Kerala State Higher Education Council
Minutes of the 16th Executive Body meeting held on 26.08.2025

The 16th Executive Body Meeting of the fourth Council was held on 26.08.2025 at 11.00 am through online mode. Prof. Rajan Gurukkal P.M., Vice Chairman presided.

The following members attended the meeting.

1. Prof. Rajan Gurukkal P.M.	**:**	**Vice Chairman, KSHEC.**
2. Dr. Sharmila Mary Joseph IAS	**:**	**Principal Secretary, Higher Education Department.**
3. Dr. Sabu Thomas	**:**	**Member, Executive Body, KSHEC**
4. Dr. M.S. Rajasree	**:**	**Member, Executive Body, KSHEC**
5. Dr. P.P. Ajayakumar	**:**	**Member, Executive Body, KSHEC**
6. Sri. Paul V. Karanthanam	**:**	**Member, Executive Body, KSHEC**
7. Dr. Rajan Varughese	**:**	**Member Secretary, KSHEC**

The following agenda was transacted and decisions taken.

Item No. 1 – Draft DPR for new projects

a. **Centre for Advanced Digital Learning and Educational Technology (CADLET).**
b. **Semi-Conductor Research Laboratory (Kochi/ Thiruvananthapuram.**
c. **Administrative and Academic Building for KIAS at Munnar.**

After discussion it was resolved to approve the DPR of the Centres of Excellence: **(Annexure -I)**

a. **Centre for Advanced Digital Learning and Educational Technology (CADLET).**
b. **Semi-Conductor Research Laboratory (Kochi/ Thiruvananthapuram.**
c. **Administrative and Academic Building for KIAS at Munnar.**

Item No. 2 – MoU - Establishment of CoE for Indigenous People's Education (CIPE) in Calicut University.

Resolved to approve the MoU for the establishment of CoE for Indigenous People's Education (CIPE) submitted by the University of Calicut. **(Annexure -II)**

Item No. 3 – Engagement of Lawyer in W(PC) 41/2025 in the High Court of Kerala related to allotment of land to KSHEC.

The Council considered the matter of Writ Petition (W(PC) 41/2025) filed in the High Court of Kerala by Mr. Jayaraman, INTUC leader and General Secretary of KSSTM Employees Union, challenging the allotment of 48.9 cents of government land to the Kerala State Higher Education Council (KSHEC) for the construction of its Headquarters building in the KSSTM campus.

The land allotment was made in 2023 based on a Cabinet decision. The decision followed a high-level meeting chaired by the Additional Chief Secretary, Higher Education Department, with the participation of the Director of KSSTM. A meeting convened by the Hon'ble Chief Minister of Kerala led to the final allotment of the revenue land through Cabinet approval. The construction of the Unnatha Vidya Bhavan (KSHEC Headquarters) is listed as Item No. 450 (3) of the LDF Manifesto. The project was entrusted to ULCCS on PMC basis as per rules. A total project estimate of ₹12.95 Crore was approved by the Government. Administrative and technical sanction for the first phase was accorded and ₹74 lakhs released to ULCCS. ULCCS has assured completion of the first phase within 14 months. In compliance with Government direction, the Council also constructed and handed over a toilet block to KSSTM. The writ petition seeks cancellation of the land allotment, which, if upheld, could delay or stall the construction of the much-awaited Council Headquarters.

Considering the significance of the matter, the Council approved the engagement of Adv. P.C. Sasidharan, Padmini, River Landing Lane, Peter Correya Road, Near Chathiyath Church, Pachalam, Kochi – 682 012, to represent the Council and conduct the case with utmost seriousness.

It was resolved to Approve the engagement of Adv. P.C. Sasidharan to defend KSHEC in W(PC) 41/2025 before the High Court of Kerala.

Item No. 4 – Proposal - Unification of Statutes related to Inter University Transfer- Govt. letter No. B2/62/2024-HEDn. dated 04.04.2024.

Resolved to constitute the following Committee to study the matter with, Dr. Damodaran, Member, Executive Body, KSHEC and Shri Paul V, Karanthanam, Member, Executive Body, KSHEC and Adv. K. T. George, former Additional Secretary, Law Department, Govt. of Kerala.

Item No. 5 – Draft Guidelines - NCC as a Value-Added Course (VAC) under FYUGP.

Resolved to approve the guidelines related to NCC as a Value-Added Course (VAC) under FYUGP and decided to forward the same to the universities. **(Annexure-III)**

Item No. 6 – Attendance Relaxation for Students in Local Bodies.

It is resolved not to recommend the relaxation of attendance for Students in Local Bodies.

Item No. 7 – Empanelment of Kerala State Rutronix as Skill Agency.

Resolved to recommend to the government to empanel Kerala State Rutronix as Skill Agency.

Item No. 8 – Complaint - Misleading Advertisement and Branding Practice in Higher Education.

It was resolved to recommend the government to initiate legal measures against misleading advertisement and branding practice in Higher Education based on Indian Act (Consumer Protection Act, 2019 (35 of 2019).

1. **Misleading Branding:**

   The use of the name *Indian Institute of Commerce* closely resembles premier government institutions such as IITs and IIMs, creating a **false impression of statutory recognition** or government affiliation.

2. **Unverified Claims in Promotions:**

   Advertisements claim *"350+ Global Rank Holders"* and *"700+ Faculty & Program Experts"* without verifiable evidence.

Celebrity endorsements further amplify this misleading credibility, in potential violation of the **Consumer Protection Act, 2019**.

3. **Structural Issues in Coaching Sector:**

    Absence of mandatory disclosures on **pass rates, placement data, and faculty credentials**.

    Heavy emphasis on selective success stories while **ignoring average student outcomes**.

    Inflated claims that can lead to **false expectations, disillusionment, and financial hardship** for aspirants and their families.

Recommendations for Policy Intervention:

- Formulate a **Code of Ethics** for private institutions offering coaching for international qualifications in Kerala.
- Mandate **disclosure norms** requiring transparent publication of student outcomes and placement records.
- Strengthen **state-supported career guidance programmes** in higher education institutions to help students make informed decisions about global qualifications in the Indian context.

While acknowledging the role of private coaching centres in academic support, it is evident that **greater transparency, accountability, and ethical regulation** are necessary to protect student interests.
The KSHEC Executive Body meeting held on 26.08.2025 resolved to place this matter before the Government for **appropriate action and necessary policy-level interventions**.

