

#### NATIONAL INSTITUTE OF TECHNOLOGY KARNATAKA SURATHKAL

### MINUTES

#### **OF**

### 36th SENATE MEETING

Date : 6.5.2014

Time : 4.30 p.m

Venue : ATB Seminar Hall, N.I.T.K., Surathkal MANGALORE PIN - 575 025.

#### NATIONAL INSTITUTE OF TECHNOLOGY KARNATAKA, SURATHKAL MANGALORE – 575 025

Proceedings of the 36th meeting of the Senate of N.I.T.K. Surathkal held on 6.5.2014 at 4.30 p.m in the Seminar Hall of the Additional Teaching Block of N.I.T.K. Surathkal.

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#### **MEMBERS PRESENT:**

EMBERS PRESENT:	
Swapan Bhattacharya	 Chairman
V.Shubha	 Member
A. Kandaswamy	 Member
M.C. Narasimhan	 Member
S.Sumam David	 Member
K. Chandrasekaran	 Member
M.B. Saidutta	 Member
Udayakumar R.Y.	 Member
Subba Rao	 Member
N. Lakshman	 Member
M.K. Nagaraj	 Member
A. Vittal Hegde	 Member
A.Mahesha	 Member
Dwarakish G.S.	 Member
Kiran G.Shirlal	 Member
Katta Venkataramana	 Member
A.U. Ravi Shankar	 Member
R. Shivashankar	 Member
K.N. Lokesh	 Member
D. Venkata Reddy	 Member
S. Shrihari	 Member
Subhas C.Yaragal	 Member
K.S. Babu Narayan	 Member
Vidya Shetty	 Member
G. Srinikethan	 Member
A.Chitharanjan Hegde	 Member
A. Nityananda Shetty	 Member
A.V. Adhikari	 Member
D.Krishna Bhat	 Member
B.Ramachandra Bhat	 Member
Annappa	 Member
M.S. Bhat	 Member
John D'Souza	 Member
Jora M Gonda	 Member
K. Panduranga Vittal	 Member
Shashikantha K	 Member
K.B.Kiran	 Member
Ananthanarayana V.S.	 Member
G. Ram Mohana Reddy	 Member
Murulidhar N.N.	 Member
Keshava Prasad Halemane	 Member
Santosh George	 Member
Prasad Krishna	 Member
G.C. Mohan Kumar	 Member

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#### National Institute of Technology Karnataka, Surathkal

P. Mohanan		Member
T.P. Ashok Babu		Member
H. Suresh Hebbar		Member
S.M. Kulkarni		Member
Gangadharan K.V.		Member
Ravikiran Kadoli		Member
Vijay Desai		Member
Narendranath S		Member
Jagannath Nayak		Member
K. N. Prabhu		Member
Arun M		Member
V. Rama Sastry		Member
Ch.S.N. Murthy		Member
N.K.Udayashankar		Member
Kasturi V. Bangera	· · · · · ·	Member
G. K. Shiva Kumar		Member
H.D. Shashikala		Member
Anusuya Chakari		Member
Akshay B Pattabi		Spl. Invitee
K.Ravindranath	•••••	Secretary

#### Preamble:

Chairman welcomed all the members to the 36th Senate meeting. After a brief discussion, with the permission of the Chair, the Secretary, Senate began the deliberations on Agenda items.

#### Item No. 36.1: CONFIRMATION OF MINUTES OF THE 35<sup>th</sup> MEETING OF THE SENATE HELD ON OCTOBER 28<sup>TH</sup>, 2013.

The Senate resolved to confirm the minutes of the 35<sup>th</sup> Senate Meeting.

# Item No. 36.2:REVIEW OF ACTION TAKEN ON THE MINUTES OF 35thSENATE MEETING HELD ON OCTOBER 28TH, 2013.

The actions taken on the minutes of the 35th Senate meeting were noted.

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#### Item No. 36.3: ITEMS PLACED BEFORE THE 36<sup>th</sup> SENATE MEETING HELD ON MAY 6<sup>th</sup>, 2014.

**Discussion and Decision Items:** 

Item No.36.3.1:	Agenda items discussed in the 26th BOS meeting held
	on 30 <sup>th</sup> April 2014.

