Prospectus

BCA : Bachelor of Computer Application

B.Sc. (ECS) : Bachelor of Science (Entire Computer Science)

M.Sc. : Master in Science (Computer Science)

Shri Shivparvati Sarvajanik Vikas Trust's

GREENFINGERS COLLEGE OF COMPUTER AND TECHNOLOGY

(Recognized by Govt. of Maharashtra & Affiliated to unyashlok Ahilyadevi Holkar Solapur University, Solapur)

Shivratna Knowledge City, Shankarnagar-Akluj

gfc_akluj@yahoo.com

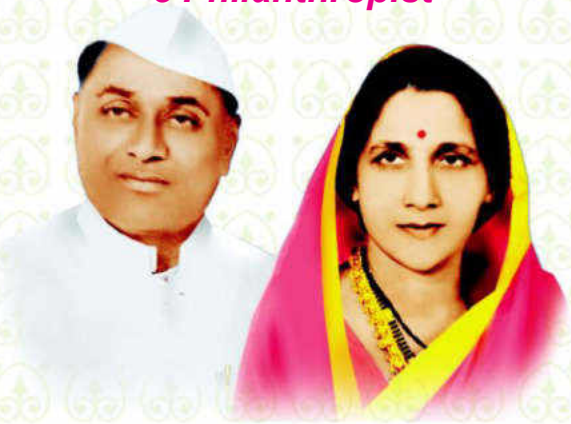
02185 - 223225

www.gfcct.in

/GreenfingerCollege/

GREENFINGERS COLLEGE OF COMPUTER AND TECHNOLOGY, AKLUJ

e Philanthropist



Late. Shankarrao Narayanrao Mohite-Patil

Founder President
Shri Shivparvati Sarvajanik Vikas Trust Shankarnagar- Akluj

The vision, untiring efforts, multidimensional thinking of a humble farmer, freedom fighter, social worker and the doyden of Co-operative movement Sahakar Maharshi Shri. Shankarrao Narayanrao Mohite-Patil alias Kakasaheb laid the foundation of "Shri Shivparvati Sarvajanik Vikas Trust Shankarnagar-Akluj 2 July, 1975 at Akluj for deprived sections, farmers, weak and backward classes of the society.

Source of Strength and Inspiration

Hon. Vijaysinh Shankarrao Mohite-Patil

(Ex. Dy. Chief Minister, Maharashtra State)
President
Shri Shivparvati Sarvajanik Vikas Trust, Akluj

The Hon. President took upon himself the arduous task of translating the vision of Hon. Shankarrao Mohite-Patil by imbibing the virtue of hard work and honesty to achive excellence in the sphere of education through his dynamic and pragmatic leadership and guidance.

Dynamic Leadership

Hon. Ranjeetsinh Vijaysinh Mohite-Patil *(MLA)*

Executive President
Shri Shivparvati Sarvajanik Vikas Trust, Akluj.

The Hon. Excecutive President is generous person with flair for culture, art and education. With his dynamic and versatile personality. He has been a mentor to the politicians, educationalist and industrialist. He has also been acting as strong guiding force to the institution. His vision is to provide quality imparting education to the student and make them capable of facing the challanges of the modern technology.

Youth Icon

Hon. Dhairyasheel Rajsinh Mohite-Patil

President
College Development Committee
Greenfingers College of Computer
& Technology, Akluj

The Hon. President of College Development Committee has swan the seed of Greenfingers College of Computer and Technology, Akluj in the year 2 July, 2007. His dedication itself to the proposition that it shall reach the heights of excellence in the field of computer and technology relevant to the IT industry. A chain institution has made an impact on Akluj township giving it an urban look. Under the dynamic and pragmatic leadership of Hon. Dhairyasheel Mohite-Patil the management is working out the plane for further development to meet the global standards in information and technology.

Principal, Dr. S.U. Shinde

It fills my heart with a sense of pride and pleasure to be a principal of reputed institution like Greenfingers College of Computer and Technology, Shanakarnagar- Akluj.

Had somebody dreamt that a child born in villagers family from rural area would one day create his own world, ample organizations like Shree Shivparvati Sarvajanik Vikas Trust, Shivratna Shikshan Sanstha and well known education center in Akluj. The man was Sahakar Maharshi Hon. Shankarrao Mohite Patil. However Hon. Vijaysinh Shankarrao Mohite Patil under whose guidance Hon. Ranjitsinh Vijaysinh Mohite-Patil, Hon. Dhairyasheel Mohite-Patil with their imagination, vision and determination fulfilled Sahakar Maharshi's dream and carried the fame of Shivratna Knowledge City, GFCCT in Akluj.