Item No. 9 – Govt. Letter No. L1/235/2025-HEDN dated 13.06.2025 - Recognition/eligibility -B.Des Fashion Design Course at Institute of Fashion Technology Kerala Reporting.

Reported and approved the report on recognition/eligibility - B.Des Fashion Design Course at Institute of Fashion Technology Keral as given below.

The Institute of Fashion Technology Kerala (IFTK) was established in 2014 by the Government of Kerala in technical collaboration with the National Institute of Fashion Technology (NIFT), Ministry of Textiles, Government of India. IFTK has been set up under the aegis of Centre for Continuing Education Kerala (CCEK), with the intention of developing professionals for taking up leadership positions in fashion business in the emerging global scenario.
The institution now offers Bachelor of Design (B.Des) – Fashion Design-an Undergraduate programme of 4-year duration. The institution was granted AICTE approval from the academic year 2019-20 onwards. Earlier Diploma courses were offered in fashion technology.
Dr. Carolin Baby was appointed as a contact faculty member in 2016 at IFTK through

- Appointment Order No. CE/D/2999/2016, dated 09/08/2016, issued by the Centre for Continuing Education Kerala (CCEK) and has continued in the post on renewal of contracts.

Observations:

The following points may be taken into consideration:-

1. Qualifications as per AICTE Norms

According to ***All India Council for Technical Education Pay Scales, Service Conditions and Minimum Qualifications for Appointment of Teachers and Other Academic Staff such as Library, Physical Education and Training & Placement Personnel in Technical Institutions and Measures for the Maintenance of Standards in Technical Education – (Degree) Regulation, 2019.,*** clause

5.1 Minimum Qualifications for direct recruitment as an Assistant Professor (Level – 10, Entry Pay 57700/-), is (h) Design:

Bachelor's Degree or minimum 4 year Diploma in any one of the streams of Design, Fine Arts, Applied Arts and Architecture or Bachelor's degree in Engineering with First class or equivalent **AND**

Master's degree or equivalent Post Graduate Diploma in relevant disciplines with First Class or equivalent in a concerned / relevant /allied subject of Industrial Design / Visual Communication / Fine Arts / Applied Arts / Architecture / Interaction Design / New Media Studies / Design Management / Ergonomics / Human Factors Engineering / Indian Craft Studies and related fields of Engineering or Design.

AND Minimum 2 years of professional design experience in Industry / research organization / Design studios.

IFTK in its notification follows AICTE norms for recruitment of Faculty Positions on Contract Basis with specialization (Fashion /Apparel / Textile / Applied Arts).

Evolving nature of design education, and the discipline of fashion science.

Today, fashion education in India offers a wide range of UG, PG, diploma, and research programs, evolving into a dynamic academic discipline aligned with global industry standards.

In 2020s AICTE regulations promoted multidisciplinary learning with new focus areas including sustainable fashion, digital fashion, and emerging technologies like AI and AR.

The field expanded with more NIFT campuses and private institutes offering specialized courses in textile design, fashion communication, and accessory design. Universities began offering B.Sc., B.A., and B.Des degrees in fashion design and related areas, along with postgraduate programs such as M.Sc. and M.A. in textiles, apparel technology, and fashion management as part of UGC Innovative Programmes.

2. Academic qualifications of Carolin Baby (As per the copy submitted)

	Qualification	Degree Awarded	Year of Degree Awarded
1	B A Communicative English	MG University, Kottayam	March 2006
2	PG Diploma in Computer Aided Fashion & Textile Management	Kitex Institute of Fashion Technology, Kochi	March 2008
3	M.Sc Fashion Technology	Punjab Technical University	Sept 2012
4	M.Sc Textiles and Fashion	Assumption College (M G University)	July 2014

5	M. Phil Textiles and Clothing	Mother Teresa Womes' University, Kodiakanal, Tamilnadu	April 2015
6	Ph.D Textiles and Clothing(Part Time)	Mother Teresa Womess' University, Kodiakanal, Tamilnadu	Jan 2024
7	Bachelor of Science (Costume Design & Fashion)	Bharathiar University	July 2024

Her appointment (2016) predates IFTK's AICTE affiliation (2019–20). The regulatory framework was not in place at the time of her appointment.

- She was appointed in **2016**, during a period when **Diploma and non-B.Des. qualifications** were the norm in many fashion institutions.
- Her qualifications include:
  - Two Master's degrees (Fashion Technology and Textiles & Fashion).
  - An M.Phil and Ph.D. in Textiles & Clothing.
  - Over 8 years of teaching experience in a design institute.
  - Research Publications
- Multiple renewals of contract and long tenure at IFTK are implicit endorsements of competence. Dr. Carolin's **PG Degrees** and **M.Phil./Ph.D. in Textiles and Clothing** are in the relevant discipline and and cover curriculum areas aligned with design education.
- She satisfies the **experience criterion** under AICTE norms.

3. **AICTE Regulations on pay scales, service conditions and minimum qualifications for the appointment of teachers and other academic staff such as library, physical education and training & placement personnel in technical institutions and measures for the maintenance of standards in technical education – (degree) regulation, 2019,** Clause 7.5 refers to -
   Incumbent faculty Members with previous qualifications Existing incumbents recruited as a Faculty with the basic minimum qualifications such as M.Sc. (Mathematics), M.Sc. (Biotechnology), M.Sc. (Electronics), M.Sc. (Computer Science & allied subjects), M.Sc. (Physics), M.Sc. (Chemistry), MCA, PGDM, AMIE / M. Com and any other similar qualifications which were considered eligible at the time of recruitment or taken admission in such courses before publication of the AICTE Gazette dated 13th March 2010 are to be considered as eligible for promotion as well as direct recruitment in the same or other institutions, subject to fulfilment of other eligibility criteria and higher qualifications as prescribed, if any, for various teaching posts.

   The academic qualifications of Dr. Carolin Baby (Bachelor of Science -Costume Design & Fashion), M.Sc Textiles and Fashion, M. Phil Textiles and Clothing, Ph.D Textiles and Clothing) are in line with the AICTE norms related to the appointment of faculty in technical institutions including Institute of Fashion Technology Kerala.
   Hence, she is eligible for teaching the programme/course of Fashion Design at the Institute of Fashion Technology Kerala (IFTK).

