VELAMMAL COLLEGE OF ENGINEERING AND TECHNOLOGY (Autonomous)
Madurai
Minutes of the Second Academic Council Meeting

Venue: Seminar Hall - I **Date:** 19.11.2022 (Saturday) **Time:** 10:30 a.m.
Management Representative: Dr. N. Suresh Kumar, Senior Principal & Coordinator, Velammal Institutions (Madurai Region), VCET.
University Nominees:

1. Dr. G. Umadevi, Professor, Department of Civil Engineering, CEG campus, A.U. Chennai.
2. Dr. A. Kunthavai, Professor, Department of Computer Science and Engineering, CIT, Coimbatore
3. Dr. N. Nandakumar Professor & HoD, Faculty of Engineering Design, Govt College of Technology, Coimbatore (online).

External Experts:

1. Dr. R. Harikumar, Professor, ECE, Bannari Amman Institute of Technology, Sathyamangalam.
2. Dr. N. Kannan, Principal, The Oxford College of Engineering, Bangalore.
3. Dr. U. Chandrasekhar, Program Director, Addwize - Wipro3D, Bengaluru (online).

Chairman Academic Council: Dr. P. Alli, Principal/VCET
Members Present:1. Dr. A. Shunmugalatha, Professor & Dean (Academics), 2. Dr. S. Vasuki, Professor & Dean (Student Affairs), 3. Dr. G. Manikandan, Professor & Dean (Research and Development), 4. Dr. L. Andal, Professor & Dean (Industry Institute Interaction), 5. Dr. R. Perumalraja, Professor & Dean (Planning & Development), 6. Mrs. J. P. Annie Sweetlin Jebarani, Associate Professor & HoD/Civil, 7. Dr. R. Deepalakshmi, Professor & HoD/CSE, 8. Dr. K. Kavitha, Professor & HoD/ECE, 9. Dr. R. Narmatha Banu, Professor & HoD/EEE, 10. Dr. R. Kavitha, Professor & HoD/IT, 11. Dr. V. Anbumalar, Professor & HoD/Mech, 12. Dr. S. Rajkumar, Associate Professor & HoD/Chemistry, 13. Dr. S. Gomathy, Professor & HoD/English, 14. Dr. A. P. Pushpalatha, Professor & HoD/Maths, 15. Dr. D. Ravindran, Associate Professor & HoD/Physics, 16. Dr. S. Karthikeyan, Associate Professor/Maths & Controller of Examinations, 17. Mrs. R. Rajapriya, Assistant Professor III/Civil, 18. Dr. G. Vinoth Chakkaravarthy, DCoE & Associate Professor/CSE, 19. Dr. P. Suveetha Dhanaselvam, Associate Professor/ECE, 20. Dr. M. Maran, Professor/Mech, 21. Mr. P. Srinivasa Perumal, Placement Officer, 22. Dr. S. Gopala Krishnan, Librarian, 23. Dr. S. Ponkumar, PED, 24. Dr. S. Dhanalaskshmi, Professor/EEE & Member Secretary.
Student Representatives: 1. Ms. C. Haripreeta/II-Civil, 2. Ms. C. Pradeesha/II-CSE, 3. Ms. S. Shivani Suvatheka/II-ECE, 4. Mr. L.R. Saravanan/ II-EEE, 5. Mr. S. Prem Kumar/II-MECH

S.No	Subject	Action	Responsibility
1.	**Introduction of Members AU & Institute Nominees**	**Dr. P. Alli, Principal, Chairman-Academic Council**, welcomed all the members of the University and the Institute nominees to the meeting. In her opening remarks, she gave a brief introduction of Velammal Educational Trust and the salient features of Velammal College of Engineering and Technology with the road map of autonomy explaining up to the current status. She requested **Dr. A. Shunmugalatha, Professor & Dean (Academics)** to move the points of Agenda items and requested her to present the Regulations 2021 to the members present.	Chairman, Academic Council

