KLEF DEPARTMENT OF MECHANICAL ENGINEERING DEPARTMENT ACADEMIC COMMITTEE MEETING MINUTES

The Department Academic Committee meeting was held from 11:15 A.M. on 05/04/2018 in the HoD Chamber, with Dr.A.Srinath, HoD-ME in the chair.

Agenda:

- 1. To discuss the feedbacks received from stake holders on curriculum
- 2. To propose the curriculum for B.Tech 2018-19 admitting batch
- 3. To revise the curriculum for B.Tech 2017-18 admitted batch
- 4. To revise the curriculum for B.Tech 2016-17 admitted batch
- 5. To propose the curriculum for M.Tech Machine Design 2018-19 admitting batch
- 6. Any other points with the permission of the DAC chairman

The following members were present:

Faculty Members:

1.	Dr. G. Diwakar	Group Head, Design Engg.
2.	Dr. K. V. Narasimha Rao	Group Head, Energy and CFD
3.	Dr. T. Babu Rao	Group Head, Manufacturing
4.	Dr. G. Yedukondalu	Group Head, Robotics & Mechatronics
5.	Mr. P. Ratna Prasad	Professor In-Charge, IQAC, Dept. of ME
6.	Mr. P. Kasi V. Rao	Professor In Charge-Academics- Dept.of ME

Student Members:

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7.	Mr. E. L. N. Rohit Madhukar (14004289)	IV/IV B.Tech.		
8.	Ms. S. Naga Lalitha Devi (14004636)	IV/IV B.Tech.		
9.	Mr. G. Vivek (14007280)	IV/IV B.Tech.		
10.	Mr. B. Chandubabu (14007522)	IV/IV B.Tech.		
11.	Mr. A. Mani Krishna (150070033)	III/IV B.Tech.		
12.	Mr. G. Raj Kumar (150070111)	III/IV B.Tech.		
13.	Mr. K. Taraka Sriram (150070177)	III/IV B.Tech.		
14.	Mr. P. Mahati Aditya (150070307)	III/IV B.Tech.		
15.	Mr. J. Kiran Datta (150070374)	III/IV B.Tech.		
16.	Mr. A. Dharmendra (160070004)	II/IV B.Tech.		
17.	Mr. S. N. Murthy (160070331)	II/IV B.Tech.		
18.	Mr. Gaya Prasad Kurmi (160070419)	II/IV B.Tech.		

The following points were discussed and resolved:

- Based on the request made by the students in separating Kinematics of Machines and Dynamics of Machines, HoD informed them that the same will be implemented for the 2017 and 2018 admitted batches.
- 2. Further it is informed to the students that two units on Vibrations will be included in the syllabus of Dynamics of Machines.

- Coding Skills for Engineers course will only by taught by the faculty of the department of Computer Science and Engineering starting from the Odd Semester of 2018 – 19 Academic Year.
- 4. HoD informed the members that students that will be placed under 'A' category will be given an opportunity to do completely project based courses and only have to take the semester end examination and has to compulsory maintain 90% attendance.
- 5. Certificate course will be offered in tie-up with the industry and it will be offered during the entire semester rather than for one week which is being done now.
- 6. OOPS course for the 2015 admitted batch will be conducted as a bridge course during the CRT classes.
- 7. It is informed to the students that their choice of the electives will be based on the outcomes of the SWEAR analysis.
- 8. Training classes for IES/GATE/GRE/IELTS and all other Competitive exams will be given by the senior faculty members who are competent.
- 9. Chairman of DAC, put forward the requests from Y13 Batch passed out student, regarding registration for additional courses, for earning additional credits citing to a shortage of credits while applying for the Master's program in *Hochschule Rosenheim*, Germany.
- 10. Hence, it is resolved that students in such cases are recommended to be given permission to register for additional courses either online (through MOOCS / Coursera etc.) or Offline at the university, giving them a chance to augment the required credit limit, on the condition that the passed-out students have not taken his Original Degrees. However, in case student has already received his provisional certificate from the university, the same may be surrendered to the university and the University Academic Council is requested to permit him/ her take up additional credits for fulfilling admission requirements for their higher studies abroad. The students of this category can submit the proofs of additional credits earned thus to the HoD / Chairman BoS and pay stipulated fee as prescribed by university for this purpose and get the additionally earned credits included in their CGPA.
- 11. Further is it also resolved that for the present students of 2015, 2014 admitted B.Tech. batch, who face such a similar situation of falling short of the required credits for applying to get admission into foreign universities (for instance, Master's in Automobile Engineering specialization in Germany) can seek permission for registering and completing the additional courses to cover the credit shortage, either through Online

- courses on MOOCS / COURSERA/ NPTEL etc.) or offline courses offered by department over and above their required courses as per their curriculum.
- 12. Faculty handling the "coding skills for engineers" course suggested offering this course as a credited course to bring the seriousness among students towards coding skills.

