## K.L.N. COLLEGE OF ENGINEERING, POTTAPALAYAM – 630 612.

(An Autonomous Institution affiliated to Anna University, Chennai)
DEPARTMENT OF MECHANICAL ENGINEERING

## Ref: KLNCE/BoS/MECH/2022

02.02.2022

Members Present:

## Minutes of Third Board of Studies Meeting

| S. No.                           | Name, Designation and Institute Details   | Det il con  |                     |
|----------------------------------|---|---|---------------------|
|                                  | Dr.P.Udhayakumar Prof. & HOD,   | Details of Members  | Signature           |
| 1                                | Department of Machaniant F  |   | 111 111             |
|                                  |   | CHAIRMAN  | Udlater             |
|                                  | 1 ottaparayam - 630 612.  | 1000 A |                     |
|                                  | Dr. R. B. Anand<br>Professor,   |   |                     |
| 2                                | Department of Mechanical Facility   |   | 101 0               |
|                                  |   | ANNA UNIVERSITY NOMINEE   | Elm 500.5,2002      |
| _                                | 11ruchirapalli – 620 015.   |   | ( top.              |
|                                  | Dr.G.Saravana Kumar<br>Professor,   |   |                     |
| 3                                | Department of Engineering Desi  | CI I CI   |                     |
|                                  | Indian institute of Technology Madrae   | SUBJECT EXPERT<br>(Other than Parent University)  | 1                   |
|                                  | Cicinal   | (Onto than Parent University)   | M 10/2/2022         |
|                                  | Dr. T. Ramesh<br>Associate Professor,   |   | ***                 |
| 4                                | Department of Mechanical F  | GUD   | , 10                |
|                                  | 1 - adding institute of Technology  | SUBJECT EXPERT<br>(Other than Parent University)  | a co                |
|                                  | 11ruchirapalli – 620 015.   | (Other than Parent University)  | (1.17)              |
| ,                                | Dr.Balakrishnan Gopal<br>Engineering Manager,   |   |                     |
| 5                                | Caterpillar India Pvt Ltd   | INDUCTOR FIRE   | 1 1 1 1             |
|                                  | Chennai,  | INDUSTRY EXPERT   | li lalaki           |
| 6                                | Mr.P.Radhaswamy   |   | ,                   |
| 0                                | Site Engineer and Operation Head for GE Engineering Projects<br>Tata Consultancy Services | INDUSTRY EXPERT   | Esta                |
|                                  | Dr. D. Threshkumar  | MOOSIKI EAFEKI  | , J_22A             |
| 7                                | Principal.  |   |                     |
|                                  | PTR College of Engineering and Technology, Madurai  | POST GRADUATE MERITORIOUS ALUMNI  | D Til-              |
| 8                                | Mr.A.Madhukar   |   | · · ·               |
| 0                                | Climatic Services, Bangalore<br>National Vice Chair – Programs, ISHRAE HQ                 | SPECIAL INVITEE   | and dead            |
| -                                | Mr.LS.Kannan,   |   | 1140                |
| 9                                | Director,   |   | Λ                   |
|                                  | Csense Management Solutions Pvt. Ltd.,  | SPECIAL INVITEE   | 1/1/2               |
|                                  | Bangalore   | S   | ( S. KINNIN)        |
|                                  | Mr.Vasant Dinkar Mestry, Founder and Managing Director,                                   |   | ILS KANA            |
| 10                               | Suvidya Institute of Technology Pyt I td  | CDECT   | M                   |
|                                  | Accent Techno Solutions Pvt Ltd   | SPECIAL INVITEE   | estry 2             |
| -                                | Mumbai  |   | Legget DI HICE 1202 |
| 11                               | Dr.A.V. Ramprasad<br>Principal,   |   |                     |
|                                  | K.L.N. College of Engineering   | SPECIAL INVITEE   | XX a                |
| 12                               | Dr.M.R.Thansekhar, Professor / Mech   | Direction   | -00-                |
|                                  | Dr.A.N.Balaji, Professor / Mech   | INTERNAL MEMBER   | Miguret             |
|                                  | Dr.P.Sabarinath ASP/Mech  | INTERNAL MEMBER   | Cabalax             |
| $\overline{}$                    | Dr. D. Satheeshpandian ASP/Mech   | INTERNAL MEMBER   | meliner             |
| 16                               | Dr .A. Hemalatha ASP/Mech   | INTERNAL MEMBER   | D. dam              |
| 17                               | Dr.C. Anbumeenakshi ASP/Mech  | INTERNAL MEMBER   | d'Hutgiti           |
|                                  | Dr. R. Ashok Kumar AP(SG)/Mech  | INTERNAL MEMBER INTERNAL MEMBER   | Galymeen !-         |
|                                  | Dr.S.Porselvi AP(SG)/Mech   | ,   | 0.3~                |
|                                  | Dr. D. Muthukrishnan AP(Sr.Gr) / Mech   | INTERNAL MEMBER   | · Saleseli          |
|                                  | Mr. E.V.Ganeshbabu AP/Mech  | INTERNAL MEMBER   | tonkh               |
| -                                | Mr. S. Nallathambi AP/Mech  | INTERNAL MEMBER   | EVI                 |
| 2Z 11                            |   | INTERNAL MEMBER   | Re                  |
| _                                | De M Manageles A DA C   | Dimmorra  | 100                 |
| 23 [                             | Dr. N.Nagasubramanian AP/Mech   | INTERNAL MEMBER   | N. Now -            |
| 23 [                             | Mr.M. Mohanraj AP/Mech  |   | Minager.            |
| 23 II<br>24 M<br>25 II           | Mr.M. Mohanraj AP/Mech<br>Dr. K.J. Nagarajan AP/Mech                                      | INTERNAL MEMBER   | W. WOL              |
| 23 II<br>24 IV<br>25 II<br>26 IV | Mr.M. Mohanraj AP/Mech<br>Dr. K.J. Nagarajan AP/Mech<br>Mr.T. Samynathan AP/Mech          | INTERNAL MEMBER INTERNAL MEMBER   | MY. MOL             |
| 23 II<br>24 M<br>25 II<br>26 M   | Mr.M. Mohanraj AP/Mech<br>Dr. K.J. Nagarajan AP/Mech                                      | INTERNAL MEMBER   | 41                  |



#### K.L.N. COLLEGE OF ENGINEERING, POTTAPALAYAM - 630 612.

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#### DEPARTMENT OF MECHANICAL ENGINEERING

Ref: KLNCE/BoS/MECH/2022

02.02.2022

#### Minutes of Third Board of Studies Meeting

The Third Board of Studies meeting of Mechanical Engineering Department was conducted on 29.01.2022 (Saturday) at 11.00 a.m. through ONLINE MODE.

#### Meeting Link:

https://meet.google.com/dsf-rqzi-sek

#### Members Present:

| S.<br>No. | Name, Designation and Institute Details  | Details of Members                                  |
|-----------|--|---|
| 1         | Dr.P.Udhayakumar Prof. & HOD, Department of Mechanical Engineering, K.L.N. College of Engineering,   | CHAIRMAN  |
| 2         | Pottapalayam – 630 612.  Dr.R.B.Anand Professor, Department of Mechanical Engineering, National Institute of Technology, Tiruchirapalli – 620 015. | ANNA UNIVERSITY<br>NOMINEE                          |
| 3         | Dr.G.Saravana Kumar Professor, Department of Engineering Design, Indian Institute of Technology Madras Chennai                                     | SUBJECT EXPERT<br>(Other than Parent<br>University) |
| 4         | Dr. T. Ramesh Associate Professor, Department of Mechanical Engineering, National Institute of Technology, Tiruchirapalli – 620 015.               | SUBJECT EXPERT<br>(Other than Parent<br>University) |
| 5         | Dr.Balakrishnan Gopal Engineering Manager, Caterpillar India Pvt Ltd Chennai.  | INDUSTRY EXPERT                                     |
| 6         | Mr.P.Radhaswamy Site Engineer and Operation Head for GE Engineering Projects Tata Consultancy Services, Chennai                                    | INDUSTRY EXPERT                                     |
| 7         | Dr. D. Threshkumar Principal. PTR College of Engineering and Technology, Madurai   | POST GRADUATE<br>MERITORIOUS<br>ALUMNI              |

| 8   | Mr.A.Madhukar,                          |                 |
|-----|---|-----------------|
|     | Climatic Services, Bangalore            | SPECIAL INVITÉE |
|     | National Vice Chair - Programs,         |                 |
|     | ISHRAE HQ                               |                 |
| 9   | Mr.LS.Kannan,                           |                 |
|     | Director,                               | SPECIAL INVITEE |
|     | Csense Management Solutions Pvt. Ltd.,  |                 |
|     | Bangalore                               |                 |
| 10  | Mr. Vasant Dinkar Mestry,               |                 |
|     | Founder and Managing Director,          | SPECIAL INVITEE |
|     | Suvidya Institute of Technology Pvt Ltd | SPECIAL INVITEE |
|     | Accent Techno Solutions Pvt Ltd         |                 |
|     | Mumbai                                  | ,               |
| .11 | Dr.A.V. Ramprasad                       |                 |
| 1   | Principal,                              | SPECIAL INVITEE |
|     | K.L.N. College of Engineering.          |                 |
| 12  | Dr.M.R.Thansekhar, Professor / Mech     | INTERNAL        |
|     |   | MEMBER          |
| 13  | Dr.A.N.Balaji, Professor / Mech         | INTERNAL        |
|     |   | MEMBER          |
| 14  | Dr.P.Sabarinath ASP/Mech                | INTERNAL        |
| •   |   | MEMBER          |
| 1.5 | Dr. D. Satheeshpandian ASP/Mech         | INTERNAL        |
|     |   | MEMBER          |
| 16. | Dr .A. Hemalatha ASP/Mech               | INTERNAL        |
|     |   | MEMBER          |
| 17  | Dr.C. Anbumeenakshi ASP/Mech            | INTERNAL        |
|     |   | MEMBER          |
| 18  | Dr. R. Ashok Kumar AP(SG)/Mech          | INTERNAL        |
|     |   | MEMBER .        |
| 19  | Dr.S.Porselvi AP(SG)/Mech               | INTERNAL        |
|     |   | MEMBER          |
| 20  | Dr. D. Muthukrishnan AP(Sr.Gr) / Mech   | INTERNAL        |
|     |   | MEMBER          |
| 21  | Mr. E.V.Ganeshbabu AP/Mech              | INTERNAL        |
|     |   | MEMBER          |
| 22  | Mr. S. Nallathambi AP/Mech              | INTERNAL        |
|     |   | MEMBER          |
| 23  | Dr. N.Nagasubramanian AP/Mech           | INTERNAL        |
| ,   |   | MEMBER          |
| 24  | Mr.M. Mohanraj AP/Mech                  | INTERNAL        |
|     |   | MEMBER          |
| 25  | Dr. K.J. Nagarajan AP/Mech              | INTERNAL        |
|     |   | MEMBER          |
| 26  | Mr.T. Samynathan AP/Mech                | INTERNAL        |
|     |   | MEMBER          |
| 27  | Mr.T.L.Vijayakumar AP/Mech              | INTERNAL        |
| - T |   | MEMBER          |
| 28  | Mrs.B. Devi AP/Mech                     | INTERNAL        |
| 20  |   | MEMBER          |

Dr.M.R.Thansekhar, Prof. /Mechanical Engineering Department welcomed the Chairman/ BoS, Anna University Nominee, Subject Experts (Other than Parent University), Industry Experts, Special Invitees, Post Graduate Meritorious Alumni and Internal Members of Mechanical Engineering Department.

Dr.A.V.Ramprasad, Principal/ KLNCE welcomed the BoS members, Special Invitees and faculty members of Mechanical Engineering. He insisted the importance of valuable participation of the Subject Experts, Industry Experts and thanked Special Invitees for their kind contribution towards the framing of syllabus.