2.	**Regulations (R21) framed for the UG from the Academic year 2021-22 under Autonomous**	**On behalf of the Chairman, Academic Council,Dr, A. Shunmugalatha, Professor & Dean (Academics)** presented the regulations-2021 under CBCS for all the UG Programmes offered in Velammal College of Engineering and Technology with effect from the academic year 2022-2023 to the University Nominees, the Institute Nominees, and other members of the Academic Council. • Admission processes are followed as per the guidelines of Anna University for regular and Lateral entry students. • Anna University has introduced three new courses such as B.E./B.Tech. Honors (Specialisation in the same discipline), B.E./B.Tech. Honors and B.E/B.Tech. (minor in other specialization). • For enrolling in B.E./B.Tech. Honors, B.E./B.Tech. Honors (Specialisation in the same discipline) and B.E./B.Tech. Honors and B.E/B.Tech. (minor in other specialization) students can optionally register for additional 6 courses and can have 18 credits in order to award B.E./B.Tech. Honors, B.E./B.Tech. Honors (Specialisation in the same discipline) and B.E./B.Tech. Honors and B.E/B.Tech. (minor in other specialization) degree. Students can have a maximum of 6 credits through online mode using NPTEL. • The eligibility for enrolling in B.E./B.Tech. Honors and B.E/B.Tech. (minor in other specialization) is that the student should have a CGPA of 7.5 and have passed all the courses in the first attempt till the IV semester. • In B.E./B. Tech Honors (Specialisation in the same discipline) the students should have earned additionally a minimum of 18 credits from a vertical of the same program. In B.E./B. Tech Honors, the students should have earned additionally a minimum of 18 credits from more than one vertical. In B.E/B. Tech (minor in other specialization), the students should have earned additionally a minimum of 18 credits by any one of the verticals from other B.E/B.Tech. Degree Programme. • If a student drops the course in between Honors Course, then it can be replaced with Professional Electives, and if a student drops the course in between the Minor degree, then it can be replaced with open electives. • Structure of the curriculum is designed to have open elective courses or professional elective courses offered in VII & VIII semesters. • The students can have the flexibility to undertake VII semester courses during VII or VIII semesters and can opt for 6 months of internship/industrial training.	Dean Academics

		• Categorization of the courses is done based on AICTE norms. • To implement Personality & Character Development, various activities are conducted on campus such as NCC, NSS, NSO & YRC. • There are various club activities that scrutinize the overall development of the students. The records of such activities are maintained by the class incharges. The Cumulative participation of a student should be for 80 hours. • Number of courses per semester is a maximum of 10, whereas theory courses and lab-integrated theory courses should not exceed 7, and lab and employability enhancement courses should not exceed 4. And the credits should not exceed 36 exclusively for regular courses. • Credit assigned for one lecture, two tutorials, and two lab hours is one. • Internship is mandatory for all the students irrespective of the department. • Students should visit the industry every semester. And it is the responsibility of BoS Chairman to make arrangements in this regard. • There are two categories under Value Added Courses such as Naan Muthalvan Course and One Credit Course. Naan Muthalvan Course is prescribed by the Government of Tamilnadu. In Autonomous regulations, one Naan Muthalvan Course is offered in V, VI & VII semesters which carries 2 credits. The students are exempted from 2 Professional electives, once they have completed 3 courses in Naan Muthalvan Scheme as per the norms of Anna University. Mentors and evaluators are appointed by the Head of the Institute and with the concern of the BoS Chairman. Online Courses shall be chosen only from NPTEL. If the student is learning 2 online courses of equivalent credit of each 3 credits, then in total 6 credits can be earned. In such cases, the student is exempted from the open or professional elective courses. • Students can take up one credit courses to strengthen their knowledge. Students can take a maximum of 2 one-credit courses during the entire duration of the programme. • There are 2 mandatory courses such as ‘The Constitution of India’ & ‘Essence of Indian Traditional Knowledge as per the guidelines of AICTE. • Students shall advance the VII & VIII semester courses other than the project work in the V & VI semester provided they do not have arrears and have a CGPA of 8.0 and above at the end of the IV semester. • Students are encouraged to learn other foreign language courses apart from English such as German, Japanese, etc. Upon completion, a valid certificate	