Item No. 10 – Govt Letter No. A2/155/2024-Indust. dated 06.06.2025 - Inquiry Regarding MoU and Association with the Indian Rubber Institute (IRI) and Rubber Technology Centre (IITK).

The following report related to Inquiry Regarding MoU and Association with the Indian Rubber Institute (IRI) and Rubber Technology Centre (IITK) was approved.

REPORT

1. Background

As directed in the communication cited under reference (1) and as per the decision of the Executive Body meeting cited under reference (2), the authenticity of the DIRI certificates produced by Sri. Syam S. (Deputy Director) and Sri. Shan P.R. (Assistant Director – Rubber) has been verified. Further, it has been examined the eligibility criteria prescribed in the relevant service rules for promotion.

2. Verification of Certificates

The Rubber Technology Centre, IIT Kharagpur has informed that the Diploma in Rubber Technology (DIRI) and Post Graduate Diploma in Rubber Technology (PGDIRI) are conducted under a Memorandum of Understanding (MoU) signed in 2010 between the Indian Rubber Institute (IRI) and the Rubber Technology Centre, IIT Kharagpur. The Rubber Technology Centre, IIT Kharagpur acts as Controller of Examinations by preparing question papers, conducting examinations, and evaluating candidates. This is carried out under the consultancy project "Training and Skill Development and its Evaluation for IRI Members (IRIM)". The certificates are issued by the Indian Rubber Institute (IRI), Dr. D. Baneijee Centre of Excellence, JSS S&T University Campus, Mysore.
It is specifically clarified that the role of IIT Kharagpur is limited to examination and evaluation.

3. Eligibility Criteria for Promotion

As per G.O. (P) No. 60/2011/ID dated 26/02/2011 (Industries Service Special Rules):
For the post of Assistant Director (Rubber):

A degree/diploma/associate membership in Rubber Technology (relating to Rubber processing such as Compounding, Vulcanizing, and Testing), awarded by a recognized Indian or foreign university/institution approved by the Government;

OR
A Postgraduate degree in Physics or Chemistry from a recognized university.

4. Qualifications of the Incumbents

Sri. Shan P.R.
B.Sc. in Polymer Chemistry
Diploma in Rubber Technology (Indian Rubber Institute)

Sri. Syam S.
Diploma in Mechanical Engineering
Diploma in Fire Safety Engineering
Diploma in Rubber Technology

Both incumbents hold qualifications consistent with the requirements prescribed in the Special Rules.

5. Conclusion

The DIRI certificates produced by Sri. Shan P.R. and Sri. Syam S. were issued under the framework of the MoU between IRI and IIT Kharagpur, and both officers hold the educational qualifications prescribed in the Industries Service Special Rules for promotion. The Executive Body of the KSHEC, in its meeting held on 26.08.2025, resolved to accept the clarification furnished by the Rubber Technology Centre, IIT Kharagpur, in this regard and forward the same to the government.

Additional Agenda

A1. UGC – Draft Guidelines for Learning Outcome -Constitution of Committee – Govt. Letter.

Resolved to constitute a committee under the Chairmanship of Prof. Prabhat Patnaik, (JNU) with members as Dr. Vanikesari, Director of Prof NR Madhava Menon Interdisciplinary Centre for Research Ethics & Protocols (ICREP), Associate Professor, School of Legal Studies, Cochin University of Science and Technology, Kochi, Prof. NJ Rao (IISc, Bangalore, Prof Rajan Gurukkal (Co Chair), Dr. Rajan Varughese, Member Secretary (Convenor) and Prof Romila Thapar as special invitee.

The Minutes were read and confirmed
The Meeting which started at 11.00 am concluded by 12.15 pm.

Rajan Varughese
Member Secretary

Vice Chairman

DPRs for Centres of Excellence (FY 2025–26)
Ref: Budget Speech 2025–26, Para 161
Govt. Letter - C3/147/2025-HEDN dated 28-05-2025

As per reference cited, an amount of **₹25 crore** was set apart in the **Budget Speech 2025–26 (para 161)** for the first phase development of the seven Centres of Excellence being established across Kerala by the Kerala State Higher Education Council (KSHEC).
In continuation of this initiative, KSHEC has prepared and is hereby submitting the **Detailed Project Reports (DPRs)** for the following three projects proposed under the next phase of development:

1. **Centre for Advanced Digital Learning & Educational Technology (CADLET), Thiruvananthapuram** – to function as a sub-centre of the Centre for Teaching, Learning, and Training.
2. **Semiconductor Research Laboratory, Kochi** – to be established as a sub-centre of the Kerala Network for Research Support in Higher Education (KNRSHE).
3. **Administrative and Academic Building of Kerala Institute for Advanced Studies (KIAS), Munnar** – to be constructed at the proposed site within the College of Engineering, Munnar campus.

In this regard, I request that the **required administrative sanction for ₹25 crore** may kindly be accorded at the earliest, to enable the timely commencement of works under the first phase of development of these three projects.

Submitted for kind consideration.

DPR 1: Centre for Advanced Digital Learning & Educational Technology (CADLET)
(Independent State-Level Centre for Online Courses, EdTech Research, and AI-driven Learning)

1. Background and Rationale

Kerala has taken strong steps toward digital transformation in higher education, with initiatives such as K-REAP and the integration of multidisciplinary education through FYUGP. However, the state currently lacks a **dedicated, independent centre** for developing, hosting, and managing **credit-linked online courses**, conducting **research in educational technology**, and training faculty in **digital pedagogy**.
National platforms like **SWAYAM** provide a framework for online learning, but Kerala requires a **state-specific hub** that:

- Aligns with university curricula,
- Provides multilingual content,
- Develops cutting-edge EdTech tools, and
- Builds faculty and student capacity.

The **Centre for Advanced Digital Learning & Educational Technology (CADLET)** will fill this gap, positioning Kerala as a leader in **online education and technology-enabled learning innovation**.

2. Vision and Mission

- **Vision:** To transform higher education in Kerala through world-class digital learning, EdTech research, and personalized student support.
- **Mission:** To create a **statewide hub for online courses, credit transfer, and educational technology innovation**, integrating global best practices with Kerala's academic ecosystem.

3. Objectives

1. Develop and host **credit-bearing online courses** aligned with university programs.
2. Create a repository of **skill-based, value-added, and professional courses**.
3. Conduct **research and innovation** in EdTech, including AI, VR/AR, and learning analytics.
4. Train faculty and instructional designers in **digital pedagogy**.
5. Provide **statewide learning analytics dashboards** for monitoring student outcomes.
6. Collaborate with **universities, industries, and start-ups** to scale innovation.

