SAHRDAYA COLLEGE OF ENGINEERING AND TECHNOLOGY (AUTONOMOUS), KODAKARA - 680684
Minutes of the meeting

Name of the meeting: Third Academic Council Meeting (Autonomous)   **Period of Review:** *01-02-2025 to 04-07-2025*

Date & Time of meeting: 5/07/2025, 11.00 AM   **Venue: Board Room/Hybrid**

Agenda*: Attached

Members attended:

Sl. No.	Name	Designation	Signature
1	Dr. Ramkumar S	**Chairperson &** Principal	**Present**
2	Dr. Jis Paul	HOD BME	**Present**
3	Dr. Dhanya Gangadharan	HOD BT	**Present**
4	Dr. Drisya M	HOD CE	**Present**
5	Dr. Manishankar S	HOD CSE	**Present**
6	Dr. Ambily Francis	HOD ECE	**Present**
7	Dr. Vijikala V	HOD EEE	**Present**
8	Dr. Sukhila Krishnan	HOD ASH	**Present**
9	Ms. Vini Jose	Training and placement officer	**Present**
10	Dr. Leon Ittiachen	Director & Professor (Dept. of BT)	**Present**
11	Dr. Sudha George Valavi	Joint Director & Professor (Dept. of ASH)	**Present**
12	Dr. Vishnu Rajan	Associate Professor, (Dept. of EC)	**Present**
13	Dr. Sreeraj R	Professor (Dept. of CSE)	**Present**
Four Experts /Academicians from outside the Autonomous college)			
14	Dr. Madhu G	Professor, (Dept. of Chemical Engineering CUSAT)	**Present-Online**
15	Dr. K Meenakshy	Retd. Principal & Professor (GEC, Thrissur)	**Present-Online**
16	Padmasree Dr. E.D. Jemmis	Professor (IISc)	**Absent**
17	Mr. Suresh Kumar	Group Manager (IBS)	**Present-Online**

18	Mr. George Oommen	Manager - People & Culture, SOTI	**Absent**
19	Dr. Smitha R	Professor (Dept. of EEE, NSS Palakkad)	**Absent**

Three Nominees of the University, not less than Professors.

20	Dr. Boby K George	Associate Professor, Dept. of Production Engineering, GEC Thrissur.	**Present-Online**
21	Dr. Sabitha S	Professor, Dept. of Computer Science and Engineering, GEC Sreekrishnapuram	**Absent**
22	Dr. Minimol B	Associate Professor, Dept of Biomedical Engineering, Model Engineering College	**Present-Online**
23	Dr. Priya K V	Assistant Professor, CSE and Asst. HOD, CSE (Special Invitee)	**Present**
24	Mr. Jibin Jose	Assistant Professor, BME and IEDC Nodal officer (Special Invitee)	**Present**
23	Dr. Nixon Kuruvila	Controller of Examinations	**Present**
24	Dr. Finto Raphel	Secretary & IQAC Coordinator, Vice Principal	**Present**

*Agenda is optional. Each agenda item must be numbered and typed in separate line)

Minutes of academic council meeting 05/07/2025

The meeting started at 11.05 A.M.

The Executive Director, Rev. Dr. Anto Chungath welcomed all members and introduced the new Principal, Dr. Ramkumar S, who formally took charge on April 15, 2025. The Chairperson (Principal) Dr. Ramkumar S extended a warm welcome and highlighted the importance of collaborative academic governance.

AC 3.01 - Review of Action Taken on Previous Academic Council Meeting

Dr. Finto Raphel, Member Secretary, presented the *Action Taken Report* on the resolutions of the First and Second Academic Council meetings. It was noted that the Second Academic Council meeting primarily ratified the minutes of the First Academic Council. The action taken report is as follows:

Sl. No.	Agenda Item	Resolution Passed	Action Taken	Remarks/Status
1	AC 1.01 – Ratification of BoS Constitution	Ratified the nomination of two subject experts outside the parent university for each department's BoS.	Orders issued; experts formally inducted; BoS meetings held with new composition.	Completed
2	AC 1.02 – Approval of Examination Manual	Approved the Examination Manual of the college.	Manual published	Implemented
3	AC 1.03.1 – B.Tech Regulations 2024	Approved the B.Tech Academic Regulations 2024.	Regulation document finalized and published in institute website; implementation from AY 2024–25.	Implemented
4	AC 1.03.2 – M.Tech Regulations 2024	Adopted APJAKTU M.Tech Regulations 2022 as M.Tech Regulations 2024.	Adopted without changes; notified for 2024 PG admissions and published in institute website.	Implemented
5	AC 1.03.3 – B.Tech Curriculum 2024 (Sem I–VIII)	Approved B.Tech curriculum for all UG programs based on BoS recommendations.	Curriculum structure uploaded to institute website; departments instructed to follow from AY 2024–25.	Implemented