We are blessed to have the company of student and given the responsibility to shape them for future. The task before us is not so easy but requires a lot of understanding, patience, loving & caring attitude and ability to accept each and every student as she/he is. We need to have potential to create an environment to expose the student to start their journey from within towards endless dimensions to explore self and surroundings. Education being the process to prepare a pupil for life creates in him/her the habit to derive joy to learn through life itself. A child learns from teachers, parents, peer groups, society and the environment around him. We, as a family of GFCCT, try to make our students to awaken themselves and define the objective of their life with the development of sense of purpose. We are committed to empower our students for self awareness, self discipline and self management.

All great things have humble beginning. The seed of this great educational institute was swan in 2007, July 2. It has grown into sprawling proverbial Banyan tree, the tree of knowledge and wisdom. I see it nothing less than an emerging vibrant IT hub with various faculties like BCA (Bachelor of Computer Application), B.Sc.(ECS) (Entire Computer Science), M.Sc. (Computer Science) offering a many splendoured bouquet of courses for hundreds of aspiring learners from UG to PG of Akluj and surrounded area.

I feel highly in debited to all LMC members and my colleagues who have extended every possible support, guidance and co-operation in various endeavors during academic year.

I hope and feel confident that GFCCT's journey will continue with more vigour, zeal and zest to scale greater height in the field of education, science and technology for a good humanity with the full cooperation of all my colleagues, well wishers, friends and of course my dear students.

The art challanges the technology, and technology inspires the art.

COLLEGE DEVELOPMENT COMMITTEE

Sr. No.	Name	Designation	Role
1	Hon. Mr. Dhairyasheel R. Mohite-Patil	Secretary of the Management	Chairman
2	Hon. Mr.Sanjay S. Rakale	President of the Management or President Nominee	Member
3	Prof. Sanjay S. Salunkhe	Head of the Department Nominated by Principal	Member
4	Prof. Vijayanadan R. Kumbhar	Three Teachers representatives elected by Permanent Full Time Teacher	Member
	Prof. Dr. Tulshiram B. Pisal		"
	Prof. Dhanshri A. Hatolkar		"
5	Mr. Navnath A. Jadhav	Non. Teaching Staff Representative	Member
6	Hon. Mr. Shital A. Magadum	Local Representative from Education, Business, Research and Social Service incl. Alumni	Member
	Hon. Mrs. Manali A. Gandhi		"
	Prof. Dr. Vishavanath M.Awad		"
	Hon. Mr. Machindra N. Pagare		"
	Prof. Yedaba S. Thorat		"
7	Prof. Anil S. Londhe	IQAC Co-Ordinator	Member
8	President and Secretary of Student Council	President, Student Council	Member
		Secretary, Student Council	"
9	Prof. Dr. Mahesh b. Dhembare	Principal Greenfingers College of Computer & Technology	Member-Secretary

VISION

Empowering Computer Innovators, Shaping Technological Sustainability in Rural India.

The vision statement of Greenfingers College of Computer and Technology, Yashwantnagar, Akluj is focused on enhancing skills and providing value-based computer education to meet global demands in the field of computer science. The mission reflects the college commitment to preparing students with the knowledge, skills, and values necessary to excel in the dynamic and ever-evolving world of computer science. By emphasizing value-based education, the college aims to cultivate not only technical expertise but also ethical and responsible behavior among our students. This mission aligns with the broader goals of equipping students to contribute effectively to the field of computer science on a global scale, while also instilling a sense of ethical awareness and responsibility.

MISSION

At Greenfingers College of Computer and Technology Shankarnagar-Akluj, our mission is to cultivate a generation of skilled, socially responsible and innovative computer professionals who are equipped to meet the evolving demands of the technology industry while embracing ethical values and sustainability. Our comprehensive educational approach involve technical proficiency, effective communication, teamwork and a commitment to lifelong learning, ultimately preparing our graduates to excel as responsible leaders in the global technological landscape.

The mission statement of Greenfingers College of Computer and Technology, Shankarnagar-Akluj, encompasses extensive set of goals and aspirations for the institution and its students. The vision outlines the following key points:

Quality Education in Computer Science: The College aims to provide high-quality education in the field of computer science. This indicates a commitment to delivering education that is not only technically sound but also relevant and up-to-date.

