

THE NATIONAL INSTITUTE OF ENGINEERING, MYSORE

14th Academic Council Meeting

July 12, 2014 (Saturday): 11 am

Agenda
No.

Particulars

1 To read and record the meeting notice

Principal and Chairman of Academic Council Dr. G L Shekar initiated the proceedings of the meeting by invoking the blessings of gurus since July 12, 2014 was 'Guru purnima'. He welcomed the honorable members. The meeting was read and recorded.

2 To read and confirm the proceedings of the 13th Academic Council meeting held on March 8, 2014

Dr. G L Shekar read the proceedings of the 13th Academic Council meeting and appraised the members about the action taken.

- Major events at NIE since March 7, 2014
- Principal gave a brief presentation about important activities that took place at NIE after the 13th Academic Council meeting (between March 7th, 2014 to July 12th 2014). The Council members appreciated the activities. Dr. G L Shekar also briefed about the ranking of NIE as given by various magazines; also the improvement in the CET ranking of students who are getting admitted to NIE (as of first round of admission).
- Dr. Bansilal, Dean, Administration & Development, apprised the members on Outcome Based Education (OBE) and the efforts made by the Institute towards achieving the same.
- Mr. K Rajanikanth appreciated the Institute for filing patents for the first time and insisted that they be commercialized. He emphasized for offering incentives to the faculty who file the patents. The members were happy as the Institute is moving towards Outcome Based Education.

3 To consider and approve:

a. B.E. Degree

(i) Scheme of teaching and examination of 1st & 2nd semester B.E. programme (Common to all branches) to be effective from the academic year 2014-15

Approval was sought by Prof. Sukanya, HoD, Department of Chemistry and Chairman, BoS, Basic Sciences.

Dr. T R Seetharam opined that the syllabi of Mathematics course has to be modified; the importance of differential equation in physical modeling of engineering applications has to be introduced. Further, he emphasized the need for introducing the technical report writing component in the course 'Functional English'

Dr. Muralidhar Kulkarni felt that language labs could be introduced in the course of Functional English.

The agenda was **approved** with suggestions to incorporate the above.

(ii) Syllabus of 1st & 2nd semester B.E. programme (Common to all branches) to be effective from the academic year 2014-15

Approved

b Civil Engineering: UG and PG programmes

- (i) Scheme of teaching and examination of 3rd to 8th semester B.E. programme in Civil Engineering (for the batch admitted during the academic year 2013-14)

Approved; The members suggestions, however, are:

Mr. Rajanikanth felt that the stacked project should be of interdisciplinary nature so that other departments can also involve.

Dr. T R Seetharam suggested that 'Earth Quake Engineering' need to be made core instead of elective subject. He further emphasized the need for introducing at least a topic on 'system with single degree of freedom' in the course of Structural Engineering.

- (ii) Syllabus of 3rd & 4th semester B.E. programme in Civil Engineering (for the batch admitted during the academic year 2013-14)

Approved

- (iii) Syllabus of 5th & 6th semester B.E. programme in Civil Engineering (for the batch admitted during the academic year 2012-13)

Approved

- (iv) Syllabus of 7 & 8th semester B.E. programme in Civil Engineering (for the batch admitted during the academic year 2011-12)

Approved

- (v) Scheme of teaching and examination of M.Tech programme in
1) Hydraulics and 2) Structural Engineering
(to be effective from the academic year 2014-15)

Approved

- (vi) Syllabus of 1st to 4th semesters of M.Tech programme in
1) Hydraulics and 2) Structural Engineering
(to be effective from the academic year 2014-15)

Approved

c Computer Science & Engineering: UG and PG programme

- (i) Scheme of teaching and examination of 3rd to 8th semester B.E. programme in **Computer Science & Engineering** (for the batch admitted during the academic year 2013-14)

Mr. Rajanikanth stressed the need for increasing the weightage for lab component.

Dr. Muralidhar Kulkarni suggested that the course 'Introduction to Microprocessor' be renamed as 'Microprocessor' followed by a course on 'Advanced Microprocessors'.

Dr. G L Shekar insisted on introducing more number of two credit courses so as to impart more technical knowledge.

Dr. Muralidhar Kulkarni felt that the course on 'Computer Organization and Architecture' is to be split into two courses; one on Computer Organization followed by 'Computer Architecture'.

The scheme was **approved** with suggestions to incorporate the above

- (ii) Syllabus of 3rd & 4th semester B.E. programme in **Computer Science & Engineering** (for the batch admitted during the academic year 2013-14)

Mr. Ranjani Kanth felt the need of introducing 'Quality' topics in the curriculum of Computer Science Engineering.