Sl. No.	Agenda Item	Resolution Passed	Action Taken	Remarks/Status
6	AC 1.03.4 – M.Tech Curriculum 2024	Approved adoption of APJAKTU M.Tech Curriculum 2022 for PG programs.	Curriculum implemented without changes for M.Tech batches from 2024.	Implemented
7	AC 1.04.1 – B.Tech Syllabus 2024 (Sem I & II)	Approved first-year UG syllabi for all B.Tech programs based on BoS suggestions.	Syllabi finalized and uploaded to institute website;	Implemented
8	AC 1.04.2 – M.Tech Syllabus 2024 (Sem I–IV)	Approved adoption of APJAKTU M.Tech syllabus 2022.	Adopted as-is; no modifications suggested.	Implemented
9	AC 1.05 – PhD Coursework	Approved PhD coursework for research scholars as per APJAKTU norms.	Courses have been notified for doctoral students; departments have been informed.	Implemented
10	AC 1.06 – Academic Calendar	Approved Academic Calendar for B.Tech and M.Tech 2024 admissions.	Calendar published and circulated to all stakeholders	Implemented
11	AC 1.07 – Any Other Item	No additional items discussed.	Not applicable.	Noted
12	AC 2.01 – Re-ratification of First AC Meeting Minutes	First Academic Council Meeting minutes re-ratified after university nominees joined.	Minutes re-ratified and officially recorded.	Completed
13	AC 2.02 – BoS Constitution – ASH Department	Ratified the nomination of two external subject experts to ASH Board of Studies.	Orders issued and BoS formed with listed experts.	Implemented
14	AC 2.03 – S1 Results Presentation	Results of S1 (2024 Admission) presented and reviewed. Suggestions for	Department-level remedial classes have been initiated; supplementary	Action Initiated

Sl. No.	Agenda Item	Resolution Passed	Action Taken	Remarks/Status
		improvement discussed.	exams are scheduled.	
15	AC 2.04.1 – Academic Calendar (S2)	Approved Academic Calendar for S2 of B.Tech and M.Tech (2024 Admission).	Calendar published and circulated to departments.	Implemented
16	AC 2.04.2 – Recommendation for New M.Tech in Biomedical Engineering	Recommended starting new M.Tech program with intake of 6.	Submitted to the Governing Body for further approval and approved	In Progress, AICTE approval Received
17	AC 2.04.3 – Recommendation to Increase Intake in B.Tech EEE	Recommended increasing B.Tech EEE intake from 30 to 60.	Submitted to the Governing Body for further approval and approved	In Progress, AICTE approval received
18	AC 2.04.4 – Faculty Research Seed Grant (FRSG-3)	Endorsed FRSG-3 and recommended financial support.	Seed grant distributed; monitoring and progress reviews planned.	Ongoing

The Member Secretary informed that appropriate actions have been initiated and implemented on all decisions taken during the previous Academic Council meetings. Prof. Madhu Gopal appreciated the efforts and opined that actions have been effectively initiated and followed up on all resolutions, and the report is satisfactory. The Chairperson invited comments from other members. The members confirmed their agreement with the presented report. With the consensus of the members, the following resolution was passed:
Resolution of the Academic Council

3.01 Resolved to accept the Action Taken Report on the resolutions passed during the First and Second Academic Council Meeting held on 31st August 2024 and 2nd February 2025, as presented by the Member Secretary.

AC 3.02 - Approval of Amendments to B.Tech Academic Regulations 2024 of Sahrdaya College of Engineering and Technology (Autonomous)

The Principal invited Dr. Finto Raphel, Vice Principal and IQAC Coordinator to present the Amendments to B.Tech Academic Regulations 2024.

Dr. Finto Raphel presented key revisions to the B.Tech Autonomous Regulations to keep them in line with the KTU Regulations 2024, for approval by the Academic Council. Highlights include:

- **Program Structure:** Defined total credits – B.Tech (170), B.Tech with Minor/Honours (185), with Minor + Honours (200) as per KTU norms.

- **MOOCs:** Expanded approved platforms, clarified proctored exam requirement, timeline, and content overlap policy.

- **Examinations:** Revised CGPA to % conversion (10 × CGPA), clarified pass criteria, malpractice handling, and replacing "I" grade with "Ab" grade as per KTU norms.

- **Break of Study & Leave:** Defined break duration (max 2 years), added clauses for uninformed absence and special leaves (e.g., for national/international events).

- **Minor Program:** Credit reduced from 20 to 15, introduced MOOC/assessment guidelines, and conditions for award as per KTU norms.

- **Honours Program:** Credit requirement set at 15, with clear options and assessment guidelines, and conditions for award as per KTU norms.

- **Student Exchange:** New clause introduced detailing eligibility, credit transfer, and approval procedures as per KTU norms.

Dr. Meenakshy K sought clarification on the inclusion of non-NPTEL MOOC agencies. It was confirmed that national-level agencies with proctored exams and approval from the Academic Council would be permitted. She also noted the credit revision from 167+3 (KTU) to 168+2, which was explained as the integration of Skill Enhancement Courses (SECs) into the curriculum. Dr. Minimol B inquired about credit distribution and distinction between SECs and PBL courses. It was clarified that redistributed credits came from the IPR course and activity points, and SECs would be certified and graded courses offered by reputable agencies. Dr. Boby K. George inquired about reflecting minors in degree and timetable management. It was clarified that minors will be listed on the degree certificate upon completion, and all courses, including minors and honours, will be scheduled within 30 contact hours per week. He appreciated the efforts to make minor programs more attractive and suggested summer terms as a future option. Prof. Madhu endorsed his full support.

