

## Minutes of Academic Council Meeting

held on 13<sup>th</sup> February, 2016

The second meeting of Academic Council was held on 13/02/2016 in meeting hall of Government College of Engineering, Karad. Following Members were present for the meeting:

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| 1. Chairman          | : Prof. (Dr) P. M. Khodke                            |
| 2. Member            | : Prof.(Dr) S. V. Kulkarni, IIT, Bombay              |
| 3. Member            | : Prof.(Dr) D. M. Devaikar, IIT, Bombay              |
| 4. Member            | : Prof. (Dr) Shivashankar Nair, IIT, Guwahati        |
| 5. Member            | : Prof. (Dr) Vasant Matsagar, IIT, Delhi             |
| 6. Member            | : Mr. H. T. Mendhegiri, Advisor, WRD, GoM, Mumbai    |
| 7. Member            | : Mr. S.V. Gadgil, Director & CEO, BHTC, Pune        |
| 8. Member            | : Mr. Ravindra L. Soman, Asst. GM, Tata Motors, Pune |
| 9. Member            | : Prof. (Dr) Y. M. Ghugal, Head Applied Mechanics    |
| 10. Member           | : Prof. (Dr) V.R. Ghorpade, University Nominee       |
| 11. Member           | : Prof. (Dr) S.H. Sawant, University Nominee         |
| 12. Member           | : Prof. (Dr) S.S. Patil, University Nominee          |
| 13. Member           | : Prof. (Dr) S.S. Valunekar, Head, Civil Engg        |
| 14. Member           | : Prof. (Dr) S. S. Mohite, Head Mechanical Engg.     |
| 15. Member           | : Mr. P. C. Shetiye, Head, MCA                       |
| 16. Member           | : Mr. Y.D. Chavan, Head, IT                          |
| 17. Member           | : Mr. S.K. Patil, Associate Professor, Electricals   |
| 18. Member           | : Mr. S. M. Shinde, Head, Mathematics                |
| 19. Member           | : Smt. (Dr) S. S. Chougule, Head, Physics            |
| 20. Member           | : Prof. (Dr) P. M. Joshi, Member                     |
| 21. Member           | : Prof.(Dr) S. K. Hirde, Member                      |
| 22. Member           | : Prof.(Dr) R. M. Warkhedkar, Member                 |
| 23. Member           | : Prof.(Dr) M. N. Hedao, Member                      |
| 24. Member Secretary | : Mr. S. H. Pawar                                    |

The leave of absence was granted to Prof. (Dr) V. A. Sawant, Shri. Pandurang Shide, Prof (Dr) H.A. Mangalvedhekar, Mr. Anirudha Patvardhan, Dr. Salil Kulkarni, Prof. (Dr) R.N. Awale, Mr. Sandip Surywanshi, Mr. Ravindra Birajdar, Dr. Suneel Jajit.

Member Secretary welcomed all members of Academic Council and requested to Hon. Chairman Dr P. M. Khodke to offer his opening remarks. Hon. Chairman, in his opening remarks informed the house about the status of autonomy and accreditation. He has explained about the concept and type of autonomy awarded to the institute. Under autonomy, he explained the house about the governance structure. He has further informed about the different courses offered by the institute. He also informed the house about the purpose of inviting more experts from industry and academia in Academic Council. He further requested

to the house to address issues like good results but low scoring of students, lack of conceptual knowledge and communication skill, faculty upgradation, unorganized research and consultancy and improving required for industry interaction. He further made house aware about the innovative courses like General Proficiency, industry training, industry visits, min/minor projects and self study incorporated in the curriculum under autonomy.

With the permission of Hon Chairman, Member Secretary started with the agenda.

#### **Item No. 2.1**

#### **To confirm the minutes of 1<sup>st</sup> Academic Council Meeting**

Prof. (Dr) S. B. Nair suggested correction in his designation as Professor instead of Deputy Director. Mr. Gadgil enquired about action taken on the suggestion of Dr. Kulkarni about the flexibility to change the passing criteria based on average class performance. Dean Academics informed the house that appropriate clause is incorporated in ordinances where in relative grading is introduced and passing criteria, in case of poor results can be lowered down.

