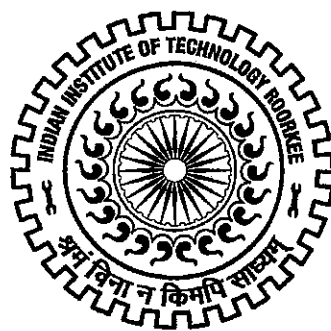


सीनेट की चतुर्थ बैठक का कार्यवृत्त
MINUTES OF THE 4th MEETING OF THE SENATE

18/24.09.2002



भारतीय प्रौद्योगिकी संस्थान रूड़की
रूड़की - 247 667 (भारत)

INDIAN INSTITUTE OF TECHNOLOGY, ROORKEE
ROORKEE-247 667 (INDIA)

INDIAN INSTITUTE OF TECHNOLOGY, ROORKEE
ROORKEE – 247 667

No. IITR/MS/4th -Senate/(9/2002)/124(i)

Dated 21st Nov.,2002

All Members of the Senate
Indian Institute of Technology, Roorkee

Subject: **Minutes of the 4th Meeting of the Senate held on 18th /24th September 2002 in the Senate Hall.**

Dear Sir,

Enclosed herewith please find a copy of the Minutes of the 4th meeting of the Senate held on 18th /24th September 2002 in the Senate Hall, for your kind perusal. Your comments, if any, on the minutes, may please be sent within 15 days.

Encl: as above

Yours faithfully,



(A.K.Srivastava)
Lt. Col. (Retd)
Registrar

Minutes of the 4th Meeting of the Senate held on 18th September 2002 at 11.00 A.M. and the adjourned meeting held on 24th September 2002 at 3.00 P.M. in the Senate Hall

The following were present:

1. Prof. Prem Vrat, Director Chairman
2. Prof. K.G.Ranga Raju (24.09.2002)
3. Prof. Najamuddin (18.09.2002)
4. Prof. R. Sankar
5. Prof. S. D. Bhattacharya
6. Prof. S. C. Gupta
7. Prof. I. M. Mishra
8. Prof. B. K. Mohanty
9. Prof. A. K. Jain, Chemistry Deptt.
10. Prof. G. Bhattacharjee
11. Prof. R. N. Goyal
12. Prof. Ravi Bhushan (18.09.2002)
13. Prof. A. N. Garg
14. Prof. Kamaluddin (18.09.2002)
15. Prof. V. K. Gupta
16. Prof. Anil Kumar (24.09.2002)
17. Prof. (Mrs) Mala Nath
18. Prof. P.C. Jain
19. Prof. Krishan Kumar (24.09.2002)
20. Prof. A. K. Mathur (18.09.2002)
21. Prof. H. C. Mehndiratta
22. Prof. Arvind Kumar
23. Prof. N.Puri (24.09.2002)
24. Prof. K.K.Singh (24.09.2002)
25. Prof. S.S.Jain (24.09.2002)
26. Prof. Deepak Kashyap (24.09.2002)
27. Prof. P. K. Jain (18.09.2002)
28. Prof. R. M. Vasan (18.09.2002)
29. Prof. S. K. Thakkar
30. Prof. M.K.Gupta (24.09.2002)
31. Prof. S. Basu
32. Prof. D. K. Paul
33. Prof. G.I.Prajapati (24.09.2002)
34. Prof. V. H. Joshi
35. Prof. Ashwani Kumar
36. Prof. H. R. Wason
37. Prof. B. Prakash
38. Prof. H. Sinvhal
39. Prof. A. K. Aswasthi
40. Prof. H. K. Verma
41. Prof. H. O. Gupta
42. Prof. R. P. Agarwal