Resolution of the Academic Council:
3.02 – Resolved to approve the proposed amendments to the B.Tech Academic Regulations 2024 of Sahrdaya College of Engineering and Technology (Autonomous), as presented and authorized the Principal to implement the approved amendments with effect from the academic year 2025–2026. *(SHR/AC/Auto/Acad. Council/B.Tech/1/Reg 2024/R1)-Annexure 1*

AC 3.03 – Approval of Amendments to the Examination Manual

AC 3.13 - Presentation of Results for S2 (2024 Admission)

The Principal invited Dr. Nixon Kuruvila, Controller of Examinations to present the agendas 3.01 and 3.13

The CoE presented key revisions to the Autonomous Examination Regulations, which the Academic Council approved. The major changes are summarized below:

- Inclusion of M.Tech in Biomedical Engineering:

    - The revised regulations now formally include the M.Tech Biomedical Engineering program under autonomous governance.

- Lab Examination Procedures (Clause 4.11):

    - Procedures for lab exams have been clearly defined. The Heads of Departments must provide the schedule and list of examiners in advance. The CoE will appoint examiners based on the submitted list.

- Revised Procedure for Malpractices in Examinations (Clause 7.9):

    - The Autonomous Examination Cell replaces the previous "Exam Monitoring Task Force" as the reporting authority for malpractice incidents with Deputy Controller of Examinations.

    - The Disciplinary Action Committee (DAC) of the institute is now the designated body for enquiry.

    - Students caught with material related to malpractice will be allowed to continue the examination, and the incident will be reported immediately to the CoE.

The Controller of Examinations presented the result analysis of the Second Semester B.Tech Regular Examination (Autonomous), May 2025. The overall pass percentage (for all subjects cleared) was **74.64%**, which improved to **83.23%** after supplementary examinations.

During the discussions, Dr. Minimol B inquired about the disciplinary measures for examination malpractice. It was clarified that the institution follows the KTU regulations.

Prof. Madhu sought clarification on the time frame for regular examination valuation. It was confirmed that results were published within 14 calendar days (10 working days) after the last exam. Students are given access to scanned answer scripts and a window for scrutiny and revaluation before the supplementary exams. Dr. Boby K George inquired about the low pass percentage (approx. 40%) in the Electrical & Electronics Engineering (EEE) program. It was noted that mathematics was a key subject with low pass rates. Departments have initiated additional academic support and special coaching for students ahead of the special supplementary exams scheduled to begin on 15th July. Dr. Meenakshy K asked about the question paper policy for supplementary exams. It was clarified that both regular and supplementary exams draw from a single vetted pool of question papers, with random selection. She also noted significant improvements in results for some programs and sought clarification on coaching support. The institution explained that targeted interventions and student awareness of timelines helped improve outcomes. Dr. Minimol B suggested presenting detailed subject-wise result data in future reports, alongside the overall pass percentages, to better analyze performance trends.

The Council noted the adherence to KTU norms and unanimously agreed to proceed with the resolution.

Also, the Academic Council noted the performance and recommended targeted academic support for branches with lower pass rates, particularly the EEE and EC branches.

3.03 Resolved to approve the amendments to the Examination Manual of Sahrdaya College of Engineering and Technology (Autonomous), as presented. Resolved further that the Principal is authorized to notify the revised Examination Manual and ensure its implementation with effect from the academic year 2025–2026.

3.12 Resolved that the results of Semester II (2024 Admission) of the B.Tech programs, as presented by the Controller of Examinations, are taken on record by the Academic Council.

The Chairperson proposed to the Council that Agenda Items AC 3.04 to AC 3.12, which pertain to curriculum and syllabus revisions for both undergraduate and postgraduate programs, be taken up together department-wise, as they follow a common structure and approach.

With the unanimous consent of the members, the Council agreed to consider these agenda items collectively, based on the recommendations of the respective Boards of Studies (BoS) and the consolidated presentations made by the Heads of Departments.

AC 3.04 Approval of Amendments to B.Tech Curriculum (2024) - Semester I to VIII of the UG programs of Sahrdaya College of Engineering and Technology (Autonomous)

AC 3.05 - Approval of Amendments to B.Tech Syllabus (2024)- Semester I and II based on the B. Tech Curriculum (2024)- Semester I to VIII of the UG programs of Sahrdaya College of Engineering and Technology (Autonomous)

AC 3.06 - Approval of B.Tech Syllabus (2024)- Semester III and IV based on the B.Tech Curriculum (2024)- Semester I to VIII of the UG programs of Sahrdaya College of Engineering and Technology (Autonomous)

AC 3.07 - Approval of B.Tech Honours Curriculum (2024) - Semester III to VII and B.Tech Minor Curriculum (2024) - Semester III to VI of the UG programs of Sahrdaya College of Engineering and Technology- (Autonomous)

AC 3.08- Approval of B.Tech Honours Semester IV Syllabus based on B.Tech Honours Curriculum (2024) - Semester III to VII and B.Tech Minor Semester III and Semester IV Syllabus based on B.Tech Minor Curriculum (2024)-Semester III to VI of the UG programs of Sahrdaya College of Engineering and Technology (Autonomous)

AC 3.09 - Ratification and Approval Related to Skill Enhancement Courses B.Tech Curriculum (2024) - Semester I to VIII of the UG programs of Sahrdaya College of Engineering and Technology (Autonomous)

AC 3.10 - Approval of M.Tech in Biomedical Engineering Curriculum (2025)-Semester I to IV Curriculum and M.Tech in Biomedical Engineering Syllabus (2025) - Semester I to II based on M.Tech in Biomedical Engineering Curriculum (2025)-Semester I to IV Curriculum

AC 3.11 – Recommendation to Start PG Diploma in Data Science and Intelligent Systems

AC 3.12 - Approval of Amendments to M.Tech Curriculum and Syllabus (2024)- Semester I to IV of the PG programs of Sahrdaya College of Engineering and Technology (Autonomous)

Dr. Jis Paul (HoD, BME) presented the report of the 2nd Board of Studies meeting held on 16 June 2025.