- Dr. P. Udhayakumar, Prof. & HOD, Chairman, BoS of Mechanical Engineering Department presented the following.
- The following suggestions and recommendations are provided in Third Academic Council Meeting on 31.07.2021 and Second Governing Body Meeting on 09.10.2021.
  - Industrial Experts can be involved in framing the syllabus of few subjects if and when required.
  - GATE Syllabus can be considered while framing the syllabus.
  - Motivation for doing more number of Industrial Projects.
  - Emphasis on Research & Development and Funded Projects.
  - Specialized Faculty members.
  - To attract more admissions of students in Mechanical Engineering.
     Resolutions made for the above suggestions
    - Guidance is received from various Industrial Experts for framing the Syllabi
      of the following Subjects like 20ME505 Machine Drawing (V Sem
      Professional Core), 20ME603 Lean Manufacturing (VI Sem Professional
      Core), 20ME6A1 Piping Design Engineering and 20ME6A4 Fundamentals of
      HVAC Systems (VI Sem Professional Electives).
    - GATE Syllabus is included in the Syllabus.
    - Faculty members have undergone relevant NPTEL Courses.
- Presentation of Syllabus for Mechanical Engineering courses offered in the V and VI semester of B.E. - Mechanical Engineering.

After the presentation, the following suggestions were given by the various Experts.

- The following recommendations are suggested in the syllabus of V and VI Sem B.E., Mech. Engg., subjects
  - (i) 20ME501 Design of Machine Elements
    Include Engineering Materials in Prerequisite
    Allocate more number of periods for Unit 1
    Unit 4 Include Joint failure and evaluation, Fail safe design
    Include latest edition of text and reference books
  - (ii) 20ME503 CAD / CAM

Allocate more number of periods for Unit 2
Unit 1 Include Projective transformation
Unit 3 Include CG and interference, GT, automation

(iii) 20ME505 MACHINE DRAWING Unit 1 Include Weld Symbols

(iv) 20ME5L2 CAD / CAM LABORATORY
Include Pocketing Exercise in Part Programming - CNC Machining Centre
Rename the exercise carried out in wire cut EDM.

(v) 20ME601 DESIGN OF TRANSMISSION SYSTEMS Unit 1 Include Wire ropes Unit 2 Include Spiral gears Unit 3 Rename the title

Include latest editions of text and reference books.

(vi) 20ME602 FINITE ELEMENT ANALYSIS
Rename the title of Unit 2 & 3
Unit 5 Include Simulation life cycle management - Introduction

- (vii) 20ME603 LEAN MANUFACTURING
  Include Software tools
- (viii) 20ME604 COMPRESSIBLE FLOW AND TURBO-MACHINERY Include the book Compressible Fluid Flow by Oosthuizen, P.H. and Carscallen, W.E., McGraw-Hill, 1997.
- (ix) 20ME6L1 COMPUTER AIDED SIMULATION AND ANALYSIS LABORATORY

Categorize the exercises as 1D, 2D and 3D

(x) 20ME6A1 PIPING DESIGN ENGINEERING Include Engineering Materials, Engineering Graphics, Strength of Materials in Prerequisite

Include Book on Pressure vessel design

- (xi) 20ME6A2 PRODUCT DESIGN AND DEVELOPEMENT Include book on Creativity in Design
- (xii) 20ME6A7 STATISTICAL QUALITY CONTROL
  Unit 4 Include Predictive model for SQC
- Engineering Economics and Financial Accounting Subject may be replaced by any other subject.

List of SWAYAM ONLINE COURSES (Jan - Apr 2022) for Online credit transfer is put up for approval

- 4. Three value added courses namely
  - 1. Design Thinking and Innovation
  - 2. Learning Python
  - 3. MySQL and PHP are proposed for approval.
- 5. Variations of the Syllabus with the Anna University Regulation 2017 Curriculum is listed below and proposed for approval

| S. No. | Course Code | Course Name  | Variation in<br>Percentage |
|--------|-------------|--|----------------------------|
| 1.     | 20ME501     | Design of Machine Elements                           | 15                         |
| 2.     | 20ME502     | Dynamics of Machines                                 | . 6                        |
| 3.     | 20ME503     | CAD / CAM  | 45                         |
| 4.     | 20ME504     | Heat and Mass Transfer                               |                            |
| 5.     | 20ME505     | Machine Drawing                                      | 100                        |
| 6.     | 20ME5L1     | Dynamics Laboratory                                  | 4                          |
| 7.     | 20ME5L2     | · CAD / CAM Laboratory                               | 40                         |
| 8.     | 20ME5L3     | Heat and Mass Transfer Laboratory                    | 20                         |
| 9.     | 20ME601     | Design of Transmission Systems                       | 7                          |
| 10.    | 20ME602     | Finite Element Analysis                              | 30                         |
| 11.    | 20ME603     | Lean Manufacturing                                   | 20                         |
| 12.    | 20ME604     | Compressible flow and Turbo machinery                | 8                          |
| 13.    | 20ME6L1     | Computer Aided Simulation and<br>Analysis Laboratory | 40                         |
| 14.    | 20ME6P1     | Design and Fabrication Project                       |                            |
|        | P           | PROFESSIONAL ELECTIVE                                |                            |
| 15.    | 20ME6A1     | Piping Design Engineering                            | 100                        |
| 16.    | 20ME6A2     | Product Design and Development 15                    |                            |
| 17.    | 20ME6A3     | Digital Manufacturing                                | 100                        |
|        |             | 1  |                            |

| 18.    | 20ME6A4   | Fundamentals of HVAC Systems          | 100 |
|--------|-----------|---------------------------------------|-----|
| 19.    | . 20ME6A5 | Renewable Sources Of Energy           | 20  |
| 20.    | 20ME6A6 . | Applied Hydraulics and Pneumatics     | 15  |
| 21.    | 20ME6A7   | Statistical Quality Control           | 20  |
| (2) 22 |           | OPEN ELECTIVE                         |     |
| 22.    | 20OE101   | Mechatronics and its applications     | 45  |
| 23.    | 20OE102   | Solid free form Manufacturing         | 20  |
| 24.    | 20OE103   | Industrial Safety Practices           |     |
| 25.    | 20OE104   | Production and Operations  Management | 20  |

Based on the suggestions given by the members, it is resolved to approve the R2020 B.E. (Mech. Engg.) V and VI Semester Syllabus with the following modifications.

- The following corrections are made in the syllabus.
  - (i) 20ME501 Design of Machine Elements

20GE201Applied Physics is included in Prerequisite

15hrs allotted for unit 1 and 11 hrs allotted for unit 2,3 and 4.

Unit 4 Joint failure and evaluation, Fail - safe design is included.

Latest edition of text and reference books is included.

#### (ii) 20ME503 CAD / CAM

Unit 1 Projective transformation is included.

11hrs allotted for unit 2 and 8 hrs allotted for unit 1 and 3.

Unit 3 CG and interference, Geometric Tolerance and automation is included.

### (iii) 20ME505 MACHINE DRAWING

Unit 1 Weld Symbols is included.

## (iv) 20ME5L2 CAD / CAM LABORATORY

Pocketing Exercise in Part Programming - CNC Machining Centre is included.

Exercise is renamed as "Perform machining operation in the given work piece using Wire cut EDM".

## (v) 20ME601 DESIGN OF TRANSMISSION SYSTEMS

Unit 1 Wire ropes is included.

Unit 2 Spiral gears are included.

Unit 3 Title renamed as "BEVEL GEARS, WORM AND WORM GEARS".

Latest edition of text and reference books is included.

#### (vi) 20ME602 FINITE ELEMENT ANALYSIS

Unit 2 renamed as "ONE DIMENASIONAL PROBLEMS"

Unit 3 renamed as "TWO DIMENSIONAL PROBLEMS"

Unit 5 Introduction to Simulation life cycle management is included.

#### (vii) 20ME603 LEAN MANUFACTURING

Software tools is included

#### (viii) 20ME604 COMPRESSIBLE FLOW AND TURBO-MACHINERY

The book "Compressible Fluid Flow by Oosthuizen, P.H. and Carscallen, W.E., McGraw-Hill, 1997 is included.

## (ix) 20ME6L1 COMPUTER AIDED SIMULATION AND ANALYSIS LABORATORY

Exercise names are categorized as follows

- > 1D application problems like composite walls/beams
- 2D application problems like flat plates, simple shells, cylinder

#### (x) 20ME6A1 PIPING DESIGN ENGINEERING

Engineering Materials, Engineering Graphics, Strength of Materials is included in Prerequisite

Book "Dennis R, Moss, "Pressure Vessel Design Manual", Elsevier Publications, 2004 is included.

#### (xi) 20ME6A2 PRODUCT DESIGN AND DEVELOPEMENT

Book Chiu-Shui Chan, "Style and creativity in design" Springer, 2015 is included.

#### (xii) 20ME6A7 STATISTICAL QUALITY CONTROL

Unit 4 Predictive model for SQC is included.

 The following list of SWAYAM ONLINE COURSES( Jan – Apr 2022) for Online credit transfer are approved

| S.<br>No. | Course title  | Course duration | Link to join the course                               |
|-----------|---|-----------------|---|
| 1.        | Introduction To Mechanical<br>Micro Machining       | 12 weeks        | https://onlinecourses.nptel.ac.in/noc22_me14/pre view |
| 2.        | Introduction to Abrasive<br>Machining and Finishing | 8 weeks         | https://onlinecourses.nptel.ac.in/noc22_me20/pre view |

|    | Processes  |          |  |
|----|--|----------|--|
| 3. | Principles of casting technology                         | 8 weeks  | https://onlinecourses.nptel.ac.in/noc22_me57/pre<br>view |
| 4. | Turbulent Combustion:<br>Theory And Modelling            | 12 weeks | https://onlinecourses.nptel.ac.in/noc22_me09/pre<br>view |
| 5. | Heat Transfer and<br>Combustion in Multiphase<br>Systems | 8 weeks  | https://onlinecourses.nptel.ac.in/noc22_me42/pre view    |
| 6. | Design Practice  | 8 weeks  | https://onlinecourses.nptel.ac.in/noc22_me29/pre view    |
| 7. | Manufacturing guidelines<br>for product design           | 8 weeks  | https://onlinecourses.nptel.ac.in/noc22_me56/pre view    |
| 8. | Design, Technology and innovation                        | 8 weeks  | https://onlinecourses.nptel.ac.in/noc22_de05/preview     |
| 9. | Strategies for sustainable design                        | 12 weeks | https://onlinecourses.nptel.ac.in/noc22_de06/preview     |

- Syllabus for Three Value added course namely
  - 1. Design Thinking and Innovation
  - 2. Learning Python .
  - 3. MySQL and PHP are approved.
- Variations in the Syllabus are approved.

Board of Studies recommended the above resolutions to be presented in the forthcoming Academic Council Meeting for further approval.

Dr.A.Hemalatha, Associate Prof. / Mech proposed the Vote of Thanks.