43. Prof. R. Mitra (18.09.2002)
44. Prof. D. K. Mehra
45. Prof. R. C. Joshi (18.09.2002)
46. Prof. A. K. Sarje (18.09.2002)
47. Prof. (Mrs.) Kum Kum Garg
48. Prof. N. K. Agarwal (18.09.2002)
49. Prof. S. N. Sinha
50. Prof. B. Sinha (18.09.2002)
51. Prof. B. S. Mathur (18.09.2002)
52. Prof. D. K. Srivastava
53. Prof. D.C.Singhal (24.09.2002)
54. Prof. Ranvir Singh (18.09.2002)
55. Prof. N. K. Goel
56. Prof. Sabiruddin
57. Prof. Pashupati Jha
58. Prof. D. K. Nauriyal
59. Prof. Asha Kapoor
60. Prof. (Mrs) Renu Rastogi
61. Prof. N.J.Rao (24.09.2002)
62. Prof. M. C. Bansal
63. Prof. A. K. Singh
64. Prof. J. S. Upadhyay
65. Prof. V.K.Nangia (24.09.2002)
66. Prof. H. G. Sharma
67. Prof. A. P. Gupta (18.09.2002)
68. Prof. U. S. Gupta (18.09.2002)
69. Prof. G. S. Srivastava
70. Prof. (Mrs) R. R. Bhargava (18.09.2002)
71. Prof. S. P. Sharma
72. Prof. T. R. Gulati (18.09.2002)
73. Prof. (Mrs) Rama Bhargava (18.09.2002)
74. Prof. R. C. Mittal (18.09.2002)
75. Prof. J. S. Saini
76. Prof. H.S.Shan (24.09.2002)
77. Prof. S. C. Jain
78. Prof. S.C.Solanki (24.09.2002)
79. Prof. M.L.Kapoor (24.09.2002)
80. Prof. T. K. Bhattacharya (18.09.2002)
81. Prof. Satya Prakash
82. Prof. R.D. Agarwal (18.09.2002)
83. Prof. S. Ray (18.09.2002)
84. Prof. Ishwar Singh (18.09.2002)
85. Prof. S.auluck (24.09.2002)
86. Prof. Jagdish Rai (18.09.2002)
87. Prof. Rajesh Srivastava
88. Prof. G. S. Singh
89. Prof. Vir Singh
90. Prof. Gopal Chauhan

91. Prof. Devadutta Das
92. Prof. U. C. Chaube
93. Prof. G. C. Mishra (18.09.2002)
94. Prof. Nayan Sharma (18.09.2002)
95. Prof. Ram Pal Singh (18.09.2002)
96. Prof. Kuldip Singh (18.09.2002)
97. Prof. S. C. Handa (18.09.2002)
98. Prof. M. P. Jain (18.09.2002)
99. Prof. S. R. Bhatt, Delhi University, Delhi (18.09.2002)
100. Mr. Arun Kumar, Head, AHEC
101. Dr. V.P.Singh (24.09.2002)
102. Dr. R. P. Singh, Head, Biotechnology (18.09.2002)
103. Mr. Yogendra Singh, Librarian (18.09.2002)
104. Dr. Rashmi Gaur
105. Dr. Vijaya Agarwal (18.09.2002)
106. Lt.Col. (Retd.) A.K.Srivastava, Registrar Secretary

The Senate recorded the apologies received from the following members for not attending the meeting on the date mentioned against each:-

1. Prof. M. K. Vasantha, Department of Electrical Engineering (18.09.2002)
2. Prof. Anil Kumar, Department of Chemistry (18.09.2002)
3. Prof. S. S. Jain, Department of Civil Engineering. (18.09.2002)
4. Prof. Padam Kumar, Department of Electronics & Computer Engineering (18.09.2002)
5. Prof. (Mrs.) Renu Bhargava, , Department of Civil Engineering (18.09.2002)
6. Prof. A. K. Pant, Department of Electrical Engineering (18.09.2002)
7. Prof. N. J. Rao, Department of Paper Technology, Saharanpur (18.09.2002)
8. Prof. Ravi Bhushan, Chemistry Department (24.09.2002)
9. Prof. M. P. Jain, Professor, Training & Placement and Industrial Liaison (24.09.2002)
10. Prof. R. C. Mittal, Mathematics Department (24.09.2002)

Proceedings on 18.9.2002

The Chairman (Director) welcomed the members to the 4th meeting of the Senate and extended a warm welcome to the external member Prof. S. R. Bhatt, Delhi University, and expressed his gratitude for his guidance and contribution to the proceedings of the meetings.

Some members raised the matter of the agenda not reaching in time, and it was ruled that the agenda should reach the members well in time to enable them to come prepared for the meeting. It was also ruled that henceforth, the agenda should be printed on both sides of the paper to effect economy.

4.1.0 To confirm the minutes of the 3rd meeting of the Senate held on 20th June 2002

The minutes of the 3rd meeting of the Senate held on 20th June 2002 were confirmed.

4.2.1 To receive a report on the actions taken to implement the decisions taken by the Senate in its 3rd meeting held on 20th June 2002

Noted with the following clarifications:

Item No. 3.3.6 The name of Prof. N. J. Rao, Department of Paper Technology, Saharanpur Campus be added in the committee constituted to suggest the equivalence of similar Diplomas from other institutions with our Diploma (post- B.Sc. 2 years)

Item No. 3.3.15 & 10.3.16 The contradictions in item No. 3.3.15 and 3.3.16, if any, be examined by Board (SRIC).

Further, it was desired that action pending on the minutes of the previous meetings should also be included in the agenda of the forthcoming meetings.

4.2.2 To receive a report from the Chairman, JEE-2002, IITR on the participation of IITR in the conduct of JEE-2002.

Noted. Prof. Harsh Sinvhal, Chairman JEE-2002 was felicitated by the Senators for excellent conduct of the Examination.

