

## भारतीय प्रौद्यौगिकी संस्थान, कानपुर INDIAN INSTITUTE OF TECHNOLOGY, KANPUR

#### कुलसचिव कार्यालय एवं सचिव शिक्षा-परिषद OFFICE OF THE REGISTRAR AND SECRETARY SENATE

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No.R/S-NAM/IITK/2010-11/112. March **31**, 2011

All Members and Special Invitees of the Senate and also to all faculty who are not members of the Senate.

Subject: Minutes of the 2010-11/4<sup>th</sup> (Special) meeting of the Senate held on 3<sup>rd</sup> March 2011 at 1530 hrs in the L-17, Lecture Hall

complex of the Institute

I am forwarding herewith a copy of the Minutes of the 2010-11/4th (Special) meeting of Senate held on 3<sup>rd</sup> March 2011 for your information and comments. Comments, if any may please be sent to the undersigned by 8<sup>th</sup> April 2011.

Registrar & Secretary, Senate

IIT Kanpur

## INDIAN INSTITUTE OF TECHNOLOGY, KANPUR



# **SENATE**

# MINUTES OF THE 2010-11/4<sup>th</sup> (SPECIAL)MEETING

**DATE**: March 3, 2011

TIME : 1530 hrs.

**VENUE**: L-17, Lecture Hall Complex,

**IIT Kanpur** 

### INDIAN INSTITUTE OF TECHNOLOGY, KANPUR

Minutes of the 2010-11/4<sup>th</sup> (Special) meeting of the Senate held on Thursday, March 3, 2011 at 1530 hrs. in L-17, Lecture Hall Complex, IIT Kanpur.

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		Programme Review Committee.							

#### **INDIAN INSTITUTE OF TECHNOLOGY, KANPUR**

Minutes of the 2010-11/4<sup>th</sup> (Special) meeting of the Senate held on Thursday, March 3, 2011 at 1530 hrs. in L-17, Lecture Hall Complex, IIT Kanpur.

Item No.1	To	consider	the	recommendations	of	the	Fifth	Academic
	Programme Review Committee.							

The Draft Minutes of the meetings of the Senate held on different dates for considering the recommendations made by the Fifth Academic Programme Review Committee were discussed and certain suggestions were made for modifying the draft Minutes. The suggestions made on the floor of the Senate have now been incorporated in the Draft Minutes and the revised Minutes are now placed at **Appendix 1** for reference and record.

#### **Approved**

Sd/-Sanjay G Dhande Director & Chairman, Senate

Dated: 31.3.2011

#### Copy to:

- 1) All members and Special Invitees of the Senate for their information, record and comment(s), if any.
- 2) All faculty, who are not members of the Senate, for their information only.

Sanjeev S Kashalkar

Registrar & Secretary Senate

# Minutes of the meetings of the Senate held on different dates for considering the recommendations made by the Fifth Academic Programme Review Committee

The Minutes summarizing the salient decisions of the Senate taken during its meetings held on 03.11.2009, 22.1.2010, 25.1.2010, 06.2.2010, 23.2.2010, 08.1.2011, 22.1.2011, 29.1.2011, 22.2.2011 and 3<sup>rd</sup> March, 2011 are placed below for consideration and record. The final APRC report incorporating the decisions of the Senate shall be printed and circulated to the Senators, as well as to the other members of the academic community. The APRC report shall also be made available on the website of the Institute in due course of time.

The Senate, while considering the detailed work presented by the Chairman of the Fifth Academic Programme Review Committee (APRC) on behalf of the Committee, appreciated the same as the report covers several significant areas of the academic concerns and curriculum related issues experienced by the Institute during the last decade, or so. The Senate in particular took note of the analysis of the present academic environment obtainable in the Institute, its strengths, weaknesses and the important suggestions pertaining to the existing academic programmes, and, after a detailed deliberation on the floor of the Senate, it has approved the following issues/points/suggestions for adoption by the Institute for the Academic Year 2011-12, and beyond. While approving the APRC report with the changes, as incorporated further, the Senate opined that with the adoption of the new academic regime, appropriate changes in the ordinances etc. relevant in this context would be necessary and that the same be proceeded with after obtaining the approval of the Senate.

The list of items, after incorporating the requisite changes consented to by the Senate, are enumerated here under.