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#### ITEM No: 26-BOS - 1:

#### Introduction of New Elective Course for B Tech 2012 Curriculum:-

#### **Resolution of the BOS**

a)	a) The Department of Information Technology: The BOS resolved to approve IT 365 Natural Language Processing (3-0-2) 4 as new Elective Course for B Tech (Information Technology) 2012 Curriculum.			
b)	<b>The Department of Mechanical Engineering:</b> The BOS resolved to approve the inclusion of:			
	<ol> <li>ME446 - Theory of Gas Turbine and Jet propulsion</li> <li>ME447 - Multi Body Dynamics and Applications</li> </ol>	(2-1-0) 3 (2-1-0) 3		

as new Elective Course for B Tech (Mechanical Engineering) 2012 Curriculum.

#### c) The Department of Computer Science and Engineering:

The BOS resolved to approve the inclusion of:

1)	CO331 - Bioinformatics	(2-1-0) 3
	CO369 - Quantitative Computer Architecture	(2-1-0) 3

as new Elective Course for B.Tech (Computer Science and Engineering) 2012Curriculum.

#### d) The Department of Civil Engineering:

The BOS resolved to approve the inclusion of:

1)	CV373 -	Probability	Methods in	Civil	Engineering	(3-0-0) 3
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- 2) CV426 Solid Waste Management
- 3) CV477 Seismoresistant Concrete Structures

as new Elective Course for B Tech (Civil Engineering) 2012 Curriculum and inclusion of

CV381 - Mini Project II	(0-0-3) 2
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in MP category

#### e) The Department of Electrical & Electronics Engineering:

The BOS resolved to approve the inclusion of:

1) EE243	- Mathematics for Electrical Engineers	(3-1-0)4
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2) EE443 - Mathematical Morphology & Applications to Signal Processing (3-1-0)4

3) EE343 - Statistical Foundation for Electrical Engineers (3-1-0)4

as new Elective Course for B Tech 2012 (Electrical & Electronics Engineering) Curriculum.

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#### f) The Department of Chemical Engineering:

The BOS resolved to approve the inclusion of :

1)	CH365 - Introduction of Molecular Simulations	(2-0-2)3
2)	CH366 - Electrochemical Engineering	(3-0-0)3
3)	CH367 - Energy Conservation and Management in	
	Process Industries	(3-0-0)3

as new Elective Course for B Tech (Chemical Engineering) 2012 Curriculum.

#### **Resolution of the Senate**

The Senate resolved to approve the inclusion of New Elective courses of a) Information Technology b) Mechanical Engineering c) Computer Science and Engineering d) Civil Engineering e) Electrical & Electronics Engineering f) Chemical Engineering in B Tech 2012 Curriculum.

#### ITEM No: 26-BOS - 2:

#### Incorporating changes in curriculum structure for B.Tech (Comp. Engg.) - 2012 Curriculum:

#### **Resolution of the BOS**

The proposal of DUGC of Department of Computer Science & Engineering was discussed. The B.Tech 2012 curriculum structure provides the flexibility to facilitate one semester project work in industry/external organizations. Hence resolved that there was no need to change the curriculum structure.

#### **Resolution of the Senate**

The Senate noted the BOS resolution

#### ITEM No: 26-BOS - 3:

Introduction of New Courses for PG programmes

#### **Resolution of the BOS**

# a) The Department of Information Technology:<br/>The BOS recommended the inclusion of :IT 825 Advanced Computer Networks(3-0-0) 3IT 826 Topics in Natural Language Processing(3-0-2) 4

as new Elective Courses for MTech (Information Technology) Curriculum.

b) The Department of Mechanical Engineering has proposed to include the four new elective courses:

The BOS resolved to approve the inclusion of :

1)	ME816 - Sustainable Energy Technologies	(3-0-0) 3
2)	ME817 - Waste to Energy Processes and Technologies	(3-0-0) 3
	ME818 - Artificial Intelligence and its Applications	(3-0-0) 3
4)	ME819 – Multiphase Flows	(3-0-0) 3
5)	ME827 - Experiments with Sensors, Actuator and	
,	Data Acquisition	(2-0-2)3

as new Elective Courses for MTech programs of Department of Mechanical Engineering Curriculum.

# c) The Department of Computer Science and Engineering proposed to include the two new electives:

The BOS resolved to approve the inclusion of :

1) CS866 - Interconnection Networks

as new Elective Course for M.Tech (Computer Science and Engineering) Curriculum.