Improving Psychomotor Skills: The vision focuses on enhancing psychomotor skills, which involve the coordination of physical actions and cognitive processes. This suggests a hands-on approach to learning, encouraging practical application of knowledge.

Positive Attitude and Communication Skills: The college seeks to nurture a positive attitude among students, along with effective communication skills. These attributes are essential for personal and professional growth, as well as successful collaboration in team settings.

Team Spirit and Entrepreneurship: The vision promotes the development of team spirit and an entrepreneurial mindset. This underscores the importance of working collaboratively and being innovative in addressing challenges. **Societal and Ethical Responsibility:** The college aims to create awareness about societal and ethical responsibilities among students. This indicates a focus on producing graduates who understand their roles in the broader social context and adhere to ethical standards.

Professional Competence in Computer Industries: The vision highlights the goal of preparing students to be competent professionals in the computer industry, capable of contributing as programmers or administrators in various roles and contexts.

Effective Communication with Stakeholders: The college emphasizes effective communication with stakeholders, including employers, employees, customers, and society at large. This points toward the development of well-rounded individuals who can engage with diverse groups effectively.

Pursuit of Higher Studies and Lifelong Learning: The vision encourages students to pursue higher studies in the relevant fields of computer and technology. It also fosters a desire for lifelong learning, promoting continuous growth and adaptation to evolving technology. who are equipped to excel in the field of computer science and contribute positively to society.

Successful Professionals with Ethical and Societal Responsibilities: Ultimately, the vision aims to shape students into successful professionals who not only excel in their careers but also uphold ethical values and take on societal responsibilities.This comprehensive vision statement reflects the college's dedication to producing well-rounded, skilled, and responsible individuals

Institutional Goals

1. **Educational Excellence:** To provide a rigorous and up-to-date curriculum that imparts a strong foundation in computer science theory and practical skills.
2. **Technical Proficiency:** To equip students with the knowledge and skills required to excel in various aspects of computer science, including programming, software development, database management, networking, and cyber security.
3. **Innovation and Creativity:** To encourage creativity and innovation in the field of computer science, promoting the development of new technologies, applications, and solutions.
4. **Ethical and Professional Conduct**: To instill a strong sense of ethics and professionalism in students, emphasizing responsible and ethical use of technology.
5. **Diversity and Inclusion:** To create a diverse and inclusive learning environment that welcomes students from all backgrounds and ensures equal opportunities for all.
6. **Industry Relevance:**To align the curriculum with industry needs and trends, preparing students for successful careers in technology-related fields.
7. **Career Preparation**: To assist students in building their professional skills, including resume writing, interview preparation, and job placement services.
8. **Continuous Improvement**: To regularly assess and improve the quality of education and services offered, staying current with evolving technologies and teaching methods.
9. **Lifelong Learning:**To instill a love for lifelong learning and adaptability, recognizing that the field of computer science is continually evolving.

CORE VALUES OF THE TRUST

1 To promote the students who are needy, eligible and honest by helping them in giving hostel facility and boost their careers.

2 To run educational institutions and make permanent provision for intelligent and professional students from the institutes.

3. Boost and explore the stundents intelligence, physical and mental development by supplying necessary facilities.

4. Organising cultural programmes for the students to expose and increase their moral values.

5 To promote the students in commercial, industrial and technical field of education.

6. Establishing technical and mechanical background by arranging seminars and workshops for the students so they can earn and learn

7 Establishing orphanage for the people, who are orphans, handicapped and widows

8 To get educational help from the institutions and by supplying necessary facilities to the above people

9. To run institutions by taking the help of old aged, orphans, handicapped and honest people.

10 To develop technical institutions and get necessary technical help from the other related institutions

11. To establish small scale industries and get affiliation from the required institutions so as to encourage and develop interest in the people.

12 To establish military educational institutions for spreading military education.

13 To run public schools from college or military training point of view.

14 To develop research counters for the poor and needy farmers.

15 For the development of technology, necessary facility for research of computer science, laboratories.

The aim and objectives mentioned above are only illustrative and not exhaustive.

Facilities and Infrastructure

Campus

Beautiful green campus with well developed garden having WiFi access to the institutional secure computer network and the internet.