Revisions to UG Curriculum

- **24EST306** retitled to *Applied Data Science & Artificial Intelligence* (S3)
- Course **24BME415** retitled to *Introduction to Point-of-Care Diagnostic Devices (IVD-1)* (S3)

- Skill enhancement course **24SEK102** (*AI for Future Workforce – Intel*) approved (S2)
- **24SEK131** replaced with *Data Analytics with R – ICT Academy Kerala* (S3)

Minor Curriculum (UG

Basket 1: Innovation, Entrepreneurial and Venture Development *(Offered in collaboration with KSUM; open to all departments)*
- Includes courses from S3 to S6 focusing on entrepreneurial mindset, product development, validation, and startup launch
- **Special Assessment Pattern**: Portfolio, prototype presentations, TRL evaluation, and capstone-based outcomes

Basket 2: Rehabilitation and Assistive Technologies
- Focus on prosthetics, biomechanics, and assistive systems
- No revisions recommended; curriculum remains unchanged

Honours Curriculum (UG)

Basket 1: Courses on imaging systems, ML/DL applications, and computational mathematics
Basket 2: Includes BioMEMS, microfluidic systems, and sensor technologies

Syllabus Revisions (UG/PG)

No new syllabus changes or content additions were proposed in this cycle
Approval of New M.Tech Curriculum in Biomedical Engineering *(Agenda AC 3.10)*
- A comprehensive PG curriculum approved with specialization in:
  - Biomedical Signal and Image Processing
  - Medical Device Design and Regulatory Affairs
- Curriculum includes:
  - Core and elective courses (program, interdisciplinary, and industry-focused)
  - Internship and research/project tracks in Semester III & IV
  - Audit and MOOC course options
  - Emphasis on regulatory practices, deep learning, clinical applications, and MedTech innovation

Total Credits:
- **Semester I** – 18 | **Semester II** – 18
- **Semester III** – 16 | **Semester IV** – 16

The Academic Council reviewed and approved the introduction of a new Minor Degree in Innovation, Entrepreneurial and Venture Development (IEV), developed in collaboration with Kerala Startup Mission and follows the scheme shown in the AICTE model curriculum . The programme is designed to nurture innovation, problem-solving, and venture creation skills among undergraduate students from all departments.Programme Highlights:

- **Total Credits**: 15
- **Eligibility**: Open to students of all B.Tech. branches
- **Structure**: Spread across Semesters 3 to 6, including a self-paced course to be completed before Semester 5

Assessment Pattern: Unlike traditional academic programmes, the IEV Minor adopts a special assessment model focused on portfolio development, prototype demonstration, mentor verification, startup validation, and strategic outcomes, promoting hands-on and experiential learning.

During the discussions, Prof. Madhu appreciated the initiative and asked about its current implementation and student response. HoD clarified that S3 had not yet started, and student selection would begin with a hackathon. Dr. Boby K. George inquired about the origin of the curriculum and the inclusion of patent drafting in it. HoD explained it was based on the AICTE model curriculum by and further developed by internal faculty in consultation with Kerala Startup Mission, and assured that IP elements would be explicitly included in the final version. Dr. Minimol B enquired whether the IEV minor is available for BME students, to which the HoD clarified that, it is open to all branches, including BME.

Dr. Boby K George questioned the inclusion of Japanese in audit courses. The HoD clarified that it is optional and that resources like the language lab are available as support mechanisms.

Dr. Dhanya Gnagadharan, Head of the Department of Biotechnology presented the recommendations of the Board of Studies for curriculum updates, which were as follows:

Curriculum Revisions (UG & PG)

The following curriculum revisions were approved:
- **UG Course Code Updates & Title Changes:**
  - *Fundamentals in Biotechnology Lab* code changed to **24ESL116**.
  - *Biological Reaction Engineering* was renamed to **Chemical and Biological Reaction Engineering**.
  - *Introduction to Artificial Intelligence and Data Science* has been renamed to **Applied Data Science and Artificial Intelligence**.
  - *Drug Delivery Principles and Applications* has been renamed to **Drug Delivery Systems and Engineering**.
- **PG Curriculum Addition:**
  - *Research Publication and Ethics* introduced as a program elective for M.Tech Semester 2.
- **Skill Enhancement Courses Approved:**
  - *AI for Future Workforce* (Intel Program) – Semester 2.
  - *Data Analytics with R* (ICT Academy) – Semester 3.

Minor Curriculum (UG)

Two minor baskets were introduced:
- **Bioinformatics and Computational Biology**
- **Precision Health Technology**

Each basket includes three core courses and a mini project; BoS suggested no changes.

Honours Curriculum (UG)

Three honours baskets were introduced. All baskets consist of three advanced courses and a mini-project. BoS recommended no changes.

Syllabus Modifications (UG & PG)

- *Bioprocess Calculations:* Corrected terminology from *adsorption* to *absorption*.
- *Biochemistry:* Added clinical references and self-study topic on point-of-care devices.
- *Microbiology:* Included pathogenic microorganism identification and microbial fermentation.
- *Biological Reaction Engineering:* Introduced specific self-study topics in Module 1.