ITEMS FOR CONSIDERATION:

4.3.1 Considered the Regulations for Postgraduate Programmes as drafted by Prof. I. M. Mishra's Committee.

Prof. A.K.Awasthi, Dean PGS&R informed the senate that the proposed regulations have been drafted by Prof. I. M. Mishra's Committee taking into account the regulations of the erstwhile University of Roorkee and other IITs. He also briefed the house about the salient features of the Regulations proposed in the draft.

The senate after deliberation decided that the draft regulations as given in the Agenda Note be reviewed in a joint meeting of the Committees constituted for drafting the regulations for the UG & PG Programmes with the Deans UGS & PGS&R, in light of the discussions held in the meeting of the Senate. The members of the Senate were asked to send their suggestions, if any, to the PG Programmes Committee regarding the discrepancies,

inconsistencies, additions, deletions etc. within a period of one week from the date of the meeting of the Senate. The Director & Chairman of Senate was authorized to consider the final draft of the regulations for both the programmes and approve them on behalf of the Senate. The action so taken be reported to the Senate at its next meeting.

4.3.2 Considered the Regulations for Undergraduate Programmes as proposed by Prof. S. Ray's Committee.

Prof. S.C.Jain, Dean UGS informed the senate that the proposed Regulations have been drafted by Prof. S. Ray's Committee taking into account the regulations followed in similar institutions and the other IITs. He also briefed the house about the salient features of the proposed Regulations.

The senate after deliberation decided that the draft regulations as given in the Agenda Note be reviewed in a joint meeting of the Committees constituted for drafting regulations for the UG & PG Programmes with the Deans UGS & PGS&R, in light of the discussions held in the meeting of the Senate. The members of the Senate were asked to send their suggestions, if any to the UG Programmes Committee regarding the discrepancies, inconsistencies, additions, deletions etc. within a period of one week from the date of the meeting of the Senate. The Committee may incorporate the suggestions received from members and if need be the final draft may be considered in the BUGS again and/ or placed before the Director & Chairman of Senate who was authorized to consider the final draft of the regulations for both the programmes and approve them on behalf of the Senate. The action so taken be reported to the Senate at its next meeting.

4.3.3 Considered the revised proposal received from the Department of Chemical Engg. to start a Modular M.Tech. (Process Integration) programme for industry sponsored candidates in terms of Senate Resolution No. 2.3.38 dated 13.3.2002.

Prof. A.K.Awasthi, Dean PGS&R stated that revised proposals to start a Modular M.Tech. (Process Integration) programme for industry sponsored candidates were deliberated and passed by the Board for PGS&R. He further briefed the house about some salient features of the programme. After protracted discussion and some minor changes, the Senate **RESOLVED** that the proposal to start a modular M.Tech. (Process Integration) programme for industry sponsored candidates as given in the Agenda Note be approved with the following observations and placed before the Board of Governors:

- (1) The Modus-operandi of the amount of fee and its collection, distribution amongst IIT, Roorkee, UMIST and EIL be worked out by a Committee of the Institute and EIL to be appointed by the Chairman, Senate.

- (2) The tri-partite M.O.U. be prepared by the same Committee, in consultation with Professor- in- charge Planning.

4.3.7 Considered proposals for starting new Masters Degree Programmes (Two years duration) and phasing out of some of the existing PG programmes in various Departments:

After due deliberation the Senate **RESOLVED** that as considered and recommended by the Board, PGS&R in its meeting held on 11th Sept. 2002, the proposals for starting the following new Masters Degree Programmes (two years duration) and phasing out of some existing PG programmes, be approved with certain observations and placed before the Board of Governors. The new courses will be effective from the session as indicated against each of them in the respective Appendices. :

1. New PG Programmes (details as per Appendix – A)

(a) Mechanical and Industrial Engineering Department

(i) CAD, CAM & Robotics

(b) Department of Hydrology

(i) Environmental Hydrology

(c) Earth Sciences Department

(i) Exploration Geology

(ii) Exploration Geophysics

(d) Physics Department

(i) Atmospheric Sciences

(e) Chemistry Department

(i) Advanced Chemical Analysis

(f) Metallurgy & Materials Engineering Department

(i) Corrosion Engineering

2. Phased out PG Programmes (details as per Appendix –B)

A. Earthquake Engineering Department

(i) PG Diploma in Earthquake Engineering

(ii) PG Diploma in Earthquake Technology

B. Chemistry Department

(i) M. Phil. (Industrial Methods of Chemical Analysis)

OBSERVATIONS:

1. Resources in respect of hostels and infrastructure requirements be examined, if not already done.
2. All energy related M.Tech. Programmes be re-analysed and an interdisciplinary programme may be started.
3. Detailed schemes of teaching and course structure of all the new programmes be placed before the Senate for approval.
4. The M.Phil (Applied Mathematics) programme may continue provided that if the programme is not run during the session 2003-04, the same should be phased out or replaced by M.Tech. (Mathematics).