Dr.P. Udhayakumar

Professor & Head/ Mech. Engg Chairman /BoS

Copy to Governing Body
Academic Council
Coordinator/IQAC
Principal
File

#### K.L.N. COLLEGE OF ENGINEERING, POTTAPALAYAM- 630612. (An Autonomous Institution, Affiliated to Anna University, Chennai) Ref:KLNCE/BoS/EEE/2022 21.01.2022 Third Board of Studies meeting- 21st January 2022 DEPARTMENT OF ELECTRICAL AND ELECTRONICS ENGINEERING Minutes of Meeting The Third Board of Studies (BoS) meeting of the Department of Electrical and Electronics Engineering was held on 21st January 2022, through online mode. meeting link: https://meet.google.com/fjx-vygj-bii MEMBERS PRESENT: Signature S. No Name, Designation and College Details Details of Members Dr. S.M. KANNAN Chairman Professor & Head, Dept.of EEE. K.L.N. College of Engineering. Dr.M.Geethanjali, Professor, M. hullight Dept.of EEE. Thiagarajar College of Engineering, Madurai. Anna University nominee Dr.R.Rajathy, Associate Professor, Dept.of EEE. Subject expert from outside the Parent University Pondicherry Engineering College, Puducherry. Dr.G.Y.RajaaVikhram, Assistant Professor, Dept.of Electronics and Instrumentation Engineering. SRM Institute of Science and Technology, Subject expert from outsidethe Kattankulathur, Chengalpattu District. Parent University Mr.BalajiGopalsamy, Senior Manager, Member representing corporate 5 NXP Semiconductors, Bengaluru sector Dr. S.Kuruseelan, Assistant Professor, School of Electrical Engineering(SELECT), Member representing Postgraduate Vellore Institute of Technology, Vandalur, Chennai. meritorious alumnus Dr.S. Venkatesan, Professor, EEE, Internal member Dr.K.Gnanambal, Professor, EEE Internal member 8 Dr.P.Loganthurai, Associate Professor/EEE 9 Internal member Dr.M.Jegadeesan, Associate Professor/EEE 10 Internal member Mr.A.Marimuthu, Associate Professor/EEE 11 Internal member Internal member 12 Dr. C. Vimala Rani, Associate Professor/EEE Dr.S.Manoharan, Assistant Professor(Sr.Gr) /EEE 13 Internal member Dr. M. Ganesh Kumari, Assistant Professor(Sr.Gr) Brun 14 Internal member 15 Mr.M.Jeyamurugan, Assistant Professor(Sr.Gr) /EEE Internal member Mr. M. Balamurugan, Assistant Professor /EEE Internal member Mr. T. Gopu, Assistant Professor/EEE Internal member 17 18 Mr.R.Jeyapandi Prathap, Assistant Professor/EEE Internal member 19 Mr.N.VimalRadhaVignesh, Assistant Professor/EEE Internal member 20 Mrs.R.Sridevi, Assistant Professor/EEE Internal member Signature of HoD/EEE

Dr.S.M.Kannan, Chairman, Board of Studies (BoS), Electrical and Electronics Engineering, welcomed all the members present. He introduced BoS members. The internal members introduced themselves.

Chairman, briefed the minutes of the Second Board of Studies meeting held on 3<sup>rd</sup> May 2021. During the meeting, the members approved the following, after incorporating the suggestions given by them.

BoS.02.01.01.: B.E. Electrical and Electronics Engineering-III to IV semester curriculum and Syllabus to be followed from the Academic year 2021-2022.

BoS.02.01.02.: B.E.-Electronics and Instrumentation Engineering- courses offered(Theory/Practical) in the III semester to be followed from the Academic year 2021-2022.

The minutes of the Second Board of Studies meeting held on 3<sup>rd</sup> May 2021 were communicated to the members. The comments received have been incorporated and placed for confirmation. The same was approved by the Second Academic council meeting held on 31<sup>st</sup> July 2021.

## **BoS 03.01: Business brought forwarded by the Chairman, BoS. To consider and approve**

BoS.03.01.01.: B.E. Electrical and Electronics Engineering-V to VI semester Curriculum and Syllabus to be followed from the Academic year 2022-2023.

BoS.03.01.02.: Fifth semester Open Electives offered by other Departments for B.E.-EEE and fifth semester open Electives (syllabus) to be offered to other Departments by EEE Department to be followed from the Academic year 2022-2023.

BoS.03.01.03.: Online courses for credit transfer, Value Added Courses and provision for studying eighth semester courses in sixth and seventh semesters.

Dr. S.M.Kannan, presented, the proposed, B.E. Electrical and Electronics Engineering, V to VI semester curriculum and syllabus. He informed that the curriculum was framed as per the guidelines of AICTE, UGC and Anna University, Chennai. The detailed syllabus includes the pre-requisites, objectives, six course outcomes, one of which should be atleast Apply level, recent publications of text and reference books. He informed that mandatory courses, such as Constitution of India and Essence of Indian Traditional knowledge (Non credit courses) are included in the curriculum of fifth and sixth semester respectively. These two courses are common to all the B.E./B.Tech programmes of KLNCE

2020 Regulation. The mini project in the sixth semester will have the regular assessment and review pattern as in the final year Project, which will benefit the students to complete the final year project well in advance which will enable them to participate in the project competition, and publications he added.

Chairman presented the details of fifth semester Open Electives (curriculum only) offered by other Departments for B.E.-EEE and fifth semester open Electives (curriculum and syllabus) to be offered to other Departments by EEE Department. This is followed as per the Regulations of Anna University.

Chairman also presented the details of KLNCE R2020 approved Online Courses for credit transfer (Professional Electives only), and proposal to conduct Value Added courses on Embedded Systems and Controller Applications (Theory cum Laboratory course) for the third year students of B.E.EEE & M.E-PSE (for the Academic year 2021-2022). The syllabus of the course is framed by the Industrial Expert in discussion with Subject Expert and senior faculty of the EEE Department. This course is of 2 credit (over and above the overall credit), 30 periods duration and will have two assessments, one at the middle and the second one after the end of the course. Grading will be given based on the assessment which will be reflected in the grade sheet.

Chairman briefed that in order to facilitate students to do eighth semester project, entirely in the industry/research centres and also to do internship in the companies selected during ON/ OFF campus recruitment, third year students (Academic year 2021-2022, 2019-2023 Batch) are permitted to do eighth semester courses in the sixth and seventh Semester respectively (fast track courses). Eligibility for availing the above is, no standing arrears, and CGPA should be 7.5& above upto fourth Semester. Based on the above, 39 students of B.E.EEE-third year students(2019-2023 batch) will do the course EE8015 – Electric Energy Generation, Utilization and Conservation (as per Regulations 2017 of Anna University) in the sixth semester, EE 8016- Energy Management and Auditing for the Academic year 2021-2022 and 2022-2023 respectively, based on their eligibility and willingness, chairman added. The members had through discussion and suggested the following

(i). For the Power System Courses, a flow may be kept to maintain the continuity of courses. Suggested to swap few courses in the sixth and seventh semester to maintain the uniformity of the courses. Also theory cum laboratory course is suggested for Power System Analysis. Internal member replied that, Power System Simulation Laboratory offered in the seventh semester, consists of simulation experiments on various Power System courses like Transmission and Distribution (IV semester), Power System Analysis (V semester), Power

- System Operation and Control (VI semester) and Protection and Switchgear (VII semester). The suggestion will be incorporated in the next regulation, considering the importance of theory and laboratory component in the same semester.
- (ii).Professional Electives may be grouped based on domain specialization, like Power System, Electrical Machines, Power Electronics, Control System and Advanced Electronics so that students have more choices for the selection of domain specific. Chairman informed that as per the suggestions of the members, the Professional Electives will be grouped based on domain specific.
- (iii). Contents of Control System may be checked for the inclusion of basic and recent developments. Internal member informed that the contents are included by considering the syllabus of GATE, higher study and industrial requirements. Also, Modern Control System course is being offered as Professional elective in the seventh semester which includes the topics related to additional requirements in Control System Engineering.
- (iv). Members concerned about the inclusion of 8085 Microprocessor as they are obsolete, suggested to limit the contents to one or two units and to include the latest processors. Internal member justified the inclusion and assured that the content will be revised by adding latest processors.
- (v). For mini Project, the similar procedures which are followed for final year project, to be adopted. The guide allotted in the sixth semester may be continued to guide till the eighth semester, members suggested.
- (vi). The syllabus of Open Electives offered to other Department by EEE Department should have the contents meant for Qualitative treatment only and not to have Quantitative treatment, as the interdisciplinary branches may not studied the Electrical Engineering Concepts in depth. Hence such courses are to be labeled below their title as "Qualitative treatment only"
- (vii). The title of the open Elective course "Special Electrical Machinery" may be revised as "Automotive Electrical Machines" and topics on Electric Vehicle, Embedded Controllers may be added, members suggested.
- (viii).Recent publications of Text/Reference books are suggested. Fifth unit of Power System Courses may include topics on recent trends, IOT, Virtual Reality etc.

Based on the suggestions given by the members, it is resolved to approve the Curriculum and syllabi, of B.E. - Electrical and Electronics Engineering –V to VI semester, Open Electives, Online courses for credit transfer, fast track courses and Value added Courses with the following modifications.

- (i).Professional Electives are grouped based on domain specialization, like Power System/Power Electronics, Electrical Machines, Control System and Advanced Electronics.
- (ii). Contents of Microprocessors, Microcontrollers and Applications are revised.
- (iii). The Open Elective courses offered to other department will have the caption 'Qualitative treatment only', below the course title.
- (iv). The title of the open Elective course "Special Electrical Machinery" is revised as "Automotive Electrical Machines".

<u>BoS 03.01.01:</u> Resolved to Approve the B.E. Electrical and Electronics Engineering-V to VI semester curriculum and Syllabus to be followed from the Academic year 2022-2023.

**BoS 03.01.02:** Resolved to Approve the Fifth semester Open Electives offered by other Departments for B.E.-EEE and fifth semester open Electives to be offered to other Departments by EEE Department to be followed from the Academic year 2022-2023. BoS.03.01.03.: Resolved to Approve the Online courses for credit transfer, Value Added Courses and provision for studying eighth semester courses in sixth and seventh semesters.

Board of studies recommended the above resolutions to be presented in the **Academic Council for further approval.** 

Chairman, thanked all the members for their kind cooperation and the meeting came to an end.

SICI

Cc to above members, Cc to BoS file.

## K.L.N. COLLEGE OF ENGINEERING

(An Autonomous Institution, Affiliated to Anna University Chennai)

## POTTAPALAYAM - 630 612



## |THIRD BOARD OF STUDIES MEETING – MINUTES

Goggle Online Meet PERIOD – JAN 2022

### Department of Electronics and Communication Engineering

## Minutes of Third Board of studies Meeting held on 29<sup>th</sup> January 2022 at 10.30AM

**Mode: Through Online** 

(Meeting Link: https://meet.google.com/buh-axsa-oak)

## **Department of Electronics and Communication Engineering**

K.L.N College of Engineering, Pottapalayam – 630 612

(An Autonomous Institution -Affiliated to Anna University, Chennai) www.klnce.edu

#### **Third Board of studies Meeting**

Mode: Through Online

(Meeting Link: <a href="https://meet.google.com/buh-axsa-oak">https://meet.google.com/buh-axsa-oak</a>)

Date & Time: 29.01.2022&10.30AM.

#### **AGENDA**

The Third Board of studies Meeting was convened to get the approval for the detailed syllabus of V and VI semester of UG Programme.

| BoS / ECE 3.1: | Welcome address and Opening Remarks by Dr.R.Jeyanthi, Professor, Department of Electronics and Communication Engineering  |  |
|----------------|---|--|
| BoS / ECE 3.2: | Review of the Minutes of the Second Board of Studies Meeting Department of Electronics and Communication Engineering held on 10 <sup>th</sup> May, 2021 and action taken report of Second meeting of Board of studies   |  |
| BoS / ECE 3.3: | Business brought forward by the Chairman, Board of studies  3.3.1 UG R2020 V and VI semester detailed syllabus.  3.3.2 Detailed syllabus of  • 20EC507-Communication Engineering course for the V Semester  B.E EIE R2020  • 20EC506 – Microcontrollers & Embedded Systems,  • 20EC5L3 - Microcontrollers & Embedded Systems Laboratory for V  Semester B.E. CSE and B.Tech IT R2020  • 20EC6B7- Communication Systems course for the VI semester  B.E EEE R2020  3.3.3 Presentation of value added course and online credit transfer course. |  |
| BoS / ECE 3.4: | Suggestions given by the BOS Members  |  |
| BoS / ECE 3.5: | Vote of thanks  |  |

#### **Department of Electronics and Communication Engineering**

#### MINUTES OF THE MEETING

Third meeting of the Board of Studies of the Electronics and Communication Engineering Department of the K.L.N college of Engineering was held on 29<sup>th</sup> January 2022 at 10.30 AM. through online.

