Sardar Patel Institute of Technology

Bhavan's Campus, Munshi Nagar, Andheri (West), Mumbai-400058-India

Computer Engineering Department

Post Graduate

Program Outcomes -Competencies – Performance Indicators

PO1: Independently carry out research /investigation and development work to solve practical problems.	
Competency	**Indicators**
1.1 Ability to carry out research /investigation.	1.1.1 Articulate problem statements and identify objectives. 1.1.2 Determine design objectives, functional requirements and arrive at specifications. 1.1.3 Establish a relationship between measured data and underlying physical principles. 1.1.4 Appropriately justify and apply suitable methodology. 1.1.5 Adhere to the timeline..
1.2 Ability to develop solution for given problem	1.2.1. Analyse and select optimal design scheme 1.2.2. Build models/prototypes to develop diverse set of design solutions. 1.2.3. Consult with domain experts to select candidate engineering design solution for further development. 1.2.4. Adhere to the timeline.
PO2: Write and present a substantial technical report/document.	
Competency	**Indicators**
2.1 Ability to review and write technical paper/seminar/project report	2.1.1. Originality & creativity 2.1.2. Read, understand and interpret technical and non-technical information. 2.1.3. Produce clear, well-constructed, and well supported written engineering documents. 2.1.4 Create flow in a document or presentation - a logical progression of ideas so that the main point is clear.

2.2.Ability to present technical report/seminar	2.2.1 Originality & Creativity 2.2.2. Organization of content 2.2.3. Clarity of artwork (Chart ,graph, Slides) 2.2.4. Dialogue with evaluator & audience 2.2.5. Timeline adherence
PO3: Demonstrate a degree of mastery over the area as per the specialization of the program. The mastery should be at a level higher than the requirements in the appropriate bachelor program**.**	
Competency	**Indicators**
3.1 Ability to demonstrate comprehensive knowledge in specific domain.	3.1.1 Apply theory and principles of Computer Engineering to solve an engineering problem. 3.1.2 Identify engineering systems, variables, and parameters to solve the problems. 3.1.3 Compare and contrast alternative solution/ processes to select the best process. 3.1.4 Extract desired understanding and concludes
3.2 Ability to formulate the problem statements of model to be develop.	3.2.1 Reasoning of problem statement 3.2.2 Organisation of problem statement 3.2.3. Impact of problem statement(Gap) 3.2.4. Apply concepts to test the model and justify the hypothesis 3.2.5. Importance to society.
3.3 Ability to derive mathematical/logical/scientific model in respective domain	3.3.1 Accuracy of model 3.3.2 Precision measurement of model 3.3.3 Fruitfulness of model 3.3.4 Scope of model 3.3.5 Robustness 3.3.6 Comparison with existing models.