

Subject: Approved Minutes of the 61<sup>st</sup> meeting of Senate of PEC  
University of Technology, Chandigarh.

A Brief of meeting and participants:

Date	19.05.2015 (Tuesday)
Time	11.00 a.m.
Venue	Conference Room, II Floor, Administrative Block, PEC Campus, Sector-12, Chandigarh.
In-Chair	Prof. Manoj Arora, Director, PEC University of Technology.
List of Participants	May be seen at Flag 'A'

B. The brief of proceeding is as follows:

At the outset Chairman welcomed all the Senators. The Member Secretary also informed the action taken report on the decisions taken in the Senate must be sent timely to the Registrar's office.

Item No.	Item	Decision
61.1	To confirm the minutes of Emergent Senate Meeting held on 19.02.2015.	Approved
61.2	Revised implementation of offering common 1 <sup>st</sup> year courses of new UG curriculum from 2015-16 session.	Approved
61.3	The proposal to start new PG programs in M. Sc (Mathematics) & M. Sc Ph.D. integrated (Chemistry)	After detailed deliberations it was decided that the agenda for the introduction of M. Sc (Mathematics) & M. Sc Ph.D. integrated (Chemistry) may be brought afresh in the next Senate meeting by appropriately

in Applied Science taking into account the suggestions put forth on the floor.

Department.

**General:** It was emphasized that for an Institution to grow, research has to play a major role. The academic creditability of Institute of Excellence like IIT & IISc is largely based on their research outcome. In the changing scenario of education, economy, innovation & technology, the line demarcating various programmes is getting blurred. Today's focus is on inter-disciplinary activities and research. In this context, the research in science in engineering institutions needs to be strengthened through programmes such as the integrated M.Sc. - Ph.D programmes currently prevailing in some IITs.

The current proposal is appreciated but modalities for running this course at PEC need to be properly worked out so that the proposal is academically, intellectually & financially viable. The issues raised by Senators were:

- Nomenclature of programme
- Requirement of infrastructure & faculty
- Exit policy after M.Sc.
- Scholarship for students enrolling in Ph.D in integrated programme
- Placing of PEC vis-à-vis other institutions like NIPER, IISER, P.U. & IIT Ropar in context of proposed programmes with reference to the intake quality and placements.
- Available expertise in Human Resources to offer Industry based programme as proposed
- Past experience of the institute in such types of proposals from Applied Science Department.

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		<ul style="list-style-type: none"> <li>Feedback from other programmes currently running in self-financing mode</li> <li>Justification of sustainability of the programme for the intake of 15 candidates with Rs. 15,000/- p.a. as Tuition fee</li> </ul> <p>Regarding M.Sc. Mathematics the item was deferred.</p>
61.4	Revision in course contents of Communication Skills (Basic & Advanced) course.	Approved
61.5	Revision of syllabi of UG and PG courses of ECE Department.	Approved
61.6	Revision in course content of course IDN510: Program Lab-I (Industrial Design Lab) of ME Industrial Design Programme	Approved
61.7	The Academic Calendar for 2015-16 session.	<p>After detailed deliberations, Senators pointed out following:</p> <ol style="list-style-type: none"> <li>1. Working on Saturdays – it should be minimal as far as possible.</li> <li>2. Whether the Industry week should be in both semesters or should only be in odd semester as in the 6<sup>th</sup> Semester students are on training.</li> <li>3. Introduction of Research week similar to Industry week.</li> <li>4. Some minor errors were observed in dates vis-à-vis overlapping between different activities.</li> <li>5. The decisions taken with reference to these issues are as follows: <ul style="list-style-type: none"> <li>• Shifting of 1<sup>st</sup> year calendar by one week may be considered. It was also observed that it shall result in shifting of all</li> </ul> </li> </ol>

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subsequent activities.

- As of now the Industry week shall continue in both the semesters. However it would be appropriate if more structured approach is followed for organizing Industry week in terms of identification of Industry experts/ identification of topics to be covered by the Industry experts/ duration of session/ participation of students, etc. The exercise for inviting the industry experts may be completed in the beginning of the semester. Accordingly the outcome shall be reviewed in the next session.
- The provision of Introduction of Research week may be worked out by Dean Academic Affairs with an objective of getting input from experts across the globe. The ongoing research work in the Institution may be compiled by clubbing similar works. Experts from other institutions working in the similar area may be invited, who may interact with M.Tech & Ph.D scholars to give the inputs on the said areas.
- The holiday period as per notification of Govt. may also be considered appropriately.