Faculty

The college has highly qualified, experienced and professional faculties in respective fields. The college has a panel of eminent visiting faculty, who include reputed practitioners, experts and consultants. To guarantee a high quality and up-to-date study program, guest lectures, viva and seminars are organized and regular meetings are held.

Computer Labs

The college has developed several labs with well-equipped software to provide students with the best exposure and practical training. All the computers are networked, controlled by central servers and administered professionally. Each lab is furnished with the latest equipment.

Library

The college has well-stocked library with a large number of books on subjects related to the courses taught, in addition to literary volumes, ready reference encyclopedias etc. The college subscribes to all important newspapers, magazines, national and international books and journals. The library has a separate reference room in which students can put their raw ideas into perspective. The college gets resource assistance from concerned university libraries.

Classrooms

The classrooms are large and airy and are equipped with the latest audio-visual equipments and LCD projectors. All classrooms have internet access over Wi-Fi. Students are permitted to bring and use their laptops in the classroom.

Hostel Facilities

The institution offers hostel facilities. There are separate hostel facilities for boys and girls. The hostel rooms are well furnished and have attached bathrooms.

Shivratna Sports Academy

Shivratna Cricket Academy, Shivratna Basketball Academy, Tararani Women Wrestling Center, Shivratna Men Wrestling Center, Shivratna Horse-Riding Academy, Shivratna Athletics Academy. The sports club of our college has teams of Cricket, Kabbadi, Volley Ball, Basket Ball and all athletics. We conduct intra-collegiate, intercollegiate, university level and state level competitions, sports meets for both indoor and out door sports every year.

ADMISSION PROCEDURE

1. Admission forms are available in the office.
2. Students seeking admission should enter all the required in the prescribed admission form.
3. Photocopies of the following documents duly attested by a competent authority should be submitted along with the admission form filled by the applicant in neat and visible handwriting.
   a. Statements of marks (Last qualifying exam)
   b. Transfer certificate / school leaving certificate (original will not be returned)
   c. Written statement regarding gap in education (Original)
   d. Caste Certificate (if applicable)
   e. Aadhaar card
   f. Migration certificate (original if applicable)
   g. Copy of the admission letter issued by admission authority in case of centralized admission process by the college/university.
   h. All the original documents except leaving certificate / transfer certificate, migration certificate /gap certificate etc will be returned to the concerned student after the same are verified by the college for scrutiny.

Reservation :

50% seats of the overall sanctioned intake capacity are reserved for reserved category students from the Maharashtra State.
Reservation will applicable only for Maharashtra domicile SC, ST, DINT, OBC SBC categories as per the Government of Maharashtra resolution .
Non-creamy layer certificate is necessary for DTNT OBC SBC category candidate at the time of final admission.
If the candidate is not domicile of State of Maharashtra then he should submit the concerned domicile certificate.
Candidates from Maharashtra State belonging to SC/ST/DT/NT/OBC submit the caste / caste validity certificate at the time of final admission.

Deposit of fees :

Fee must be deposited with Accountant, Greenfingers College Office.

Cancellation of admission and refund of fees :

As per Punyashlok Ahilyadevi Holkar Solapur Unversity rules and norms.

Scholarship :

1 Central Government Scholarship for backward class students.
2 Post Matriculation GOI Scholarship for backward class students.
3 Merit Scholarship form Mertiorious (above 60%) students. (Central Section Scheme)
4 Sports Scholarship Students who have won medals at all India level, inter university tournaments.
5 Bharat Sarkar Alpasankhayak Scholarship for OBC students (Above 60%)
6 EBC Facilities.
7 Rajshree Shahumaharaj Scholarship

COURSES OFFERED

Punyashlok Ahilyadevi Holkar Solapur University, Solapur

Choice Based Credit System (CBCS)

The learning ambience of computational science cater the needs of students who wish to persue higher education to obtain BCA , B. Sc.(ECS) & M.Sc. (Computer Science).

Sr.no	Name of faculty	Name of Course	Intake capacity
1	Computer Science	**BCA** (Bachelor of Computer Application)	120
2	Computer Science	**B.Sc.**(ECS : Entire Computer Science)	160
3	Computer Science	**M.Sc.** (Master in Computer Science)	20

Structure for B. C. A. (Science) – Part I

COURSES UNDER GRADUATION :

BACHELOR OF COMPUTER APPLICATION (B.C.A.)

ELIGIBILITY : H.S.C. (10+2) from any stream passed

CRITERIA FOR SELECTION: Based on College / University level Common Entrance Exam and merit of 12th level.

