No. BI |ME | 65 | 403 Date 12/5/2014



#### Minutes of Meeting

#### **Board of Studies (Mechanical Engineering)**

A meeting of BOS (Mech. Engg.) was held on 15.3.2014. Following members were present:

Dr. Sehijpal Singh

Dr. Paramjit Singh Bilga

Dr. Harwinder Singh

Dr. Jatinder Kapoor

Dr. Harmeet Singh

Dr. Gurinder Singh Brar

Er. Gursharan Singh, True Success Management Consultant Pvt. Ltd.,

Er. B.S. Sangha, Institute of Auto Parts, Ludhiana

Er. P.S. Gill, Ex-faculty, Ex-Design Engineer, General Motors, USA

Dr. Rupinder Singh, Dean Academic, GNDEC

Prof. J.S Grewal, I/C M.Tech and HOD (Prod)

Following members could not attend the meeting:

Dr. Inderdeep Singh (IIT Roorkee)

Dr. Ajay Batish (Thapar University)

Dr.H.S shan (Ex Faculty, IIT Roorkee)

Dr. Sandeep Grover, YMCA, Fridabad

Prof Deepinder Singh, GNDEC

The chairman welcomed all the members and apprised about the agenda items and other functions of BOS under the autonomous system granted by UGC to GNDEC. The members were also apprised about the Program Educational Objectives (PEOs) and Program Outcomes (POs) of B.Tech (Mech Engg) program.

The decisions taken are attached in Annexure A

Reculud.





## Annexure A

Annexure A	
	Decisions Taken
Agenda Item	
PG Courses (M.Tech- Prod. and Industrial)  1.1 In the existing scheme, the subjects (Core as well as electives) are fixed semester wise. To make the system more flexible, it is proposed that subjects should not be fixed in a semester. However the number of subjects in a semester may be fixed. A student should pass all core and elective subjects in three semesters.	members. The decision shows next meeting.  The matter shall be discussed in Next meeting
proposed that in place of Approval/Rejection of the thesis, appropriate marks should be given, which should be equivalent to one semester.	
1.3 It is proposed that lab should be removed from 1 <sup>st</sup> and 2 <sup>nd</sup> semesters. Only one lab should be included in third semester in	Approved
1.4 The thesis work will start from 3 <sup>rd</sup> semester onwards along with 2 theory subjects & seminars. Synopsis should be finalized in the 3 <sup>rd</sup> semester however the final submission of thesis can be done during the 4 <sup>th</sup> semester. The submission of thesis can only	Approved
be permitted after the completion of all the previous requirements.  1.5 a Keeping in view the deficiencies in PG courses of Mechanical Engineering, like weak mathematics, lack of understanding of fundamental derivations of equations of equilibrium/motion/design of experiment, programming skills, numerical analysis etc following subjects are proposed to include in PG programs as core or elective and at least one should be offered as mandatory course.	Approved
Research Methodology     Numerical Methods     Finite Element Method     Design of Experiments      At least one subject should be offered which should be inter-departmental elective.	Approved



### Gourse B. Tech (Mech)

l Percentage of Credit hours of existing course is given below r discussion:-

S.N 0	Broad Area	Existing Percentage of credits	Range recommended as per AICT model curriculum
1.	Humanities and social sciences including management	7.5	5-10
2.	Basic Sciences (including electives) and Env. Sc. Including human values	12.5	15-20
3.	Engineering Sciences including materials, workshops, Drawing, Basics of electrical/electronics/mechanical/computer etc.	14.7	15-20
4.	Professional courses relevant to the chosen specialization/branch	44.6	30-40
5.	Professional subjects- electives relevant to chosen specialization	3.57	10-15
6.	Open Elective from other technical and emerging subject areas	1.7	5-10
7	Project work/Seminar and /or internship in industry		10-15

The matter was discussed at length. Following points were highlighted.

- The experts linked with industry apprised the board that following sectors are going to provide maximum jobs to the graduates of Mech Engg:
  - a. Automobiles
  - b. Engg Goods/Consumer goods
  - c. Process Industries
  - d. Steel, cement, paper and petroleum
- 2. Manufacturing/Production and Services sector are going to become equally important sectors as regards to job opportunities
- 3. Engineering fundamentals are lacking in the graduates.
- Less than 10% graduates of Mech. Engg. are going to core Engg jobs.
- 5. 30-40% graduates are absorbed in software development jobs
- 6. Keeping in view the above situation, it was suggested that following courses may be added to the existing curriculum keeping in view the deficiency of credits as per given in the table (S.No 5 and 6).
  - a. Product Design and Development
  - b. Maintenance Engg
  - c. Quality Control and Engg
  - d. Automation
  - e. MoUs need to be signed for making demonstration of latest technology being used in Industry as the Industries have the latest technology which may not be cost effective to procure in the Institution. The time slots need to be given in curriculum to cover this part.
- Contents of communication skills and interview skills need to be enhanced
- 8. It was suggested to go through the findings of a latest survey on Employability Skill Gap Analysis

	conducted by TCS while revising the curriculum
2 Industrial Training: Discussion on the present system and any aggestions for further improvement	<ol> <li>Effective monitoring need to be done.</li> <li>Industry Institute Interaction (III) need to be enhanced</li> <li>Best Project award may be introduced to motivate the students for taking industrial problem based projects</li> <li>Industrial training to the teachers is needed. One way may be to depute the teachers for some time where the students are taking their training</li> </ol>
	5. Effective monitoring system should be in place
3.1 The question papers of end semester examination should be internal, but should be checked (for correct Format and standard) by a committee consisting of 05 members (03 external + HOD+ 01 internal).	<ol> <li>The present system should be continued to maintain secrecy</li> <li>BOS members were of the view that three experts may not be sufficient to judge the quality of question papers. However the format may be checked at COE level itself.</li> </ol>
3.2 The revised scheme and syllabus should be completed before 15 <sup>th</sup> June, 2014 and final approval of the same should be taken by the BOS before 30 <sup>th</sup> June, 2014.	Agreed upon

Sell

Dr. Sehijpal Singh

Chairman

BOS (GNDEC) (Mech Engs)

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# Minutes of Meeting

# Meeting of Board of Studies (Mechanical Engineering) (15.3.14)

C: No	Name of member	Signature
Sr.No.	Nume of the	•
1.	Dr. Sehijpal Singh, GNDEC	Sell
2.	Dr. Paramjit Singh Bilga, GNDEC	Des Ga 15/3/2014
3.	Dr. Harwinder Singh, GNDEC	Ho
4.	Dr. Jatinder Kapoor, GNDEC	
5.	Prof. Deepinder Singh, GNDEC	
6.	Dr. Harmeet Singh, GNDEC	Jane .
7.	Dr. Gurinder Singh Brar, GNDEC	for the second
8.	Dr. Rupinder Singh, GNDEC	K
9.	Prof. Jasmaninder Singh Grewal, GNDEC	SGIENN
10.	Er. Gursharan Singh, True Success Management Consultant Pvt. Ltd.	Japa.
11.	Er. B.S. Sangha, Institute of Auto Parts, Ludhiana	250-62
12.	Er. P.S. Gill, Ex- faculty, GNDEC, Ex- Design Engineer, General Motors, USA	