Dean Academic Affairs after incorporating the suggestions of Senators shall obtain approval from Chairman Senate and notify the same.

61.8	The approval of syllabi of 3 <sup>rd</sup> to 8 <sup>th</sup> semester courses of new UG Curriculum implemented from 2014-15 academic session.	After deliberations, the syllabi of all the courses of various programmes for 3 <sup>rd</sup> to 8 <sup>th</sup> semester were approved subject to incorporation of corrections as detailed in Annexure-1. The departments have to resubmit the syllabi by May 31, 2015 to Dean
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		Academic Office. All the syllabi will then be brought in standard format and uploaded on the website by Dean Academic Office latest by June 15, 2015.
61.9	Introduction of Workshop practical course in summer/winter break for the UG students admitted from 2014-15 batch onwards,	Approved as proposed.
61.10	The creation of 2 seats under Supernumerary Quota for students from Jammu & Kashmir.	Approved
61.11	Extension to Mr. Manmeet Singh, Ph.D. student, SID 13309015 for presenting State of Art seminar.	Approved
61.12	Exemption from entrance test for regular faculty of PEC for admission to Ph.D. program	A committee of Senate comprising of Prof. Shiv Narayan, Deptt. of Electrical Engineering and Dr. T.K. Jindal, Department of Aerospace Engineering is constituted. The committee has to submit the report within a weeks time.
61.13	Semester Leave for Bharat Bhushan Garg, SID 10104070 BE Electrical Engineering.	Head, Department of Electrical Engineering in consultation with Dean Academic Affairs shall submit the case with full facts for the consideration of Chairman, Senate.
61.14	Semester leave to Mr. Anshu, SID: 14215019, M.E Electronics Engg.(VLSI Design)	Approved. However it has to be seen in light of prevailing academic rules whether the candidate is eligible for registration into 3 <sup>rd</sup> semester of M.E. Programme in case he missed his 2 <sup>nd</sup> semester. In case it is not permissible the candidate may be allowed two semester leave.

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61.1(S)	<b>Applicability of Ph.D - Rules</b> for Ph.D. student admitted before July, 2014.	<b>The students enrolled prior to 2014</b> shall be covered by rules prevailing at the time of their admission i.e. 2006/2009, as the case may be. As far as publications and other academic details are concerned, students from 2014-15 onwards are covered by the rules notified in 2014. The formation of Institution committees & bodies as notified in 2014 rules would continue for all students irrespective of their enrolment year.
61.2(S)	Implementation of Plagiarism Software for Ph.D. Programme	Approved with immediate effect. All Supervisors and research scholars working under them must ensure that they are completely trained in using the software and interpretation of plagiarism reports. In future, this will be extended to Master's degree programmes also.
61.3(S)	Rules of branch change at the end of 1 <sup>st</sup> semester	Noted.
61.4(S)	Semester Leave of BE Students	Noted
61.5(S)	Special request of Shreya Mittal, SID 13104002	Noted
61.6(S)	Review of Grades in 1 <sup>st</sup> year courses of BE & ME programme (MAN101, CSN104, GSC101, HSS102 & CSN501)	Noted

The Senate was of the view that issues recommended by various committees of Senate may be brought to Hon'ble Chairman for decision and Senate may be informed for outcome for purpose of records.

Meeting ended with the vote of thanks to Chair.



## ANNEXURE-I

The proposed syllabi for the UG curriculum of 3<sup>rd</sup> to 8<sup>th</sup> semester were deliberated at length. The Senators made some general observations which are to be implemented across all departments and then specific observations were made in the syllabi of individual departments. The general observations made by the Senators are:

- Include e-material under suggested books category.
- Some branch specific topics to be included in the subject "Engineering Analysis and Design".
- Course title and code should be same if the contents of the syllabus are same.
- As far as possible, core courses should be taught by senior and experienced faculty of the department.
- A Senate sub-committee comprising Dr. Alakesh Manna and Dr. Siby John will examine the course objectives and course outcomes of all the courses across all departments and will ensure uniformity.
- Category of the course to be mentioned in the syllabus.
- The word "etc." should not appear in the syllabus.
- The revised syllabi after incorporating the changes should be sent to DAA by 31<sup>st</sup> May, 2015 and it should be uploaded on institute website by 15<sup>th</sup> June, 2015.