- *Fluid Flow and Particle Technology Lab:* Recommended inclusion of simulation experiments.

There were no comments from any members.

Dr. Drisya, Head of the Department of Civil Engineering presented the recommendations of the Board of Studies for curriculum updates, which were as follows:

Curriculum Revisions (UG)

- **Course Title Change**:
  - *Introduction to Artificial Intelligence and Data Science* was renamed to *Applied Data Science and Artificial Intelligence* (Sem 3) — *Adopted*.
- **Skill Enhancement Courses**:
  - *AI for Future Workforce* (Intel Corporation) — *Adopted*.
  - *AutoCAD 2D and 3D for Building Plan and Modelling* — No changes; *Not Applicable*.

Minor Curriculum (UG)

Basket 1: Construction Technology
Includes courses on construction materials, concrete technology, equipment management, and a mini project (Sem 3–6). *No revisions were recommended.*

Basket 2: Sustainability Engineering
Includes courses on sustainable engineering, plastic waste management, sustainability analysis, and a mini project (Sem 3–6). *No revisions were recommended.*

Honours Curriculum (UG)

Basket 1: Courses on modern construction materials, repair and maintenance, retrofitting, and a mini project (Sem 4–7). *No revisions were recommended.*

Basket 2: Courses on bituminous materials, remote sensing and GIS, pavement management, and a mini project (Sem 4–7). *No revisions were recommended.*

Syllabus Revision and Modification (UG)

- **Fluid Mechanics (24CET303, Sem 4)**: Modules 3 and 4 contents interchanged to group all open channel flow topics under Module 4 — *Adopted*.
- **Water Resource Engineering (24CER404, Sem 4)**:
  - GIS-related content to be removed and offered as a separate course.
  - *Evapotranspiration* has been added to Module 3.
  - *Reservoirs* topic shifted from Module 3 to Module 4 — *Adopted*.

There were no specific comments from members.

Dr. Manishankar, the Head of the Department of Computer Science and Engineering, presented the BoS-approved curriculum changes and enhancements as follows:

Curriculum Revisions (UG & PG)

- **Course Title Changes**:
  - *Research and Publication Ethics* introduced as a credit course for PhD scholars under the autonomous stream.
  - *Discrete Mathematics & Statistics* renamed to include *Probability Theory*.
- **Skill Enhancement Courses Adopted**:
  - *AI for Future Workforce* (Intel Corporation)
  - *MERN Stack (ICT Academy Kerala)*

Minor Program (UG)

Basket 1: Advanced Web Development
Includes Web Development, Android Programming, Full Stack MERN Stack, and Mini Project (Sem 3–6).

Basket 2: Cybersecurity
Includes Introduction to Cryptography, Cyber Forensics, Cybersecurity and Privacy, and Mini Project (Sem 3–6).

No changes were proposed in these baskets.

Honours Program (UG)

Basket 1: Includes courses on Mathematics for ML, Neural Networks, Advanced ML, and Mini Project (Sem 4–7).

Basket 2: Includes Cybersecurity, Cryptographic Algorithms, Network Security, and Mini Project (Sem 4–7).

All courses were retained without modification.

Syllabus Revisions (UG & PG)

- **UG Core Courses**: Revisions made in subjects such as *Foundations of Computing, Theory of Computation, Computer Architecture, Operating Systems,* and *Database Management Systems* to reflect advanced topics, industry practices, and modern tools.
- **UG Electives**: Enhancements in *Advanced Data Structures, UI/UX Design, Functional Programming,* and *Mobile App Development* , incorporating practical components and current trends (e.g., MVVM, JWT/OAuth, Jest).
- **PG Courses**:
  - *Advanced Machine Learning*: MLOps added.
  - *Computing Lab I*: Google Colab removed.

PG Diploma in Data Science and AI (New Program)

- Two-term structure totalling **40 credits** with core courses in *Machine Learning, Cloud Computing, Data Mining, Research Methodology,* and *Dissertation Phase.*
- Industry-driven content aligned with current market needs.

During the discussions, Prof. Boby K George appreciated the inclusion of the *Research Methodology and Publication Ethics* course and confirmed it is open to PhD students across departments. He suggested introducing a new minor in AI/Data Science, as many students are interested in these areas for their final projects, and existing minors like Web Development and Cybersecurity are already popular. The department clarified that the ECE department already offers a minor in AI, so it focused on other interdisciplinary areas to avoid overlap.

Dr. Vijikala, Head of the Department of Electrical and Electronics Engineering presented the following recommendations from the Board of Studies:

- **Curriculum Revisions (UG & PG)**
  - *Introduction to Artificial Intelligence and Data Science* renamed to **Applied Data Science and Artificial Intelligence** (Semester 3).
  - Two skill enhancement programs were adopted:
    - **AI for Future Workforce** (Intel Corporation) – Semester 2
    - **Model-Based Design of Electrical Systems using MATLAB** (MathWorks) – Semester 3

Minor Program (UG)

Two minor baskets were proposed and ratified:
- **Basket 1: Electric Vehicles** (Semesters 3 to 6)
  - Includes courses on EV introduction, green transportation, battery technologies, and a mini-project.
- **Basket 2: Sustainable Energy Engineering** (Semesters 3 to 6)
  - Includes courses on renewable systems, energy storage, policy and economics, and a mini project.