#### The following members were present:

| Sl.NO | Name of the Member and<br>Designation   | Role  | Signature      |
|-------|---|---|----------------|
| 1     | Dr.V.Kejalakshmi,<br>Professor & HOD, KLNCE   | Chairman  |                |
| 2     | Dr.M.Poongothai,<br>Associate Professor/ECE<br>Coimbatore Institute of Technology,<br>Coimbatore                        | Anna<br>University<br>Nominee                                     | Porgol         |
| 3     | Dr.A.Sivanantha Raja, Professor & HOD/ECE Alagappa Chettiar Government College of Engineering and Technology, Karaikudi | Special<br>Invitee  | John           |
| 4     | Dr.D.Sriram Kumar, Professor/ECE<br>National Institute of Technology,<br>Tiruchirappalli                                | Subject<br>Expert   | Down.          |
| 5     | Dr.U.Syed Abudhagir, Associate<br>Professor/ECE<br>B.V. Raju Institute of Technology,<br>Narsaur, Medak, Telangana      | Subject<br>Expert   | 1. 25 Aby      |
| 6     | Mr.R.B.Anent Prakash, Senior<br>Manager<br>Synopsys Inc., Bangalore   | Member<br>representing<br>Industry                                | And Rebuild By |
| 7     | Dr.B.Sridevi, Professor & HOD/ECE<br>Velammal Institute of Technology,<br>Chennai                                       | Member<br>representing<br>Post-graduate<br>meritorious<br>alumnus | B.L.du         |

| S.NO | Name of the Member and<br>Designation                | Role     | Signature                                 |
|------|--|----------|---|
| 8    | Dr.S.C.SIVAPRAKASH , Professor                       |          | And                                       |
| 9    | Dr.R.JEYANTHI , Professor                            |          | Dut-                                      |
| 10   | Dr.N.JANAKIRAMAN, Professor                          |          | AT long                                   |
| 11   | Mr.S.R.NARESH, Associate Professor                   |          | fore                                      |
| 12   | Dr.P.KARPAGAVALLI ,<br>Associate Professor           | Internal | Jan   |
| 14   | Dr.R.MOHAN KUMAR,<br>Associate Professor             | Members  | Profes                                    |
| 15   | Dr.B.BUVANESWARI,<br>Associate Professor             |          | 3 3 ful                                   |
| 16   | Dr.S.SUBHA , Assistant Professor (SG)                |          | P.S. Kumarus                              |
| 17   | Dr.P.S.KUMARESH,<br>Assistant Professor (SG)         |          | 5. 5.29.                                  |
| 18   | Mrs.R.THILAGAVATHY ,<br>Assistant Professor ( Sr.Gr) |          | etit                                      |
| 19   | Ms.L.MEENAKSHI,<br>Assistant Professor ( Sr.Gr)      |          | 2m  |
| 20   | Mrs.M.AMUDHA<br>Assistant Professor ( Sr.Gr)         |          | H. Soff                                   |
| 21   | Mrs.T.R.MUTHU,<br>Assistant Professor (Sr.Gr)        |          | 8-7                                       |
| 22   | Mr.S.RAVI SANKAR,<br>Assistant Professor             |          | guirolut.                                 |
| 23   | Mr.D.ANAND, Assistant Professor                      |          | 2.  |
| 24   | Mrs.A.MEENA, Assistant Professor                     |          | A. Herraf.                                |
| 25   | Mrs.R.PAVITHRA, Assistant Professor                  |          | de la |
| 26   | Mr.S.SELVA KUMAR, Assistant<br>Professor             |          | dik                                       |

| BoS / ECE 3.1:        | WELCOME ADDRESS AND OPENING REMARKS BY Dr.R.JEYANTHI, PROFESSOR, DEPARTMENT OF ELECTRONICS AND COMMUNICATION ENGINEERING  Dr.R.Jeyanthi, Professor of the Electronics and Communication Engineering welcomed and introduced the members of Third Board of Studies and thanked each of them for sparing their valuable time to attend the meeting  |  |  |
|-----------------------|---|--|--|
| <b>BoS / ECE 3.2:</b> | TO CONFIRM THE MINUTES OF SECOND BOS MEETING HELD ON  |  |  |
|                       | 10.05.2021  |  |  |
|                       | The minutes of the Second Board of Studies meeting held on 10.05.2021 were communicated to the members. The comments received have been incorporated and placed for confirmation. The same was approved by the third Academic council Meeting held on 31.07.2021.   |  |  |
| BoS / ECE             | TO CONFIRM AND APPROVE  |  |  |
| 3.3.1:                | UG R2020 V& VI semester detailed syllabus   |  |  |
|                       | RESOLVED TO APPROVE   |  |  |
|                       | Proposed V& VI semester detailed syllabus of UG R2020   |  |  |
| BoS / ECE<br>3.3.2    | TO CONFIRM AND APPROVE  Detailed syllabus of  • 20EC507- Communication Engineering course for the V Semester B.E EIE R2020  • 20EC506-Microcontrollers & Embedded Systems,  • 20EC5L3 - Microcontrollers & Embedded Systems Laboratory for V Semester B.E. CSE and B.Tech IT R2020  • 20EC6B7- Communication Systems course for the VI semester B.E EEE R2020  RESOLVED TO APPROVE  Proposed syllabus of  • 20EC507- Communication Engineering course for the V Semester B.E EIE R2020  • 20EC506 - Microcontrollers & Embedded Systems,  • 20EC5L3 - Microcontrollers & Embedded Systems Laboratory for V Semester B.E. CSE and B.Tech IT R2020  • 20EC6B7- Communication Systems course for the VI semester B.E EEE R2020 |  |  |
| BoS / ECE 3.4         | Suggestions Given by the Members:  The members had a deep discussion with the department members  |  |  |

and gave the following suggestions.

#### Suggestions provided for UG

#### Dr.M.Poongothai, ASP/ECE, CIT, Coimbatore - AU Nominee

- Microprocessors and Microcontrollers course (20EC504) has 3 processors. It is difficult
  for students to learn all three in the given period. Suggested removing the MSP430
  microcontroller.
- Suggested to include I/O and Timer Programming instead of basic programs in 8051 in Microprocessors and Microcontrollers laboratory course (20EC5L2). Also insisted on including MSP430 as case studies like temperature monitoring.
- Recommended to change the course titled "Python for IOT" (20EC6A5) to "IOT and its applications". Some applications may be included in its unit V of this course.

#### Dr. A. Sivanantha Raja, Prof & HOD/ECE, A.C.Tech., Karaikudi - Special invitee

- Feedback may be collected from faculty members and students to reframe the syllabus of Microprocessors and Microcontrollers
- Advised to have Miniprojects in Theory cum Practical courses. Also clarified its evaluation process.
- Also Suggested to conduct examination for AICTE Mandatory zero-credit courses like Essence of Indian Traditional Knowledge .

#### Dr.D.Sriram Kumar, Professor/ECE, NIT, Trichy – Subject Expert

- Suggested to change the 2<sup>nd</sup> textbook for Control System Engineering (20EC501)as "Control system Engineering" by Norman S. Nise.
- Suggested to change the latest edition book as reference in DSP architecture and Programming course (20EC6A2).
- Mentioned to add some topics in Modern Antennas in Wireless Telecommunications (20EC601).
- Suggested to fix Cooperative communication systems Course(20EC6A3) in semester VIII
  in the Professional elective list, since its prerequisite will be Wireless
  Communication(20OE303).
- Recommended to include CAD tools for Laboratory courses to facilitate the students to become skilled in both Hardware and Software.
- Suggested to include some applications in Machine learning(20CS604).

## Dr.U.Syed Abudhagir, ASP/ECE, B.V. Raju Institute of Technology, Telengana - Subject Expert

- In the Machine Learning course(20CS604), expert pointed out to add classification of learning topics(supervised, unsupervised) in Unit 1.
- Suggested to remove Genetic algorithms from Unit 2
- Recommended to include case studies.

## Mr.R.B.Anent Prakash, Senior Manager, Synopsys Inc., Bangalore – Industry Representative

- Recommended to add case study in any one of the processors in Microprocessors and Microcontrollers course.
- Suggested to add RISC-V processor as an add on topic for students to explore from Open Source ISA. Students may be encouraged to do case-study on RISC-V vs classical processors like 8086
- Students may be motivated to participate in various competitions like Swadesi Microprocessor Challenge and Hackathons
- Advised to merge unit II and unit III in to one unit titled Design Rules & Floor planning, unit IV and unit V to Simulation & Synthesisin CAD for VLSI Circuits course(20EC6B6) and also to include physical design implementation and Power analysis as remaining units.
- Case study and Mini Projects may be included using Using Open Source EDA tools (like qflow or OpenLane) or using commercially available Industry standard EDA tools from Synopsys/Cadence/Mentor (Siemens EDA) for VLSI courses

## Dr.B.Sridevi, Professor & HOD/ECE, Velammal Institute of Technology, Chennai - Post-Graduate meritorious alumnus

- Case studies based on Peer to Peer Network may be included.
- Mini Projects may be included in the Communication Networks Course (20EC602).

#### **Suggestions provided for UG-Other Department Course**

Members recommended the following other department courses without any modifications.

- 20EC507- Communication Engineering course for the V Semester B.E EIE R2020
- 20EC506 Microcontrollers & Embedded Systems,
- 20EC5L3 Microcontrollers & Embedded Systems Laboratory for V Semester B.E.
   CSE and B.Tech IT R2020
- 20EC6B7- Communication Systems course for the VI semester B.E EEE R2020

| <b>BoS / ECE 2.5</b> | Vote of thanks Ms.L.Meenakshi, Assistant Professor thanked all the members for their |
|----------------------|--|
|                      | valuable suggestions and kind cooperation.   |

#### Meeting Follow-up actions taken

Based on the suggestions given by the members, BoS resolved to recommend the following to the Academic council for further approval.

#### As per Dr. M. Poongothai, AU Nominee's suggestions

- Microprocessor and Microcontroller subject is revised.
- The course title "Python for IOT" is changed to "IOT and its applications" and the latest applications are included in unit V.

#### As per Dr. A. Sivanantha Raja, Special Invitee's suggestions

- Core subjects are analyzed and revised wherever needed based on the student feedback. Student's feedback form for the syllabus is posted in the website also.
- The suggestion to have mini projects in Theory cum Practical courses and its evaluation process is represented into the standing committee.
- The Chairperson confirmed that the conduct of examination of AICTE Mandatory zero-credit course is planned.

#### As per Dr. D. Sriram Kumar, Subject Expert's suggestions

- The text books for the courses "Control System Engineering" and "DSP architecture and Programming" are updated.
- The "Modern Antennas in Wireless Telecommunications" course syllabus is changed and the corresponding text books and reference books are updated.
- The "Cooperative communication systems" course is fixed in semester VIII.
- All laboratory courses include the simulation tools in addition to hardware experiments.
- Modifications mentioned for Machine learning subject will be represented in the standing committee. The same will be forwarded by CSE BoS.

#### As per Dr. U. Syed Abudhagir, Subject Expert's suggestions

• Suggestions given for the machine learning course will be taken forward by the CSE department. After getting approval from ACM, it will be incorporated.

#### As per Mr. R. B. Anent Prakash, Industry representative's suggestions

- The participation in various competitions like Swadesi Microprocessor Challenge and Hackathons are encouraged through Electronics Innovation Club.
- The "Digital VLSI Design and FPGA Implementation" course is framed as a studio course and it contains laboratory practice of RTL Verilog design from Synthesis to Place and Route till Signoff verification using Industry standard EDA tool Cadence. Some case studies are included as per suggestion.
- "CAD for VLSI Circuits" course is modified with the inclusion of Physical Design Implementation, Signoff Static Timing Analysis (STA), Power & Physical Verification.

#### As per Dr. B. Sridevi, Post-Graduate meritorious alumnus suggestions

- As per suggestion, Peer to Peer network topic is included in the lab component.
- The suggestion to have Miniprojects in Theory cum Practical courses and its evaluation process will be represented in the standing committee.