Approved

- (iii) Syllabus of 5th & 6th semester B.E. programme in **Computer Science & Engineering** (for the batch admitted during the academic year 2012-13)

Approved

- (iv) Syllabus of 7 & 8th semester B.E. programme in **Computer Science & Engineering** (for the batch admitted during the academic year 2011-12)

Dr. G L Shekar insisted for shifting the course "Seminar" to earlier semester.

Dr. T R Seetharam opined that introduction of more number of electives on the current topics would help the students.

Approved

- (v) Scheme of teaching and examination of M.Tech programme in **Information Technology** (to be effective from the academic year 2014-15)

Approved

- (vi) Syllabus of 1st to 4th semesters of M.Tech programme in **Information Technology** (to be effective from the academic year 2014-15)

Approved

d Electronics & Communication Engineering: UG programme

- (i) Scheme of teaching and examination of 3rd to 8th semester B.E. programme in **Electronics & Communication Engineering** (for the batch admitted during the academic year 2013-14)

Dr. T R Seetharam and Dr. Muralidhar Kulkarni suggested that for those courses with lab components in their syllabi, change the course name including the lab name; Alternately, Dr. G Ravi suggested affixing a * for these courses and explicitly mentioning the lab component in the grade card.

Dr. T R Seetharam insisted that "mini project" should have only two credits and the number of credits for the same should be made uniform across all the departments. Further, he suggested that the contact hours for the project work need not be indicated.

Mr. Rajanikanth suggested that the relevant information about the Self Learning Component for all the courses should be made available to the students.

The scheme was **approved** with suggestions to incorporate the above

- (ii) Syllabus of 3rd & 4th semester B.E. programme in **Electronics & Communication Engineering** (for the batch admitted during the academic year 2013-14)

Approved

- (iii) Syllabus of 5th & 6th semester B.E. programme in **Electronics & Communication Engineering** (for the batch admitted during the academic year 2012-13)

Approved

- (iv) Syllabus of 7 & 8th semester B.E. programme in **Electronics & Communication Engineering** (for the batch admitted during the academic year 2011-12)

Approved

e Electrical & Electronics Engineering : UG and PG programme

- (i) Scheme of teaching and examination of 3rd to 8th semester B.E. programme in **Electrical & Electronics Engineering** (for the batch admitted during the academic year 2013-14)

1. Dr. T R Seetharam emphasized the need for allotting common credits to mini project, seminar and project work across all the departments.
2. Dr. Muralidhar Kulkarni suggested shifting the Seminar from 8th semester to 6th Semester; he also felt that the students be allowed to register for electives from other departments.
3. Most of the members opined that the Institute should have a common policy across all the departments to offer at least two open electives.
4. Dr. Muralidhar Kulkarni and Dr. Y S Varadarajan insisted that the credits for mini project should be two only and it should be uniform across all the departments.
5. Mr. Rajanikanth emphasized the need for introducing Project Management as a core course in all the departments.

The scheme was **approved** with suggestions to incorporate the above

- (ii) Syllabus of 3rd & 4th semester B.E. programme in **Electrical & Electronics Engineering** (for the batch admitted during the academic year 2013-14)

Approved

- (iii) Syllabus of 5th & 6th semester B.E. programme in **Electrical & Electronics Engineering** (for the batch admitted during the academic year 2012-13)

Approved

- (iv) Syllabus of 7 & 8th semester B.E. programme in **Electrical & Electronics Engineering** (for the batch admitted during the academic year 2011-12)

Approved

- (v) Scheme of teaching and examination of M.Tech programme in **1) Power Systems and 2) Computer Applications to Industrial Drives** (to be effective from the academic year 2014-15)

Dr. T R Seetharam felt that the course Dynamics of Non-linear System could be introduced as an elective to balance the curriculum.

Approved

- (vi) Syllabus of 1st to 4th semesters of M.Tech programme in **1) Power Systems and 2) Computer Applications to Industrial Drives** (to be effective from the academic year 2014-15)

Approved

f Industrial & Production Engineering : UG and PG programme

- (i) Scheme of teaching and examination of 3rd to 8th semester B.E. programme in **Industrial & Production Engineering** (for the batch admitted during the academic year 2013-14)

Dr. T R Seetharam suggested renaming the following courses.

