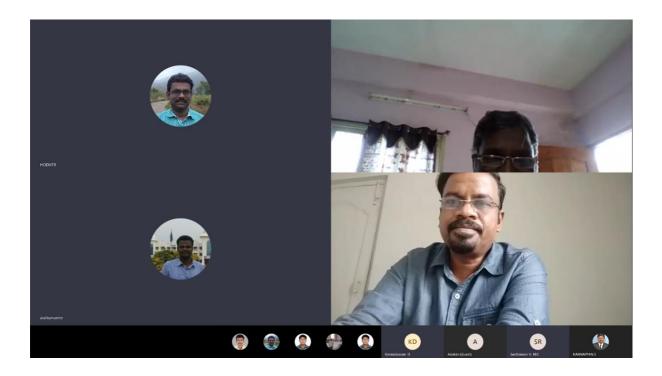
ANNEXURE XI

DEPARTMENT OF MECHATRONICS ENGINEERING





DEPARTMENT OF MECHATRONICS ENGINEERING Minutes of Meeting –First Draft –BoS –05th August, 2020 MINUTES OF THE 1st ONLINE MEETING

BOARD OF STUDIES OF MECHATRONICS ENGINEERING

DATE: 05th August, 2020, Wednesday **Time:** 10.00 PM –12.30 PM

PLATFORM: Microsoft Team

Meeting Link: http://tiny.cc/MTREBOS

IN ATTENDANCE:

S.No	Name of the Expert	Designation	Capacity
1	Dr. V. Santhanam	Dr. V. Santhanam, Professor & Head, Department of Mechatronics Engineer- ing, Rajalakshmi Engineering College,Chennai - 602 105. santhanam.v@rajalakshmi.edu.in Ph: 9840166401	AU Nominee
2	Dr. T. Asokan	Dr. T. Asokan, Professor & Head, Department of Engineering Design, Indian Institute of Technology Madras, Chennai – 600036 <u>asok@iitm.ac.in</u> Ph: 22574707	Academic Council nominated BoS Members
3	Dr. N. Selvaraj	Dr. N. Selvaraj, Professor, Department of Mechanical Engineering, National Institute of Technology Warangal, Telangana-506004 selva@nitw.ac.in Ph:9989231847	



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4	Dr. N. Manivannan	Mr. N. Manivannan Managing Director, Techland Automation, 196 Dindigul main road, Tiruchirappalli – 620001. info@techland.in Ph:9994304608	Industrialist
5.	Dr. D. Kannadassan	Dr. D. Kannadasan, Associate Professor, Center For Nanotechnology Research, Vellore Institute of Technology, Vellore-600 014 dkannadasan@vit.ac.in Ph:91-9944055243	Alumni

FACULTY OF MECHATRONICS ENGINEERING	MEMBERS
WECHATRONICS ENGINEERING	WENDERS

S.No	Name of the Faculty	Designation
1	Dr. K. Kannan	Associate Professor
2	Mr. G. Sakthivel	Assistant Professor
3	Mr. A. Arul Kumar	Assistant Professor
4	Mr. S. Kannappan	Assistant Professor
5	Mr. P. Balasundar	Assistant Professor
6	Mr. B. Aravind Kumar	Assistant Professor
7	Mr. A. Ganesan	Assistant Professor



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THE MINUTES:

The meeting is called for considering the Undergraduate curriculum & syllabi.

DISCUSSIONS:

- 1. Dr. K. Kannan welcomed the gathering and introduced the external members to the faculty.
- 2. Dr. K. Kannan presented the Overview of the Institution/Department, Courses offered in the institution, Student and Faculty strength and also about the growth and development of the Institution/Department.
- 3. Dr. K. Kannan discussed about the Proceedings of 1st Academic Council Meeting held on 17th July 2020 to the experts. The highlights of the discussion were as follows:

Recommendations from the Governing Body and Aca- demic Council for Framing UG Curriculum:	 Credit range: 165 –170 2.20 –24 credit per Semester. VIII Sem Project Work: 8 –10 credits Online Course (Maximum 6 credits) Audit Course (Mandatory non credit) First semester is common for all Programme First year credit range: 40 –42 Engineering Graphics to be in II Semester Programme specific papers could be offered in II Sem. AICTE & AU 2019 curriculum could be taken as base for framing curriculum. IIII Sem Mathematics (Programme specific) Mandatory
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- **4.** After this, Dr. K. Kannan presented the regulation of Undergraduate syllabus.
- **5.** Dr. K. Kannan, presented the proposed R2020 First year curriculum, syllabus and curriculum framework for the Undergraduate (UG) program. Also, he presented the overall credit of proposed R2020 KCET.
- **6.** In the proposed R2020 KCET Curriculum, two models were proposed for II Semester. Dr. V. Santhanam, recommended to follow the curriculum in which there are program specific theory and lab course. The program specific theory paper named "Engineering"



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Mechanics" will be helpful for students to study strength of materials & Machine design in the upcoming semester.

- **7.** Dr. N. Selvaraj, Dr. T. Asokan, Dr. N. Manivannan & Dr. D. Kannadassan suggested to follow the same because it is suitable for our students.
- **8.** Dr. T. Asokan told that it is not good to offer Fundamentals of Electrical and Electronics Lab in II semester without offereing Theory course on Fundamentals of Electrical and Electronics. So, it is decided to offer GE155-Computer Modeling and Drafting laboratory as program specific lab in II semester.
- **9.** Dr. N. Selvaraj & Dr. T. Asokan Suggested to modify GE155-Computer Modeling and Drafting laboratory as Computer Aided Drafting laboratory. Also they asked to include one exercise for "Geometrical Dimensioning and Tolerances"
- **10.**Dr. K. Kannan presented the proposed UG curriculum for the II, III and IV year. The board of study members recommended that the academic council recommendations could be adopted.
- **11.**Students should complete two mandatory audit courses (non –credit) to become eligible for getting degree.
- **12.**Online courses of maximum 6 credits (one online course should be given during VI/VII semester).
- 13. Over and above credit for internship/training, value added programs can be included.
- **14.** Dr. T. Asokan suggested to include the fundamentals of Electrical and Electronics Engineering as introduction part in Electrical Machines and Drives which will be offered in III Semester.
- **15.** Dr. V. Santhanam recommended to include at least one programming subject like C, C++, Python, PLC & Robot languages in higher semester since there is no Programming oriented subjects in higher semesters.
- **16.** Dr. N. Manivannan suggested to add some programming papers like C, C++ and python in higher semesters



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- 17. Dr. N. Selvaraj recommended to increase the number of papers in elective options for the students and suggested to include electives like Nano Science & Nano Materials, Soft computing techniques, Design of Experiments, Artificial Intelligence & Machine Learning & Software Project management.
- **18.** Dr. N. Selvaraj suggested that the subject Design of Machine Elements is a vast one. So, while framing syllabus, care must be taken to have the syllabus content for 3 Credits alone.
- **19.** Dr. N. Manivannan suggested the elective subjects like Embedded System, Autotronics & Computer networks will help the students for placement.
- 20.Dr. N. Selvaraj suggested having atleast one theory paper in Eighth semester in addition to one online course and main project. It was explained that students will be motivated to undertake industrial project as Main project and they will be at industry during their VIII Semester.
- **21.**Dr. N. Selvaraj suggested to modify the professional elective title in VII semester MT920- Modeling and simulation into System simulation.
- **22.** Dr. V. Santhanam asked about the Kinematics and Dynamics Lab exercises. It was explained that Kinematics Lab will be done using ADAMS package and Dynamics Lab exercises will be done using various kits.
- **23.** Dr. V. Santhanam also asked about the Robotics Lab in seventh semester. It was explained that experiments will be done using ROS and 1D, 2D & 4D robot kits.
- **24.** Dr. V. Santhanam & Dr. T. Asokan suggested the Credits can be reduced to one and the number of hours can also be reduced to 2 hours instead of 4 hours for Manufacturing Laboratory & Sensors Laboratory and the credits can be used for any other necessary subjects.
- **25.**Dr. N. Selvaraj suggested limiting the content of MT910-Computer Networks specific to Mechatronics Engineering only.
- **26.**Dr. V. Santhanam suggested to ensure the syllabus do not overlap for CNC Technology, Computer Aided Design, Manufacturing Technology and Advanced Manufacturing Technology.



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- **27.** Date of next meeting: The next meeting will be held during the (tentatively, December, 2020).
- **28.**Mr. A. Arul Kumar proposed the vote of thanks to all the external and internal experts and the meeting adjourned.