4.3.8 Considered the proposals for an increase in the intake in M.Tech./ M.Sc. Programmes run by A.H.E.C., Earthquake Engg., Hydrology, E&CE & Earth Sciences Deptts.

RESOLVED that as considered and recommended by the Board for PGS&R in its meeting held on 11th September 2002, the proposals to increase the intake in M.Tech./ M.Sc. Programme run by A.H.E.C., Earthquake Engg., Hydrology, E&CE & Earth Sciences Deptts and renaming the specializations i.e. "Microwave & Radar" to "**RF and Microwave Engineering**" "Solid State Electronics" to "**Semi Conductor Devices and VLSI Technology**" and diversification of M.Tech CSE to **M.Tech. (CST) & M.Tech. (IT)** respectively, as per **Appendix 'C'**, be approved and placed before the Board of Governors. The enhancement in intake will be effective from the session 2003-2004.

4.3.14 Considered the recommendations dated 10th September 2002 of the Board of Undergraduate Studies with regard to enhancement of student intake in various UG Programmes:

After some discussion the Senate **RESOLVED** that as considered and recommended by the Board, UGS in its meeting held on 10th Sept. 2002, the enhancement of student intake in various UG programmes as given in **Appendix 'D'** be approved with some minor changes and placed before the Board of Governors. The enhancement of student intake in various UG programmes will be effective from the session 2003-2004.

The Senate **FURTHER RESOLVED** that enhancement (if any) desired by the respective departments be considered later for subsequent academic sessions.

Thereafter, due to paucity of time, the Chairman adjourned the meeting for 24th September 2002.

Proceedings on 24.9.2002

4.3.4 To Consider equivalence of Masters' Degree in Sciences, Arts, Computer Applications etc. vis-à-vis M.Tech. degree.

This item was postponed.

4.3.5 To consider the award of Institutional Assistantship to candidates already admitted to Ph.D. programmes, without assistantship.

This item was postponed.

4.3.6 To consider the proposal of Hum. & Social Sciences Department to run Pre Ph.D. courses in Economics and English in the department.

This item was postponed.

4.3.9 Considered academic requirements for admission to Ph.D. programmes in the Hydrology Department.

After due deliberation, the Senate **RESOLVED** that as recommended by the Board, PGS&R in its meeting held on 11th September 2002, the academic requirements for admission to the Ph.D. programme in Hydrology Department be approved as follows:

- (a) Master's degree in Civil Engg./Water Resources Development/ Hydrology.
- (b) Master's Degree in Agricultural Engg./ Environmental Engg./ Instrumentation/ Water Use Management.
- (c) M.Sc./ M.Tech. in Geology/ Geophysics/ Soil Science/ Forestry or Natural Resources/ Chemistry/ Meteorology/ Atmospheric Physics/ Mathematics/ Nuclear Physics/ M.Sc. Hydrology with Mathematics at Bachelor's level.

4.3.10 Considered the Draft Rules for Sponsored Research Projects as recommended by Board for SRIC in its meeting held on 29th July, 2002:

During the course of discussion on the Draft Rules for Sponsored Research Projects, some members of the Senate pointed out some discrepancies, omissions, additions, etc. and also made some suggestions for incorporation. After lengthy discussion on the issue, the Senate **RESOLVED** that the suggestions sent by the members be discussed in the next meeting of the Board for SRIC and re-drafted Rules be placed before the Chairman to be approved on behalf of the Senate.

4.3.11 Considered the recommendations dated September 10, 2002 of the Board of Undergraduate Studies with regard to the syllabi etc. for various courses in the Department of Humanities & Social Sciences and Mathematics.

After discussion, the Senate **RESOLVED** that as recommended by the Board for Undergraduate Studies, the following syllabi etc. for various courses in the Department of Humanities & Social Sciences and Mathematics be approved with some observations:

(a) Humanities & Social Sciences Department:

Sl. No.	Subject Code	Name	Credits	Semester
1.	IHS-31	Applied Hindi	04	Autumn/Spring
2.	IHS-32	Elementary Hindi	04	Autumn
3.	IHS-33	Kavya Parichaya	04	Autumn
4.	IHS-41	Sociology of Development	04	Autumn/Spring
5.	IHS-22	Introduction to Philosophy	04	Autumn/Spring

- (i) The above five courses be approved in addition to the existing electives.
- (ii) A fresh proposal providing for a maximum of 12 credits in Humanities including Core Courses and Electives be placed before the Senate by Dean UGS in its next meeting .
- (iii) The detailed syllabi are as given in the Agenda Note.