		has to be produced by those students which is approved by embassies and approved by the Government of India. • Students are given the privilege to drop the course during the fifth to the final semester, and that can opt only once in a course of study. The total number of credits for such courses shall not exceed 6 per semester. • As per the suggestions of the Academic Council Experts, the academic audit is conducted once in a semester. • Anna University has introduced relative gradings. The award of the letter grade will be decided using the relative grading principle. • Thanked the university for awarding the Autonomous status and we may also from time to time revise or change the regulations, curriculum & syllabus, and scheme of examination with the approval of the Academic Council members. • Proposed to introduce new programmes B.Tech. in Artificial Intelligence and Data Science (AIDS) and Master of Business Administration (MBA). • Dr. R. Harikumar, External Expert suggested all the departments to follow the semester-wise numbering for course codes. All the experts approved the regulations-2021 under CBCS for all the existing 6 UG Programmes to be offered in Velammal College of Engineering and Technology with effect from the academic year 2022-2023 and proposed new programmes AIDS and MBA from 2023-24.	
3.	**Minutes of the various BoS and Curriculum and Syllabus for all UG programs under Autonomous by respective HoDs**	**Mrs. J. P. Annie Sweetlin Jebarani, Associate Professor & HoD/Civil** presented the curriculum and syllabus of Civil UG programs and regulation 2021 under CBCS pattern. • **Dr. Uma Devi, University Nominee** suggested elaborating the course name of the professional elective 21 PCE 40 SMART CITIES. All the experts approved the curriculum and syllabus. **Dr. R. Deepalakshmi, Professor & HoD/CSE** presented the curriculum and syllabus of Computer Science and Engineering UG programs and regulation 2021 under CBCS pattern **Dr. G.Uma Devi, University Nominee** suggested the following: • Course Name has to be expanded in the verticals to have a descriptive meaning. • Inclusion of Multidisciplinary courses in the CSE curriculum as specialization courses. • Ensure including all the Core Courses in the curriculum as per the reference given by Anna University. **Dr.A.Kunthavai, University Nominee** suggested the following:	Chairperson (Civil, CSE, ECE, EEE, IT, and Mechanical Engineering)

		• Microsoft Office Fundamentals can be included in the earlier semesters. An appeal was made to Dr. Uma Devi to represent the same in Anna University Academic Council Meeting. • Unix Internals course has to be considered a core course in the 5th Semester. • All courses in the curriculum should have recent edition textbooks. • Instead of having Cloud Computing and Virtualization as separate courses, they can be offered as a single course. • Courses such as Blockchain and Data Science can be included as core subjects. • **Dr. N. Kannan, an Expert Member** suggested having the Innovation and Design thinking course as a one-credit course • **Dr. U. Chandrasekhar, an Expert Member** suggested including IoT Technologies as one Vertical. • **Dr. N. Suresh Kumar, Senior Principal** suggested having a minimum number of 4 - industry supported one-credit courses in the curriculum. • **Dr.P.Alli, Principal** insisted to specify the supporting industry names for one credit course. All the experts approved the curriculum and syllabus. **Dr. K. Kavitha, Professor & HoD/ECE** presented the curriculum and syllabus of Electronics and Communication Engineering UG programs and regulation 2021 under CBCS pattern: Experts suggested the following: • The word "Advanced" has to be removed from the course names. • SDR-based experiments have to be included in the lab courses. • "Mobile computing" can be offered as a theory cum lab course. • Circuit analysis can be removed and combined with EC-I and EC-II in the forthcoming syllabus. • In the subject "Signals and Systems" instead of studying transforms, the application-oriented part can be included using transforms for the next revision. • The word "Therapeutic equipment" has to be changed as "Rehabilitation". • Subjects based on Emotional intelligence can be introduced as 1 credit course. • In Vertical VII, "Network on a chip" can be included. • "Evolutionary computing" can be included in any one of the verticals. • "Soft computing" can be included as a 1 credit course if possible.	