- a. All the courses on Manufacturing Process (Three of them) to Manufacturing Processes.
- b. Fluid Mechanics & Hydraulic Machines to Fluid Mechanics & Machinery.
- c. Dynamics of Machines to Dynamics of Machinery
- d. Engineering Economics to Cost Estimation and Engineering Economics
- e. Finite Element Method to Finite Element Methods

The scheme was **approved** with suggestions to incorporate the above

- (ii) Syllabus of 3rd & 4th semester B.E. programme in **Industrial & Production Engineering** (for the batch admitted during the academic year 2013-14)

Approved

- (iii) Syllabus of 5th & 6th semester B.E. programme in **Industrial & Production Engineering** (for the batch admitted during the academic year 2012-13)

Mr. Rajanikanth felt that professional communication should be made a core course for all disciplines of engineering

Approved

- (iv) Syllabus of 7 & 8th semester B.E. programme in **Industrial & Production Engineering** (for the batch admitted during the academic year 2011-12)

- a. Mr. Rajanikanth insisted that the elective course 'Data Base Management systems (DBMS)' should be made an Institutional elective
- b. Dr. T R Seetharam felt that once the title of the course offered in different departments are same, the contents should also be the same.

Approved

- (v) Scheme of teaching and examination of M.Tech programme in **Production Engineering & Systems Technology** (to be effective from the academic year 2014-15)

- a. Dr. T R Seetharam felt that some of the core courses of PG programme could be offered as electives to UG students. Also, he suggested that Rapid Prototyping, Reverse Engineering and Value Engineering could be offered as electives.
- b. Many members felt that the course on Professional communication need not be offered for PG student.

Approved with the suggestions to incorporate the above.

- (vi) Syllabus of 1st to 4th semesters of M.Tech programme in **Production Engineering & System Technology** (to be effective from the academic year 2014-15)

Approved

g Information Science & Engineering : UG and PG programme

- (i) Scheme of teaching and examination of 3rd to 8th semester B.E. programme in **Information Science & Engineering** (for the batch admitted during the academic year 2013-14)

Mr. Rajanikanth insisted to focus more on android.

The scheme was **approved** with suggestions to incorporate the above

- (ii) Syllabus of 3rd & 4th semester B.E. programme in **Information Science & Engineering** (for the batch admitted during the academic year 2013-14)

Mr. Rajanikanth suggested that micro level security issues could be incorporated in appropriate courses.

Approved

- (iii) Syllabus of 5th & 6th semester B.E. programme in **Information Science & Engineering** (for the batch admitted during the academic year 2012-13)

Dr. Muralidhar Kulkarni suggested to introduce an elective course on 'Internet of Things (IOT)

Approved

- (iv) Syllabus of 7 & 8th semester B.E. programme in **Information Science & Engineering** (for the batch admitted during the academic year 2011-12)

Dr. Muralidhar Kulkarni felt that it will be appropriate to add a topic on 'Performance Analysis' in a relevant course

Approved

- (v) Scheme of teaching and examination of M.Tech programme in **Computer Network Engineering** (to be effective from the academic year 2014-15)

Approved

- (vi) Syllabus of 1st to 4th semesters of M.Tech programme in **Computer Network Engineering** (to be effective from the academic year 2014-15)

Approved

h Mechanical Engineering : UG and PG programme

- (i) Scheme of teaching and examination of 3rd to 8th semester B.E. programme in **Mechanical Engineering** (for the batch admitted during the academic year 2013-14)

a. Dr. T R Seetharam suggested to introduce courses on 'Refrigeration and Air Conditioning, Thermal Management of Electronic Components, Solar Energy and Wind Energy as elective courses.

b. Dr. G L Shekar felt that Statistical Quality Control is essential and important in Mechanical Engineering and suggested to introduce it as a core course.

c. Dr T R Seetharam suggested that a laboratory could be introduced based on FLUENT software having two credits.

Approved with the suggestions to incorporate the above.

- (ii) Syllabus of 3rd & 4th semester B.E. programme in **Mechanical Engineering** (for the batch admitted during the academic year 2013-14)

Approved

- (iii) Syllabus of 5th & 6th semester B.E. programme in **Mechanical Engineering** (for the batch admitted during the academic year 2012-13)

Dr. Nagaraja suggested to introduce an elective course on 'Hybrid Vehicles'

Approved with the suggestions to incorporate the above.

- (iv) Syllabus of 7 & 8th semester B.E. programme in **Mechanical Engineering** (for the batch admitted during the academic year 2011-12)

Approved

- (v) Scheme of teaching and examination of M.Tech programme in **Industrial Automation & Robotics** (to be effective from the academic year 2014-15)

Approved

- (vi) Syllabus of 1st to 4th semesters of M.Tech programme in **Industrial Automation & Robotics** (to be effective from the academic year 2014-15)

Approved

- (vii) Scheme of teaching and examination of M.Tech programme in **Machine Design** (to be effective from the academic year 2014-15)

Approved

- (viii) Syllabus of 1st to 4th semesters of M.Tech programme in **Machine Design** (to be effective from the academic year 2014-15)

Approved

- (ix) Scheme of teaching and examination of M.Tech programme in **Nano Technology** (to be effective from the academic year 2014-15)

Dr. T R Seetharam suggested introducing elective course on Micro and Nano Scale Heat Transfer.