(b) Mathematics Department

Sl. No.	Subject Code	Name	Credits	Semester
1.	MA-201A	Numerical Methods and Auto CAD	04	Autumn
2.	IMA-01	Mechanics	04	Autumn/Spring
3.	IMA-03	Mathematical Methods	04	Autumn/Spring
4.	IMA-06	Operations Research	04	Autumn
5.	IMA-07	Optimization Techniques	04	Spring
6.	IMA-09	Graph Theory	04	Autumn/Spring
7.	IMA-10	Discrete Mathematical Structure	04	Autumn/Spring
8.	IMA-11	Complex Variable & Transforms	04	Autumn/Spring
9.	IMA-14	Mathematical Modelling	04	Autumn/Spring
10.	IMA-15	Fuzzy Sets and Fuzzy Systems	04	Autumn/Spring
11.	IMA-16	Applied Linear Algebra	04	Autumn/Spring
12.	IMA-17	Computer Graphics	04	Autumn/Spring
13.	IMA-18	Finite Element Methods	04	Autumn/Spring

14.	IMA-20	Robotics and Control Theory	04	Autumn/Spring
15.	IMA-21	Mathematical Control Theory	04	Autumn/Spring
16.	MA-101	Mathematics-I	04	Autumn
17.	MA-102	Mathematics-II	04	Spring
18.	MA-201	Mathematics-III	04	Autumn
19.	MA-204	Mathematics-IV	04	Autumn/Spring
20.	IC-201	Numerical Methods	04	Autumn/Spring

The detailed syllabi are as given in the Agenda Note.

4.3.12 Considered the syllabi of preparatory courses for admission of SC/ST students to Undergraduate courses:

RESOLVED that as recommended by Board for UGS in its meeting held on 12th September 2002, the syllabi of preparatory courses for SC/ST students for admission in Undergraduate programmes as given in the Agenda Note, be approved.

4.3.13 Considered the recommendations of the Board of Undergraduate Studies with regard to introduction of new courses at UG/PG levels:

- (a) Prof. S.C.Jain, Dean UGS briefed the senate about the introduction of the Dual Degree programmes (05 years) and highlighted the salient features. After extensive deliberation, the Senate **RESOLVED** that as recommended by the BUGS, the following Dual Degree Programmes (05 years) be approved from the session 2003-2004, and the matter be placed before the Board of Governors for specific approval.

Department	Programme		Approved intake (M.Tech)
	Main Discipline (B.Tech.)	Specialisation (M.Tech.)	
Chemical Engg.	Chemical Engineering	Hydrocarbon Engineering	15
E. & C.E.	Electronics & Communication Engineering	Wireless Communication	10
	Computer Science & Engineering	Information Technology	15
		Total	40

- (b) Prof. S.C.Jain, Dean UGS briefed the senate about starting the integrated M.Sc. programmes (05 years). After deliberation, the Senate resolved that the recommendations of BUGS regarding these programmes be considered later, after creation of adequate infrastructure at the Institute level i.e. hostels, mess etc. and departmental level i.e. faculty, lecture rooms, laboratory facility etc.

- (c) BUGS recommendation for renaming the B.Tech. degree being offered in Industrial Engineering to B.Tech. (Production and Industrial Engineering from the session 2003-2004 was considered and approved.
- (d) Senate considered the recommendations of BUGS for starting a new B.Tech. programme in Instrumentation and Control. After extensive deliberation the need to start such programme was felt and decided that a final proposal from the participating departments namely Electrical Engineering, Chemical Engineering, Mechanical & Industrial Engineering and Electronics & Computer Engineering and any other identified, is to be submitted for approval.

4.3.15 Considered the panel of experts to act as Nominees of the Senate for faculty selection of WRDTC and Humanities & Social Sciences:

After due deliberation, the Senate RESOLVED as under:

1. Additional names be added by WRDTC in the field of Hydraulic Structures from the list of Civil Engineering Department.
2. The Department of Humanities & Social Sciences may consider adding persons to the list from the IITs / I.I.Sc./TISS/ IIMs.

The Chairman was authorised to approve the same on behalf of the Senate.

4.3.16 Considered award of degrees/ diplomas to the students who have qualified for the award of degrees/ diplomas in various disciplines/ courses.

RESOLVED that the award of degrees/ diplomas to the students who have qualified for the award of degrees/ diplomas in various disciplines/ courses be approved as under:

Sl. No.	Name of the Degree /Diploma	Number of Degrees
1.	B.Tech. / B.Arch.	388
2.	M.Tech. /M.Arch. / MURP/M.Sc./ MCA/MBA/M. Phil./P.G. Diploma	572
3.	Institute Diploma	10
	Total	970

FURTHER RESOLVED that the Chairman of the Senate be authorised to approve award of degrees/ diplomas to such candidates, whose results may be declared after the meeting of the Senate.

4.3.17 Considered the revised proposals to start a new M.Tech. (Industrial Safety and Hazard Management) Programme:

This item was postponed.