4. Governance Structure

- **Advisory Board**: Chaired by the Vice-Chairperson of KSHEC; members from universities, IT sector, and educational experts.
- **Executive Director**: Senior academic with expertise in digital education.
- **Academic Board**: Approves online courses, credit equivalency, and quality standards.
- **Divisions within CADLET**:
  - *Course Development & Content Production*
  - *Technology & Learning Analytics*
  - *Research & Innovation in EdTech*
  - *Faculty Training & Outreach*

5. Infrastructure Requirements

- **Headquarters (Proposed: Kochi /TVM)**
  - 3 high-definition multimedia studios
  - Audio recording booth
  - Post-production & editing suites
  - VR/AR & AI lab
  - Training rooms and conference facilities
- **Technology**
  - Scalable cloud-based LMS integrated with K-REAP and SWAYAM
  - AI-driven adaptive learning engine
  - Multilingual content delivery platform
  - Secure online examination and proctoring system

6. Staffing Plan (Phase I: 2025–26)

- Executive Director – 1
- Academic Coordinators – 3 (STEM, Humanities and social science)
- Instructional Designers – 3
- Multimedia Producers – 2
- Studio Technicians – 3
- LMS Developers – 2
- Learning Analytics Specialist – 1
- Administrative & Outreach Staff – 5

(Staffing will expand in later phases.)

7. Budget Plan (Current Financial Year 2025–26)

Capital Expenditure (₹9.0 crore)

Component	Revised Amount (₹ Crore)	Notes
Infrastructure & Studio Setup	**3.50**	**2 HD studios + audio booth**

LMS Development & Cloud Services	**2.00**	**Core platform with K-REAP & SWAYAM integration**
AI Learning Analytics (basic)	**0.75**	**Pilot analytics dashboard**
Content Development Fund (30–40 courses)	**2.25**	**Course creation in first year**
Faculty Training & Workshops	**0.50**	**Training 100 teachers**
Total Capital	**9.00**	

8. Recurring Expenditure (₹1.0 crore)

Component	**Revised Amount (₹ Crore)**	**Notes**
Salaries & Administrative Costs	**0.60**	**Core staff only**
Server Maintenance & Security	**0.25**	**Cloud & cybersecurity**
Outreach & Promotion	**0.15**	**Digital-first campaigns**
Total Recurring	**1.00**	

***The recurring expense can be meet from the course fees**

9. Implementation Plan (2025–26)

- **Q1 (Apr–Jun): Governance setup, staff recruitment, LMS pilot launch.**
- **Q2 (Jul–Sep): Studios operational, first courses developed, initial faculty training.**
- **Q3 (Oct–Dec): Launch 15–20 credit-linked + 10 skill/value-added courses.**
- **Q4 (Jan–Mar): Expand to 30–40 credit-linked courses, integrate with 5 universities.**

10. Deliverables by March 2026

- **Courses: 30–40 credit-linked + 10 skill/value-added.**
- **Faculty: 100 trained in digital pedagogy.**
- **Students: 10,000+ enrollments across 5 universities.**
- **Technology: LMS + pilot AI analytics integrated with K-REAP.**

11. Justification of Recurring Cost

By fixing recurring cost at 10% of total, CADLET remains lean in Year 1, focusing on:

- **Infrastructure and technology backbone (90%).**
- **Essential operations, staff salaries, and LMS upkeep (10%).**
- **Future years will scale recurring budget in proportion to course expansion and staffing.**

12. Conclusion

The **Centre for Advanced Digital Learning & Educational Technology (CADLET)** will be Kerala's flagship digital learning and EdTech innovation centre, combining **online course delivery, research, and pedagogy training** under one umbrella. With a phased investment of **₹10 crore in the current financial year (2025–26)**, the centre will establish its foundation, deliver pilot courses, and build the technological backbone needed to scale statewide.

DPR 2: Semiconductor Research Laboratory (SRL)

(Sub-Center under Kerala Network for Research Support in Higher Education – KNRSHE)

Proposed Host Institution: Cochin University of Science and Technology (CUSAT)

1. Background and National Context

Semiconductors are the **foundation of modern technology**, powering electronics, telecommunications, automobiles, healthcare devices, and defense applications. Globally,

the semiconductor industry is valued at **USD 600+ billion** and is projected to cross **USD 1 trillion by 2030**.
India has recently taken decisive steps through the **Semicon India Programme (2021–)**, with an outlay of **₹76,000 crore**, aimed at building domestic capacity in:

- Semiconductor fabrication (fabs),
- Assembly, Testing, Marking, and Packaging (ATMP), and
- VLSI/Chip design ecosystem.

Recent national-level developments include:

- **Micron's ATMP facility in Gujarat (₹22,500 crore investment)**.
- **Tata Group's semiconductor packaging facility in Assam (₹27,000 crore)**.
- **ISMC Analog Fab proposal in Karnataka**.
- **R&D collaborations between IISc, IITs, and global companies** for chip design and prototyping.

Kerala, despite its strengths in **education, IT workforce, and research ecosystem**, has not yet positioned itself in the national semiconductor roadmap. The establishment of a **Semiconductor Research Laboratory (SRL) at CUSAT** will bridge this gap by providing:

- **Shared infrastructure for VLSI design and device prototyping**,
- **Training and capacity building for the semiconductor workforce**, and
- **A link between Kerala's academic ecosystem and India's semiconductor mission**.

2. Strategic Importance for Kerala

- Kerala produces **over 40,000 engineering graduates annually**, many specializing in Electronics, Computer Science, and IT – but lacks advanced semiconductor training infrastructure.
- CUSAT, located in Kochi, is strategically positioned close to **IT hubs, start-ups, ISRO facilities, and port/logistics networks**.
- By creating SRL, Kerala can:
    - Retain talent that currently migrates to Bengaluru/Hyderabad for VLSI training,
    - Develop a **skilled workforce** for upcoming fabs and ATMP units in India, and
    - Contribute to **national semiconductor R&D** through niche areas like **photonics, sensors, and low-power chip design**.