# d) The Department of Civil Engineering has proposed to include the four new electives:

The BOS resolved to approve the inclusion of :

1)	EN818 - Environmental Hydraulics	(3-0-0) 3
2)	EN819 - Modeling Waste Water Treatment Process	
	and Plants	(3-0-0) 3
3)	CM813 - Sustainability in Built Environment	(3-0-0) 3
4)	TS816 – Traffic Simulation and Modeling	(3-0-0) 3

as new Elective Courses for MTech Environmental Engg, Construction Technology and Management and Transportation Engg. programs of Dept. of Civil Engineering.

# e) The Department of Chemical Engineering has proposed to include the one new electives:

The BOS resolved to approve the inclusion of :

CH 815 - Cavitations and Its Applications in Chemical Engineering (2-1-0) 3

as new Elective Course for M.Tech (Chemical Engineering) Curriculum.

#### **Resolution of the Senate**

The Senate resolved to approve the inclusion of New Elective courses for MTech programme a) Information Technology b) Mechanical Engineering c) Computer Science and Engineering d) Civil Engineering e) Chemical Engineering.

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#### ITEM No: 26-BOS - 4:

#### Modification of existing courses -

#### **Resolution of the BOS**

#### a) The Department of Mechanical Engineering: The BOS resolved to approve the modification of existing course: (3-0-0) 3 ME803 – Wind Energy Conversion

b) The Department of Civil Engineering - MTech (Geotechnical Engineering) modification of Course structure and contents

The BOS resolved to approve the modification of Course structure and Contents of M.Tech (Geotechnical Engineering).

To be effective from Academic Session 2014-15

#### c) The Department of Electrical & Electronics Engineering:

The BOS resolved to defer the proposal submitted by DPGC of the Department of Electrical & Electronics Engineering. It may be revisited at the during restructuring of M.Tech programs.

#### **Resolution of the Senate**

The Senate resolved to approve the following recommendations of BOS :

- 1) Modification of the course ME-803 Wind Energy Conversion
- 2) Modification of the Course structure and Contents of MTech Geotechnical Engineering
- 3) Senate noted the BOS resolution.

#### **ITEM No: 26-BOS -5:**

#### Inclusion of Additional Guide for M.Tech (by research) student-

#### **Resolution of the BOS**

The BOS has asked DPGC to give additional information on the research work of the student and the proposal was deferred.

#### **Resolution of the Senate**

The Senate noted the BOS resolution.



#### **ITEM No: 26-BOS - 6:**

#### Introduction of new 900 level courses for the PhD students-

#### **Resolution of the BOS**

#### a) Department of Information Technology:

The BOS resolved to approve the inclusion of new 900 level courses :

The Bob received to approve		
IT 913 Modern Cryptography	4	
IT 914 Computer Network Security	4	
IT 915 Digital Forensic	4	
IT 916 Special Topics in Computer Networks	4	
IT 917 Vehicular Adhoc Networks	4	
IT 918 Special Topics in Wireless Sensor Networks	4	
IT 919 Performance Analysis of Local Area Networks and		
Wide Area Networks	4	
IT920 Modeling and Analysis of Networks Protocols	4	
IT 921 Packet Forwarding Technologies	4	
IT 922 Computer Network System Design	4	

#### b) The Department of Electronics and Communication Engineering:

The BOS resolved to approve the inclusion of new 900 level courses :

EC906 – Selected Topics in Signal Processing				
EC907- Applications of Signal Processing	4			
EC908 – Selected Topics in Computer Communication				
Networks	4			
EC909 – Advanced Topics in Radar Signal Processing4				
EC910 – Selected Topics in Analog and Mixed Signal				
Integrated Circuits	4			
EC911 – Mathematical Methods for Signal Processing				
and Communication Engineering	4			

#### **Resolution of the Senate**

The Senate resolved to approve the inclusion of new 900 level Courses in the Department of Information Technology and Electronics and Communication Engineering.