With above corrections, minutes of first Academic Council have been confirmed.

#### **Item No 2.2**

#### **To report actions taken on the minutes of 1<sup>st</sup> Academic Council Meeting held on 21<sup>st</sup> April 2014**

- Member Secretary presented report on action taken on the minutes of 1<sup>st</sup> Academic Council meeting held on 21<sup>st</sup> April, 2014. Mr. Gadgil appreciated for nomination of more members from academic as well as industry. He further enquired about the corrected copy of Ordinances and Regulations which were produced by Dean, Academics.
- Hon. Chairman suggested to shift sub point no. 11 from Appendix C to R-14 of PG regulations. He also instructed to replace word "appointed" by "recommended" in sub point 12 in panel of examiners.
- While deliberating on guidelines for curriculum, Mr. Soman enquired about the purpose of keeping industrial visit at second year level for MCA. Dean Academics informed the house that MCA students undertake their projects in industry at third year level. In order to make them aware about the industrial environment, the visits are kept for MCA in second year.
- Dean Academics informed the house about continuous evaluation formats and explained the contents. While appreciating the formats, Dr. Dewaikar suggested to remove typography and grammatical mistakes. Mr. Soman suggested to incorporate justification/reasons for evaluating low or high for particular experiment in separate remark column. Dr. Nair suggested to correct the range of marks for different attributes for example 0-2, 3-4, etc. Dr. Nair suggested not to disclose the evaluation of particular students to other.

students. Mr. Mendhegiri suggested to explore the possibility maintaining this assessment online. Mr. Gadgil complemented the assessment of co-scholastic attributes of students in CAS sheets. Hon. Chairman instructed to appoint the committee for revising the format. The committee shall consist of three members Dr. S.K. Hirde, Dr. R.M. Warkhedkar, Dr. P.M. Joshi.

- Dr. Nair advised to decide mechanism for checking and certifying plagiarism in the contents of dissertation/ project report. Mr. Gadgil enquired about difference between audit and credit courses which was explained by Dean, Academic. Dr. Dewaikar enquired about mechanism for fixing total number of credits MCA, M.Tech. and B.Tech. Dean Academics informed the house that total credits of other autonomous institutes including IITs were considered while deciding total credits. Dr. Matsagar enquired about evaluation system of UG and PG projects. Dean Academics informed the house that though an UG project is common for batch of five students, every individual is evaluated separately.

With above discussion and suggestions, the house approved the action taken report on the minutes of 1st Academic Council Meeting held on 21st April 2014

**Item No 2.3**

**To note award of autonomy to the institute**

House noted award of autonomy to the institute.

**Item No 2.4**

**To note the status of Accreditation by NBA**

The house noted the status of accreditation.

**Item No 2.5**

**To discuss and approve curriculum structure (revised) of all U.G. programs and MCA**

Member Secretary presented revised curriculum structure of B.Tech. and MCA programs to the house. Following suggestions were offered by the members on the structure.

**B.Tech. Civil Engineering**

- Dr. Dewaikar suggested to have two separate courses on mathematics viz. Numerical Methods and Applied Statistics. He further suggested to enlist all the electives and ensure that electives on Geotechnical, Transportation, Water Resources and GIS & Remote Sensing are incorporated.

- Dr. Matsagar suggested to change the title of the Project Planning and Management (CE 702) as-Construction Planning & Management. The possibilities of-separating of these subjects should also be explored. He further suggested to change the title of Earthquake Engineering & Structural Rehabilitation of Building Management (CE 703) by Structural Dynamics & Earthquake Engineering. The word presented presentation shall be removed from CE 710.
- Mr. Mendhegiri mentioned that the title of CE 804 Construction Practices does not reflect the probable contents. The title may be changed as per the contents.