13. Thus DAC resolved that

- For the 2015 admitted B.Tech. batch students, the "Coding skills for Engineers" course is considered as one of the two open electives, a credited course with a course code of 15GN2205
- For the 2016 admitted B.Tech. batch students, the "Coding skills for Engineers" course is considered as one of the three open electives, a credited course with a course code of 17CS1202
- For 2017 admitted B.Tech. Mechanical Engineering students, Coding Course with Data Structures concept will be replacing the existing Data Structures course for the same number of credits (5) and another coding course to be offered as an open elective.
- 14. DAC members proposed the following Engineering Science courses for 2018-19 curriculum
 - a. Engineering Graphics
 - b. Workshop Practice
 - Mechanics and Materials-I
 - d. Introduction to Computational Thinking and Data Sciences
- 15. DAC members proposed the following core courses for 2018-19 curriculum
 - a. Measurements and Instrumentation
 - b. Thermal-Fluids Engineering-I
 - c. Thermal-Fluids Engineering-II
 - d. Mechanics and Materials-II
 - e. Dynamics and Control-I
 - f. Dynamics and Control-II
 - g. Mechanical Engineering Design
 - h. Design for Manufacturing-I
 - i. Design for Manufacturing-II
 - j. Introduction to Robotics
 - k. Finite Element Analysis of Solids and Fluids

- 1. Engineering Management
- m. Heat Transfer
- 16. DAC members approved the following Technical skill courses proposed by Group Heads for 2018-19 curriculum.
 - a. Problem Solving techniques in Design
 - b. Problem Solving techniques in Thermal
 - c. Manufacturing Technologies
 - d. Control Systems for Machines
- 17. Based on the inputs from Industry peers, DAC members approved the following skill based specializations as professional electives for 2018-19 curriculum
 - a. Design
 - b. Strategic Manufacturing
 - c. Automobile Engineering
 - d. Robotics and Mechatronics
 - e. Autotronics
 - f. Data Analytics and soft computing
- 18. The DAC members discussed and resolved to recommend the M.Tech Machine Design 2018-19 Curriculum for BOS approval.
- 19. It is resolved to approve and recommend the changes in Curriculum Structure and Syllabus of the Professional Electives, Professional Core courses for the 2017 admitted B.Tech. Mechanical Engineering students and the same are approved to be put up and implemented as it is for that of 2018 admitted B.Tech. Mechanical Engineering Students, as listed out in above minute points.
- 20. It is resolved to offer the technical skill courses and skill based professional electives proposed for 2017 and 2018 batch students to be implemented to 2015 and 2016 admitted batches also from current academic year onwards.
- 21. It is resolved to offer the following Open Electives for Y15 batch students in addition to the existing open electives
 - a. Industrial Engineering techniques
 - b. Alternate Energy Sources
 - c. Materials for Engineering Applications
- 22. It is resolved that 2017 and 2018 admitted batch students should follow the following criteria in doing certificate courses:

- Every student must undertake one certificate course in relevant modeling and assembly
 of Machine components using the softwares like Solidworks, AutoCAD-3D, Pro-E,
 CATIA, Unigraphics etc., at the level of their III or IV semester.
- Every student must undertake one certificate course on software analysis solvers like ANSYS, HyperWorks, NISA, ANSYS Fluent, LS Dyna etc., which must be selected by them according to their choice of skill development specialization sector during their V semester of study.
- Every student must undertake one certificate course on Python/Java Programming language with its application to solve various Mechanical Engineering problems during their VI semester.

• Every student must undertake one certificate course on Data Analytics/Machine learning or Internet of Things (IOT) at their VII semester of study.

(Dr. A. Srinath) Chairman – DAC Dept. of ME

Dr. A. SRINATH
PROFESSOR & HEAD
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DEPARTMENT OF MECHANICAL ENGINEERING DEPARTMENT ACADEMIC COMMITTEE MEETING MINUTES

The Department Academic Committee meeting was held from 10:00 A.M. on 08/03/2018 in the HoD Chamber, with Dr.A.Srinath, HoD-ME in the chair.

The following members were present:

Faculty:

- 1. Dr. G. Diwakar, Group Head, Design Engg.
- 2. Dr. K. V. Narasimha Rao, Group Head, Energy and CFD
- 3. Dr. T. Babu Rao, Group Head, Manufacturing
- 4. Dr. G. Yedukondalu, Group Head, Robotics & Mechatronics
- 5. Dr. Abhijeet Ganguly, Professor
- 6. Mr. P. Ratna Prasad, Asst. Professor
- 7. Mr. P. Kasi V. Rao, Professor In Charge-Academics- Dept. of ME.

Student Members:

- 8. Mr. E. L. N. Rohit Madhukar (14004289), IV/IV B. Tech.
- 9. Ms. S. Naga Lalitha Devi (14004636), IV/IV B.Tech.
- 10. Mr. G. Vivek (14007280), IV/IV B. Tech.
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- 12. Mr. A. Mani Krishna (150070033), III/IV B.Tech.
- 13. Mr. G. Raj Kumar (150070111), III/IV B.Tech.
- 14. Mr. K. Taraka Sriram (150070177), III/IV B.Tech.
- 15. Mr. P. Mahati Aditya (150070307), III/IV B.Tech.
- 16. Mr. J. Kiran Datta (150070374), III/IV B.Tech.
- 17. Mr. A. Dharmendra (160070004), II/IV B.Tech.
- 18. Mr. S. N. Murthy (160070331), II/IV B.Tech.
- 19. Mr. Gaya Prasad Kurmi (160070419), II/IV B.Tech.