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#### ITEM No: 26-BOS - 7:

# Eligibility to admission to PhD programme - Change in regulations – Dept. of Mechanical Engineering.

#### **Resolution of the BOS**

The BOS resolved to approve the changes in eligibility to admission to Ph.D Programme proposed by the Department of Mechanical Engineering as follows:

Existing	Proposed		
Admission to a Ph.D. Programme shall be open to candidates who passed the prescribed qualifying examination with a Cumulative Grade Point Average (CGPA) of at least 6.5 in the 0-10 scale grading system, or not less than 60% marks in the aggregate (taking into account the marks scored in all the subjects of all the public/ university examinations conducted during the entire prescribed period for the degree programme). However, this prescribed minimum shall be a CGPA of 6.0 or 55% marks in the aggregate for SC/ST candidates.	Admission to a Ph.D. Programme shall be open to candidates who passed the undergraduate and postgraduate degree in relevant field with a Cumulative Grade Point Average (CGPA) of at least 6.5 in the 0-10 scale grading system, or not less than 60% marks in the aggregate (taking into account the marks scored in all the subjects of all the public/ university examinations conducted during the entire prescribed period for the degree programme). However, this prescribed minimum shall be a CGPA of 6.0 or 55% marks in the aggregate for SC/ST candidates.		

#### **Resolution of the Senate**

The Senate resolved to approve the changes in eligibility requirements for admissions to PhD programmes to be effective from July 2014 admissions.

#### ITEM No: 26-BOS - 8:

Increase in number of PhD Scholars / Guide – Department of Chemistry

#### **Resolution of the BOS**

The present ratio of Research scholars per faculty is only around 2.2. The BOS resolved to defer the proposal.

#### **Resolution of the Senate**

The Senate noted the BOS resolution.

#### ITEM No: 26-BOS - 9:

#### <u>Recognition of Chartered Accountancy qualification for registration to Ph.D.</u> <u>Programme in Department of Humanities, Social Sciences and Management.</u>

#### **Resolution of the BOS**

The BOS resolved to approve to recognize Chartered Accountancy along with graduation degree as equivalent to postgraduate degree in Commerce for admission to Ph.D. programme in Dept. of HSSM.

#### **Resolution of the Senate**

The Senate resolved to approve the Chartered Accountancy along with Graduation Degree as equivalent to Postgraduate Degree in Commerce for admission in PhD programme in Dept. of HSSM.

#### ITEM No: 26-BOS - 10:

#### Constitution of RPAC panel for Department of Information Technology

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#### **Resolution of the BOS**

The BOS resolved to approve the following modification for constitution of RPAC panel for the Research Scholars of Department of Information Technology as the no of members in the DRPC of Dept of IT is only 4. 3 faculty from Dept of IT/CSE/EE/EC instead of 3 faculty from Department.

#### **Resolution of the Senate**

The Senate resolved to approve the recommendation of BOS.

#### ITEM No: 26-BOS - 11:

# <u>Admission of top 10% of B.Tech students of NITK to Direct PhD programme at IIT Madras-</u>

#### **Resolution of the BOS**

The BOS resolved to recommend the proposal of IIT Madras to admit top 10% of 3rd Year B.Tech students of NITK to direct PhD programme at IITM.

#### **Resolution of the Senate**

The Senate resolved to approve the proposal of IIT Madras to admit top 10% of 3rd year B Tech students of NITK to direct PhD program at IIT Madras in principle. Changes required in academic regulations to facilitate it has to be discussed in BOS.

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#### ITEM No: 26-BOS - 12:

#### Sponsored Ph.D. (External Registration) for contract faculty of other NITs -

#### **Resolution of the BOS**

The BOS discussed the proposal from NIT Uttarakhand regarding External Registration of Contract faculty Sponsored from NIT Uttarakhand. The contract faculty sponsored from other NITs may apply during the normal PhD admissions under the category External Registration (Sponsored from educational institutions). For such applicants the requirement of two years of service in Sponsoring organization after qualifying degree may be waived.

#### **Resolution of the Senate**

The Senate resolved to approve to waiver the requirements of two years of services in sponsoring organization after qualifying degree for contract faculty sponsored from other NITs to be effective from July 2014 admission.

#### ITEM No: 26-BOS - 13:

#### Inclusion of Additional guides for PhD Scholars

#### **Resolution of the BOS**

- a) The BOS resolved not to approve additional guide for Mr Giridhara Babu Y (Reg. No ME12P07) as he has already completed his research proposal seminar.
- b) The BOS has asked DRGC to give additional information on the research profile and publications of the proposed Additional Guide for Mr. J. Felix [Reg. No. ME13P02] and the proposal was deferred.
- c) The BOS resolved to approve Dr. Srinivasa Pai P. Professor, NMAMIT NITTE as an Additional Guide for Mrs Rashmi [Reg. No. ME13P04] in the Department of Mechanical Engineering.