CHAIRMAN/ECE BOARD

#### ENCL:

- 1. B.E. ECE I to VIII Semester Curriculum
- 2. B.E. ECE V and VI semester detailed syllabus

CC to General Body, Academic Council, Principal, File

#### K.L.N. COLLEGE OF ENGINEERING, POTTAPALAYAM - 630 612.

(An Autonomous Institution, Affiliated to Anna University, Chennai)

#### DEPARTMENT OF COMPUTER SCIENCE AND ENGINEERING

Ref: KLNCE/BoS/CSE/2022

11.02.2021

#### Minutes of Third Board of Studies Meeting

The Third Board of Studies meeting of Computer Science and Engineering department was conducted on 10.02.2022 at 03.30 p.m. through online.

#### Meeting Link:

https://klncollegeofengineering.my,webex.com/klncollegeofengineering.my/j.php?MTID=mc716ab6ce11328ca76066ef2d20f0c5c

#### Members Present:

| S. No. | Name of the Members   | Category   | Signature  |
|--------|---|--|--|
| 1      | Dr.P.R.Vijayalakshmi Prof. & HoD, Department of Computer Science and Engineering, K.L.N. College of Engineering, Pottapalayam – 630 612.    | CHAIRMAN   | find   |
| 2      | Dr.N.Ramasubramanian Professor, Department of Computer Science and Engineering, National Institute of Technology, Tiruchirapalli – 620 015. | ANNA UNIVERSITY<br>NOMINEE                           | ROMANUS AND HALLAND HALLAND IN CONTRACT RECORD IN CONTRA |
| 3      | Dr.T.Subbulakshmi Professor, Department of Computer Science and Engineering, Vellore Institute of Technology, Chennai – 600 127.            | SUBJECT EXPERT<br>(outside the Parent<br>University) | 4  |
| 4      | Dr. R. Ramalakshmi Professor, Department of Computer Science and Engineering, Kalasalingam University, Krishnankoil -626 128.               | SUBJECT EXPERT<br>(outside the Parent<br>University) | e Paul   |
| 5      | Mr.A.P.Vinoth Kumar<br>Senior IT Analyst – SAP SPP,<br>Neovia Logistics,<br>Chennai.  | Industry Expert                                      |  |
| 6      | Mr.K.J.Ashok Babu Information Security Consultant -PCl, Stickman Consulting Pvt. Ltd., Shivaji Nagar, Bangalore – 560001.                   | Postgraduate<br>Meritorious Alumnus                  | Asher 4:500 N.) (941/11, 2020 00:50 Unit-5.5)            |

| S. No. | Name of the Members   | Category        | Signature   |
|--------|---|-----------------|-------------|
| 7      | Dr.S.Miruna Joe Amali<br>Professor / CSE  | Member          | fol Dogumal |
| 8      | Dr. P. Prem Kumar,<br>ASP/CSE   | Member          | Gr.         |
| 9.     | Dr.R.Lakshmi<br>ASP / CSE   | Member          | R. Laus     |
| 10     | Mr.D.Pravin Kumar<br>ASP / CSE  | Member          | 000         |
| 11     | Dr. S. Subhashini,<br>ASP/CSE   | Member          | J. Jul      |
| 12     | Mrs. N. Gajalakshmi,<br>ASP/CSE   | Member          | N.55        |
| 13     | Mrs.V.Karpagam<br>AP (Sr. Gr.) / CSE  | Member          | 11/mg       |
| 14     | Mr.J.Sulthan Alikhan<br>AP (Sr. Gr.) / CSE  | Member          | J. full     |
| 15     | Mrs.R.Kirubahari<br>AP / CSE  | Member          | OR -        |
| 16     | Mr.D.Prabhu<br>AP / CSE   | Member          | 4           |
| 17     | Mrs.S.Venkatalakshmi<br>AP / CSE  | Member          | Va S        |
| 18     | Mrs. G. Rajeswari, AP/CSE   | Member          | and a       |
| 19     | Mrs. S. Maria Shobana,<br>AP/CSE  | Member          | Spert       |
| 20     | Mr. M. Arul Selvan,<br>AP/CSE   | Member          | 10M         |
| 21     | Ms. S. Sangamithra,<br>AP/CSE   | Member          | Sw.         |
| 22     | Mrs. D. Thanga Maari,<br>AP/CSE   | Member          | Du          |
| 23     | Mrs. C. Sasirekha,<br>AP/CSE  | Member          | 1.800       |
| 24     | Dr.A.V.Ramprasad Principal, K.L.N. College of Engineering, Pottapalayam – 630 612 | Special invitee | 86          |

At the outset, on behalf of KLNCE Management, Principal and Department of CSE, Dr.P.R.Vijayalakshmi, Prof. & HoD, Chairman, Board of Studies of CSE department welcomed the Anna University Nominee, BoS of CSE department, other BoS members from various reputed academic institutions and from industries. Also, she welcomed all the members joined in the meeting.

Dr.A.V.Ramprasad, Principal, KLNCE welcomed all the experts and invited the experts to share their intelligible comments in enhancing the syllabus of B.E. CSE program and also appreciated all faculty members of CSE department for their effort put on to framing the syllabus.

Dr.S.Miruna Joe Amali, Professor of CSE department presented the following as per the following agenda.

- Curriculum for semester V to VIII updated after second BOS and ACM
- Syllabus for semester V and VI B.E. CSE courses
- Syllabus for semester VI Professional Electives and Value Added Courses offered to B.E. CSE students
- Syllabus for semester V Open Electives offered by CSE to other B.E./B.Tech programs
- Syllabus of CSE course offered to B.E. EEE program
- Credit Transfer Courses, Value Added Courses and Fast Track Courses.

After the presentation, the following suggestions were given by the various Experts.

Dr.N.Ramasubramanian, Prof. / CSE, NIT, Trichy appreciated that the curriculum has been updated and coined according to the comments suggested during previous BoS meetings. AU nominee appreciated that all the concepts required to acquire knowledge have been included in the core courses syllabus. Professor recommended the following suggestions towards the B.E. CSE syllabus.

- Suggested to motivate students for implementing multidisciplinary and interdisciplinary projects.
- 2. Regarding conduct of Value Added Courses, suggested providing more number of course choices from different domains based on current placement requirements.

Dr. T. Subbulakshmi, Prof. /CSE, VIT, Chennai suggested the following comments.

- 1. Suggested to include co-curricular courses in Value Added Courses.
- 2. Suggested to include different categories of routing in Computer Networks
- 3. In Computer Networks Laboratory, recommended to include real time implementations rather than simulation study.
- 4. Insisted not to restrict the list of sample projects in Software Engineering Laboratory.
- 5. In general, suggested to include, case studies, real time problems and industry oriented applications as part of Unit V.

Dr.R.Ramalakshmi, Prof. / CSE, Kalasalingam University, Krishnankoil suggested the following comments.

- 1. In the Professional Elective Data Warehouse and Data Mining course, suggested to include other tools in addition to Weka in Unit V.
- 2. Recommended to include SDN in Computer Networks syllabus.

Mr.K.J.Ashok Babu, PG alumnus, suggested including recent trending topics relating to Firewall and Virus in Cryptography and Network Security course.

Mr.A.P.Vinoth Kumar, Senior IT Analyst- SAP SPP, Neovia Logistics, Chennai acknowledged that all the important topics required for CSE have been included in the core and elective courses.

Based on the suggestions given by the members, it is resolved to approve the R 2020 V and VI semester syllabus offered to B.E. (CSE) and other B.E. EEE program with the following modifications.

 In the Data Warehouse and Data Mining course, other tools in addition to Weka have been included in Unit V.

 In Computer Networks syllabus, Categories of Routing included in Unit III and Software Defined Networks (SDN) included in Unit I.

3. Recent topics in Malware and Ransomware included in Unit V of Cryptography and Network Security.

4. Value Added Courses has been updated based on placement requirements.

Board of Studies recommended the above resolutions to be presented in the Academic Council for further approval.

Dr.R.Lakshmi, ASP / CSE proposed the Vote of Thanks.

Dr.P.R.Vijayalakshmi, Prof. & HoD / CSE Chairman / Board of Studies

Cc to Governing Body, Academic Council, Coordinator / IQAC, Principal, File



### K.L.N.COLLEGE OF ENGINEERING, POTTAPALAYAM-630612.

(An Autonomous Institution, Affiliated to Anna University, Chennai)

Ref: KLNCE/BoS//IT/2022/

Date: 25.01.2022

#### Minutes of Fourth Board of Studies Meeting

The fourth Board of Studies meeting was conducted through online on 25-01-2022(Tuesday). The meeting was started by 10.00am. The following salient points were discussed in the meeting.

Meeting Link

https://meet.google.com/ytc-gyxa-egm

#### Members Present:

| 1 | Dr.P.Ganesh Kumar  | CHAIRMAN  |
|---|--|---|
|   | Professor & HoD / Department of Information Technology K.L.N.College of Engineering, Pottapalayam-630612.  | CHAIRMAN  |
| 2 | Dr.S.Padmavathi Professor /Department of Information Technology Thaigarajar College of Engineering, Madurai-625015   | ANNA UNIVERSITY<br>NOMINEE                                |
| 3 | Dr.A.Umamakeswari Dean/ School of Computing, Shanmugha Arts, Science, Technology& Research Academy SASTRA Deemed to be University, Thanjavur- 613401.                            | SUBJECT EXPERT<br>(from outside the Parent<br>University) |
| 4 | Dr.T. Senthil kumar Associate Professor / Department of CSE Amirta School of Engineering AmritaViswaVidyapeetham, Coimbatore-641112.   | SUBJECT EXPERT<br>(From outside the Parent<br>University) |
| 5 | Mr.Sathya Narayana University Focal Honeywell Technologies and Solutions, Madurai-625020 Attended by, Mr.Ananda Vel Murugan Honeywell Technologies and Solutions, Madurai-625020 | INDUSTRY EXPERT   |
| 6 | Ms.M.Priya PHP Developer, Pruvity HR Solutions Pvt. Ltd, Madurai-625020  | PG ALUMNUS  |
| 7 | Dr.A.V.RAMPRASAD,  Principal / K.L.N.College of Engineering, Pottapalayam-630612.  | SPECIAL INVITEE   |

| 8  | Dr.G.RAMESH, Professor/ IT    | Member |  |
|----|-------------------------------|--------|--|
| 9  | Dr.J.S.KANCHANA, Professor/IT | Member |  |
| 10 | Dr.S.ILANGOVAN, ASP/IT        | Member |  |
| 11 | Dr.S.RAMESH, ASP/IT           | Member |  |
| 12 | Mr.A.SELVARAJ,(Sr.Gr.)/IT     | Member |  |
| 13 | Mr.M.SATHEESH KUMAR,AP/IT     | Member |  |
| 15 | Ms.S.VIJAYASHARMILA, AP/IT    | Member |  |
| 16 | Mr.V.ARAVINDARAJAN, AP/IT     | Member |  |
| 17 | Mrs.S.JENIBA, AP/IT           | Member |  |
| 18 | Mr.K.VIMAL, AP/IT             | Member |  |
| 19 | Ms.N.MUTHAMILSELVI, AP/IT     | Member |  |
| 20 | Mr.G.H.RAM GANESH, AP/IT      | Member |  |
| 21 | Ms.RM.SUGANYA, AP/IT          | Member |  |
| 22 | Mrs.T.T.MATHANGI, AP/IT       | Member |  |
| 23 | Mrs.N.LOGAMITHRA, AP/IT       | Member |  |

- Dr.P.Ganesh Kumar, Chairman /BOS delivered Welcome Address and introduced the members of BOS. He presented the Vision and Mission of the Institution and Department and History of the department.
- Dr.A.V.Ramprasad, Principal gave introductory remarks about the achievements of the
  Institution from the inception. He outlined the process of curriculum development in KLNCE.
  He requested the experts to provide the suggestions to strengthen the curriculum and syllabus of
  the KLNCE Autonomous system.
- Chairman/BOS presented the suggestions which were recorded in the third BOS meeting and the appropriate implementation done in syllabus and curriculum.
- Chairman/BOS presented the revised Curriculum of UG programme B.Tech-IT (3<sup>rd</sup> to 8<sup>th</sup> Semester) and the syllabus for the subject's specific to IT in 5<sup>th</sup> and 6<sup>th</sup> semesters. He extended the detailed presentation of B.Tech.- Artificial Intelligence and Data Science (AIDS) programme Entire Curriculum(1 to 8 Semesters) and 3<sup>rd</sup> & 4<sup>th</sup> semester syllabus. The subjects common to CSE and IT are approved in CSE board, Chairman told.
- He also added that Fast Track and Value Added Courses will be conducted to students for their third and final year academic studies.