The department-wise observations made by the Senators are:

### **Aerospace Engg. Department:**

- List of open electives to be re-defined.
- About 3-4 subjects on Aerospace Engineering to be added as electives.
- AEN 201 – contents to be revised to include latest topics and advanced joining processes, latest books to be added.
- AEN 204 – title to be changed, contents to be oriented towards aircraft structures.
- AEN 206 – contents to be re-oriented towards Engineering Analysis and Design.
- AEN 304 – contents to be vetted by industry.
- AEN 403 – headings of Ch. 2, 3 and 4 to be revised, add latest books.
- AEN 413 – more topics on missiles to be added, syllabus to be vetted by TBRL/ISRO.
- AEN 414 – revise course outcomes.
- AEN 415 – Include topics on CNT and Graphene, fabrication of composites and characterization and applications of these materials.
- AEN 462 – remove practicals.

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## CIVIL Engg. Department

- Consider changing the titles of Transportation Engg. subjects.
- CEN 202 – entire syllabus to be re-framed.
- CEN 203 – reduce number of chapters but improve detailing.
- CEN 206 – include topics on modeling.
- CEN 207 – include topics on ANSYS software.
- CEN 208 – include topics on STADD PRO software.
- CEN 210 – 4 credits, review the entire contents as well as title, correction in chapter nos., syllabus to be vetted by soil mechanics expert.
- CEN 302 – 4 credits, review the list of experiments.
- CEN 304 – Include topics on advanced transportation systems.
- CEN 305 – include topics on solid waste management and environmental aspects.
- CEN 401 – include topics on precision agriculture, add latest books.
- CEN 402 – include topics on supply chain management.
- CEN 404 – give practicals in proper format and no. of lectures in consolidated form.
- CEN 405 – Include topics on high rise buildings and tower design.
- CEN 406 – remove “and detailing” from the title.
- CEN 410 – detailed contents are required.
- CEN 417 – detailed contents are required.
- CEN 419 – detailed contents are required.
- CEN 461 – delete paragraph on case studies.
- CEN 462 – title to be “Disaster Management”, contents to be reviewed.
- CEN 463 – contents to be reviewed, detailing to be done.
- CEN 424 – contents to be reviewed.
- CEN 425 – contents to be reviewed, remove pre-requisite.

## **Computer Science & Engg. Department:**

- Some new subjects such as Bioinformatics may be added as electives.
- CSN 209 – improve course objectives.
- CSN 210 – add latest books.
- CSN 301 – improve course objectives.
- CSN 302 – remove acronyms from chapter 8.
- CSN 304 – to be vetted by industry.
- CSN 305 – to be revised, detailing of contents is required.
- CSN 403 – add topics on machine learning algorithms.
- CSN 404 – to be revised, add topics on image-to-image compatibility, pattern recognition etc.
- CSN 406 – add latest books.
- CSN 407 – entire contents to be revised, enlarge chapters 2 and 5.
- CSN 411 – change title to “Applied Cryptography”.

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- CSN 421 - elaboration of contents is required.
- CSN 422 - remove the words "topics in" from the title.
- CSN 423 - remove the words "topics in" from the title.

### **Electrical Engg. Department:**

- EEN 201 - to be vetted by industry.
- EEN 202 - review course outcomes.
- EEN 206 - revise chapters 2 and 4.
- EEN 208 - include topics on 8086.
- EEN 304 - revise chapter 5.
- EEN 305 - 3 credits.
- EEN 402 - to be vetted by industry.
- EEN 404 - detailing of chapters 7 and 9 is required.

### **ECE Department:**

- ECN 201 - revise course objectives and outcomes.
- ECN 202 - change headings of chapters 2 and 3, remove overlap with MAN-105.
- ECN 203 - revise contents, give more emphasis on 8086.
- ECN 206 - revise contents.
- ECN 207 - Head, Computer Centre will revise the contents and include latest topics.
- ECN 209 - some contents to be shifted to ECN 202, new topics to be added.
- ECN 402 - add topics on image-to-image registration.
- ECN 403 - add more topics on fuzzy systems.
- ECN 406 - contents obsolete, major revision is required.
- ECN 413 - to be made open elective.
- ECN 416 - major revision is required, add topics on CAD.
- ECN 421 - add topics on Pentium.