- 1. Credit System: The recommendations of the APRC for adopting a completely Credit based academic system was approved. The proposal requiring 395 to 430 credits for graduation with a Bachelors Degree was approved. The methodology for arriving at the value of credits for any particular course based on the formula C=3L+2T+P+A was also approved. The details regarding abbreviations used and the proposed Credit System may be referred in Section 2.1 of the APRC Report.
- 2. Grading Scales: The suggestion to add a new letter grade A\* was approved. A\* would distinguish outstanding students from the rest and in such cases A\* will be provided on their Transcripts. However, in the proposed Grading Scales the Senate desired that the description of Grade 'E' should be 'Fail/Exposure' instead of 'Exposure/Repeat'. The details regarding the proposed Grading Scales may be referred in Section 2.2 of the APRC Report.
- 3. Graduation Requirements and BT BS with Distinction: The admission for a B.Tech./BS programme shall continue to be through JEE route, as hitherto. The student would be expected to collect the required number of credits for graduation in a particular programme. While approving the preceding recommendations, the Senate deliberated at length on the recommendation that it will be possible for a student to complete B.Tech./BS programme in 7 semesters (instead of 8, as at present) and approved it.

Further, the recommendation that students whose academic performance is superior, will be awarded a 'Distinction' provided they have minimum CPI >=8.5 was also approved.

The details regarding the proposed Graduation Requirements and BT/BS with Distinction may be referred in Section 2.3 of the APRC Report.

- 4. APEC Rules: The recommendations of the APRC in respect of academically deficient students {(a) those not securing at least 75% of the cumulative normal load based on 50 credits per semester will be under Warning and (b) those not securing at least 50% of the cumulative normal load will be considered for Termination of their academic programme} was approved with the proviso that Warning be replaced by Probation and that a student may drop a course up to four weeks prior to the last day of the classes with the consent of the Instructor. It is also necessary that Warning shall be issued by an Instructor of the course within 10 days after the mid semester examination to a student based on his/her performance in the course up to that time. The Instructor may also rightfully recommend for de-registration of a student in a course to the Chairperson, SUGC, by four weeks prior to the last day of the classes in a semester and shall provide sufficient data in support of the recommendation for de-registering a student. For further details regarding the proposed APEC rules, please refer Section 2.4 of the APRC Report.
- 5. Structure of Academic programmes- Overview: The Senate has accepted the details contained in the Section 2.5.1 of the APRC Report. This Section provides for percentage distribution for credit allocation to different academic programmes, collectively contributing towards grant of a Graduation Degree. The template for a Four Year Degree Programme, proposed as an example, was also approved: However, the Senate has suggested some reordering/sequencing of Physics courses (Semester-I and II) as also balancing of course load across the semesters.
- 6. B.Tech./UG projects: The Senate has accepted the details contained in the Section 2.5.2 of the APRC Report. Essentially, the APRC Report has recommended that the traditional B.Tech. Project and Undergraduate Research be made optional. However, the Senate has made a change to the extent that a committee of not less than three-members should be set up for evaluating an Undergraduate Project. In the event a Department wishes to make B.Tech. project mandatory, it may do so by appropriately allocating the Departmental Credits.
- 7. Minor: The Senate has accepted in principle the concept of a Minor, further details of which are contained in the Section 2.5.3 of the APRC Report. It provides that the UG students may opt for Minor from a Department different from their parent department or, across multiple departments/IDPs. A Minor would constitute a set of 3 to 4 courses together accounting for 24-36 credits. While considering this sub-section, the Senate has advised that a sub-committee of the Senate be constituted for ensuring that the Minors are properly and successfully implemented. Each HoD may consider nominating a faculty member for facilitating a dialogue across the Departments/IDPs so that Inter-disciplinary Minors may become feasible.

8. Double Major & Dual Degree: The Senate approved the details contained in the Sections 2.5.4 & 2.5.5 of the APRC Report.

For a *Double Major* a UG student may opt for a *Second Major* at the end of the fifth semester of the programme, provided S/he has a minimum CPI of 8.0. The programme for such a UG student will get extended by one year.

For obtaining *Dual Degree*, a B.Tech./BS student may opt for M.Tech./MS/MBA programmes. This will extend the programme by one year. The Appendix-XIII of the report provides for two possible examples pertaining to *Dual Degree* structures.

The Senate after some deliberations has made the following suggestions, namely that an option for progression of BS/BT to M.Des./Ph.D be allowed and that an Empowered Committee of the Senate may work out the details in this regard. Such an Empowered Committee should also look into the details of the procedures relevant for change of programme (Branch change). Further, the issue of *Double Major*, or *Dual Degree*, may warrant a review after a few years of operations.

