fine arts
- Augment the strength of existing faculty, attract good faculty and create provision for retaining them
- Academic freedom - degree conferring institute
- Attract industry funding
- Provision for free online courses of National Program on Technology Enhanced Learning (NPTEL), including the certificate courses.
- Redefined examination model
- Endowed Teaching Chairs by Corporates
- Blended learning to encourage research and entrepreneurship

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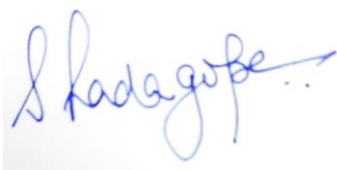
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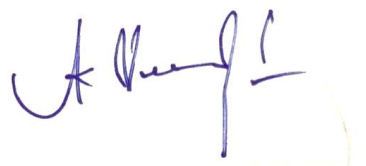
Mr. Prashanth Prakash



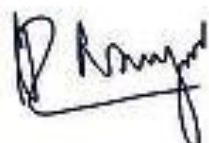
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Mr. Narayanan Ramaswamy



Mr. Harish Narasappa