3. Objectives

1. Establish a **state-of-the-art VLSI Design Lab** with industry-grade CAD tools.
2. Provide **pilot packaging and testing facilities** to support device prototyping.
3. Collaborate with **national semiconductor centres** (IIT Madras, IISc Bangalore, SCL Chandigarh) for fabrication access.
4. Create a **training hub for students, faculty, and professionals** in semiconductor design, packaging, and testing.
5. Operate as a **KNRSHE sub-center** with shared access for all Kerala universities and colleges.

4. Proposed Facilities at SRL

4.1 VLSI Design & Simulation Lab

- CAD Tool Suites: **Cadence, Synopsys, Mentor Graphics**.
- FPGA and ASIC prototyping boards.

- High-performance servers for design simulation.

4.2 Packaging and Testing Lab (Pilot Scale)
- Wire bonder (entry-level).
- Die attach station.
- Encapsulation & reflow soldering.
- Probe station and semiconductor parameter analyzer.
- Burn-in and reliability testing units.

4.3 Training & Outreach
- Smart classrooms and seminar halls.
- Virtual labs and online learning modules.
- Certificate programs in VLSI and semiconductor testing.

5. Governance Structure
- **Parent Body:** KNRSHE under KSHEC.
- **Host:** CUSAT (Kochi).
- **Management Committee:** KSHEC, CUSAT, industry experts (Tata Elxsi, UST Global, ISRO VSSC).
- **Technical Advisory Board:** Eminent researchers from IITs, IISc, and global semiconductor companies.

6. Financial Plan (₹10 Crore – FY 2025–26)

Capital Expenditure (₹9.0 Crore)

Component	Amount (₹ Crore)
VLSI CAD Tools & HPC Servers	3.00
FPGA & ASIC Kits	0.50
Packaging & Assembly Lab	2.00
Testing & Characterization	2.50
Infrastructure (Lab setup, HVAC, ESD safety)	1.00
Total Capital	**9.00**

Operational Expenditure (₹1.0 Crore = 10%)
- Salaries for technical staff.
- Consumables and utilities.
- Training & outreach programs.
  (AMC charges to be covered from user fees.)

7. Implementation Timeline (FY 2025–26)
- **Q1:** DPR approval, governance set-up, procurement process.
- **Q2:** Installation of VLSI design lab; initiate training batches.
- **Q3:** Commission packaging & testing facilities.
- **Q4:** Launch pilot research projects; open access to universities under KNRSHE.

8. Expected Outcomes (March 2026)
- **30–40 VLSI design workstations** operational.
- **10+ testing/packaging tools** commissioned.
- **200 students and 50 faculty** trained in semiconductor design/testing.
- Collaborative projects with ISRO, IITs, and semiconductor companies.

- Position Kerala as a **semiconductor talent hub** integrated into India's semiconductor mission.

9. Long-Term Roadmap

- **Year 2–3:** Expand device fabrication collaborations; introduce advanced packaging (flip-chip, 3D ICs).
- **Year 4–5:** Scale into **specialized research areas** like photonics, MEMS, and sensors.
- **Beyond:** SRL evolves into a **Centre of Excellence in Semiconductor Research**, complementing national fabs and ATMPs.

10. Conclusion

The establishment of the **Semiconductor Research Laboratory (SRL) at CUSAT** will mark Kerala's formal entry into the **national semiconductor ecosystem**. With a capital outlay of **₹10 crore in FY 2025–26**, this **pilot-scale laboratory** will provide Kerala's students and researchers with **world-class VLSI design, packaging, and testing facilities**.

By serving as a **sub-center of KNRSHE**, the SRL will democratize access, enhance employability, foster industry collaborations, and align Kerala's higher education system with India's **strategic semiconductor roadmap**.

DPR 3: Detailed Project Report (DPR) for the construction of Administrative and Academic Building (G+2) for Kerala Institute for Advanced Studies (KIAS) Proposed Cost: ₹5 Crore Location: College of Engineering, Munnar

1. Introduction

The Kerala Institute for Advanced Studies (KIAS), established as one of the Centres of Excellence under the Kerala State Higher Education Council (KSHEC), is envisioned as a premier hub for advanced interdisciplinary research, visiting fellowships, and academic collaborations. Currently functioning in temporary facilities, the institute requires a dedicated **Administrative and Academic Building** to consolidate its activities and provide world-class infrastructure.

This DPR outlines the proposal for constructing a **G+2 administrative-cum-academic building** within a budget of **₹5 crore**, to serve as the institutional nucleus of KIAS.

2. Objectives

- To construct a **functional G+2 building** housing administrative offices, seminar halls, conference spaces, fellow offices, library, and common facilities.
- To support the work of **20 long-term fellows, 10 research fellows, and 10 visiting fellows** simultaneously.
- To establish modern facilities for **seminars, workshops, conferences, and academic collaborations**.
- To create a physical identity for KIAS, integrated with the College of Engineering, Munnar campus.

3. Proposed Building Facilities

Ground Floor

- **Lobby & Reception with Visiting Lounge**
- **Director's Office and Secretariat**
- **Administrative Offices** (Accounts, HR, General Administration)
- **Cafeteria with Pantry** (capacity 40–50)

- **Library & Digital Library** (ICT-enabled, with e-resource terminals)
- **Reading Room (30 seats)**

First Floor

- **Large Conference Hall (200-seating capacity, ICT-enabled)**
- **Seminar Rooms** – 2 to 3 rooms (each 60 seats)
- **Discussion Rooms / Meeting Spaces** (2 rooms, 10–15 seats each)
- **Shared Office Space for Fellows (20 fellows)**

Second Floor

- **Research Fellows' Offices (10 fellows)**
- **Visiting Fellows' Offices (10 fellows)**
- **Additional Seminar Room (optional if budget permits)**
- **Breakout Discussion Rooms & Collaboration Spaces**

4. Area and Space Allocation

- Total built-up area: ~ **20,000 – 22,000 sq. ft.**
- Ground Floor: ~7,000 sq. ft.
- First Floor: ~7,500 sq. ft.
- Second Floor: ~7,500 sq. ft.