#### B.Tech. Mechanical Engineering

- Mr. Gadgil suggested to ensure that following points are considered while detailing the curriculum.
  1. Interface with electronic control unit
  2. Human machine interface with computer
  3. PCB, Microprocessor and PLC
  4. Product Development
  5. Advance Processes
  6. Industry visit to places where NC/CNC are available in quantum
  7. Exposure to PRO-E, JAVA
  8. World renowned standards e.g. Germany standards
  9. Non conventional energy – innovations
  10. Simulation Techniques / Software
  11. More vocational training
- Mr. Soman suggested to consider following points while detailing the curriculum
  1. Introduction of Jig & Fixtures at appropriate level instead of elective
  2. Increase in Metallurgy levels
  3. Electives on industrial engineering
  4. ORT
  5. Preliminary contents of ERP can be considered elsewhere instead of one separate elective
  6. Subject on finance management

#### B.Tech. Electrical Engineering

- Dr. Kulkarni suggested following points to be considered in the revised structure of Electrical Engineering:
  1. The course EE 303 Generation and Economics is outdated. Instead Power System – I should be introduced which may contain transmission, synchronous machine etc.
  2. The course EE 508 should include ODE/PDE and Finite Element Methods.
  3. List of open electives should be prepared immediately. Also the course code EE 631 in electrical engineering structure does not sense much for electrical engineering.

4. Course title of EE 802 should be changed to computer aided design of electrical machines. It will include free ware software and commercial MATLAB software. Same suggestions for EE 805 be adopted
5. Dr Kulkarni suggested to add Sadiku book for electromagnetic.
6. The structure should contains two power electronics subjects i.e. Power Electronics I, Power Electronics II.
7. The possibilities of introduction of B.Tech. in parent discipline with minor in other discipline for high performing students may be explored.
- Dr. Matsagar suggested following points to be considered :
  1. To evolve institute level policy for providing course code for open electives.
  2. A course EE 709 should be titled as Industrial Training and contact hours of 1be removed. Also number of credits for industrial training should be checked
  3. The foot note in curriculum structure of semester VII should be verified and made proper.

#### B.Tech. Information Technology

- Dr. Nair suggested following points to be considered in the revised structure of Information Technology:
  1. While discussing on course IT 303, the traditional sequence of digital design, computer architecture and micro processor be followed and should be kept in different semester. IT 303 may be bifurcated in two subjects.
  2. The hardware subjects should be uniformly distributed in different semesters (for e.g. IT 303 and IT 305).
  3. The possibility of promoting IT 405 in 3<sup>rd</sup> semester may be considered.
  4. The "advance" word in the title should be consistently changed as "advanced" in the curriculum structure of all programs. Similarly, the word "system" should be made plural across all programs.
  5. Try to add tutorial in appropriate courses.
  6. The title of IT 703 may be changed to "Human computer interface"
  7. The department should suggest those electives depending on availability of faculty.
  8. The title of 704 may be changed to "Network Security".

#### B.Tech. Electronics and Telecommunication

- Dr. Kulkarni suggested to shift EX 505 in 3<sup>rd</sup> or 4<sup>th</sup> semester.
- Dr. Nair enquired about contents of Artificial Intelligence in electronics and IT. If the contents are same then they should have common course code. Also IT course should have lab as well.
- Dr. Ghorpade suggested to remove "and seminar" form the title of EX 609. Also 1 hr of lecture seems inappropriate.

- Dr. Kulkarni suggested to prepare prerequisite chart for all courses. It must made compulsory for all programs and may be put before next council meeting.
- Dr. Ghorpade suggested to remove "and dissertation" from title of EX 807 and also 1 hr of lecture provided.
- Dr. Nair suggested that electives be floated based on the existing faculty member's expertise in niche areas.

#### MCA

- Dr. Ghorpade enquired whether students have studied different software before taking of MC 304 Software Testing. Prof. Shetiye informed that students have studied in first year.
- Dr. Nair suggested to have embedded system as a compulsory course. Also suggested to enlist the names of Elective -I. Dr. Nair suggested to club MC 502 Artificial Intelligence and Expert system with other programs.
- Dr. Nair suggested to remove Human Computer Interface from the title of MC 514.