4.3.18 Considered the medals/ prizes to be awarded to students for their academic/ over all excellence:

RESOLVED that the following medals/ prizes to be awarded to students for their academic/ over all excellence to fall in line with the IITs be approved:

President's Gold Medal

To be awarded to the student who obtains the highest marks/CGPA among all students obtaining a B.Tech. degree in that year from the 4/5-year B.Tech./B.Arch., 5-year Integrated M.Tech. and 5-year Dual-Degree programmes. For the purpose of this award, the marks/CGPA for the 4-year programme students will be computed without including the Major Project grades, while those for the dual-degree students will be based on the UG credits. In case there is a tie, the medal will be awarded to the student with the largest earned credits.

Director's Gold Medal

To be awarded to a student who is adjudged as the best all-rounder from amongst the graduating students of the 4/5-year B.Tech./B.Arch., 5-year Integrated M.Tech. and 5-year Dual-Degree programmes.

Institute Gold Medal

To be awarded to a student securing a CGPA of 10, other than the one who has been awarded the President's Gold Medal.

Institute Silver Medal (One for each UG/dual degree programme)

To be awarded to a student (one in each programme) who obtains the highest marks/CGPA among the graduating class of undergraduate students of the Institute, in his/her programme. A separate (additional) Institute Silver Medal, will be awarded for each Dual-Degree programme to a student who obtains the highest marks/CGPA amongst the graduating students of that programme. For the purpose of this award, the marks/CGPA will be calculated on the basis of the cumulative performance in both B.Tech./ B.Arch. and M.Tech. credits. In case there is a tie, the medal is awarded to the student with the largest earned credits. No Silver Medal will be awarded in the discipline from which a student gets the President's Gold Medal & Institute Gold Medal. A minimum marks/CGPA of 8.5 or its equivalent is required for award of the

Institute Silver Medal; in case no graduating student satisfies this criterion, the student with the highest marks/CGPA will be given a certificate.

The Trust Prizes/Medals will continue to be awarded as hithertofore.

4.3.19 Considered the formats for degrees/ diplomas to be awarded from the year 2002 onwards :

RESOLVED that the formats for degrees/ diplomas to be awarded from the year 2002 onwards as given in the Agenda Note, be approved with the following provision:

- (a) No visible security marks should appear on the degree/diploma formats.
- (b) Inclusion of the Roorkee Lion watermark to be considered by Prof. S.P.Gupta's Committee.
- (c) Seal should be fixed on the South-East corner of the degree/diploma formats.

4.3.20 Considered the award of Doctor of Social Sciences (Honoris Causa) to be conferred on Dr. Amartya Sen (Nobel Laureate), on the occasion of the 2nd Annual Convocation on 24th November 2002:

RESOLVED that the Degree of Doctor of Social Sciences (Honoris Causa) to be conferred on Dr. Amartya Sen (Nobel Laureate) be approved.

4.3.21 Considered the admission for Postgraduate Programmes (Engineering) based on the GATE Score:

RESOLVED that the admission for Postgraduate Programmes (Engineering) based on the GATE Score only be approved in line with other IITs and MHRDs mandate, with the proviso that minimum 75% GATE score should be specified for Unreserved (UR) candidates and 50% GATE score should be specified for SC/ST candidates.

FURTHER RESOLVED that for Postgraduate (Sciences) programmes, an entrance examination be continued on all India basis. Further, the modalities for holding a common entrance examination for all the IITs be worked out in consultation with the other Institutes as per PG Board's recommendations.

REPORTING ITEMS:

- 4.4.1** Reported that the Director on the recommendations of the Prof. & Head of Mathematics Department has approved the following Pre Ph.D. courses to be given to Ph.D. candidates from the session 2002-2003.

MA-901: REAL AND COMPLEX ANALYSIS (COMPULSORY) 4 Credits

MA-902: ADVANCED NUMERICAL ANALYSIS (OPTIONAL) 4 Credits

MA-903: ORDINARY & PARTIAL DIFFERENTIAL EQUATIONS
(COMPULSORY) 4 Credits

MA-904: APPROXIMATION THEORY (OPTIONAL) 4 Credits

- 4.4.2** Reported that the Director on the recommendations of Prof. & Head of Humanities and Social Sciences Deptt. has approved the following Pre Ph.D. courses in Psychology to be given to Ph.D. candidates from the session 2002-2003:

HS-901	Research Methods in Psychology	(3 Credits)
HS-902	Understanding Personality	(4 Credits)
HS-903	Advance Course in Social Psychology	(3 Credits)
HS-904	Understanding Organizational Behaviour Theory & Research.	(3 Credits)
HS-905	Seminar (Psychology)	(3 Credits)

- 4.4.3** Reported that the Executive Committee of the Senate in its meeting held on 16.7.2002 has approved the recommendations of the 4-semester Committee regarding the conversion of marks into grades for the students who have failed in a class under the old scheme of teaching.

Noted.