5. Financial Estimate (₹5 Crore)

Capital Expenditure (₹4.50 Crore)

Component	Estimated Cost (₹ Crore)
Civil Construction (G+2, ~20,000 sq. ft., incl. interiors)	3.20
Electrical, HVAC, ICT Infrastructure	0.50
Furniture & Furnishing	0.40
Digital Library Setup (servers, e-access terminals)	0.25
Cafeteria Setup, Landscaping, Miscellaneous	0.15
Total Capital Cost	**4.50**

Operational Expenditure (₹0.50 Crore = 10%)

- Initial staffing (technical + administrative support)
- Utilities and consumables
- Maintenance of ICT & seminar facilities
  (AMC of major equipment to be met from user charges and project funds)

Total Project Cost (Phase I, FY 2025–26): ₹5.00 Crore

6. Implementation Timeline (FY 2025–26)

- **Q1 (Apr–Jun):** DPR approval, administrative sanction, architectural plan finalization.
- **Q2 (Jul–Sep):** Tendering, site preparation, foundation work.
- **Q3 (Oct–Dec):** Completion of ground floor structure, initiation of interiors.
- **Q4 (Jan–Mar):** Completion of first and second floors, ICT setup, digital library installation.

7. Expected Outcomes by March 2026

- A fully functional **administrative-cum-academic building (G+2)** for KIAS.
- State-of-the-art **conference and seminar facilities** for up to 200 participants.
- Workspaces for **20 fellows, 10 research fellows, and 10 visiting fellows**.
- Digital library and ICT-enabled infrastructure accessible to scholars.

- Cafeteria, lounge, and discussion spaces supporting an **international academic environment**.

8. Long-Term Vision

This G+2 administrative building represents the **first core infrastructure** for KIAS. In subsequent phases, KIAS will expand into:

- **Residential facilities** for fellows and visiting scholars,
- **Guest house**

9. Conclusion

The proposed **G+2 Administrative and Academic Building for KIAS** at College of Engineering, Munnar, with an estimated cost of **₹5 crore**, is critical for establishing the institutional identity and ensuring smooth academic and administrative functioning. This investment will provide a **sustainable physical foundation** for KIAS, positioning it as a leading Centre of Excellence in Kerala's higher education landscape.

MEMORANDUM OF UNDERSTANDING

between

Kerala State Higher Education Council

and

Name of Institution

an MoU with university to establish the COE

This Memorandum of Understanding (hereinafter referred to as the “MoU”) is made and executed at Thiruvananthapuram on this the …….. day of …………………….. 2024,

BETWEEN

Kerala State Higher Education Council, having its office situated at Science and Technology Museum Campus, Vikas Bhavan P.O., Thiruvananthapuram-695033, represented by**……………………………………………………..………………………… ………..,** **……………………………………………….** (hereinafter referred to as “**KSHEC**”), which expression shall unless repugnant to the context or meaning thereof, include its administrators, successors and permitted assigns of the FIRST PARTY;

AND

.

The -------------------university established under---act in the state providing degrees in various academic disciplines including science , technology humanities social science, commerce and management at graduate postgraduate and doctoral level, having its administrative office at-----, Kerala represented-----------, (hereinafter referred to as “-----------"), which expression shall unless repugnant to the context or meaning thereof, include its administrators, successors and permitted assigns of SECOND PARTY.

WHEREAS:

a. KSHEC is an apex level statutory body instituted under the Kerala State Higher Education Council Act, 2007 and the Kerala State Higher Education Council (Amendment) Act, 2018 of the State Legislature of Kerala.

b. -------------university is one of the university focused on and having accredited by NAAC with …. Grade and also placed rank in NIRF

c. The Center of Excellence (here after CoE) refers to an autonomous institution established by the department of higher education through KSHEC with the intention of improving the quality of research ecosystem and knowledge management in the identified sector.

d. Each of the COE focuses on a particular field of study, research and practice. It is to be designed and developed as a hub of expertise, innovation and collaboration within the identified specific area .

e. The higher education reforms commission has recommended many areas in which centre of excellence (CoE) have to be developed in the state to have quality research and developments.

f. AS part of implementing the recommendation of the higher Education reforms commission KSHEC has identified the 7 specific field/discipline in which the CoE need to be established in the first phase.

g. KSHEC has submitted a proposal before the Government for establishing 7 CoE in different areas with subcenters at diffrnent locations in the state in collaboration with suitable host institutions for each of this CoE.

h. Government has accorded Administrative Sanction to KSHEC for Establishing 7 CoE in these specific areas of study with in the state higher education institutions vide G.O.(Rt)No.897/2024/HEDN dated 22.07.2024 .

i. KSHEC has invited expression of interest from universities vide letter no KSHEC 4-A7/706/MS/Drct/2024(COE) dated 23.08.2024 for hosting centers of excellence.

j. University vide letter no has intimated KSHEC their expression of interest to host KSHEC-Centres of Excellence in their campus

k. KSHEC has conducted a visit and assessed the suitability of the facilities that is being offered by the university for the CoE and recommended to the Government to establish the COE at the University campus based on the MOU ;

l. vide letter No ----------- dated -----------, Government of Kerala directed KSHEC to enter into an MoU with university to establish the COE at the university .

m. The Parties mutually agree to enter this MoU to record the terms and understanding between the Parties and the manner in which the Parties wish to combine their efforts and collaborate with each other in developing CoE.

1. AREAS OF COOPERATION

Both Parties shall mutually engage to,

1.1 Establish a COE as an autonomous institution of the department of higher education with the intention of improving the quality of research ecosystem and knowledge management in the field of ---------

1.2 The established CoE shall not be a part of the host institution at any point time, and shall be open for access and collaboration to the whole academic/industry community of the state

1.3 The CoE should be allowed to draw their strength from university departments and research institutions in terms of cooperation/collaboration and assistance

2. ROLES AND RESPONSIBILITIES

2.1 KSHEC shall at its own cost and expense observe, undertake and comply the following roles and responsibilities.

i. Define the mission, goals, and long-term strategy of the CoE.

ii. Establish governance structures, policies, and decision-making processes for the CoE.

iii. Establish a governing body for the CoE as per government direction

iv. Ensure the CoE is adequately funded and staffed with the right expertise.

v. appoint directors / coordinators for the CoE as per the recommendation of the governing body of the CoE

vi. Liaise with key stakeholders, including government bodies, academia, industry leaders, and international partners.

vii. Ensure necessary infrastructure and manpower support from University to the CoE for successful development