House resolved that wherever major corrections are necessary, the concern BoS should redraft the structure and get approved from respective members (outside experts) of Academic Council. House further resolved to authorized Chairman, Academic Council to approve the structure where minor corrections are needed after confirming that the suggestions have been incorporated.

#### Item No 2.6

##### **To discuss and approve second year curriculum contents for all B. Tech programs**

Member Secretary presented the curriculum contents for all courses of all B.Tech. programs to the house. He informed that details have been submitted by respective BoS and requested the house to offer suggestions/approval to the contents as per the program.

Suggestions common to all programs:

1. The standard formats with respect to the titles be followed including course name, program name, year and semester.
2. Course objectives and course outcomes should be revisited and corrected accordingly.
3. Articulation matrix and list of tutorials is missing in few courses.
4. In the details of few books single text book is specified. At list two text book should be specified.
5. Entire document should be process to spell check and all spelling mistakes should be corrected. It should be done by giving entire document to the DTP operator.
6. Website links should be specific. For NPTEL courses name of the faculty needs to be specified.

8. Short name in unit name and course contents shall be avoided.
9. List of tutorial should be essentially mentioned for the courses having tutorials.
10. Industrial safety and health may be considered as separate course in all programs.
11. Web link for khanacademy be added wherever relevant.
12. Dean Academic shall check template again for uniformity.
13. Majority of programs have not mentioned self study contents. They should incorporate the same as discussed in guidelines.
14. In common course Environmental Studies following corrections are to be included.
  - In CO 1 remove the word political
  - In Unit I sub point a) replace the word forest by Environment
  - In Unit I sub point f) delete solar energy, biomass energy, nuclear energy
  - In Unit V add social environment and sustainability
  - In Unit VI add Environment Impact Assessment, Green Tribunals
  - In references add various environmental acts

#### B.Tech. Civil Engineering

Course code	Page No.	Suggestions
CE 301	142	Curve fitting replaced by Regression analysis, probability distribution replaced by probability theory and formatting of unit IV
CE 302	145	Long form of S.F. and B.M. text books and reference books should be bifurcated, remove book at serial number 2 and 7. Add book Hibbler and Gupta
CE 303	149	Add rainwater harvesting and equipments
CE 304	153	Add few reference books
CE 305	156-157	Add separate unit on Total Station by merging unit IV & V. and also revise CO accordingly
CE 306	160	Revise COs and correct CO 9 as two point problem and specify the names of instrument in experiment 8, rename experiment name 10 as two point problem
CE 307	163	Shift practical no 2 in Concrete Technology, add two hinge and three hinge arch, mention bar/member in practical no. 4 and 8, add one more experiment
CE 308	165	Rename experiment 6 as Measurement of Discharge using mouthpiece
CE 401	167	Include two hinge arch, three hinge arch and cable, add reference books, correct the title Text books
CE 402	170-171	Add separate unit on Total Station and also revise CO accordingly
CE 403	176	Transfer Text Book 4 to reference book
CE 404	181	Check necessity of reference 1 and 3, correct spelling in reference 4,

		also add more reference books on Indian Geology
CE 405	183-184	Add introduction to Hydraulic Machinery, Unit V rename as Hydraulic Pump Turbine revise the contents accordingly, add website reference
CE 406	186 A-C	Add separate experiments on Total Station and also revise CO accordingly
CE 407	188	Correct the spelling as References, correct Cos sentences grammatically
CE 408	189	Add AutoDesk suite unit, number of assignment should be increased and multiple problem should be described in each assignment
CE 409	191	Check Chazy's spelling, rename experiment no. 7 and 8 as Study of a turbine and Study of centrifugal pump accordingly
CE 410	195-196	In experiment no. 6 correct proctor as Proctor, experiment no. 11 change as exercise, remove word Dr from name of author, also mention edition and year of edition

Program head should see that a common format for describing course contents particularly laboratory courses is followed.