### **Mechanical Engg. Department:**

- Include more practicals wherever possible.
- MEN 206 - revise the contents to include topics on simulation and modelling.
- MEN 209 - remove obsolete contents, to be vetted by industry.
- MEN 210 - contents to be pruned.
- MEN 304 - add practical contents along with tutorials.
- MEN 305 - drop the word "drafting" from the title.
- MEN 403 - to be made an open elective.
- MEN 411 - contents to be pruned.
- MEN 412 - to be vetted by industry.

- MEN 416 – change title as “Industrial Automation and Robotics”.
- MEN 417 – add practical contents along with tutorials.
- MEN 418 – to be made an open elective.
- MEN 461 – to be made an open elective.
- MEN 422 – to be made an open elective.
- MEN 423 – add more topics on fatigue and latest books.
- MEN 425 – add practical content and more topics on hybrid manufacturing processes.
- MEN 432 – add practical content.

#### **Metallurgical Engg. Department:**

- MTN 201 – remove the words “non-ferrous” from the title.
- MTN 203 – detailing in chapters is required.
- MTN 204 – re-arrange the topics and no. of lectures.
- MTN 206 – title to be “Engineering Analysis and Design”.
- MTN 208 – detailing in some chapters is required.
- MTN 209 – remove the words “iron making” from the title.
- MTN 305 – include topics on “problems in welding” and “welding defects and remedies”.
- MTN 403 – include topics on “micro casting” and “heat transfer in metal casting”.
- MTN 405 – increase contents of chapter 2.
- MTN 407 – add heading in chapter 2.
- MTN 409 – detailing of chapter 4 is required.
- MTN 410 – review the title.
- MTN 411 – detailing of chapter 1 and 7 is required.
- MTN 423 – add topics on gamma radiography and safety precautions.
- MTN 424 – divide chapter 3.
- MTN 425 – divide chapter 3.

#### **Production Engg. Department:**

- Contents of many subjects are obsolete, very old books have been included.
- More synergy with Mechanical Engg. is required, may take electives from Mechanical Engg.
- PEN 202 – add more books.
- PEN 203 – change title as “Metallurgy and Heat Treatment” and remove topics on metal casting.
- PEN 204 – major revision is required.
- PEN 206 – major revision is required, make it similar to Mechanical Engg.
- PEN 207 – change suggested books.
- PEN 208 – detailing is required, add latest books.

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Sanjeev Sofat Deputy Director	(i)	Ex-officio	Member
Head of all the Academic Departments	(ii)	Aerospace Engineering	Member
	(iii)	Applied Sciences Deptt.	Member
	(iv)	Civil Engineering Deptt.	Member
	(v)	Computer Science	Member
	(vi)	Electrical Engineering Deptt.	Member
	(vii)	Electronics & Electrical Communication Engineering Deptt.	Member
	(viii)	Mechanical Engineering Deptt.	Member
	(ix)	Materials & Metallurgical Engineering Deptt.	Member
	(x)	Production Engineering Deptt.	Member
Prof. Shiv Naryana	(xi)	Two Professors, other than Deans/ Heads of Department by rotation.	Member
Prof. R.K. Sehmi	(xii)		
Dr. Umesh Sharma	(xiii)	Two Associate Professors from the departments, elected from amongst the Assistant Professors.	Members
Dr. Jagtar Singh Gill	(xiv)		
Dr. Kamal Kumar	(xv)	Two Assistant Professor from the departments, elected from amongst the Lecturers	Members
Dr. D.R. Prajapati	(xvi)		
Prof. P.K. Raina Prof. Incharge (Academics & Research), IIT Ropar.	(xvii)	Two persons from educationists of repute or persons from any other field related to the activities of the Institute who are not in the service of the Institute, nominated by the Chairman of the Board of Governors.	Members
Sh. Parmod Rehlan, Director, Design Solutions Inc. (PEC Alumnus Civ. Engg. 1984)	(xviii)		
Ms. Seema Vashisht	(xix)	Two persons who are not members of the teaching staff, co-opted by the Senate for their specialized knowledge.	Members
Sh. Sushil Kumar, Network Administrator	(xx)		
Sh. Manish Kumar Jindal Registrar	(xxi)	Ex-officio	Secretary

#### Special Invitees:

1. Dean Academic Affairs
2. Dr. Sanjeev Kumar, Associate Dean Academic Affairs