2.2 University independently undertake and comply the following roles and responsibilities.

i. The university shall provide the CoE access to dedicated office space and shared, laboratories, classrooms, meeting rooms, and other physical infrastructure required for the center's functioning.
ii. The host university shall responsible for providing essential utilities like electricity, water, and security services for CoE
iii. The CoE’s staff and researchers may be granted access to the university’s library resources, including physical and digital materials.
iv. The university may also provide access to its subscriptions to e-journals, databases, and other scholarly resources
v. Responsibility for cleaning and maintenance of the facilities used by the CoE might lie with the university.
vi. Security for both personnel and the physical infrastructure is typically provided by the university.
vii. The university shall provide access to meeting rooms, auditoriums, and conference facilities for organizing seminars, workshops, or conferences
viii. University students and faculty might be allowed to collaborate with the CoE on research projects or training programs.
ix. The University shall assigned dedicated faculty and research staff to the CoE as an adjunct /associate faculty for research, mentorship, and project supervision
x. The university may allow their interested faculties to take up the part time administrative responsibilities of the CoE if required

2.3: Joint Responsibilities:

i. Conducting joint research and development (R&D) activities including applying for grants, co-publishing research papers, and engaging in collaborative projects with the partner organization.

ii. Designing and implementing specialized courses, workshops, or certification programs that align with the CoE's focus area.

iii. Establishing global partnerships with international universities or organizations to enhance research output and innovation.

iv. Ensuring the long-term viability of the center by planning for additional funding, revenue generation, and self-sustenance models.

v. Exploring ways to expand the CoE's scope, either by increasing research areas, adding more partners, or scaling up programs.

DEFINITE AGREEMENT/ADDENDUM

The Parties shall enter into Definite Agreements/Addendums coterminous with this MoU for incorporating any additional terms and conditions as per mutually agreed terms.

TERM

a. This MoU shall be effective from the date of signing and valid for a period of five (5) years from the date of signing.
b. This MoU shall be reviewed two months before the end of the Term or at a time mutually agreed by the Parties for possible renewal.
c. The Parties may terminate this MoU by giving written notice of 90 (ninety) days to the other Party or immediately on mutual agreement.

IN WITNESS WHEREOF, the Parties have caused their duly authorised representatives to sign this MoU on the date first above written.

For **Kerala State Higher Education Council**

For **Host university/institute**

…………………………….
…………………………….

Date:

Witness:

Name and Signature:

Guidelines

NCC as a Value-Added Course (VAC) under FYUGP

1.0 Introduction

In accordance with the directives issued by the University Grants Commission (UGC) [Ref 1: Letter No. 1-18/2019(CPP-II), dated 15 April 2021], the All India Council for Technical Education (AICTE) [Ref 2: Letter No. AICTE/P&AP/NCC-GE/Circular/2021, dated 26 April 2021], and the Ministry of Defence [Ref 3: Letter No. 4/9/2021-D(GS-VI)/35/Def Secy/21, dated 4 May 2021], all Higher Education Institutions (HEIs) have been directed to integrate NCC as a General Elective (GE) credit course in undergraduate programs.

Further, as per Ref 4 [Letter No. 47002/JSM/DO/II, dated 14 June 2024 from the Additional Director General, NCC Directorate Kerala & Lakshadweep], a detailed course structure and credit framework have been submitted to the Hon'ble Minister for Higher Education and Social Justice, and subsequently forwarded to KSHEC for academic scrutiny and recommendations.

Based on Ref 5 [Govt Letter No. B3/385/2022/HED, dated 16 March 2024] and the proceedings of the Vice Chairman, KSHEC [Ref 6: KSHEC-A3/306-17, dated 19 April 2024], a committee was constituted to examine the inclusion of NCC, NSS, Sports, and Arts within the academic credit structure. The committee has recommended that successful completion of structured programs like NCC/NSS be awarded 3 academic credits, equivalent to one Value-Added Course (VAC) under the FYUGP framework.

However, the Kerala State Higher Education Council (KSHEC) has been receiving a considerable number of queries from universities, colleges, and students regarding various aspects of the implementation of NCC as a Value-Added Course under the Four-Year Undergraduate Programme (FYUGP). These queries pertain to areas such as course registration procedures, credit awarding mechanisms, evaluation and grading practices, eligibility norms, and documentation requirements. In order to ensure clarity, uniformity, and smooth academic integration of the NCC programme within the FYUGP framework, KSHEC is issuing the following additional guidelines. These guidelines are intended to facilitate effective implementation of the course, standardize assessment protocols, and enable seamless creditisation for eligible NCC cadets across all Higher Education Institutions in the state.

2.0 Description of the VAC course for NCC

Suggested course title: National Service, Leadership, and Civic Engagement through NCC

Course Objectives

- To instill a sense of discipline, civic responsibility, and leadership in students.
- To develop competencies in disaster response, environment conservation, and community engagement.
- To enhance physical fitness, coordination, and confidence through drills and field activities.
- To foster national integration and personality development.

Course Duration

- Three/two Years (6/4Semesters) with progressive documentation and evaluation.
- Credit awarded at the end of the sixth semester upon successful completion.
- Course Credit

3 Credits (equivalent to one VAC course)

3.0 Implementation

Universities may include a Value-Added Course titled "National Service, Leadership and Civic Engagement through NCC" in their course basket under the Four-Year Undergraduate Programme (FYUGP). This course shall be open exclusively to students who are officially enrolled as NCC cadets during their undergraduate studies. To be eligible, students must complete a minimum of two to three years of active and continuous participation in NCC activities, fulfilling all prescribed requirements related to theory sessions, practical training, and camp attendance. Only those who meet the stipulated academic and attendance benchmarks will be eligible for credit recognition. The course carries 3 academic credits, which shall be awarded at the end of the sixth semester upon successful verification of completion. The curriculum of this VAC must align with the official NCC training modules and additionally ensure the inclusion of essential learning components such as Disaster Management and First Aid, Personality Development and Leadership, and Community Service and Civic Engagement, along with any other components as prescribed by the NCC from time to time. This integrated approach aims to foster civic responsibility, national service orientation, and leadership qualities among students, while also contributing meaningfully to their holistic development and social consciousness.

4.0 Course Outcomes (COs)

Upon completion, the cadet will be able to:

- **CO1**: Demonstrate discipline, physical endurance, and commitment to service.
- **CO2**: Exhibit leadership skills, personality traits, and team management.
- **CO3**: Apply disaster response techniques and participate in community services.
- **CO4**: Communicate effectively in social awareness programs.
- **CO5**: Engage in environmental and national service activities with civic responsibility.