#### B.Tech. Mechanical Engineering

Course code	Page No.	Suggestions
ME 301	200	Instead of maths it should be mathematics in course title
ME 304	210-11	Add latest processes, machinery in unit II think of adding plastic painting, plastic coating, laser etching, in V check if CNC details can be introduced. Also check whether conveyor lines and automation are included elsewhere. No. of text books are many.
ME 310	224	Add profile projector
ME 402	234-35	Remove word numerical mentioned at the end of units, remove typographical errors and unnecessary full stops. Check name of authors in text book no.2
ME 403	239	Different valves are missing, add Pump Turbine
ME 405	245	Heat treatment of casting, metallurgy and machinery missing
ME 410	258	Can we introduce special purpose machines

#### B.Tech. Electrical Engineering

Course code	Page No.	Suggestions
EE 301	261	Remove CO 1, add title of unit I as Matrix Algebra, add text books as well as reference books, maintain uniformity in writing text books
EE 303	265	Details are expected to be replaced by other course
EE 403	288	A book by P.H. Bhimra be added



EE 404	291	Add text books
EE 405	293	Unit on generation be added including renewable energy
EE 409	301	Rewrite details course contains, also add reference
EE 410	303	Instead of generic experiment list, it can be a write a program on certain concepts taught in earlier semester

### B.Tech. Information Technology

Course code	Page No.	Suggestions
IT 301	307	Instead of curve fitting it should be regression analysis, add text books
IT 302	302	Add references
IT 303	313	Change title in structure shall be changed details
IT 304	317	More text books and reference books
IT 305	319-320	Add introduction to IO, revise unit V and add Pentium organization and change the contents accordingly
IT 306	322	Revise course objectives, check CA and ESE marks, don't be generic while writing titles of the experiments
IT 307	324	Name of lab will change, CO 3 be revised
IT 308	326	Check course code and correct CO 1, format experiment 8, revise experiment 9 (replace introduction by various configuration), revise entire list of experiment in generic term
IT 401	329	O.S. should be covered before unit IV and make unit IV simple
IT 404	338	Content should not be written in the form of question.
IT 406	344	Revisit list of experiments
IT 407	347	List of submission : remove irrelevant points,
IT 408	349	Tutorials be added.

### B.Tech. Electronics and Telecommunication

Course code	Page No.	Suggestions
EX 301	90	Correct CO 6 and Outcome 6, course syllabus shall be replaced as course contents, add more text books, articulation matrix and list of tutorials be added
EX 305	102	Khanacademy be added wherever relevant
EX 306	104	Course contents should not be in the form of question.
EX 307	109	Check assessment pattern
EX 309	112	Change the title of course, Remove 1+1 in total credits and check with structure
EX 402	120	Mention IC no. in unit VI, site course name and course coordinator name in useful links

EX 403	123	Useful links missing
EX 404	129	Format references
EX 406	131	Objectives are not mentioned better remove it, two aims in experiment no. 4,
EX 407	133	Course objective and course outcomes missing, mapping and assessment pattern blank
EX 408	135	Check the title and remove first year B.Tech., assessment pattern missing
EX 409	139	Check assessment pattern.

House resolved to get approval from outside experts to circulation for major corrections. House further resolved to authorize Hon. Chairman, Academic Council to approve the contents after verifying the corrections.

#### Item No 2.7

#### To discuss and approve second year curriculum contents for Master of Computer Applications (MCA)

Member Secretary presented the curriculum contents for all courses of MCA program to the house. He informed that details have been submitted by respective BoS and requested the house to offer suggestions which are as follows.

Course code	Page No.	Suggestions
MC 301	352	Add text books, self study contents be identified in all courses
MC 303	357	Add text books
MC 305	360	List of experiments missing
MC 305, 306, 307		All three courses look alike, check course code, reorient three labs
MC 307	364	Spelling phython be corrected
MC 309	367	Real lab to be established
MC 401	369	COs and outcomes be corrected
MC 404	380	Department has to evolve plan for new courses, video conferencing can be used

House resolved to get approval from outside experts to circulation for major corrections. House further resolved to authorize Hon. Chairman, Academic Council to approve the contents after verifying the corrections.