#### Suggestions and Recommendations by BOS members for B.Tech-IT Programme:

#### Dr. S. Padmavathy

- The expert asked to explain the mark assessment system for "Theory cum practical" course. HOD narrated the process of mark assessment of this course.
- The expert suggested to write separate COs for both Theory and practical part for "Theory cum Practical" course at the end of the unit by taking 4 COs for Theory and 3 COs for practical for this course. HOD assured to do the necessaries as told by expert through ACM.
- The expert insisted to insert PO-CO mapping in syllabus framing. HOD told that this information would be put forth to ACM.
- The expert insisted to show case mark assessment system to student knowledge for all type of course like, theory, practical, theory cum practical, project. HOD assured to execute expert suggestion.

#### Dr.A.Umamakeswari

- The expert member suggested reorganizing the content of theory cum practical syllabus such a way that theory part Unit 1 to 5 as first part then followed by list of practical experiments as second part after the 5th Unit.
- The expert member suggested avoiding Study experiment at the lab practical course which is mentioned at IOT lab.
- The expert member suggested that list of text books and reference books should be mentioned with unique way (for example either "third edition" or "3rd edition"). Another expert member suggested to keep word format for edition (ie. third edition)
- The expert queried to clarify difference between courses like "Internet of Things" and
  "Internet of Things & its applications". Our HOD responded that "Internet of Things"
  syllabus designed for core branch students &" Internet of Things & its applications" is
  designed as Open Elective Course for all other branch students (syllabus content is very
  easy to learn, no need for perquisite for taking this course)
- The expert member quoted some set of typographical errors like text books instead of text book when list of books is more than one.

#### Dr.T.Senthil kumar

- The expert suggested to keep maximum of 5 COs which should be aligned with specialization of courses. HOD replied that this point will be put forth to ACM.
- The expert has the same mind set of changing the title of course "Object Oriented Programming" instead of "Object Oriented Programming using Java"

#### Anandha Vel Murugan

 The expert told to include syllabus content in Web programming course with latest technology like spring, JQuery. HOD replied that latest technology-concepts are included in the professional elective courses.

## Suggestions and Recommendations by BOS members for B.Tech-AIDS Programme: Dr.S. Padmavathy

- The expert member asked about the inclusion of AIDS programme specific courses details. HOD show cased distribution of AIDS programme specific courses in the curriculum.
- The expert suggested to change the title of course "Object Oriented Programming" instead of "Object Oriented Programming using Java" Since the expert member expressed that course are uniquely differentiated by their course code. Need not worry of same title of courses in different programmes

#### Anandha Vel Murugan

- The expert suggested adding python tool for Data Visualization practical's instead of R
  tools since most of software industries are using python instead of rare R tool. HOD
  assured to include python tool in syllabus with less exposure of R tool.
- Based on the suggestions given by the experts/members, it is resolved to approve the R2020 B.Tech (Information Technology) 3<sup>rd</sup> to 8<sup>th</sup> Semester Curriculum and 5<sup>th</sup> and 6<sup>th</sup> semester syllabus specific to IT department and B.Tech (Artificial Intelligence and Data Science) 3<sup>rd</sup> and 4<sup>th</sup> Semester curriculum and syllabus with the suggested modifications.
- Board of Studies recommended the above resolutions to be presented in the Academic Council for further approval.
- Dr.G.Ramesh, Professor/IT, summarized the suggestions and queries raised by Experts.
- Dr.J.S. Kanchana, Professor/IT, delivered Vote of Thanks.
- The technical support for the entire meeting was done by Mr.M.SatheeshKumar,
   Assistant Professor/IT
- This BoS online meeting came to end at 11.30am.

Dr. P. Ganesh Kumar, Professor and Head / IT

Chairman/Board of Studies

CC to CSE Board, ECE Board, EEE Board, MBA Board, Maths Board Governing Body, Academic Council Coordinator / IQAC, Principal, File

## K.L.N. COLLEGE OF ENGINEERING, POTTAPALAYAM - 630 612

# (An Autonomous Institution affiliated to Anna University, Chennai) DEPARTMENT OF INFORMATION TECHNOLOGY FOURTH BoS MEETING on 25.01.2022

#### **Members Present:**

| S. No. | Name of the member with designation and address   | Details of Member   | Signature     |
|--------|---|---|---------------|
| 1      | Dr.P.Ganesh Kumar Professor & HoD / Department of Information Technology K.L.N. College of Engineering, Pottapalayam-630612.                            | CHAIRMAN  |               |
| 2      | Dr.S.Padmavathi Professor /Department of Information Technology Thaigarajar College of Engineering, Madurai-625015.                                     | ANNA<br>UNIVERSITY<br>NOMINEE                             | Dmanh 29 1 22 |
| 3      | Dr.T.Senthilkumar Associate Professor / Department of CSE Amirta School of Engineering Amrita Viswa Vidyapeetham, Coimbatore-641112.                    | SUBJECT EXPERT<br>(from outside the<br>Parent University) | 22/1/2022     |
| 4      | Dr.A.Umamakeswari Dean / School of Computing, Shanmugha Arts, Science, Technology & Research Academy SASTRA Deemed to be University, Thanjavur- 613401. | SUBJECT EXPERT<br>(from outside the<br>Parent University) | selve         |
| 5      | Mr. Sathya Narayana<br>University Focal<br>Honeywell Technologies and Solutions, Madurai-<br>625020   | Industry Expert   | Amwingen      |
| 6      | Mrs.M.Priya PHP Developer, Pruvity HR Solutions Private Limited, Madurai- 625020.   | Postgraduate<br>Meritorious Alumnus                       | M. Prings.    |
| 7      | Dr.A.V.Ramprasad Principal K.L.N. College of Engineering, Pottapalayam-630612.  | Special invitee   | Da F          |
| 8      | <b>Dr.G.Ramesh,</b> Professor/Department of Information Technology K.L.N. College of Engineering, Pottapalayam-630612.                                  | Member  | 9.3           |
| 9      | Dr.J.S.Kanchana Professor/Department of Information Technology K.L.N. College of Engineering, Pottapalayam-630612.                                      | Member  | Mar           |
| 10     | Dr.S.Ilangovan Asso Prof/Department of Information Technology K.L.N. College of Engineering, Pottapalayam-630612.                                       | Member  | Maugan        |

| 11 | Dr.S.Ramesh Asso Prof/Department of Information Technology K.L.N. College of Engineering, Pottapalayam-630612.            | Member | S.R.h        |
|----|---|--------|--------------|
| 12 | Mr.A.Selvaraj Asst Prof /Department of Information Technology K.L.N. College of Engineering, Pottapalayam-630612.         | Member | sop my       |
| 13 | Mr.M.Satheesh Kumar Asst Prof /Department of Information Technology K.L.N. College of Engineering, Pottapalayam-630612.   | Member | on           |
| 14 | Ms.S.Vijayasharmila Asst Prof /Department of Information Technology K.L.N. College of Engineering, Pottapalayam-630612.   | Member |              |
| 15 | Mr.V.Aravinda Rajan Asst Prof /Department of Information Technology K.L.N. College of Engineering, Pottapalayam-630612.   | Member | Di-          |
| 16 | Mrs. S. Jeniba Asst Prof /Department of Information Technology K.L.N. College of Engineering, Pottapalayam-630612.        | Member | 821          |
| 17 | Mr. K. Vimal Asst Prof /Department of Information Technology K.L.N. College of Engineering, Pottapalayam-630612.          | Member | & . word     |
| 18 | Ms. N. Muthamil Selvi Asst Prof /Department of Information Technology K.L.N. College of Engineering, Pottapalayam-630612. | Member | NAHA         |
| 19 | Mr.G.H.Ram Ganesh Asst Prof/Department of Information Technology K.L.N. College of Engineering, Pottapalayam-630612.      | Member | and          |
| 20 | Ms.RM.Suganya Asst Prof / Department of Information Technology K.L.N. College of Engineering, Pottapalayam-630612.        | Member | RM.Sug       |
| 21 | Mrs.T.T.Mathangi Asst Prof/Department of Information Technology K.L.N. College of Engineering, Pottapalayam-630612.       | Member | T.T. Note IT |
| 22 | Mrs.N.Logamithra Asst Prof / Department of Information Technology K.L.N. College of Engineering, Pottapalayam-630612.     | Member | NHA          |

### Third Board of Studies meeting - 01st Feb 2022

### DEPARTMENT OF AUTOMOBILE ENGINEERING



#### Minutes of Meeting

Ref: KLNCE/BoS/Au.Engg./2022

Dated: 04.02.2022

The Third Board of Studies (BoS) meeting of the Department of Automobile Engineering was held on 01st Feb 2022 in online mode through Google Meet.

https://meet.google.com/oys-puxj-vko

| S. No. | Name, Designation and College Details   | Details of Members                              | Signature |
|--------|---|---|-----------|
| 1      | Dr.R.M.Satheesh Kumar, Professor &Head, Department of Automobile Engineering. K.L.N. College of Engineering.          | Chairman  | Lund      |
| 2      | Dr. V. M. Murugesan Associate Professor, Department of Automobile Engineering, PSG College of Technology, Coimbatore. | Anna University nominee                         | Immi.     |
| 3      | Dr. J. Jerald Associate Professor, Department of Production Engineering, NIT, Tiruchirappalli.                        | Subject expert outside the<br>Parent University | 4 cass    |
| 4      | Dr. R. Vasudevan Professor and Dean, School of Mechanical Engineering, VIT University, Vellore.                       | Subject expert outside the Parent University    | Done .    |
| 5      | Mr. K. Sundar Assistant General Manager, Quality Assurance Hi-Tech Arai Pvt.Ltd, Madurai.                             | Industry Expert                                 | 47        |
| 6      | Mr. P. Baskara Sethupathi Assistant Professor (SG) Department of Automobile Engineering, SRM IST, Chennai.            | Meritorious alumnus                             | Nº108 th  |
| 7      | Dr.A.V.Ramprasad, Principal, K.L.N. College of Engineering.   | Special Invitee                                 | Do 9      |
| 8      | Mr. R. V. Suresh Babu,<br>ASP/Au.Engg., KLNCE   | Member  | 98~~L     |
| 9      | Dr. J. Rajesh Babu,<br>ASP/Au.Engg., KLNCE  | Member  | 78/10     |
| 10     | Mr. N. Rajkumar,<br>ASP/Au.Engg., KLNCE   | Member  | By kny.   |
| 11     | Mr.S.Suresh, AP (SG)/Au.Engg., KLNCE  | Member  | S.Surry   |
| 12     | Mr.L.Vivek Krishnakumar,<br>AP/Au.Engg., KLNCE  | Member  | TAKE      |
| 13     | Mr.G.S.Santha Venkatesh,<br>AP/Au.Engg., KLNCE  | Member  | y. s. /   |

#### K.L.N. COLLEGE OF ENGINEERING

Pottapalayam, Sivagangai District-630612.

(An Autonomous Institution, Affiliated to Anna University, Chennai)

Ref: KLNCE/BoS/Au.Engg./2022 04.02.2022

## Board of Studies meeting – 01st February 2022

#### **DEPARTMENT OF AUTOMOBILE ENGINEERING**

#### **Minutes of Meeting**

The Board of Studies (BoS) meeting of the Department of Automobile Engineering was held on 1<sup>st</sup> February 2022, @ 10:30 Am in online mode through Google Meet.