DURATION: 3 years

SCHEME OF EXAMINATION

1. The exam shall be conducted at the end of each semester.
2. The evaluation of the performance of the students in theory papers shall be on the basis of both internal & University level assessment.

B.C.A. - I Semester - I

Subject Core Course & Type	Name & Type of the Paper	No. of Papers / Practical	Total Marks Per Paper	UA	CA	Credits
AECC	English Paper I Part-A (Communication Skill)	Paper - I	50	40	10	2.0
DSC1A	Fundamentals of Computer	Paper - I	50	40	10	4.0
	Office Automation	Paper - II	50	40	10	
DSC2A	Programming using 'C'	Paper - I	50	40	10	4.0
	Web Designing using HTML	Paper - II	50	40	10	
DSC 3 A/GE-1A	Basics of Mathematics	Paper - I	50	40	10	4.0
	Descriptive Statistics	Paper - II	50	40	10	
DSC 4 A/GE-2A	Fundamentals of Electronics	Paper - I	50	40	10	4.0
	Linear Electronics	Paper - II	50	40	10	
Total			**450**	**360**	**90**	**18**

B.C.A. - I Semester - II

Subject Core Course & Type	Name & Type of the Paper	No. of Papers / Practical	Total Marks Per Paper	UA	CA	Credits
AECC	English Paper I Part-B (Communication Skill)	Paper - II	50	40	10	2.0
DSC1B	Basics of Python Programming	Paper - III	50	40	10	4.0
	Operating System	Paper - IV	50	40	10	
DSC2B	Advanced 'C' Programming	Paper - III	50	40	10	4.0
	Web Designing using JavaScript	Paper - IV	50	40	10	
DSC 3 B/GE-1B	Graph Theory	Paper - III	50	40	10	4.0
	Probability Theory	Paper - IV	50	40	10	
DSC 4 B/GE-2B	Digital Computer Fundamentals	Paper - III	50	40	10	4.0
	Introduction of Microprocessor & Interfacing	Paper - IV	50	40	10	
Democracy, Elections and Good Governance			50	40	10	NC
Total			**450**	**400**	**100**	**18**

Practical

Subject Core Course & Type	Name & Type of the Paper	No. of Papers / Practical	Total Marks Per Paper	UA	CA	Credits
Core Practical	DSC1A&1B	Practical I	100	80	20	4.0
	DSC2A&2B	Practical II	100	80	20	4.0
	DSC3A&3B/GE-1A&1B	Practical III	100	80	20	4.0
	DSC4A&4B/GE-2A&2B	Practical IV	100	80	20	4.0
	Total (Parctical)		**400**	**320**	**80**	**16**
	Total		**1350**	**1080**	**270**	**52**

B.C.A. - II

B.C.A. - II Semester - III

Subject Core Course & Type	Name & Type of the Paper	No. of Papers / Practical	Total Marks Per Paper	UA	CA	Credits
DSC1C	Object Oriented Programming Using Java-I	Paper-V	50	40	10	4.0
	Data Structure Using 'C'-I	Paper-VI	50	40	10	
DSC2C	Database Management System-I	Paper-V	50	40	10	4.0
	Software Engineering	Paper-VI	50	40	10	
#DSC 3C/GE-3C	FA Using Tally	Paper-V	50	40	10	4.0
	Operating System-II	Paper-VI	50	40	10	
$SEC - I	Web Technology Using PHP		100	80	20	4.0
Total			**400**	**320**	**80**	**16**

B.C.A. - II Semester - IV

Subject Core Course & Type	Name & Type of the Paper	No. of Papers / Practical	Total Marks Per Paper	UA	CA	Credits
DSC 1D	Object Oriented Programming Using Java-II	Paper-VII	50	40	10	4.0
	Data Structure Using 'C'-II	Paper-VIII	50	40	10	
DSC2D	Database Management System-II	Paper-VII	50	40	10	4.0
	Software Testing & QA	Paper-VIII	50	40	10	
#DSD 3D/GE-3D	Digital Marketing	Paper-VII	50	40	10	4.0
	Python-II	Paper-VIII	50	40	10	
Total			**300**	**240**	**60**	**12**
	Environmental Studies		50	40	10	NC