#### Resolution of the Senate

The Senate noted resolution of BOS

#### ITEM No: 26-BOS - 14:

CGPA to Percentage Conversion Formula - Department of Civil Engineering

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#### **Resolution of the BOS**

The BOS resolved to recommend modification of **NITK Regulations General (G.5.13)** as follows:

Existing	Proposed		
CGPA scale and percentage. However,			

#### **Resolution of the Senate**

The Senate resolved to approve the recommendation of BOS

# Item No.36.3.2: Admission of students made under UG, PG and PhD programme for the academic year 2013-14.

The Senate resolved to approve the admission statistics of students made under Undergraduate, Postgraduate and PhD programmes for the academic year 2013-14.

#### Item No.36.3.3: To consider implementation of the Trainee Teachers Scheme in NITs from the year 2013-14.

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The Senate resolved to obtain information from IITs in the Admission process and operational details of the Trainee Teachers Scheme.

#### Item No.36.3.4: Earmarking two MTech sponsored seats for Indian Navy one each in Department of E & C and Department of Mechanical Engineering.

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The Senate resolved to approve to earmark two M.Tech sponsored seats for Indian Navy one each in Department of E&C and Dept. of Mechanical Engineering from the academic year 2014-15.

# Item No.36.3.5: Provision to do Internal Sliding before last round of M.Tech Admissions.

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The Senate resolved to approve internal sliding after Round 4 of CCMT-2014 admission before Spot Round. The Chairman CCMT 2014 will be requested to provide the list of students after implementing Internal Sliding.

#### Item No.36.3.6: Request to condone the delay in Thesis submission.

The Senate resolved to approve the condone in delay of submission of Thesis of the PhD Research Scholars Sreekantha Jois H S (CY08F03) and Shree Laxmi Prasanth (CV07F01).

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## Item No.36.3.7: Request to condone the delay in submission of Research Proposal.

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The Senate resolved to approve the condone in delay of submission of Research Proposal of the PhD Research Scholars Dinesh Naik (ITI1P01) and Basavaraj S Shalavadi (EE11F01).

# Item No.36.3.8: Request to condone the delay in submission of M.Tech (R) Research Proposal.

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The Senate resolved to approve the condone in delay of submission of M.Tech (R) Research Proposal of student D Sai Parameshwari (CE12F01).

#### Item No.36.3.9: Delay in submission of PhD synopsis and thesis

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The Senate resolved to approve the condone in delay of submission of PhD synopsis and Thesis of student Pruthviraj (AM05P02).

# Item No.36.3.10:Sitting fee for Indian Examiner for conducting<br/>PhD viva voce exam

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The Senate resolved to approve Rs 2000/- as Sitting Fee for Indian Examiner for conducting PhD Viva-Voce Exam.

#### Item No. 36.3.11: Increase in Institute Scholarship for PhD programme.

The Senate noted the resolution of 38th BOG Item No. 38.4.9 dated March 2, 2014, to increase the Doctoral fellowships from 100 to 150 from the academic year 2014-15 and approved the proposed Seat Matrix.

Details of Intake are as follows:

OC	OC-PH	OBC	OBC-PH	SC	SC-PH	ST	ST-PH	Total
74	2	39	1	21	1	11	1	150

#### **Ratification Items**

#### Item No. 36.3.12: Seat Matrix for DASA 2014-15.

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The Senate resolved to ratify the Seat Matrix for DASA Undergraduate admission 2014-15.

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#### Item No.36.3.13: Equivalent Course for students joined prior to 2012.

The Senate resolved to ratify the additional equivalent courses in curriculum 2013 of Department of IT, E&C and Computer Science & Engineering for BTech students who have joined prior to July 2012.

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# Item No.36.3.14: Restructuring & renaming of M.Tech (SACA) programme.

The Senate noted the resolution of 38th BOG dated March 2, 2014 to approve the recommendation of BOS/Senate Chairman for restructuring and renaming of present MTech - System Analysis and Computer Applications (SACA) as MTech-Computational Mathematics.

#### Meeting ended with vote of thanks to the Chair.

**(K.Ravindranath)** Secretary-Senate, NITK

(Swapan Bhattacharya) (Swapan Bhattacharya) Chairman-Senate, NITK 26

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