Honours Program (UG)

Two honours baskets were approved:
- **Basket 1:** Focus on EV architecture, storage systems, motor control, and a mini project. (Semesters 4 to 7)
- **Basket 2:** Covers renewable technologies, energy storage, smart grids, and a mini project. (Semesters 4 to 7)

Syllabus Revisions

The following UG/PG course syllabi were revised and adopted:
- Engineering Economics (S3): Include profit and balance sheet analysis.
- Electronic Instrumentation (S4): Clarify logic gates with ladder logic.
- Solid State Devices (S4): Update content and add "quality power."
- Advanced Electronic Design (S4): Add I²C protocol.
- Energy Storage Systems (S4): Include limitations of energy storage.

There were no comments from members.

Dr. Ambili Francis, Head of the Department of Electronics and Communication Engineering, presented the recommendations of the Board of Studies meeting held earlier.

The following revisions were highlighted:
- **Curriculum Revisions (UG & PG)**
  - The course *"Introduction to Artificial Intelligence and Data Science"* was renamed as *"Applied Data Science and Artificial Intelligence"* (Semester 3).
  - *"Physical Design Automation"* (Semester 4) was retitled as *"Digital Systems and VLSI Design"*.
  - *"Research Publication and Ethics"* was added as a program elective in M.Tech Semester 2.
  - Two skill enhancement programs (*AI for Future Workforce* by Intel and *Android Basics with Compose* by Google) were adopted for Semesters 2 and 3.
- **Minor Program (UG)**
  - Two baskets were proposed and ratified:
    - **Artificial Intelligence and Machine Learning**
    - **Internet of Things and Robotics**
  - Each basket consists of three courses and a mini project (Semesters 3 to 6).
- **Honours Program (UG)**
  - Two baskets were approved.
  - Both follow a four-semester structure, ending with a mini-project (Semesters 4 to 7).
- **Syllabus Revisions and Modifications**
  - Enhancements were made to courses such as *Foundations of Computing, Solid State Devices, Signals and Systems,* and *System Verilog* to reflect industry requirements and student preparedness better.
  - Revisions aim to simplify difficult content, improve relevance, and promote higher-order learning.

There were no specific comments from members.

The Principal moved the resolutions from 3.04 to 3.12.

3.04 Resolved to approve the amendments to the B.Tech Curriculum (2024) for Semester I to VIII of the UG programs of Sahrdaya College of Engineering and Technology (Autonomous), as presented by the respective Boards of Studies and recommended by the Academic Committee. Resolved further that the Principal is authorized to ensure the implementation of these amendments with effect from the academic year 2025–2026.

3.05 Resolved to approve the amendments to the B.Tech Syllabus (2024) for Semester I and II based on the revised B.Tech Curriculum (2024) – Semester I to VIII of the UG programs of Sahrdaya College of Engineering and Technology (Autonomous), as recommended by the Board of Studies of the respective departments. Resolved further that the Principal is authorized to ensure the implementation of these amendments with effect from the academic year 2025–2026.

3.06 Resolved to approve the B.Tech Syllabus (2024) for Semester III and IV in line with the B.Tech Curriculum (2024) – Semester I to VIII of the UG programs of Sahrdaya College of Engineering and Technology (Autonomous), as recommended by the Board of Studies of the respective departments.

3.07 Resolved to approve the B.Tech Honours Curriculum (2024) – Semester III to VII and B.Tech Minor Curriculum (2024) – Semester III to VI of the UG programs, as recommended by the Board of Studies of the respective departments.

3.08 Resolved to approve the B.Tech Honours Semester IV Syllabus and B.Tech Minor Semester III and IV Syllabus based on the respective approved curricula, as recommended by the Board of Studies of the respective departments.

3.09 Resolved to ratify and approve the Skill Enhancement Courses incorporated into the B.Tech Curriculum (2024) for Semester II and III, as recommended by the Board of Studies of the respective departments.

3.10 Resolved to approve the M.Tech in Biomedical Engineering Curriculum (2025) – Semester I to IV and the corresponding Syllabus (2025) – Semester I and II, based on the approved curriculum framework of the PG programs of Sahrdaya College of Engineering and Technology (Autonomous), as recommended by the Board of Studies of the Biomedical Engineering department.

3.11 Resolved to recommend the initiation of a PG Diploma program in Data Science and Intelligent Systems under the autonomous scheme, subject to statutory approvals, to cater to emerging interdisciplinary skill demands, as recommended by the Board of Studies of the respective department. Resolved further that, subject to the approval of the program by the statutory bodies, the regulations, curriculum and syllabus are approved as recommended by the Board of Studies of the Computer Science and Engineering Departments.

3.12 Resolved to approve the amendments to the M.Tech Curriculum and Syllabus (2024) – Semester I to IV of the PG programs of Sahrdaya College of Engineering and Technology (Autonomous), as recommended by the Board of Studies of the respective departments. Resolved further that the Principal is authorized to ensure the implementation of these amendments with effect from the academic year 2025–2026.

The Academic Council adopted the resolutions.

AC 3.14 - Special Approval Cases – Student Requests

The Principal invited Dr. Sukhila Krishnan, head of the Applied Science and Humanities Department, to present special approval cases based on student requests.

As per the medical fitness certificate dated 12 February 2025, Ms. Angel Mariya U J (Register Number: SHR24CS067), a student of B.Tech Computer Science and Engineering (CSA), was unable to attend regular classes or register for Semester 1 (S1) courses during the academic year 2024–25 due to her medical condition.