#### https://meet.google.com/oys-puxj-vko

|       | BERS PRESENT:   | Datails of mambay Mambays       |  |
|-------|---|---------------------------------|--|
| S. No | Name, Designation and College Details                   | Details of member Members       |  |
| 1.    | Dr.R.M.Satheesh Kumar,                                  | DOG CL :                        |  |
|       | Professor & Head,                                       | BOS Chairman                    |  |
|       | Department of Automobile Engineering.                   |                                 |  |
|       | K.L.N. College of Engineering.                          |                                 |  |
| 2.    | Dr. V. M. Murugesan                                     |                                 |  |
|       | Associate Professor,                                    |                                 |  |
|       | Department of Automobile Engineering,                   | Anna University nominee         |  |
|       | PSG College of Technology,                              |                                 |  |
|       | Coimbatore.   |                                 |  |
| 3.    | Dr. J. Jerald   |                                 |  |
|       | Associate Professor,                                    | Subject expert from outside the |  |
|       | Department of Production Engineering,                   | Parent University               |  |
|       | NIT, Tiruchirappalli.                                   | Turent emversity                |  |
| 4.    | Dr. R. Vasudevan  |                                 |  |
|       | Professor and Dean,                                     | Subject expert from outside the |  |
|       | School of Mechanical Engineering,                       | Parent University               |  |
|       | VIT University, Vellore.                                |                                 |  |
| 5.    | Mr. K. Sundar   |                                 |  |
|       | Assistant General Manager, Quality Assurance,           | Member representing industry    |  |
|       | Hi-Tech Arai Pvt.Ltd, Madurai.                          |                                 |  |
| 6.    | Mr. P. Baskara Sethupathi                               | Member representing             |  |
|       | Assistant Professor (SG),                               | Postgraduate meritorious        |  |
|       | Department of Automobile Engineering,                   | alumnus                         |  |
|       | SRM IST, Chennai.                                       | arumnus                         |  |
| 7.    | Mr.R.V.Suresh Babu, Associate Professor, Au.Engg.       | Member                          |  |
| 8.    | <b>Dr.J.Rajesh Babu</b> , Associate Professor, Au.Engg. | Member                          |  |
| 9.    | Mr.N.Rajkumar, Associate Professor, Au.Engg.            | Member                          |  |
| 10.   | Mr.S.Suresh, Assistant Professor(Sr.Gr)                 | Member                          |  |
| 11.   | Mr.L.Vivek Krishnakumar, Assistant Professor            | M- 1                            |  |
|       | (Sr.Gr)   | Member                          |  |
| 12.   | Mr.G.S.Santha venkatesh, Assistant Professor            | Member                          |  |
|       | Dr.A.V.Ramprasad,                                       |                                 |  |
| 13.   | Principal,  | Special Invitee                 |  |
|       | K.L.N. College of Engineering.                          | F                               |  |

Mr.R.V.Suresh Babu, Associate Professor, Automobile Engineering, welcomed all the experts and members of BOS for the third online BOS meeting of Automobile Engineering. Dr.A.V.Ramprasad, also welcomed the members and thanked the Expert members for their support in refining the curriculum and syllabus.

Dr.R.M. Satheesh Kumar Chairman, BoS, started his presentation with the review of I to IV semester curriculum of Automobile Engineering. Further he presented the proposed curriculum of V to VIII semesters, proposed third year V and VI Semester B.E.Automobile engineering Syllabus, Syllabus of Open elective courses offered by the Automobile Engineering department, Open elective courses offered by the other departments, Value added courses and option for students to study online courses from NPTEL instead of elective courses under Credit transfer scheme. The proposed curriculum was framed as per the guidelines of AICTE, UGC and Anna University, Chennai.

Dr.J.Rajesh babu, Associate Professor, Automobile Engineering, thanked the expert members.Principal,BOS Chairman and Internal Members.

After reviewing the proposed curriculum and syllabus of Third year B.E Automobile engineering and overall curriculum the expert members suggested the following points.

#### Dr. V. M. Murugesan

- Suggested to change the title of Unit II in "Electric Vehicle" course of fifth semester from "Electric storage for EV" to "Energy sources for EV".
- Suggested to change the title of Unit II in Automotive Electrical and Electronics course of fifth semester from "Automotive Electrical Equipments" to "Starting, Charging and Ignition system"
- Suggested to modify the title of Unit III in "Vehicle Design Data Characteristics" course of fifth semester from "Performance Curve" to "Engine Performance Characteristics".
- Suggested to alter the sequence of the first three units in the fifth semester "Automotive Fuels and Lubricants" course as follows: Unit-II to Unit I, Unit-III to Unit II and Unit-I to Unit III.
- Suggested to remove the topic 'Design of helical spring' from Unit-II in "Design of Automotive Engine Components" course of sixth semester since the above topic was covered in the theory course "Design of Machine elements" of fifth semester.

- Suggested to include the topics "transaxle and transfer case design" in Unit-V of "Automotive Chassis Components Design" course of sixth semester.
- Suggested to change the name of the open elective course offered to other departments as "Basics of Automobile Engineering" instead of "Two and Four Wheeler", and suggested to include the contents of Two and Four Wheeler in Unit IV and Unit V.
- Suggested to include the topics "Types of electric vehicle" in Unit-I and "Battery" in Unit-IV in "Electric Vehicle" course of fifth semester.

#### Dr. R. Vasudevan

- Suggested to rearrange the units in the theory cum lab course "Automotive Fuels and Lubricants" Theory part of fifth semester.
- Suggested to include Bio Fuel as a topic in the course "Automotive Fuels and Lubricants" in the theory part of fifth semester.
- Suggested to modify the name of the experiments as "Testing of Battery" instead of
  "Testing and Checking of Battery" in "Automotive Electrical and Electronics" lab
  course in fifth semester.

#### Dr. J. Jerald

- Suggested to suitably reduce the content of "Automotive Fuels and Lubricants"
  course of fifth semester as the syllabus has been framed as theory cum practical
  course.
- Suggested to shift the "design of helical spring" topic from Unit-II to Unit-I in "Design of Automotive Engine Components" course of sixth semester.
- Suggested to include the topic "design of Cam shaft" in "Design of Automotive Engine Components" course.
- Suggested to change the title of Unit-I as "Introduction of Robotics" in the course "Robotics" offered as Professional Elective course.
- Suggested to include fundamental topics in "Supply Chain Management" open elective course since it has no prerequisite courses in the open electives offered to other departments.
- Suggested to change the topic "Surface finish and Surface roughness" to "Surface Morphology" in Unit-II of "Design of Automotive Engine Components" course of sixth semester.

#### Mr. K. Sundar

- Suggested to include expanded form for abbreviated terms given in the syllabus.
- Suggested to include value added courses with more real time case studies which will enhance the placement opportunity for the students.

#### Mr. P. Baskara Sethupathi

- Suggested to include the topic "gear design" in "Design of Chassis Components" course of sixth semester.
- Suggested to modify the name of the experiment as "Modelling of Piston" instead of "Design and drawing of Piston" in "Computer aided Vehicle design Lab" course of sixth semester.

CHAIRMAN / BoS Dr.R.M.Satheesh Kumar, Prof & Head/Au.Engg.

Cc to Members of BoS, Principal, Coordinator / IQAC, Academic Council, Governing Body and File.

## K.L.N. COLLEGE OF ENGINEERING, POTTAPALAYAM - 630 612

## (An Autonomous Institution, Approved by AICTE, New Delhi ) Affiliated to Anna University, Chennai (An ISO 9001: 2015 Certified Institution)



## Accredited by NAAC, Bengaluru

## DEPARTMENT OF ELECTRONICS AND INSTRUMENTATION ENGINEERING

Ref: KLNCE/BoS/EIE/2022

28.01.2022

## Third Board of Studies (BoS) Meeting

Date of the Meeting: 25.01.2022 (Tuesday)

Time: 11.A.M

Online Platform: G -Meet

G suite meeting: https://meet.google.com/vzu-ywkd-mjn

## MINUTES OF THIRD BOARD OF STUDIES MEETING

The Third Board of Studies meeting for the Electronics & Instrumentation Engineering department was conducted online on 25.01.2022 (Tuesday) at 11.00 a.m. The following members were present in the Meeting

| S. No | Name, Designation and College<br>Details  | Designation             | Signature   |
|-------|---|-------------------------|-------------|
| 1.    | Prof.S.Nagammai Professor &Head, Department of Electronics & Instrumentation Engineering, K.L.N. College of Engineering | Chairman                | Joseph      |
| 2.    | Dr. N.Sivakumaran, Professor Instrumentation & Control Engineering National Institute of Technology Tiruchirappalli     | Anna University Nominee | <b>Q</b> 2L |

| 3.  | Dr. P.Thirusakthimurugan<br>Professor & Head /EIE<br>Pondicherry Technological<br>University<br>Puducherry. | Subject expert<br>outside the Parent<br>University | Tim Forthing Mr. |
|-----|---|--|------------------|
| 4.  | Dr. D. Sivakumar, Professor/EIE Annamalai University Chidambaram.   | Subject expert outside<br>the Parent University    | Diri             |
| 5.  | Dr. P. R. Venkateswaran,<br>Manager,<br>Welding Research Institute,<br>BHEL, Trichy.                        | Industry Expert                                    | Queillat.        |
| 6.  | Dr.A.Umarani, Professor/EIE   | Member   | J. Ps            |
| 7.  | Dr.D.Pradeep Kannan,<br>Professor/EIE   | Member   | HA               |
| 8.  | Mr. P.Ravikumar, Associate<br>Professor   | Member   | manhour          |
| 9.  | Dr. S.Balamurugan,<br>Assistant Professor (SG)  | Member   | 8,00             |
| 10. | Mrs.N.Vishnu Devi, Assistant<br>Professor   | Member   | Da al            |
| 11. | Dr.A.V.Ramprasad, Principal, K.L.N.College of Engineering   | Special Invitee                                    | De 7             |

On behalf of KLNCE Management, Principal and Department of EIE, Prof. S.Nagammai, Chairman, Board of studies (BoS), Electronics and Instrumentation Engineering, welcomed the members and presented suggestions given in the second Board of Studies meeting held on 12.05.2021. The following is the agenda for the meeting:

#### AGENDA

- Presentation of suggestions given in second BoS meeting
- Presentation of detailed syllabus of 5<sup>th</sup> & 6<sup>th</sup> semester courses
- Presentation of syllabus of Professional Elective courses
- Presentation of open elective courses offered by EIE department
- Presentation of online courses for credit transfer

- Presentation of value added courses
- · Provision for fast track course

The minutes of the second Board of Studies meeting was communicated to the members. The suggestions given were incorporated and presented for confirmation. Chairman informed that the minutes were approved by the second Academic council meeting held on 17/4/2021, also briefed the suggestions of the ACM members such as industry collaborated courses, improvement in consultancy and research, employable courses through industries.

#### BoS 03.01: Business brought forwarded by the Chairman, BoS

To consider and approve V & VI semester curriculum and Syllabus of B.E. Electronics and Instrumentation Engineering, Professional Elective courses and Open Elective courses offered by EIE students and for other department candidates.

#### After the presentation, the following suggestions were given by the Experts

- 1. Suggested to include M.Gopal, "Control System: Principle and design", as text book instead of Nagarath, I.J. and Gopal, M., 'Control Systems Engineering'
- 2. Suggested to include recent topics like 4G & 5G in unit V in the course 'Communication Engineering'
- 3. Suggested to include the topic Model Predictive Control in the course 'Process Control'
- 4. Suggested to include the topic Laser therapeutic and telemedicine in the course 'Biomedical Instrumentation'
- Suggested to rename the titles of Unit III & IV in the courses namely MEMS & Instrumentation in Steel Industry
- 6. Approved the list of online courses for credit transfer
- 7. Approved the syllabus of Open electives courses offered by EIE department
- 8. Approved the syllabus of value added courses
- 9. Approved the syllabus of V & VI semester courses

#### Follow up Action:

Based on the suggestion given by the Expert members, it is resolved to approve the curriculum and syllabus of V & VI semester of Electronics and Instrumentation Engineering with the following modifications.

- "M.Gopal, "Control System: Principle and design" has been included as a text book for the course 'Control Engineering'
- ii. Recent topics like 4G & 5G are included in Unit V in the course 'Communication Engineering'
- iii. The topic Model Predictive Control has been included in the course 'Process Control'
- iv. The topic Laser therapeutic and telemedicine has been included in the course 'Biomedical Instrumentation'
- v. Titles of unit III & IV in the courses namely MEMS & Instrumentation in Steel Industry are renamed.