4.4.4 Reported that the Director has approved the Viva-Voce Examination reports for the award of Ph.D. degree in respect of the following Research Scholars:

Sl. No.	Name of the candidate	Department	
1.	Abbas Tali Al-Judi	Biotechnology	Genetic and Symbiotic Studies on Purine Auxotrophs of <i>Sinorhizobium meliloti</i> .
2.	Kavita Shakti Swaroop Rattan (Ms)	Biotechnology	Studies on Cytochrome P-450 Dependent Detoxification of Xenobiotics in Bacteria.
3.	Yisaye Kindie Adem	Chemical Engineering	Heat Transfer in Agitated Newtonian and Non-Newtonian Liquids.
4.	Chandrajit Balomajumder	Chemical Engineering	Studies on Modelling of High Pressure Polyethylene Reactor.
5.	Prakash Balawantrao Gangavati	Chemical Engineering	Biomass Characterization and Gasification in a Fluidized Bed.
6.	Preeti Babbar (Ms)	Chemistry	Synthetic, Structural and Catalytic Studies on Co and Cu Complexes with Pyrazolylborates.
7.	Sujata Sahoo (Ms)	Chemistry	Studies on Graft Copolymerization on Cellulose from the Binary Mixtures of the Vinyl Monomers.
8.	Jayanta Pathak	Civil Engineering	Generation of Design Earthquake and Damage Detection Using Ann.
9.	Gopal Prasad Juyal	Civil Engineering	Scour around Permeable Spurs
10.	Lakshmy Parameswaran (Ms)	Civil Engineering	Analysis of Wind Induced Oscillations in Cable Stayed Bridges.
11.	Manoj Kumar Jain	Civil Engineering	Distributed Modelling of Run Off and Sediment Yield Using Remote Sensing and GIS.
12.	Mayank Dave	E & C Engg.	Quality of Service Management in ATM Networks.
13.	Rajoo Pandey	E & C Engg.	Blind Equalization and Source Separation Using Neural Networks.
14.	Kamelsh Chandra	Met. & Materials Engg.	Design and Development of Fe-P Based Powder Metallurgical Magnetic Materials.
15.	Mathew Kutty Jose	Earth Sciences	Simulation of Flow in Multilayered Aquifer System with and without Discontinuity.
16.	Anjana Rani Gupta (Ms)	Paper Technology	Mathematical Modelling and Analysis of Pulp Washing Problem for Optimum Operation.

- 4.4.5 **Reported that in compliance with the decision of the Senate vide its resolution No. 2.3.30 dated 13.3.2002, the following students admitted to M.Tech. Degree course without fellowship during the session 2001-2002, have been awarded fellowship from the dates indicated against each till 31.1.2002:**

ELECTRICAL ENGINEERING DEPARTMENT

Measurement & Instrumentation:

- | | | |
|----|-----------------------------|------------|
| 1. | Sri Pankaj Kumar Chandrakar | 11.09.2001 |
| 2. | Sri Abhinay Mohan | 21.09.2001 |
| 3. | Sri Nitin | 01.11.2001 |

Power Apparatus & Electric Drives

- | | | |
|----|---------------------|------------|
| 1. | Sri Pankaj Arora | 21.09.2001 |
| 2. | Sri Neel Mani Yadav | 01.11.2001 |

CHEMICAL ENGINEERING DEPARTMENT

Industrial Pollution Abatement

- | | | |
|----|------------------------------|------------|
| 1. | Sri Sudhanshu Prasad | 21.09.2001 |
| 2. | Sri Vimal Chandra Srivastava | 21.09.2001 |

- 4.4.6 **Reported the nomination of Dr. M.L.Kapoor on the Board of Governors in place of Prof. S.S.Saini, Civil Engg. Deptt., IIT Roorkee who has opted for Voluntary Retirement w.e.f. 20.8.2002:**

Noted. In future, an agenda item may be placed before the Senate for nomination of persons on the Board of Governors.

- 4.4.7 **Reported the following for the 2nd Annual Convocation of the Institute to be held on November 24, 2002.**

1. That the 2nd Annual Convocation of the Institute will be held on November 24, 2002 from 1430 hrs – 1730 hrs.
3. That Dr. Murli Manohar Joshi, Hon'ble Union Minister for Human Resource Development has consented to be the Chief Guest on this occasion and shall deliver the Convocation Address.
4. That invitations for the Convocation function will be issued on behalf of the Members of the Senate and the Board of Governors.

- 4.4.8 **Reported that MHRD has authorised IITR for conducting the Entrance Examination at the all India level for admission to MCA degree courses in the country, for the year 2003-2004.**

Noted.

The meeting ended with a vote of thanks to the Chair.