Approved

- (x) Syllabus of 1st to 4th semesters of M.Tech programme in **Nano Technology** (to be effective from the academic year 2014-15)

Approved

i Department of PG Studies – CEA : MCA programme

- (i) Scheme of teaching and examination of 1 to 6th semesters **MCA** programme (to be effective from the academic year 2014-15)

Approved

- (ii) Syllabus of 1 to 6th semesters **MCA** programme (to be effective from the academic year 2014-15)

Approved

j. Provisional list of successful candidates for the conferment of B.E. degree (2010-14: 4th autonomous batch) in the following disciplines:

- (i) Civil Engineering
- (ii) Mechanical Engineering
- (iii) Electrical & Electronics Engineering
- (iv) Electronics & Communication Engineering
- (v) Industrial & Production Engineering
- (vi) Computer Science & Engineering
- (vii) Information Science & Engineering

Approved

k Examination results of

B.E. programme in: Civil Engineering, Mechanical Engineering, Electrical & Electronics Engineering, Electronics & Communication Engineering, Industrial & Production Engineering, Computer Science & Engineering and Information Science & Engineering

M. Tech programme in: Hydraulics, Information Technology (IT), Electrical Power Systems (EPS), Computer Applications to Industrial Drives (CAID), Production Engineering and System Technology (PEST), Industrial Automation and Robotics (IAR)M. Tech Programme

Approved

MCA Programme

Approved

l List of final semester students appearing for Make-Up Term Examination (MUTE) who may become eligible for award of degree

Approved

m To conduct Graduation Ceremony on August 23, 2014

Approved

n Calendar of academic events for the odd semester of 2014-15

Approved

o Minor modifications / amendments to Academic Regulations

Approved

p Blueprints for syllabus structure and question paper pattern to be effective from the academic year 2014–15

Approved

4

To read and record:

a Placement statistics of the year 2013-14 (2010-14 batch – 4th autonomous batch)

Read and recorded

- b** Increase in intake of B.E programme in **Civil Engineering** from 60 to 120 from the academic year 2014-15

Read and recorded

- c** Increase in intake of B.E programme in **Mechanical Engineering** from 120 to 180 from the academic year 2014-15

Read and recorded

- d** Increase in intake of B.E programme in **Electronics & Communication Engineering** from 60 to 120 from the academic year 2014-15

Read and recorded

- e** Grant of permission to start New M.Tech programme in **Nano-Technology** from the academic year 2014-2015 in the Department of Mechanical Engineering with an intake of 24

Read and recorded

- f** Grant of permission to start New M.Tech programme in **Machine Design** from the academic year 2014-2015 in the Department of Mechanical Engineering with an intake of 24

Read and recorded

- g** Academic activities / accomplishments

Read and recorded

The external member of the council appreciated the numerous academic activities and other accomplishments of various departments.

5

Any other subject

Feedback from members

Dr. Nagaraja :

- Appreciated the Institute for offering a variety of programmes catering to the need of the Industry and society.
- Emphasized the need for standardization across different departments by framing broad guide lines.
- All the Ph.D scholars should have a Institute level Doctoral Committee (DC) to monitor the progress
- Suggested to form a multidisciplinary team of faculty to solve live engineering problems.

Mr. Rajani Kanth:

- Emphasized that the courses 'Professional Communication, Project Management and Quality concepts should be a core course across all the departments.
- Suggested to focus and strengthen the facilities in the laboratories so that the students are better exposed.

Dr. Nanjunda Rao :

- Suggested to frame the curriculum of Mathematics course to suit the need of the respective departments; wherever possible, the faculty of mathematics should emphasize on the engineering applications of the topics in Mathematics that is being covered.

Dr. Muralidhar Kulkarni:

- Suggested that one mathematics course could be taught by the departmental faculty emphasizing the engineering applications of the principles of mathematics that is covered in the mathematics course.
- Advised the faculty to apply for research funding to the Department of Information Technology.
- Suggested to involve faculty from basic sciences to teach M.Tech course on Nano-Technology.
- Suggested to start two M.Tech courses: 1. Signal Processing and 2. VLSI Design in the department of E&C engineering and an interdisciplinary M.Tech course by research.
- Felt that every faculty of the Institute should be made to visit the universities abroad with whom MOUs have been signed.
- Suggested to organize one or two international conferences in a year

Dr. T R Seetharam :

- Suggested to introduce Biological Sciences in the curriculum of all Engineering disciplines.
- Suggested to make Internship compulsory for all UG students.

Dr. Srikantha Guptha:

Suggested that all the UG & PG Projects should consist of

- A progress report in the form of GANT chart
- Cost estimation
- Project Management Component.

Dr. Y.S.Varadarajan Member Secretary proposed vote of thanks.



Principal