Subject Core Course & Type	Name & Type of the Paper	No. of Papers / Practical	Total Marks Per Paper	UA	CA	Credits
	DSC1C&1D	Practical I & II	200	160	40	8
Practical on	DSC2C&2D	Practical I & II	200	160	40	8
	DSC3C&3DGR3C&GR3D	Practical I & II	200	160	40	8
		Total (Parctical)	**600**	**180**	**120**	**24**
		Total	**1800**	**960**	**240**	**48**

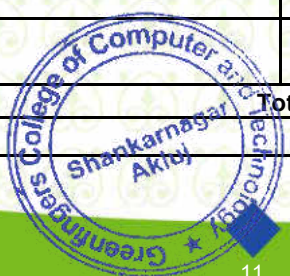
B.C.A. - III Semester - V

Subject Core Course & Type	Name & Type of the Paper	No. of Papers / Practical	Total Marks Per Paper	UA	CA	Credits
	English (Business English)		50	40	10	2.0
DSE1A	Core Java	Paper IX	100	80	20	4.0
DSE2A	Visual Programming	Paper X	100	80	20	4.0
DSE3A	Computer Graphics	Paper XI	100	80	20	4.0
DSE4A	Recent Trends in IT	Paper XII	100	80	20	4.0
SEC 3	Linux and Shell Programming	Paper XIII	100	80	20	4.0
Total			**550**	**440**	**110**	**22.0**

B.C.A. - III Semester - VI

Subject Core Course & Type	Name & Type of the Paper	No. of Papers / Practical	Total Marks Per Paper	UA	CA	Credits
	English (Business English)		50	40	10	2.0
DSE1B	Advanced Java	Paper XIV	100	80	20	4.0
DSE2B	Dot Net Technology	Paper XV	100	80	20	4.0
DSE3B	Data Mining & Data Warehouse	Paper XVI	100	80	20	4.0
DSE4B	Cryptography and Network	Paper XVII	100	80	20	4.0
SEC 4	Security Advanced Python	Paper XVIII	100	80	20	4.0
Total			**550**	**440**	**110**	**22.0**

Subject Core Course & Type	Name & Type of the Paper	No. of Papers / Practical	Total Marks Per Paper	UA	CA	Credits
	DSE 1A &1B	Practical IV	100	80	20	4.0
Practical on	DSE 1A &1B	Practical V	100	80	20	4.0
	DSE 1A &1B	Practical VI	100	80	20	4.0
	DSE 1A &1B	Practical VII	100	30	0	4.0
				50	20	
		Total (Parctical)	**400**	**320**	**80**	**16**
		Total	**1500**	**1200**	**300**	**60**



DEPARTMENTOFBACHELOROF SCIENCE IN ENTIRE COMPUTER SCIENCE (B.Sc. ECS)

PROGRAMME OUTCOMES (POs)

PO1. Software Engineering knowledge: Apply the knowledge of mathematics, science, software engineering fundamentals, to the solution of real life problems.

PO 2. Problem analysis: Identify, formulate, review research literature, and analyze complex problems reaching substantiated conclusions using first principles of mathematics, natural sciences, and engineering sciences.

PO 3. Design/development of solutions: 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.

PO 4. 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.

PO 5. Modern tool usage: Create, select, and apply appropriate techniques, resources, and modernITtoolsincludingpredictionandmodelingtocomplexactivitieswithanunderstanding of the limitations.

PO 6. 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 practice.

PO 7. Environment and sustainability: Understand the impact of the software and hardware solutionsinsocietalandenvironmentalcontexts,anddemonstratetheknowledge of,andneed for sustainable development.

PO 8. Ethics: Apply ethical principles and commit to professional ethics and responsibilities and norms of the engineering practice.

PO 9. Individual and team work: Function effectively as an individual, and as a member or leader in diverse teams, and in multidisciplinary settings.

PO10.Communication: Communicateeffectivelyonprojectactivitieswiththe ITcommunity 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.

PO 11. Project management and finance: Demonstrate knowledge and understanding of the software project andmanagement principles andapply these to one'sownwork, asa member and leader in a team, to manage projects and in multidisciplinary environments.

PO 12. 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.

PROGRAMME SPECIFIC OUTCOMES (PSOs)

PSO1: Demonstrate the aptitude for Computer Programming and Computer based problemsolving skills.

PSO2: Design and develop computer programs/computer -based systems in the areas related to algorithms, networking, web design, cloud computing, IoT and data analytics.

PSO3: The abilityto work independently ona substantialsoftware projectandasan effective team member.

