## DEPARTMENT OF ELECTRICAL ENGINEERING DAYALBAGH EDUCATIONAL INSTITUTE

## **PROGRAM EDUCATIONAL OBJECTIVES:**

1. Train the students to analyze, plan and apply the acquired knowledge in basic sciences and mathematics in solving Engineering problems with technical, economic, environmental and social contexts.

2. Be able to design, build and test various Electronics systems, Software and Power systems problems for given specifications.

3. Develop Entrepreneurial qualities with a deeper appreciation of field problems acquired by pursuing multiple projects including Product Manufacturing, Design Engineering/ Theme Development, Rural Engineering Project, Major project, Industrial Training, Industrial Visits etc.

4. Acquire ability to pursue research in the areas of Power Systems, VLSI Design, Soft Computing, Digital Image Processing and Digital Signal Processing.

5. Develop ability to work in a team using technical knowhow, common tools and environments to achieve project objectives.

6. Acquire ability to communicate effectively, demonstrate leadership qualities and exhibit professional conduct in their career.

7. Acquire appreciation of rural life and polity and technologies related to Agriculture and Village Industries at the grassroots level.

8. Acquire an understanding of Indian Culture and broad understanding of oneness of all of all Religions

9. Acquire ability to work with one's own hands and respect for soiled hands

10. Engage in lifelong learning, career enhancement and adapt to changing professional and societal needs.

**PROGRAM OUTCOMES**: At the end of the program the student will be able to:

1. Apply Basic Science and Mathematics to analyze complex Electrical Engineering problems.

2. Gather requirement specifications, design and test Electronics systems, Software and Electrical Machines and Power Systems.

3. Apply various Soft computing tools & algorithms for the solution of various Engineering problems.

4. Specify, design and test various algorithms, electronic systems, analog and digital communication systems and power systems.

5. Evaluate strengths and weaknesses of state of art Electrical / Electronics/ Software systems.

6. Understand and practice professional ethics.

7. Work in a team using technical skills, common tools and environments to achieve project objective.

8. Communicate effectively with peers and others.

9. Appreciate better the Indian polity in terms of Indian Culture, Indian Ethos, Indian rural scenario with emphasis on Agriculture, multiplicity of Cultures and Religion etc.

10. Understand how the Industrial organizations work, develop optimal models, generate

wealth, and manage their finances. 11. Pursue life-long learning as a means of enhancing knowledge and skills for continuous professional advancement.