Subsequently, upon regaining her health, she was able to register for and successfully completed Semester 2 (S2). As per the B.Tech Academic Regulations:

- Clause 24R4.3: *"Students shall complete formalities, such as teaching evaluation/feedback of the courses registered in the previous semester, if any, as notified by the institution before the registration for the semester."*

- Clause 24R8.7: *"Students must register for all the courses listed in the curriculum for a semester to be eligible to enroll for the next higher semester."*

Despite these stipulations, the Principal had granted special permission for Ms. Angel Mariya to register for S2 directly, considering her valid medical condition and the submission of required documentation.

Considering this, the matter is placed before the Academic Council for ratification of the Principal's approval as an exemption from Clauses 24R4.3 and 24R8.7 for Ms. Angel Mariya U J.

After presenting the case by HOD, ASH, the principal invited members for discussion.

Prof. Madhu Gopal supported the exemption from regulation clauses on a *humanitarian basis* and recommended ratifying the Principal's decision as a special case. All members, including Prof. Meenakshy K and Prof. Boby K George, agreed with the proposal.

The principal moved the resolution for approval.

3.14 Resolved to ratify the Principal's approval granting an exemption from Clauses 24R4.3 and 24R8.7 of the B.Tech Academic Regulations to Ms. Angel Mariya U J (SHR24CS067) of CSA, in view of the documented medical condition certified by a competent medical institution. Resolved further that this exemption be treated as a special case, and does not set a precedent, with future cases to be considered individually based on the merit and supporting documentation.

The Academic Council adopted the resolution.

AC 3.15 - Any Other Item with the Permission of the Chair

No members raised any other items.

The Principal then presented the major accomplishments of the institution during the review period.

Prof. Madhu Gopal inquired about the accreditation status of the undergraduate and postgraduate programs. It was clarified by Sahrdaya CET that all UG programs are currently accredited, which is why no recent CoA visit occurred. However, PG program accreditation has not yet been pursued and is identified as a future milestone. Prof. Madhu Gopal suggested that the institution should work towards:

- PG program accreditation, and

- Upgrading UG accreditation from Tier II to Tier I, especially since the institution has attained autonomous status.

He also appreciated the improvements and wished the institution success in its accreditation goals.

The Principal invited Director Dr. Leon Ittiachen to propose a vote of Thanks. Dr. Leon, Director of Sahrdaya CET, delivered the vote of thanks, expressing gratitude to all participants for their valuable contributions and active participation in the meeting. He specially thanked the external members—Dr. Meenakshy, Dr. Boby George (GEC), Dr. Minimol (Model Engineering College), Dr. Madhu Gopal, and industry expert Mr. Suresh, for their continued support and insights. He also acknowledged the efforts of the internal team, including administrators, the Controller of Examinations, and HODs, for their diligent preparation and presentations. He concluded by looking forward to their participation in future meetings.

The meeting concluded at 1.00 PM.

Please note that the list of documents pertaining to each applicable resolution has been provided in the appendix, and all annexures referenced therein are duly attached

Date: 05/07/2025

Prepared by: Dr. Finto Raphel IQAC Coordinator & Member Secretary

Approved by: Dr. Ramkumar S, Principal and Chairperson

For Sahrdaya College Of
Engineering & Technology

Dr. Ramkumar S
Principal

APPENDIX

Sl No.	Name of the Document:	Document No.
1	B.Tech Academic Regulations 2024 (Agenda 3.02)	SHR/AC/Auto/Acad. Council/B.Tech/1/Reg 2024/ Annexure 1
2	Examination Manual (Agenda 3.03)	SHR/AC/Auto/Exam Manual/2.0 Annexure 2
3	Skill Enhancement Courses (Agenda 3.09)	SHR/AC/Auto/Acad. Council/B.Tech/4/SEC/R1 Annexure 42 SHR/AC/Auto/Acad. Council/B.Tech/4/ Syll. /SEC Annexure 43

UG Documents

SL No.	Name of the Department	B.Tech Curriculum (2024) (Agenda 3.04)	B.Tech Syllabus (2024) for Semester I and II (Agenda 3.05)	B.Tech Syllabus (2024) for Semester III and IV (Agenda 3.06)	B.Tech Honours Curriculum (2024) (Agenda 3.07)	B.Tech Minor Curriculum (2024) (Agenda 3.07)	B.Tech Honours Semester IV Syllabus (Agenda 3.08)	B.Tech Minor Semester III and IV (Agenda 3.08)
1	Biomedical Engineering	SHR/AC/Auto/Acad. Council/B.Tech/2/Curri./BME/R1 Annexure 3		SHR/AC/Auto/Acad. Council /B.Tech/3/Syll./BME/S3-S4 Annexure 12	SHR/AC/Auto/Acad. Council/B.Tech/2/Curri./Honours/BME Annexure 18	SHR/AC/Auto/Acad. Council/B.Tech/2/Curri./Minor/BME Annexure 24	SHR/AC/Auto/Acad. Council/B.Tech/3/Syll./Honours/BME/S4 Annexure 30	SHR/AC/Auto/Acad. Council/B.Tech/3/Syll./Minor/BME/S3-S4 Annexure 36
2	Biotechnology	SHR/AC/Auto/Acad.	SHR/AC/Auto/Acad.	SHR/AC/Auto/Acad. Council	SHR/AC/Auto/Acad.	SHR/AC/Auto/Acad.	SHR/AC/Auto/Acad.	SHR/AC/Auto/Acad.

