

SANKALCHAND PATEL UNIVERSITY, VISNAGAR

Faculty of Computer Science



Structure, Teaching Scheme and Syllabus of Integrated Master of Computer Application (IMCA)

Program Code: CS301

with effect from:

2026-27

Program Outcomes:

P01	Computational Knowledge	Apply knowledge of computing fundamentals, computing specialization, mathematics, and domain knowledge appropriate for the computing specialization to the abstraction and conceptualization of computing models from defined problems and requirements.
P02	Problem Analysis	Identify, formulate, research literature, and solve <i>complex</i> computing problems reaching substantiated conclusions using fundamental principles of mathematics, computing sciences, and relevant domain disciplines.
P03	Design /Development of Solutions	Design and evaluate solutions for <i>complex</i> computing problems, and design and evaluate systems, components, or processes that meet specified needs with appropriate consideration for public health and safety, cultural, societal, and environmental considerations.
P04	Conduct Investigations of Complex Computing 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.
P05	Modern Tool Usage	Create, select, adapt and apply appropriate techniques, resources, and modern computing tools to <i>complex</i> computing activities, with an understanding of the limitations
P06	Professional Ethics	Understand and commit to professional ethics and cyber regulations, responsibilities, and norms of professional computing practice
P07	Life-long Learning	Recognize the need, and have the ability, to engage in independent learning for continual development as a computing professional.

P08	Project management and finance	Demonstrate knowledge and understanding of the computing 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.
P09	Communication Efficacy	Communicate effectively with the computing community, and with society at large, about <i>complex</i> computing activities by being able to comprehend and write effective reports, design documentation, make effective presentations, and give and understand clear instructions.
P010	Societal and Environmental Concern	Understand and assess societal, environmental, health, safety, legal, and cultural issues within local and global contexts, and the consequential responsibilities relevant to professional computing practice
P011	Individual and Team Work	Function effectively as an individual and as a member or leader in diverse teams and in multidisciplinary environments.
P012	Innovation and Entrepreneurship	Identify a timely opportunity and using innovation to pursue that opportunity to create value and wealth for the betterment of the individual and society at large.

Program Specification Outcomes:

PSO 1: Design, develop and implement interdisciplinary application software projects to meet the demands of industry requirements using modern tools and technologies.

PSO 2: Analyses the societal needs to provide novel solutions through technological based research

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