

• **Program Outcomes (POs): (Engineering)**

- **Engineering knowledge:** Apply the knowledge of mathematics, science, engineering Fundamentals, and an engineering specialization to the solution of complex engineering Problems
- **Problem analysis:** Identify, formulate, review research literature, and analyze complex Engineering problems reaching substantiated conclusions using first principles of Mathematics, natural sciences, and engineering sciences.
- **Design/development of solutions:** Design solutions for complex engineering problems and design system components or processes that meet the specified needs with appropriate consideration for the public health and safety, and the cultural, societal, and environmental considerations.
- **Conduct investigations of complex problems:** Use research-based knowledge and Research methods including design of experiments, analysis and interpretation of data, and synthesis of the information to provide valid conclusions.
- **Modern tool usage:** Create, select, and apply appropriate techniques, resources, and modern engineering and IT tools including prediction and modelling to complex Engineering activities with an understanding of the limitations.
- **The engineer and society:** Apply reasoning informed by the contextual knowledge to assess societal, health, safety, legal and cultural issues and the consequent responsibilities relevant to the professional engineering practice.
- **Environment and sustainability:** Understand the impact of the professional engineering solutions in societal and environmental contexts, and demonstrate the knowledge of, and need for sustainable development.
- **Ethics:** Apply ethical principles and commit to professional ethics and responsibilities and norms of the engineering practice.
- **Individual and team work:** Function effectively as an individual, and as a member or leader in diverse teams, and in multidisciplinary settings.
- **Communication:** Communicate effectively on complex engineering activities with the Engineering community and with society at large, such as, being able to comprehend and write effective reports and design documentation, make effective presentations, and give and receive clear instructions.





- **Project management and finance:** Demonstrate knowledge and understanding of the engineering and management principles and apply these to one's own work, as a member and leader in a team, to manage projects and in multidisciplinary environments.
- **Life-long learning:** Recognize the need for, and have the preparation and ability to engage in independent and life-long learning in the broadest context of technological change.

• **Program Outcomes (POs): (Master of Business Administration)**

1. **Knowledge Up-gradation** –Apply and upgrade knowledge Of Management fundamentals and specialization to the solution of management issue.
2. **Problem definition and analysis**-Identify, formulate, Evaluate, review usage of research literature and analyze complex management issues/problems reaching substantiated conclusions using principles of management specialization.
3. **Development of solutions** –Development of solutions for management issues/problems to design system, procedures or processes, methods, models etc.
4. **Investigations and Research study**- Use research oriented knowledge and methods including design of experiments, analysis and interpretation of data and evaluation and analysis of the information to provide valid conclusion.
5. **Modern Tools and technology** –create, select, and apply appropriate techniques resources and modern managerial tools including forecasting and implementation to management issues problems, activities with an understanding of the limitations.
6. **Management professionals and society:** Application of reasoning informed by the contextual knowledge get assess societal, health safety, legal and cultural issues and the consequent responsibilities relevant to the professional managerial practice.
7. **Sustainability with Environment** –the impact of the professional and managerial solutions in societal and environmental contexts and demonstrate the knowledge and need for sustainable development.
8. **Ethics**-Apply ethical principles and commitment to professional ethics and responsibilities and norms of the management practices.
9. **Individual and Team work**-Function effectively as an individual and as a member or leader in diverse teams and in multidisciplinary settings.
10. **Communication**-Communicate effectively on management issues/problems, activities with the community and with society at large, such as, being able to comprehend and write effective reports.





**11. Project Management-** Demonstrate knowledge and understanding of the management Principles and apply these to one's own work as a member and leader in a team to manage Projects and in multidisciplinary environments.

**12 .lifelong learning-**Recognize the need for and have the preparation and ability to engage in independent and lifelong learning in the broadest context of technological change.

• **Programme Specific Outcomes(PSOs):**

➤ Computer Engineering :-

**A graduate of the Computer Engineering Program will demonstrate-**

1. Professional Skills-The ability to understand, analyze and develop computer programs in the areas related to algorithms, system software, multimedia, web design, big data analytics, and networking for efficient design of computer-based systems of varying.
2. Problem-Solving Skills- The ability to apply standard practices and strategies in software project development using open-ended programming environments to deliver a quality product for business success.
3. Successful Career and Entrepreneurship- The ability to employ modern computer languages, environments, and platforms in creating innovative career paths to be an entrepreneur, and a zest for higher studies.

➤ Electronics And Telecommunication :-

**A graduate of the Electronics and Telecommunication Engineering Program will demonstrate-**

1. Professional Skills: An ability to recognize the basic concepts in Electronics & Telecommunication Engineering and to apply them to various areas, like Signal processing, embedded systems in the design and implementation of systems.
2. Problem-Solving Skills: An ability to solve complex Electronics and Telecommunication Engineering problems using latest hardware and software tools, along with analytical skills to arrive cost effective and appropriate solutions.
3. Demonstrate Communication System: Demonstrate concept of data communication networking, OFC networking and wireless technology in various situations, and develop ability to classifying networks, analyzing performance and implementing new communication technologies.
4. System Design: Design electronics circuits using the analytical knowledge in Electronics & Telecommunication engineering by modern software tools and realize it on LAB-VIEW.