		• "Innovation and design thinking" can be included as 1 credit course. All the experts approved the curriculum and syllabus. **Dr. R. Narmathabanu, Professor & HoD/EEE** presented the curriculum and syllabus of EEE UG programs and regulation 2021 under CBCS pattern: Experts suggested the following: • In Vertical V (Modern Control Technologies) o The course name "Process Control" can be changed as " Applications of Process Control" o Revisions should be made on Adaptive Control Course. o Modify the word "Advanced" in the course "Advanced Control System". o Remove the course "System Identification". • The course "Digital Signal Processing" has to be included. • One credit courses – must be industry-supported courses. All the experts approved the curriculum and syllabus. **Dr. R. Kavitha, Professor & HoD/IT** presented the curriculum and syllabus of Information Technology - UG programs and regulation 2021 under CBCS pattern: **Dr. G.Uma Devi, University Nominee** suggested the following: • Course names should be in their expanded forms, such as Python Programming Principles. • Multi-disciplinary applications can be included in CSE Specialization courses • Core Courses should be included as per the Anna University Curriculum. • Mandatory topics should be offered as core subjects and the remaining as electives **Dr.A.Kunthavai, University Nominee** suggested the following: • 95% of similarity is there between CSE and IT Curriculum. • Recent Editions of Textbooks must be included in the reference.. • In V-Semester, Web Technology and Web Technology Laboratory are specified as two separate courses. They can be combined as a single course (Theory cum practical). • Practical components must be included in the verticals. • Courses such as Blockchain and Data Science can be included as core subjects. • Human resource Management courses can be excluded.	

		• Courses like “Compiler Design”, and “Digital Signal Processing” can be included in the IT Curriculum. • **Dr. M. Kannan, Expert Member** suggested having “Innovation and Design Thinking” as one credit course. • **Dr. N. Suresh Kumar, Senior Principal** suggested having 4 Industry supported one-credit courses in the curriculum. • **Dr. P. Alli, Principal** suggested specifying the industry’s name who supports in offering one credit course. All the experts approved the curriculum and syllabus. **Dr. V. Anbumalar, Professor & HoD/Mech** presented the curriculum and syllabus of Mechanical Engineering - UG programs and regulation 2021 under CBCS pattern: Experts suggested the following: • The course CAD/CAM lab which is in the Vth – Semester, is repeated in the verticals. It has to be merged or categorized under core courses. • **Dr. U. Chandrasekhar, an Expert Member** recommended to refer the AICTE – Model BE - Mechanical Curriculum developed by Dr. B. Ravi (IIT – Mumbai). He further suggested “IT-fying” Mechanical Engineering to enhance the syllabus. • Latest courses in engineering such as Drone Technology, Robotics, Process Simulation, Additive Manufacturing, Automation, Industry 4.0, and recent trends and industry-required concepts have to be added to the curriculum. • Industry requirements and changes in the industry requirement needs to be closely monitored. • Projects need to be utilized for student competency development. • Verticals have no practical components. Hence it has to be revised by adding practical components to the offered courses. • The course title “Robotics” needs revision based on the contents of the syllabus. • “Design & Fabrication Project” can be revised as “Design Thinking & Prototyping”. • Online digital sources such as “Digital Foundry” - an initiative of IIT and other sources- can be utilized. • The course name “New Product Development” in vertical -I has to be revised. • The course syllabus can have the latest view on offering the courses.	