The following points were discussed by the student members:

- 1. Final year student members suggested separating of the Internal Combustion Engines and Gas Turbines course into two separate courses, keeping in view the requirements for GATE.
- 2. All the Student members requested for arranging for Industrial Visits from right from II year I Semester onwards once in every semester, for better practical learning of the courses.
- 3. Final year student members requested offering of additional courses to fulfill the 180 credit requirements so that they fulfill the minimum qualifying rule, for applying for Master's program in European countries, in particular, Germany. They requested that these courses, be preferably offered offline, as they have no satisfaction about the courses, that they are right now taking for fulfilling this requirement, through MOOCS / Courseera.
- 4. Final year student members requested for conducting of GATE /GRE/ IELTS coaching within the University, by senior faculty members, and expressed their dissatisfaction about the currently ongoing coaching through Competitive Exams Cell of our university wherein some outside faculty are being called for imparting coaching who are not competent enough.

- 5. Third year student members requested for separation of Kinematics and Dynamics of Machines course into Two different courses for better understanding of the depth of the subject.
- 6. Final year student members suggested that Mechanical Vibrations be made a Professional Core course keeping in view of the good number of core companies visiting the campus for placement, and all of whom are posing main frame questions in technical rounds, from this course.
- 7. All the student members requested that Coding Skills course should be taught by the faculty members of the CSE department and not by faculty of ME dept, which will make the course effective and useful in structured way rather than offering it in a self-learning mode which is being done right now. Moreover all the student members complained that this course has no syllabus, no evaluation pattern and credits structure finalized, so far and the students are henceforth not finding this course to be included in their CGPA and thus are not taking it seriously.
- 8. Student members requested for better implementation of the Communication and Soft Skills courses rather than just making them write notes in those classes, which is right now being done in all CSS / English courses by the faculty of these courses.
- 9. Student members are in favor of continuing the present two test evaluation procedure without any choice so that they can concentrate on studying the entire syllabus rather than limiting themselves to half the syllabus when the exams are held with 50% choice.
- 10. Student members requested to have certificate courses whenever offered, spread across the entire semester in the time table rather than having them for one week at a stretch. They have also requested to offer those Software tools as certificate courses which are not associated with any course (such as LS Dyna, NASTRAN, NISA) and also to properly structure which course to take in which semester / level rather than giving the choice to the students, who without any knowledge are taking analysis related courses prior to their completing the modeling related courses.
- 11. Student members have requested for more practical oriented teaching in Manufacturing and Automobile engineering courses for better understanding of the concepts, wherein only PPTs are being used right now with some videos, whereas they expressed that if faculty who teach these courses, take them to the labs and demonstrate the course topic through a lab set up it would be understood by them much more effectively.
- 12. Student members had expressed satisfaction with the syllabus content of the labs offered under each course and only requested for proper restructuring of the experiments based on the course outcomes.
- 13. Student members also suggested elimination of writing records as well as observation notes in the lab. Instead HoD suggested them that starting from next year every lab manual will be given as a soft copy by the course coordinators through LMS so that the students need not duplicate the observation notes in the record again.
- 14. Student members also suggested that at least 10 viva questions at the end of each experiment to be included in the manuals that will be useful for them to prepare for practical exams as well as for competitive exams.
- 15. III year students expressed happiness and shared the advantages of the SWEAR analysis that was conducted over the past 2 weeks. HoD informed that the same SWEAR analysis will also be carried out for the II year students in the forthcoming week.
- 16. Students members are in favor of implementing the attainment of a certain minimum number of credits at the end of the second and third years for being eligible to register for III year and final years which puts the responsibility on the students to progress to III and IV years of B.Tech, without which the current batches of students are not taking

academics seriously and this is one of the main reasons for many students having accumulated backlogs as on date.

- 17. III Year students have requested that they did not undergo OOPS course, and for software placements in 2018-19 they will need this course knowledge, hence the HoD informed that for the III year students, OOPS course will be taught during the summer CRT training classes as it was not covered in their curriculum and which is important keeping placements in view.
- 18. HoD informed that the term paper batches are to be evaluated based on the review paper they write by referring to a minimum of 5-6 papers in their chosen specialization area.
- 19. Student members requested for an orientation program on the opportunities of being an entrepreneur and suggested introducing a course on entrepreneurship for the benefit of the students.
- 20. HoD informed to the student members that seminars, group discussions, debates, mock interviews will be organized as a part of the association activities under MESA so that the students can take advantage of these to improve their communication skills which will help them during their placement drives.
- 21. Student members requested for having weekly off days on Saturday and Sunday, rather than on Wednesday and Sunday, so that they can take training classes for competitive exams at a stretch for two days if this is implemented.
- 22. HoD informed to the student members that the DAC meeting will be held on the 2nd Wednesday of every month at 10:00 AM in the HoD's chamber and all faculty, students members must attend this meeting without fail.

(Dr. A. Srinath) Chairman – DAC Dept. of ME

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