➤ Mechanical Engineering :-

**A graduate of the Mechanical Engineering Program will demonstrate-**

1. Engineering Knowledge: Graduates will demonstrate application of fundamental knowledge in mathematics, science and engineering.
2. Problem Analysis: Graduate will demonstrate the ability to identify, formulate, research literature and analyze complex engineering problems.
3. Design/Development of Solutions: Graduates will have the confidence to apply engineering solutions in socio-technical contexts by demonstrating awareness of contemporary issues.
4. Conduct Investigation of Complex Problems: Graduates will demonstrate the ability to identify, formulate and solve mechanical engineering problems using research based knowledge and research methods.
5. Modern Tool Usage: Graduates will be familiar with modern engineering software tools and equipment to analyze engineering problems.
6. The engineer and Society: Graduate will be able to apply contextual knowledge to assess societal, health, Safety, legal and cultural issues.
7. Environment and Sustainability: Graduate will understand the impact of the professional engineering solutions in societal and environmental contexts and demonstrate the knowledge of need for sustainable development.
8. Ethics: Graduates will demonstrate an understanding of their professional and ethical responsibilities.
9. Individual and Team Work: Graduates will demonstrate the ability to function on engineering task as well as on multidisciplinary design teams.
10. Communication: Graduates will be able to communicate effectively in both verbal and written forms.
11. Project Management and Finance: Graduate will demonstrate knowledge and understanding of the engineering and management principles and apply these to work as a member or leader of team.
12. Life-long learning: Graduates should be capable of self-education and clearly understand the value of lifelong learning.

➤ Civil Engineering :-

**A graduate of the Civil Engineering Program will demonstrate-**

1. An ability to apply knowledge of mathematics, science and engineering.
2. An ability to design and conduct experiments and to analyze and interpret data in two or more of the following areas: environmental engineering, geotechnical engineering, hydraulics, structural engineering and construction materials.





3. An ability to design a civil engineering system, component, or process to meet specified performance, cost, time, safety and quality needs and objectives.
4. An ability to function on multi-disciplinary teams.
5. An ability to identify, formulate, and solve civil engineering problems.
6. An understanding of professional and ethical responsibility.
7. An ability to convey technical material through oral presentations and written papers and reports.
8. The broad education necessary to understand the impact of engineering solutions in a global and social context.
9. An ability to use the techniques, skills, and modern engineering tools necessary for engineering practice.

• **Programme Educational Objectives(PEOs):**

➤ **Computer Engineering**

1. To create competencies and opportunities for Higher Education.
2. To create professional manpower skilled for the IT Industry.
3. To write laboratory practicals with advanced FOSS Tools.
4. To create inter-disciplinary opportunities.
5. To create opportunities of developing technical documents and presentation skills.
6. To create opportunities of industry-Institute interactions.

➤ **Electronics and Telecommunication Engineering**

1. To make The Electronics & Telecommunication Engineers, the best in terms of excellence in education, .research, service to industry & society.
2. To create a matured technocrat to meet the challenges ahead in this ever evolving and highly competitive world of tomorrow.
3. To contribute to the prosperity of the society in our own way by developing competent professionals in the field of Electronics & Telecommunication.
4. To facilitate a harmonious symphony of excellence in teaching with a well-rounded professional approach.

➤ **Mechanical Engineering**

1. To mould the budding engineers for the successful professional career in Indian and multinational Companies, consulting firms and government organizations.
2. To provide students with a sound foundation in the mathematical, scientific and engineering fundamentals necessary to formulate, solve and analyze engineering problems and to prepare them for graduate studies.
3. To develop the ability among students to synthesize data and apply technical concepts for product design, manufacturing and entire value chain.





4. To provide opportunity for students to work as part of teams on multidisciplinary projects to encourage the leadership and teamwork skills.
5. To promote the awareness of the life-long learning and techno-entrepreneurship.
6. To motivate and ensure the multifaceted development of students through proper exposure, opportunities and training.

➤ Civil Engineering

1. A solid foundation in mathematics, science, computer as well as fundamental knowledge of relevant engineering principles in civil engineering disciplines.
2. The capability for critical thinking, engineering reasoning, problem solving, experimentation, and teamwork.
3. Practical skills and experience to design, construct, manage and operate the essential elements of civil engineering systems.
4. The integrated understanding of sustainability.
5. In-depth and advanced professional knowledge in various aspects of civil engineering works including the related ordinances, codes of practices, regulations and standards, and keeping track of the latest trend in the civil engineering profession.
6. A sense of professional ethics, social commitment and responsibility to the public.



  
Principal / Director  
Samarth Group of Institutions  
College Of Engineering, Belhe