- 9. B.Tech. in Engineering Science: A UG student may opt for a B.Tech. in Engineering Science which will essentially be an Inter-disciplinary degree, not limited to a single department. The APRC report suggests that such a programme will help a student to excel both in Engineering, as well as Applied Sciences. The Senate has approved 'in principle' the details in this regard, as contained in the Section 2.5.6 of the APRC Report, read together with the details in Appendix-XI. However, the Senate has not approved the proposed templates and has suggested formation of a Core Group for examining the programme in further detail. This Group/committee should also work out the core content of the programme.
- **10. (a)** The Institute has adopted the model that all admissions, through JEE, will be to four-year Baccalaureate Programmes.
  - **(b)** Engineering Science programme will be available to the students as a branch-change option only.
- 11. Examination: The Senate has accepted the details as contained in the 2.5.7 Section of the APRC Report, which provides for *only one mid-semester* examination, instead of two, as at present. Further, the duration of the examination may be of two-hours. The Senate has, however, advised that the spirit of Continuous Evaluation and process of feed back should not be allowed to be diluted.
- 12. Modular Courses: The Senate has approved the details in this regard, as contained in the Section 2.5.8 of the APRC Report which suggests that a modular course will run for half -a-semester and will have only one examination at the end of the duration. However, the Senate has made the suggestion that the SUGC be mandated to consider the course proposal. Further, it has also been suggested that splitting of courses may not be allowed. The modalities for the conduct of make up examination for a module be worked out. It was also clarified that the preceding modular course should not be a pre-requisite for the succeeding modular course.

13. Electives: The APRC report proposes for more flexibility for students through an increase in the elective component of the curriculum, with about 12% as core electives (ESO-SO), about 13-16% as open electives, and about 4-7% as departmental electives. The Committee also has recommended that the category of Science Electives (SE) be discontinued. Instead, students will take a minimum of 10 credits (one full-semester course), or a maximum of 35 credits (approx. three full-semester courses), as their Science Option (SO), as part of their elective core programme.

The above recommendations were accepted by the Senate.

14. Core programme: The APR Committee has proposed that in the compulsory core programme, students will be required to do only two Math courses and one Chemistry course. TA201 has been split into two courses – TA102 (ME) and TA 201 (MSE). A six-credit course on life sciences has been included in the core curriculum. All courses with two-hour tutorials will now have only one-hour tutorials. Due to reduction in contact hours in various core courses (such as Discussion Hour), the core load has been reduced. Further discussions on the academic programme structure may be perused in Section 2.5.1 and Appendices VI, VII, VIII, IX, X of the Report.

The above recommendations were accepted by the Senate.

- 15. HSS courses: The Senate approved the suggestion made in the APRC report to the effect that HSS courses (except those offered at Level I) will not have tutorials. One HSS slot has been added, taking the total of HSS slots to five (about 11-12% of the curriculum). Students will have to take a minimum of 20 HSS Level I credits (two full-semester courses), and a minimum of 27 HSS Level II credits (three full-semester courses).
- **16. Introduction to profession:** D0 (Introduction to Profession) has been deleted from the curriculum. Departments may choose to use one of their departmental core courses for this purpose.

The above recommendations were accepted by the Senate.

- 17. Communication skills: The recommendations are discussed in Appendix V. The above recommendations were accepted by the Senate with the suggestion that the Head, CDTE should build the required frame-work for running the communication skill course.
- 18. Class attendance: The fifth academic programme review committee recommends that 80% class attendance be made mandatory for passing a course. However, the Senate did not accept the recommendation. It was suggested that in the event an Instructor finds a student to be irregular in the class, he may issue a warning up to the first week after the mid-semester examination. If the student does not heed the warning, S/he can be deregistered from a course on the recommendation of the Instructor up to four weeks prior to the last day of the classes in a semester. However, the policy in regard to class attendance should be announced at the beginning of the semester.

- 19. Transfer of credits from outside IIT Kanpur: Up to 25% of the credits required for graduation can be collected from outside IIT Kanpur. This avenue can also be exercised to collect UG research credits from outside IIT Kanpur. Necessary approval(s) from various bodies are required for such a transfer. The recommendations, as above were accepted by the Senate.
- **20.** Class size: The Senate concurred with the suggestion that the maximum of a class size should be approximately 500. Further, the Senate also agreed to the suggestion that in the case of a course that contributes towards a Minor, the lower cap on the Class size should not be smaller than 1/5 of the batch size. Similarly, the lower cap for ESO courses should not be smaller than 1/4<sup>th</sup> of the batch size.
- 21. Some of the other suggestions made in the APRC Report were approved by the Senate as per following details:
  - (a) Only one tutorial per week is recommended.
  - (b) Duration of each lecture will be of 50 minutes.
  - (c) The concept of supplementary examination is against the spirit of continuous evaluation and therefore should not be provided for.
  - (d) As regards slow pace programme the Senate felt that it should be continued, though the present form requires some changes and for this a Committee of the Senate may be formed for reviewing the present model, and for recommending a modified proposal.
- 22. The Senate also decided that:
  - (i) A time table Committee need be appointed for working out the details pursuant to the adoption of APRC report.
  - (ii) All the relevant changes in the Ordinances are to be brought to Senate for further consideration and approval.

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