

BISHOP HEBER COLLEGE (AUTONOMOUS) TIRUCHIRAPPALLI — 620017 TAMILNADU, INDIA

B. Sc. Computer Science

Vision

The Department of Computer Science is driven to provide excellent educational opportunities that accomplished the needs of our students, and empower them as an active technocrat in the top – notch IT industry and nation building.

Mission

- Facilitating the quality technical education through enriched curriculum to solve the real-world problems.
- Creating the knowledge of innovative and sustainable research areas of computational science to build technological advanced society/nation.
- Educating the professional ethics, attitude, human values and career building skills for their professional and personal life.

Programme Outcomes

- Acquiring the knowledge through a set of required courses covering essential areas in computing and a set of technical electives enabling students to deepen their knowledge in chosen areas of computational sciences.
- 2. Imbibing a strong computational oriented technical basis with a flexible interdisciplinary component and an emphasis on communication skills.
- 3. Applying the analytical skills to assess the problem and identify its solution using appropriate development of applications.
- 4. Design the applications using the programming skills of latest computing languages for societal needs and business use-cases.
- 5. Proposing original ideas and solutions, culminating into a modern, easy to use tool, by a larger section of the society with longevity.
- 6. Rendering eminent employability platform as a Up Grad professionals in a significant and indigenous sectors.
- 7. Perform effectively as an individual and as a member or a leader in a multidisciplinary setting to accomplish a goal.
- 8. Apply ethical principles and commit to professional ethics and responsibilities and norms of the scientific practice.
- 9. 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

- 1. Demonstrate the analytical and technical skills in the development of applications development using the knowledge of programming languages, operating systems, database management systems, computer graphics and software engineering.
- Integrate with the computer science community by the ability to function effectively on teams to accomplish shared computing design, evaluation, or implementation goals and also develop an entrepreneurship spirit.
- 3. Exhibit the skills for getting the higher studies and employment in the computing and inter disciplines for the development of professional and societal needs.
- 4. Apply the technical skills for the development of rural areas and technically illiterate areas by providing the solutions of their problems to build the digitally empowered nation.



BISHOP HEBER COLLEGE (AUTONOMOUS) TIRUCHIRAPPALLI — 620017 TAMILNADU, INDIA

M. Sc. Computer Science

Vision

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Mission

- Facilitating the quality technical education through enriched curriculum to solve the real-world problems.
- Creating the knowledge of innovative and sustainable research areas of computational science to build technological advanced society/nation.
- Educating the professional ethics, attitude, human values and career building skills for their professional and personal life.

Programme Outcomes

- 1. Apply the knowledge of mathematics, science, and computing to the solution of complex scientific problems.
- 2. Identify, formulate, research literature, and analyze complex scientific problems reaching substantiated conclusions using first principles of mathematics, natural sciences, and applied sciences.
- 3. Design solutions for complex 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.
- 4. 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.
- 5. Create, select, and apply appropriate techniques, resources, and modern computing and IT tools including prediction and modeling to complex scientific activities with an understanding of the limitations.
- 6. Apply reasoning informed by the contextual knowledge to assess societal, health, safety, legal and cultural issues and the consequent responsibilities relevant to the professional practice.
- 7. Understand the impact of the professional software engineering solutions in societal and environmental contexts, and demonstrate the knowledge of, and need for sustainable development.
- 8. Apply ethical principles and commit to professional ethics and responsibilities and norms of the scientific practice.
- 9. Function effectively as an individual, and as a member or leader in diverse teams, and in multidisciplinary settings.

Programme Specific Outcomes

- 1. Communicate computer science concepts, designs, and solutions effectively and professionally
- 2. Apply knowledge of computing to produce effective designs and solutions for specific problems
- 3. Use software development tools, software systems, and modern computing platforms