#	Department							
3	Civil Engineering	Council/B.Tech/2/Curri./BT/R1 — **Annexure 4**	Council/B.Tech/3/Syll./BT/R1 — **Annexure 9**	/B.Tech/3/Syll./BT/S3-S4 — **Annexure 13**	Council/B.Tech/2/Curri./Honours/BT — **Annexure 19**	Council/B.Tech/2/Curri./Minor/BT — **Annexure 25**	Council/B.Tech/3/Syll./Honours/BT/S4 — **Annexure 31**	Council/B.Tech/3/Syll./Minors/BT/S3-S4 — **Annexure 37**
		SHR/AC/Auto/Acad. Council/B.Tech/2/Curri./CE/R1 — **Annexure 5**		SHR/AC/Auto/Acad. Council/B.Tech/3/Syll./CE/S3-S4 — **Annexure 14**	SHR/AC/Auto/Acad. Council/B.Tech/2/Curri./Honour/CE — **Annexure 20**	SHR/AC/Auto/Acad. Council/B.Tech/2/Curri./Minor/CE — **Annexure 26**	SHR/AC/Auto/Acad. Council/B.Tech/3/Syll./Honours/CE/S4 — **Annexure 32**	SHR/AC/Auto/Acad. Council/B.Tech/3/Syll./Minor/BME/S3-S4 — **Annexure 38**
4	Computer Science & Engineering	SHR/AC/Auto/Acad. Council/B.Tech/2/Curri./CSE/R1 — **Annexure 6**	SHR/AC/Auto/Acad. Council/B.Tech/3/Syll./CSE/S1-S2/R1 — **Annexure 10**		SHR/AC/Auto/Acad. Council/B.Tech/2/Curri./Honour/CSE — **Annexure 21**	SHR/AC/Auto/Acad. Council/B.Tech/2/Curri./Minor/CSE — **Annexure 27**	SHR/AC/Auto/Acad. Council/B.Tech/3/Syll./Honours/CSE/S4 — **Annexure 33**	SHR/AC/Auto/Acad. Council/B.Tech/3/Syll./Minor/CSE — **Annexure 39**
5	Electrical & Electronics Engineering	SHR/AC/Auto/Aca. Council/B.Tech/2/Curri./EEE/R1 — **Annexure 7**			SHR/AC/Auto/Acad. Council/B.Tech/2/Curri./Honours/EEE — **Annexure 22**	SHR/AC/Auto/Acad. Council/B.Tech/2/Curri./Minor/EEE — **Annexure 28**	SHR/AC/Auto/Acad. Council/B.Tech/3/Syll. Honours/EEE/S4 — **Annexure 34**	SHR/AC/Auto/Acad. Council/B.Tech/3/Syll./Minor/EEE/S3-S4 — **Annexure 40**

6	Electronics & Communication Engineering	SHR/AC/Auto/Acad. Council/B.Tech/2/Curri./ECE/R1 **Annexure 8**	SHR/AC/Auto/Acad. Council/B.Tech/3/Syll./ECE/R1 **Annexure 11**	SHR/AC/Auto/Acad. Council/B.Tech/3/Syll./ECE/S3-S4 **Annexure 17**	SHR/AC/Auto/Acad. Council/B.Tech/2/Curri./Honours/ECE **Annexure 23**	SHR/AC/Auto/Acad. Council/B.Tech/2/Curri./Minor/ECE **Annexure 29**	SHR/AC/Auto/Acad. Council/B.Tech/3/Syll./Honours/ECE/S4 **Annexure 35**	SHR/AC/Auto/Acad. Council/B.Tech/3/Syll./Minor/ECE/S3-S4 **Annexure 41**

PG Documents

SL No.	Name of the Department	M.Tech Curriculum (Agenda 3.10) (Agenda 3.12)	M.Tech Syllabus (Agenda 3.10) (Agenda 3.12)	PG Diploma Regulations	PG Diploma Curriculum	PG Diploma Syllabus (Agenda 3.11)
1	Biomedical Engineering	SHR/AC/Auto/Acad.Council/M.Tech/2/Curri./BME **Annexure 44**	SHR/AC/Auto/Acad. Council/M.Tech/3/Syll./BME/S1-S2 **Annexure 47**			
2	Biotechnology	SHR/AC/Auto/Acad. Council/M.Tech/2/Curri./IBT/Rev 1.0 **Annexure 45**	SHR/AC/Auto/Acad. Council/M.Tech/3/Syll./IBT **Annexure 48**			
3	Computer Science & Engineering	SHR/AC/Auto/ Acad. Council /M.Tech/2/Curri./CSE/S1-S4/R1 **Annexure 46**	SHR/AC/Auto/Acad. Council/M.Tech/3/Syll./CSE/S1-S4/R1 **Annexure 49**	SHR/AC/Auto/Acad. Council//PG Diploma/1/Reg 2025 **Annexure 51**	SHR/AC/Auto/Acad. Council/PG.Diploma/2/Curri. /CSE	

			Annexure 52
			SHR/AC/Auto/Acad. Council/PG.Diploma/3/Syll. /CSE
			Annexure 53
4	Electronics & Communication Engineering	SHR/AC/Auto/Acad. Council/M.Tech/2/Curri. /ES/R1 **Annexure 47**	SHR/AC/Auto/Acad. Council/M.Tech/3/Syll. /ES/R1 **Annexure 50**