NEW P.G. PROGRAMMES

Deptt./Centre	Specialization	Degree/Diploma	Duration in years	Approved Intake	Approved year of Start	Departmental / Interdisciplinary*
1. Mechanical & Ind. Engineering	CAD, CAM & ROBOTICS	M.Tech.	2	10	2003-2004	Departmental
2. Hydrology	Environmental Hydrology	M.Tech.	2	10	2003-2004	Departmental
3. Earth Sciences	Exploration Geology	M.Tech.	2	15	2003-2004	Departmental
	Exploration * Geophysics	M.Tech.	2	15*	2004-2005	Departmental
4. Physics	Atmospheric Sciences	M.Tech.	2	10	2003-2004	Departmental
5. Chemistry	Advanced Method of Chemical Analysis	M.Tech.	2	10	2003-2004	Departmental
6. Met. & Mat. Engg.	Corrosion Engg.	M.Tech.	2	10	2003-2004	Departmental
Total					80(65+15*)	

* The Programmes in Exploration Geophysics to start from the Academic Session 2004-2005.

P.G. Programmes to be phased out w.e.f. the Academic Session 2003-2004

Name of Course
1. P.G. Diploma in Earthquake Engg.
2. P.G. Diploma in Earthquake Technology
3. M. Phil. Chemistry

ENHANCEMENT OF SEATS IN VARIOUS PG PROGRAMMES

19

S.No	Name of Programme	Existing Faculty	No. of Sanctioned Seats	Student admitted in 2002-2003			Approved Increase in seats 2003-2004	Total Intake to be effective from 2003-2004.	Remark's
				No.	Gate*	Rank*			
	<u>M.Tech.Programme</u>								
1.	A.H.E.C.(A.H.E.S)	6	14(12+2)	13	77.93	42	02	16	Approved increase of 2 seats, each year upto 2007-08, making total 30 Seats.
2.	<u>E&C.Engg</u>								
(a)	Microwave & Radar	23	06	06	87.12	276	04	10	Renamed as 'RF and Microwave Engg.'
(b)	Solid State Electronics		06	06	94.00	134	04	10	Renamed as 'Semi Conductor Devices & VLSI Technology'.
(c)	M. Tech. CSE		35	35	-	-	-	20	Diversified to M.Tech. (CST)
								15	Diversified to M.Tech. (IT)
3.	<u>EARTHQUAKE ENGG.</u>								
	Structural Dynamics	23	12	11	77.33	51	08	20	
4.	<u>HYDROLOGY</u>								
(a)	Sponsored	7	30	09	-	-	-	20	Reduction of seats by 10
(b)	Fresh GATE qualified		-	-	-	-	-	10	10 seats for non sponsored students
<u>M.Sc. Programme</u>									
1.	Earth Sciences(Applied Geology)	23	12	12	-	38	08	20	Approved increase of remaining 05 seats in the session 2004-2005
TOTAL		82	115	92			26	141	

*GATE Score/Rank of last student admitted.

ENHANCEMENT OF PRESENT STUDENT INTAKE

Branch	Present Intake				Seats Vacant (2002-03)				Student Strength (2002-03)	Approved Increased students intake for (2003-04)*			
	Total	Gen	SC	ST	Total	Gen	SC	ST		Total	Gen	SC	ST
	B.Arch	35	27	05	03	11	03	05		03	24	50	39
B.Tech. Chem.	35	27	05	03	09	01	05	03	26	35	27	05	03
B.Tech. Civil	60	46	09	05	19	06	08	05	41	75	58	11	06
B.Tech. CSE.	30	23	05	02	--	--	--	--	30	30	23	05	02
B.Tech. Elect.	60	46	09	05	04	--	--	04	56	75	58	11	06
B.Tech. E&C.	35	27	05	03	03	--	--	03	32	35	27	05	03
B.Tech. Ind.	20	15	03	02	05	--	03	02	15	30	23	05	02
B.Tech. Mech.	40	31	06	03	03	--	--	03	37	50	39	07	04
B.Tech. Met.	45	35	07	03	10	--	07	03	35	60	46	09	05
B.Tech. P & P.	30	23	05	02	16	09	05	02	14	50	39	07	04
Total	390	300	59	31	80	19	33	28	310	490	379	72	39

- to compensate possibility of reduced intake due to unfilled seats

Percent vacancy in 2002-03 category wise

General $19/300 = 6.33\%$ SC $33/59 = 55.9\%$ ST $28/31 = 90.3\%$

If same ratio is maintained, expected students intake in 2003-04 based on proposed intake

General $(1 - .0633) 379 = 355$ SC $(1-.559)*72 = 32$ ST $(1-.903)*39=4$

Total=355+32+4 =391

Registered candidates Preparatory courses(2002-03)=26 [SC(24/33)+ST(02/28)]

Expected students from preparatory courses =50% of 26 =13

Expected strength of students in Academic Year (2003-04) =391+13 =404

Appendix 'D'
Item No. 4.3.14