BoS of Electronics and Instrumentation Engineering recommend the above resolutions to be presented in the Academic Council for further approval.

Dr.A.Umarani, Professor/EIE thanked all the members for their valuable suggestions. Meeting ended at 12.30 p.m.

Chairman/BoS S.NAGAMMAI Prof& Head/EIE

Cc To: Head/ Academics, Coordinator / IQAC, Principal and File.



#### K.L.N. College of Engineering

# (An Autonomous Institution Affiliated to Anna University, Chennai) Accredited by NBA, New Delhi and Accredited by NAAC (Sponsored by K.L.N. Sourashtra College of Engineering Council) Pottapalayam- 630 612, Sivagangai District



Third Board of Studies Meeting - 02<sup>nd</sup> February 2022

## DEPARTMENT OF SCIENCE AND HUMANITIES (Mathematics) Minutes of the Meeting

Third Board of Studies Meeting (through online - https://meet.google.com/fbf-fxdm-oqw) for Science and Humanities Department (Mathematics) held on 02<sup>nd</sup> February 2022 at 2:30 pm.

#### Members Present:

| S.No | Name, Designation, and College   | Details of Members   | Signature      |
|------|--|--|----------------|
| 1.   | Dr. A.V. Ramprasad   | Principal  | Do 8           |
| 2.   | Dr. J.K. Subashini   | BoS Chairman, S&H Department Professor &Head / Mathematics | Hugh           |
| 3.   | Dr. G. Senguttuvan  Professor & HOD, Department of Physics & Nanoscience and Nanotechnology, UCE, BIT campus Anna university, Tiruchirapalli | Anna University Nominee                                    | \$ 2/2/2012 ·  |
| 4.   | Dr. S. Jeyabharathi Professor & Head, Mathematics Thiagarajar College of Engineering, Madurai  | Subject Expert / Mathematics                               | guya Blace the |
| 5.   | Dr. R. Selvarani   | Associate Professor / Mathematics                          | 2.6            |
| 6.   | Dr. S. Sabarinathan  | Associate Professor / Mathematics                          | 5.81 at        |
| 7.   | Mrs. R. Kalaiselvi   | Assistant Professor / Mathematics                          | Rokelinghi     |
| 8.   | Mr. G. Pushparajan   | Assistant Professor / Mathematics                          | Chulfore       |
| 9.   | Mr. G. B. Kannan   | Assistant Professor / Mathematics                          | GIB V          |
| 10.  | Mrs. M. M. Jeyalakshmi   | Assistant Professor / Mathematics                          | M. Jugar       |
| 11.  | Mr. V. Ananth  | Assistant Professor / Mathematics                          | V. Am          |
| 2.   | Mrs. M. Nancy Femila   | Assistant Professor / Mathematics                          | Mul            |
| 3.   | Mrs. K. Sathyabama   | Assistant Professor / Mathematics                          |                |
| 4.   | Mrs. R Usha  | Assistant Professor / Mathematics                          | Ksattyrbama    |

The meeting started with the screen sharing information by Dr. J.K. Subashini, Professor & Head, Mathematics and delivered the Welcome Address.

Dr. A.V.Ramprasad, Principal offered special address. He thanked Anna University nominee and subject expert for their valuable suggestions and support on preparation of syllabi pertaining to BE/ Mech and BE/CSE programmes.

Dr. J.K. Subashini, Professor & Head, Mathematics presented the detailed syllabus of each course.

Firstly, the syllabus for the course Operations Research (20HS601), pertaining to the Sixth semester of Mechanical Engineering programme was presented. Then the syllabus of the open elective course Linear Algebra and Number Theory (200E801), pertaining to the Fifth semester of Computer Science and Engineering programme was presented.

The AU Nominee and the subject expert made their comments, recommendations and remarks for individual courses. Dr.J K Subashini, Professor & Head, Mathematics explained, justified and took note on certain points for ratification.

Following are the observations and suggestions made by AU Nominee and respective Subject expert.

Dr. S. Jeyabharathi suggested the following:

- For the Sixth semester course titled "OPERATIONS RESEARCH (20HS601)", the availability of the entire content of the syllabus, to be checked in the text book of
- For the Fifth semester open elective course titled "LINEAR ALGEBRA AND ii. NUMBER THEORY (200E801)".
  - 1. To check for availability of the entire content of the syllabus, to be checked in the text books and Reference books.
  - 2. One unit may be allotted for the basics of MATLAB courses.
  - 3. A case study / Application oriented assignment may be given.

Follow up Action:

Based on the suggestions given by the expert members, it is resolved to approve the syllabus of the course namely OPERATIONS RESEARCH- (20HS601) and LINEAR ALGEBRA AND NUMBER THEORY (200E801).

Board of studies of Science and Humanities (Mathematics) recommend the above syllabus to be presented in the Academic council for further approval.

Dr. J.K. Subashini, Professor & Head, Mathematics, proposed vote of thanks.

Chairman / BoS S&H Department Dr. J.K. Subashini, Professor & Head / Mathematics

CC:

- General Body
- 2. Academic Council
- 3. Principal
- 4. File

## K.L.N. COLLEGE OF ENGINEERING, POTTAPALAYAM – 630612

(An Autonomous Institution, Affiliated to Anna University, Chennai.)

#### **DEPARTMENT OF MANAGEMENT STUDIES**

Minutes of the Board of Studies Meeting, held on 31/01/2022 through Google meet.

#### **Members Present:**

#### I-Details of the Expert Members:

| S.No. | Name of the Member & Designation  | Category  | Signature |
|-------|---|---|-----------|
| 1     | Dr .K.Arul Rajan, Professor, Dept. of Management Studies, PSG Institute of Management, Coimbatore.                          | Anna University - Nominee                             | ALP       |
| 2     | Dr.C.Jothi Baskara Mohan<br>Associate Professor & Head<br>Dept. of Business Administration,<br>Thiagarajar College, Madurai | Subject Expert Member from Outside -Parent University | St.       |

#### **II-Details of Internal Members:**

| Sl.No. |                        | Designation                | Signature |
|--------|------------------------|----------------------------|-----------|
| 1      | Dr.T.Jothimurugan      | Chairman- BoS              | e 2       |
| -      |                        | & Director MBA             | 1400      |
| 2      | Dr.S.N.R.Srikumar      | Professor, MBA             | hor       |
| 3      | Dr.R.S.Balasenthil     | Associate Professor        | Allumin   |
| 4      | Prof. B.Shanthi        | Assistant Professor(SG)    | B SLoth   |
| 5      | Prof. B.Palanivelrajan | Assistant Professor(SG)    | Bing      |
| 6      | Prof.T.S.Ramkumar      | Assistant Professor(Sr.Gr) | DR Lewy   |
| 7      | Dr.K.S.Hariharan       | Assistant Professor(Sr.Gr) | 3113      |
| 8      | Prof. T.Sownthariya    | Assistant Professor1       | T. Duy    |
| 9      | Prof.M.Krishnaveni     | Assistant Professor1       | Milhe     |

• **Dr.T.Jothimurugan**, Chairman-BoS, welcomed the Board of Studies Members and Faculty members of MBA, KLNCE, and briefed about the purpose of getting approval for the value added courses for the MBA program and management subjects for B.E. /

B.Tech program as per the UG and PG Regulation-2020. He requested the members to offer their contribution and suggestions in the proposed subjects.

- He thanked Anna University nominee **Dr.K.Arul Rajan** Professor, Dept. of Management studies, PSG Institute of Management, and **Dr.C.Jothi Baskara Mohan**, Associate Professor & Head Dept. of Business Administration, Thiagarajar College for their contribution and support in the previous BoS. He requested Dr.R.S.Balasenthil to present the proposed syllabus.
- Dr.R.S.Balasenthil presented the syllabus of value added courses for MBA and professional courses for B.E./B.Tech.
- List of MBA Value Added Courses (VAC) presented for approval by MBA BOS on 31<sup>st</sup> Jan 2022:

| Course Code | Course Name                      | Department offering |
|-------------|----------------------------------|---------------------|
| 20MB3V1     | Inbound Marketing                | MBA                 |
| 20MB3V2     | Tally ERP                        | MBA                 |
| 20MB3V3     | Human Values and Business Ethics | MBA                 |

• List of BE/B.Tech. Courses – presented for approval by MBA BOS on 31st Jan 2022

| Course  | Course          | Course Name                  | Department | Semester |
|---------|-----------------|------------------------------|------------|----------|
| Code    | Category        |                              | offering   |          |
| 20HS601 | Professional    | Principle of management      | IT & CSE   | 6        |
|         | Core Course     |                              |            |          |
| 20HS6A1 | Professional    | Intellectual property Rights | ECE,EEE &  | 6        |
|         | Elective Course |                              | EIE        |          |
| 20HS6A2 | Professional    | Entrepreneurship             | CSE & IT   | 6        |
|         | Elective Course | Development                  | 8 9 0      | 1 b      |
| 20HS6B1 | Professional    | Project Management And       | ECE        | 6        |
|         | Elective Course | Entrepreneurship             |            |          |
| 20OE301 | Professional    | Human Relations At Work      | ECE        | 6        |
| 2       | Open Elective   |                              |            |          |
|         | Course          |                              |            |          |

- Dr.K. Arul Rajan suggested the following changes and additions in the value added course of MBA:
  - > To change the title of the value added course from **online marketing** to Inbound Marketing as followed in Premier Business Schools.
  - To include 'Instagram' and 'Referral Marketing' in the syllabus and explained the advantages of Instagram and Referral marketing in Social Media Marketing and its benefits in the current scenario under Inbound Marketing. He also suggested to include the term "Referral Marketing" with email marketing and quoted Zomato, Amazon and Swiggy.
  - To include Tata Mcgraw Hill book for Reference in Inbound Marketing course.
  - > To review the term "Godown" in the Tally Course.

- Dr.K. Arul Rajan emphasized the faculty members to attend the 5 day FDP offered by AICTE on 'Universal Human Values' to teach the subject 'Human Values and Business Ethics' effectively
- Dr.C.Jothi Baskara Mohan, suggested the following changes and additions in the proposed Management subject of B.E./B.Tech., course:
  - In Principles of Management to reduce the content and coverage of the subject to suit the engineering students. To include the contributions of Management thinkers in the first unit; To add the term 'Staffing' in third unit along with Organising; To replace the term 'HR planning' with 'Man power planning' in third unit. To remove the topic 'Culture Elements and types of culture Managing cultural diversity' from fourth unit Directing, and the topic 'Planning operations. control and performance direct and preventive control reporting' from the fifth unit Controlling.
  - In Entrepreneurship Development to include the Governments' supporting institutions like SIPCOT, EDC, ITCOT in the second unit; To rename the title of fourth unit as 'Launching And Managing Of Small Enterprise' instead of 'Managing Of Small Enterprise'; To realign the order of the fourth unit by starting with 'Ownership structure' and include HR, Operations and Marketing aspects, IT startups and its case studies.
  - In Project Management and Entrepreneurship to reorder the order of units from Unit 3-Social Entrepreneurship, Unit 4-Entrepreneurship, Unit 5-Entrepreneurial idea and Innovation as, Unit 3-Entrepreneurship, Unit 4-Entrepreneurial idea and Innovation, Unit 5-social entrepreneurship in order to have a coherence.
- It has been resolved to incorporate the above suggestions offered by the Anna University nominee and subject expert in the respective syllabus of Value Added Program of MBA and Management subjects of BE./B.Tech. Programs.
- Finally, Mrs.B.Shanthi, Assistant Professor (SG) / MBA, thanked Anna University nominee, subject expert and all the members of faculty for giving valuable suggestions and their kind cooperation in the enhancement of curriculum and syllabus.

Im

Dr.T.Jothimurugan,
Director / MBA &
Chairman / Board of Studies

CC to: GB, ACM, Principal and IQAC File copy