5.0 Role of University

The university shall play a central role in the academic integration and administration of the NCC course under the Four-Year Undergraduate Programme (FYUGP). Based on the FYUGP regulation it shall officially notify the inclusion of NCC as a Value-Added Course (VAC) in the curriculum, ensuring that the structure, credit allocation, and evaluation framework are aligned with UGC and NCC guidelines. The university shall recognize the training activities, parades, and camps completed by cadets over a span of two to three years as equivalent to three academic credits and shall formalize the credit transfer and evaluation mechanism. To facilitate student participation, the university shall open registration for this course in both odd and even semesters through its course management system. Students who have successfully completed the prescribed NCC training requirements shall be advised to register for the course in the immediate subsequent semester. For example, a student who enrolls in the NCC programme in the first semester and completes the required training by the end of the fourth semester may register for the NCC course in either the fourth or fifth semester. Similarly, a student who joins NCC during the second year shall be permitted to register for the course in the sixth or seventh semester, based on the completion of the training criteria. The university shall also ensure proper coordination with colleges and NCC units to validate student performance records, issue necessary approvals, and incorporate the credits into the student's academic transcript.

6.0 Role of the NCC Directorate:

The NCC Directorate holds a crucial role in standardizing, guiding, and ensuring the effective implementation of the NCC-based Value-Added Course under the FYUGP framework. It shall be responsible for developing a comprehensive and standardized syllabus for the course, incorporating both traditional NCC activities—such as parade drills, leadership training, and camps—and structured academic modules on Disaster Management, Personality Development, Civic Engagement, and related topics. This syllabus, along with a clearly defined evaluation and grading scheme, shall be submitted to the universities for formal academic approval. The Directorate shall also ensure that Associate NCC Officers (ANOs) are adequately trained to deliver the course content, assess students' performance, and maintain academic rigour in line with university standards. It must facilitate the timely appointment and orientation of ANOs across institutions and arrange periodic training programmes to keep them updated on course delivery, assessment methodologies, and curricular expectations. To ensure smooth integration, the Directorate shall coordinate with university authorities and state education departments to align NCC activities with the academic calendar, minimizing scheduling conflicts and optimizing student participation. Additionally, the Directorate shall monitor the conduct of NCC programmes at the institutional level to ensure uniform quality and discipline. It must also maintain a centralized and verifiable database of enrolled cadets, detailing their attendance, training progress, camp participation, and academic outcomes for audit and academic credit purposes. The NCC Directorate shall serve as the principal policy-level link between universities and institutions, proactively addressing jurisdictional and implementation challenges to uphold the integrity and effectiveness of the course across the state.

7.0 Role of Associate NCC Officers (ANOs):

Associate NCC Officers (ANOs), play a pivotal role in the academic and operational implementation of NCC as a Value-Added Course under FYUGP. ANOs shall ensure the official enrolment of eligible students into the NCC programme and maintain accurate records of each cadet's participation and progress. In particular, ANOs must verify that students who register for the NCC course in any specific semester—whether odd or even—complete all the required academic formalities within that semester, including the prescribed internal assessments and final grade submissions. They are entrusted with organizing regular parade sessions, theoretical instruction, and practical training in alignment with the approved NCC syllabus. ANOs shall also conduct both internal and end-semester evaluations of the course at the college level, regardless of the semester in which the student is registered. Detailed attendance records, assessments of discipline, leadership, and camp participation must be maintained meticulously and submitted to the designated nodal officer or institutional coordinator within the stipulated time. Furthermore, ANOs shall ensure the participation of cadets in mandatory camps, and community engagement programmes. In addition to their instructional responsibilities, ANOs play a key mentoring role, guiding students to align their NCC activities with academic and personal development goals. They also serve as the communication link between the institution, the affiliating university, and the NCC Directorate, ensuring that all stakeholders remain informed and coordinated throughout the delivery of the course.

8.0 Evaluation Scheme (100 Marks Total)

Component	Mode of Evaluation	Weightage
Theory (internal & external)	Written test/MCQs (institutional level)	30%
Practical Training & Drill	Continuous assessment by ANO	30%
Camp Participation & Reports	Certificate verification, reflective report	20%
Community & Environmental Engagement	Portfolio submission, activity reports	15%
Attendance & Discipline	Maintained by ANO / college coordinator	5%
Total		100%

9.0 Grading (10-Point FYUGP Scale)

Marks (%)	Grade	Grade Point
≥ 90%	O	10
80 – 89%	A+	9
70 – 79%	A	8
60 – 69%	B+	7
50 – 59%	B	6
40 – 49%	C	5
< 40%	F (Fail)	0

10.0 Course Components and Structure(Illustrative)

SI NO	Component	Mode	Hours Equivalent	Assessment Mode
1	Institutional Training (Parades, Drills, Weapon Training)	Practical	60 hrs	Attendance, Practical Evaluation
2	Camps (e.g., ATC, RDC, NIC, Trekking, etc.)	Experiential	40 hrs	Participation Certificate + Report
3	Theory (Disaster Management, First Aid, Leadership, Civic Engagement, Personality Development, National Integration, Environment)	Lectures (Online/Offline)	30 hrs	Internal Exam / Assignment
4	Community Service (Swachh Bharat, Blood Donation, etc.)	Field Work	20 hrs	Activity Log + Reflective Essay
5	Discipline, Leadership & Personal Conduct	Continuous Observation	-	ANO Remarks & Institutional Report

11.0 Syllabus Outline (Illustrative Topics)

A. Theoretical Component (minimum 30 hrs)

- **Disaster Management and First Aid**
  Types of disasters, emergency response, basic life support, first aid kits.
- **Civic Engagement and Community Development**
  Role of youth in nation-building, Panchayati Raj, government schemes.
- **Leadership and Personality Development**
  Leadership qualities, communication skills, time management, team building.
- **National Integration and Constitution**
  Diversity of India, duties and rights of citizens, national symbols.
- **Environmental Awareness and Sustainable Development**
  Climate change, conservation, waste management, water harvesting.
- **Or any other topic as decided by NCC**

B Practical Component (more than 90+hrs)

1. Foot and arms drill
2. Weapon training
3. Physical fitness, yoga, obstacle training
4. Participation in ATC/NIC/RDC or equivalent
5. Blood donation, cleanliness drives, tree planting, traffic awareness
6. Or any other activity as decided by the NCC directorate