**Item No 2.8**

**To discuss and approve revision in curriculum contents of first year B. Tech, M. Tech. Programs**

Member Secretary presented the revised curriculum contents of first year B.Tech., M.Tech. programs to the house. The suggestions of Academic Council are as follows:

Course code	Page No.	Suggestions
FE 101	389	Unit matrix be replaced by Matrix Algebra, in unit III instead of simple electric circuit ODE/PDE should be mentioned, solutions for homogeneous and non homogeneous differential equations can be optional, the faculty needs to take relevant application examples while teaching to students of different programs
CM 104	398	Total boring machine and Time & motion study be included.
FE 201	395	Numerical integration (IVP/BVP) is missing, type of partial differential equation i.e. parabolic, hyperbolic, elliptical can be added in unit V. Heat equation; wave equation can also be added. But before that check it with Maths III for electrical and mechanical

House resolved to authorize Hon. Chairman, Academic Council to approve the contents after verifying the corrections.

**Item No 2.9**

**To note students performance in the examinations during academic year 2014-15**

Member Secretary presented the performance of the students in examination during academic year 2014-15. House expressed concerned on the results TE Civil/ TE Electrical/ TE IT and the respective courses responsible for poor results. House suggested Dean Academic to do further analysis for poor results requesting concerned heads for causes and remedial actions. The outcome should be compared with course feedback and the faculty should be made accountable. The action taken report may be placed before in next meeting. With above suggestions house noted students performance in the examinations during academic year 2014-15.

**Item No 2.10**

**To note students performance in the autonomy examinations of first year B.Tech., M.Tech. and MCA during academic year 2015-16**

Member Secretary presented the performance of the students in examination in the autonomy examinations of first year B.Tech., M.Tech. and MCA during academic year 2015-16. House

expressed concerned on the results of few courses viz. FE 101, FE 103 and FE 203. House suggested Dean Academic to do further analysis for poor results requesting concerned heads for causes and remedial actions. The outcome should be compared with course feedback and the faculty should be made accountable. The action taken report may be placed before in next meeting.

With above suggestions house noted students performance in the autonomy examinations of first year B.Tech., M.Tech. and MCA during academic year 2015-16.

**Item No 2.11**

**To note report of Training & Placement cell for academic year 2014-15 and 2015-16**

Academic Council noted the report and suggested to interact to TPOs of different IITs for increasing dynamism among the students for more placement. The institute should focus on to increase number eligible students for placement. Respective department shall prepare action plan for increasing number of eligible students and report in next academic council meeting.

**Item No 2.12**

**To note faculty development programs conducted during 2014-15 and 2015-16**

The Academic Council noted faculty development programs conducted during 2014-15 and 2015-16.

**Item No 2.13**

**To discuss and approve revision in 'Ordinances' and Rules & Regulation for PG programs**

Academic Council approved revision in 'Ordinances' and Rules & Regulation for PG programs.

**Item No 2.14**

**To discuss and approve revision in Rules and Regulations for Examination and Evaluation of UG & PG Programs**

The house approved revision in Rules and Regulations for Examination and Evaluation of UG & PG Programs.

Item No 2.15

To note Academic Calendar for 2015-16

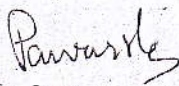
The Academic Council noted Academic Calendar for 2015-16.


Item No 2.16

Any other item with the permission of Honourable Chair

1. With permission of chair, Member Secretary presented additional item on revision in curriculum structure of first year M.Tech. of all five programs. He explained the house that a course on Research Methodology is made common in all M.Tech. programs. As the contents of the course are not relevant for few PG programs, the concerned BoS have submitted request to revise the structure. House unanimously gave permission for the same.
2. Dean Academics has informed the house that the examination pattern particularly duration is uniform for all courses. However, it was observed that students falls short of time by appearing the examination in drawing related courses. Dean Academics submitted the proposal for increasing duration of examination of drawing related to courses. House resolved to increase the duration proportionately.

Meeting concluded with vote of thanks proposed by Mr. S. H. Pawar, Member Secretary.

  
 Mr. S.H. Pawar  
 Member Secretary,

  
 Prof. (Dr) P.M. Khodke  
 Chairman

Date: 13/02/2016  
 Place: Karad