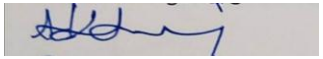
		• The courses should be designed to have better institute industry interaction to attract more students towards Mechanical Engineering. All the experts approved the curriculum and syllabus.	
4.	**Common Suggestions**	**Experts** suggested the following • In Maths, Linear and Nonlinear Programming Course has to be added to the curriculum of all the departments. • In the curriculum of CSE & IT, it is suggested to add titles such as Testing of Hypothesis, Z-Score, and Friedman test in the IVth semester Maths course "Stochastic Process and its Applications". • Mathematics department needs to have theory integrated labs course. • One maths course can be offered as branch-specific by offering a syllabus based on case studies and applications. • **Dr. N. Nandakumar, University Nominee** suggested including the articulation matrix at the end of each course syllabus for NBA purposes. He also shared the format with **Dr.A.Shunmugalatha, Professor & Dean (Academics)** regarding the same, which will be incorporated in the forthcoming syllabus. • Innovation & Design thinking course can be given to all students of all branches. • For IT & CSE departments cloud data analytics has to be offered as a core subject. • "Drone Technology" can be included as an open elective in Mechanical Engineering. • Digital Foundry program of the IIT forum and other such sources can be utilized. • **Dr. N. Suresh Kumar, Senior Principal & Dr. P. Alli, Principal, and Chairman** suggested having a list of course which has to be offered as core courses. All the departments should ensure that all the essential core courses which are mentioned in the Anna University syllabus list have to be mandatorily available in our curriculum. • Practical components can be included in the Verticals. • One credit courses – must be industry-supported courses. • Courses have to be designed in an innovative manner. • Advancement in new product development can be considered. • It is very important to name the title of the courses which describes the subject about its focus area/coverage/objective.	All

		• Reference Books should be updated to newer editions. • More focus should be given to "Industry 4.0".It should be a common program that has to be included in all department courses. • Subject names shouldn't have any abbreviations like CAD etc., (Abbreviations can be given in brackets) • Experts enquired about the implementation of foreign languages and suggested having Japanese and German instead of Hindi. • It is suggested to have interdisciplinary lab courses as well instead of having only theories. **Dr. N. Suresh Kumar, Senior Principal** enquired about the feedback on the autonomous status of the academic year 2021-2022. **Dr.A.Shunmugalatha, Professor & Dean (Academics)** briefed the happenings of the past one year. **Dr.A.Shunmugalatha, Professor & Dean (Academics)** stated the following: • After achieving the Autonomous status, we have given our best in most of the areas. • For setting the Question Papers, Bloom's level of taxonomy is being followed. • As per the suggestions of the experts given in the previous academic council, members are identified for the academic audit in order to scrutinize the files/documentation method. • With respect to the setting of the question paper, invigilators, and evaluators the ratio between the internal and the external is 50:50. • The CoE maintains confidentiality regarding the question paper. She also appreciated and thanked the Controller of Examinations and the Deputy Controller of Examinations for respecting confidentiality and assisting in the successful implementation of the Autonomous process. • If a student is absent for retest, then the mark awarded will be zero. And the verification of such students is done by the academic audit members. • Thanked all the faculty members for being the pillar of the autonomous process. • Course file is maintained very accurately. • HoDs used to verify at least five or six IAT papers to ensure the marks are awarded as per the answer key. • Best results under the Autonomous stream are obtained with the support of management, Senior Principal, Principal, Deans, Heads of various departments, and faculty members.	

		Student Representatives shared their views and suggestions towards the end of the meeting.	
5.	**Concluding remarks by Principal**	**Dr. P. Alli, Principal & Chairman** thanked all the online and offline experts for their active involvement in the discussion and for providing suggestions for improving our curriculum and syllabus. All suggestions were taken in the proper sense and all feasible suggestions will be carried out and informed to the members.	



Dr. G. Umadevi



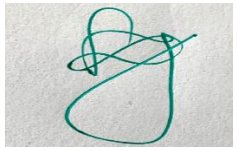
Dr. A. Kunthavai



Dr.N. Nandakumar



Dr. R. Harikumar



Dr. N. Kannan



Dr. U. Chandrasekhar