**Punjab Technical University**

**Annual Progress report for PhD students**

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| **1. Name of the candidate:** | RANINDER KAUR DHILLON |
| **2. Enrolment/Registration number:**  | 1003010 |
| **3. Discipline:**  | CSE |
| **4. Name of the Supervisor:** | Dr. Hardeep Singh Rai |
| **5. Title of Thesis(Proposed):** | Building Code Compliance for Structural Safety |
| **6. Progress report for the session:** | Jan 2015-Dec 2015 |
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| **7. Research activities performed in the last one year** *( Course work in progress/completed,* *synopsis submitted/defended, Pre-abstract submitted/defended and Thesis submitted/defended)* |
| **Semester –I:** Course work completed **Semester-II ….............****Semester –III:** Synopsis submitted  **Semester-IV……****Semester –V Semester-VI :** Synopsis defended**Semester –VII………....... Semester-VIII………………****Semester –IX……………………………… Semester-X…………………** |
| **8. Brief summary of the research work carried in last one year ( 300 words) Attach as Annexure if required** |
| Study of the working of different Rule engines is done. A rule engine framework is created using Java based Drools Rule engine. Building codes IS-456 for Structural Elements like Slabs , Columns, Beams , Cantilever, Frames are mapped to rules and stored in rules table. This also includes:1. Compliance Rule Engine Assumptions & Axioms Identifications.
2. Design of compliance Rule Engine based on Limit State using mathematical formulae from Limit State Methods.
3. Semantic Gap Mapping between IFC format and Limit State Methods (IS)
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| **9. Research Papers Published in the refereed journals in last one year with Impact Factor** |
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| **10. Research Papers Published in the Conference Proceedings in last one year** |
| **11. Conferences/Seminars/workshops attended in the last one year** |
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| **12. Any other achievements (*Please attach separate sheets if required.)*** |
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It is certified that all information mentioned in the Annual progress report is correct to best of my knowledge.

Date: Full Signature of the Applicant

 Signature of the Supervisor with Seal

Note: The Annual Progress reports will be placed before the RDC of concern discipline for approval. The report and further recommendation will be kept in the personal file of the candidate. In the case candidate who does not submit the progress report within the stipulated time, the RDC may recommend suitable action, and repletion of such practice might invite cancellation of his/her PhD registration/enrollment.