Board of Studies (BOS) Meeting Agenda, ECE Department

BOS Meeting of ECE has been convened on 8.7.2018 at 9.45AM in Board room (F008) of KLEF deemed to be university and discussed the following **agenda**:

- 1. Proposed curriculum of 2018 admitted 'Bachelors of Technology' students.
 - a. Course structures
 - b. Proposed teaching pedagogies
 - c. Academic flexibilities like honors with extract credits acquired through either advanced study of same courses or with procuring additional credits form additional courses as per student's choice.
 - d. Regular B. Tech degree *along with specialization* by acquiring credits for *professional electives* from courses of specific domain or regular degree (without specialization) from professional electives as per student choice (may not belong to a specific domain).
 - e. Open electives offered by other departments.
 - f. Engineering Physics and Engineering chemistry courses are to be offered as domain specific electives at advanced level.
 - g. Learning difficulties and addressing them
 - h. Career and academic counseling.
 - i. Credited co-curricular activities.
 - j. Skilling in professional domains and branch specific areas to promote industry ready competency among learners.
 - k. Necessary certification curses
 - 1. Inculcation of societal and ethical concern etc., regarding.
- 2. Modifications proposed for 2017 admitted 'Bachelors of Technology' students.
 - a. Credit and course balance as per 2018 proposed curriculum.
 - b. Proposed teaching pedagogies as per the proposed lines of 2018 curriculum.

Minutes of the Meeting of Board of Studies (BOS), ECE Department

BOS Meeting of ECE was conducted on 8.7.2018 at 9.45AM in Board room (F008) of KLEF deemed to be university.

Minutes of meeting:

- 1. Chairman of the Board Dr. V S V Parbhakar, addressed the members and introduced external BOS Members to the board and further internal members introduced themselves.
- 2. Address by chair regarding the rationale for the proposal of new curriculum.
- 3. Dean (Academics) Dr. Pranvir. S. Satvat explained the guidelines, commonalities, workshop to suit discipline requirements and uniqueness (60% practice and 40% Theory based curriculum) of KLEF new curriculum.
- 4. Proposed curriculum presentation by Chair.
 - a. General Comments:
 - i. Dr. V. Anil expressed their concern about motivating students towards domain specific courses in induction program and ecology and environment and other necessary courses.
 - ii. Mr. Vinay asked the reason behind a few courses in IV year 2nd semester without dedicating learners to project work? Specifically reg. the course Biology for engineers. Mr. Visweswaran suggested to prepone the offering of Biology for engineers at 4/2, as it may influence the placement interviewer's glance and inference about curriculum.
 - iii. Mr. Visweswaran inquired about certifications and recommended to include some sensors based activity as a part of curriculum keeping in view of IOT for near future, may be as an inter disciplinary open elective.
 - iv. Contents of Professional electives should be revisited keeping in view of the syllabus coverage of core courses, suggested by Dr.V.Anil.
 - v. Inclusion of case studies in professional courses, where ever possible, suggestion by Dr.V.Anil and Dr.Rajavaraprasad.
 - vi. Mr. Vinay inquired about Detention and Condonation procedures. Dr. Pranvir.S.Satvat explained the procedures of KLEF.
 - vii. Mr.Visweswaran suggested to include a few open courseware courses as equivalent to credited courses offered by KLEF to inculcate self learning. He also recommended robotics, embedded systems etc., courses to be offered as open electives by ECE department jointly with other departments to promote inter- disciplinary activity.
 - viii. Members opined to include C⁺⁺ in skilling components.
 - b. Course related comments
 - i. Dr. Sarath proposed to change the nomenclature of the english course tilted: 'Basic of communications'. As the department is offering a degree

- in communications engineering, it may confuse the stake holders and leads to a misinterpretation that it may be another departmental core subject
- ii. Dr. Jayarami Reddy asked to provide a tutorial session for basic science course Single variable calculus and matrix algebra.
- iii. Dr. K V Narasimharao aksed to downsize university common syllabus in workshop course.
- iv. Dr. V.Anil suggested retaining a general physics course at basic level and introduce one more elective course in advanced physics at advanced level.
 He also told that IIITH is also revising their syllabus this time. Internal BOS differed.
- v. Domain specific chemistry course with more inclination towards Vapor deposition, silicon batch processing etc., is suggested by Mr. Pydanna.
- vi. Dr. V. Anil suggested revising 'Electrical technology' with Basics of circuit theory and DC machines. He also recommended introducing control systems as an elective to facilitate GATE aspirants along with choice for inter-disciplinary professional elective as well. Somlal inquired about Control systems.
- vii. Dr. V.Anil suggested the inclusion of Band pass sampling concepts to the syllabus of course Signal and systems.
- viii. Dr. V.Anil and Dr. Rajavaraprasad recommended offering a separate course on 'Electromagnetic fields and Transmission lines.' Mr. M. Venkata Narayana requested a tutorial session to be attached with EMTL. Dr. Sarath opined that it may not be necessary.
 - ix. *Digital Signal processing* course syllabus should be reorganized, a suggestion from Dr. V.Anil and also recommended to add time-Frequency analysis concept to the syllabus.
 - x. Audio and Speech signal processing syllabus to be revised with more focus on speech signal processing. Suggested by Dr. V.Anil. Mr.Vinay recommended to include audio codec and speech encoding concepts.
- xi. Dr. Anil inquired about ANN and suggested to include a few topics of deep learning in the applications of ANN.
- xii. Mr. Pydanna suggested the inclusion of C-V characteristics of MOS at High & low frequencies in next level course of AECD.
- xiii. Mr. Pydanna and S.Srinivas recommended to include Euler path based stick diagram, Logical effect instead of driving large capacitance, FIN FET and SOMMSOFET to VLSI Design syllabus.
- xiv. Mr. Pydanna and S.Srinivas_asked to include scripting(Perl recommended) in skilling. Asked to collect a few industry centric requirements and include them as experiments for scripting.

- xv. Dr. Rajavaraprasad and S.Srinivas suggested to include ARM processor based learning along with Embedded C concepts by downsizing 8086 concepts in processors and controllers course.
- xvi. Dr. Rajavaraprasad S.Srinivas suggested including embedded systems course in core courses.
- xvii. Mr.Pydanna suggested including noise margin concepts and power gating techniques in Low Power VLSI Course.
- xviii. Prepared syllabus for Computer communications stream and Electronic system design are to be revisited. It is appearing to be so heavy and may not be covered on time. Proper downsizing is required as suggested by Dr. Rajavaraprasad and Mr. Vinay form Qualcom.
 - xix. Mr. Vinay recommended a project based study, to be attached, with VOIP course. He appreciated the content of VOIP course.
 - xx. Members inquire about the evaluation pattern to be adopted for ESD course. Clarity yet to be sought.
- xxi. Dr. Anil and Raja Varaprasad recommended removing Information theory and coding from ACDC course.
- xxii. Dr. M. Narasingarao suggested revisiting prerequisites for various courses.