BACHELOR OF SCIENCE
(ENTIRE COMPUTER SCIENCE): B.Sc.(ECS)

ELIGIBILITY: H.Sc. (Science) Diploma (2 Years after S.S.C.)

CRITERIA FOR SELECTION :University level Common Entrance Test and merit of 12th standard

DURATION: 3 Years

SCHEME OF EXAMINATION

I.The examination shall be conducted at the end of each semester year.

II. Every paper shall carry 100 marks.

SCHEME OF EXAMINATION

I.The examination shall be conducted at the end of each semester

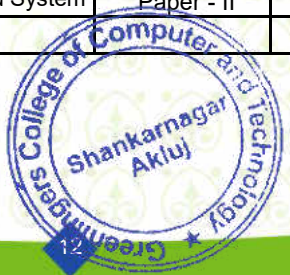
II. Every paper shall carry 100 marks divided into.

B.Sc. (ECS) Semester - I

Subject Core Course & Type	Name & Type of the Paper	No. of Papers / Practical	Total Marks Per Paper	UA	CA	Credits
AECC	English Paper I Part-A (Communication Skill)		50	40	10	2
DSC 1A	Fundamentals of Computer	Paper - I	50	40	10	2
	Basics of Operating System	Paper - II	50	40	10	2
DSC 2A	Programming using 'C'	Paper - I	50	40	10	2
	Python - I	Paper - II	50	40	10	2
DSC 3A /GE-1A	Numerical Methods	Paper - I	50	40	10	2
	Graph Theory	Paper - II	50	40	10	2
DSC 4A /GE-2A	Basic Electronics	Paper - I	50	40	10	2
	Advanced Electronics	Paper - II	50	40	10	2
Total			**450**	**360**	**90**	**18**

B.Sc.(ECS) Semester - II

Subject Core Course & Type	Name & Type of the Paper	No. of Papers / Practical	Total Marks Per Paper	UA	CA	Credits
AECC	English Paper I Part-B (Communication Skill)		50	40	10	2
DSC -1B	Introduction to web Technology	Paper - I	50	40	10	2
	Operating System	Paper - II	50	40	10	2
DSC - 2B	Object Oriented Programming using C++	Paper - I	50	40	10	2
	Python - II	Paper - II	50	40	10	2
DSC 3B /GE-1B	Linear Algebra	Paper - I	50	40	10	2
	Discrete Mathematics	Paper - II	50	40	10	2
DSC 4B /GE-2B	Digital Electronics & Microprocessor	Paper - I	50	40	10	2
	Introduction to Microcontroller & Embedded System	Paper - II	50	40	10	2
Total			**450**	**360**	**90**	**18**



Practical

Subject Core Course & Type	Name & Type of the Paper	No. of Papers / Practical	Total Marks Per Paper	UA	CA	Credits
	DSC 1A & 1B	Practical IV	100	80	20	4.0
Core Practical	DSC 1A & 1B	Practical V	100	80	20	4.0
	DSC3A&3B/GE1A&1B	Practical VI	100	80	20	4.0
	DSC4A&3B/GE2A&2B	Practical VII	100	80	20	4.0
		Total (Parctical)	**400**	**320**	**80**	**16**
		Total	**1300**	**1040**	**260**	**52**

B.Sc.(ECS) - II Semester - III

Subject Core Course & Type	Name & Type of the Paper	No. of Papers / Practical	Total Marks Per Paper	UA	CA	Credits
DSC 1C	Data Structure using C++ -I	Paper - V	50	40	10	4
	Linux OS and Shell Scripting	Paper - VI	50	40	10	
DSC 2C	Software Engineering	Paper - V	50	40	10	4
	Database Management System-I	Paper - VI	50	40	10	
#DSC 3C	Probability Theory	Paper - V	50	40	10	4
	Data Science with Python	Paper - VI	50	40	10	
Total			**300**	**240**	**60**	**12**
$SEC-I	Web Development Using PHP		50	80	20	4

B.Sc. (ECS) - II Semester - IV

Subject Core Course & Type	Name & Type of the Paper	No. of Papers / Practical	Total Marks Per Paper	UA	CA	Credits
DSC 1D	Data Structure using C++ -II	Paper-VII	50	40	10	4
	Core Java	Paper-VIII	50	40	10	
DSC 2D	Software Testing	Paper-VII	50	40	10	4
	Database Managment System-II	Paper-VIII	50	40	10	
#DSC 3D	Descriptive Statistics	Paper-VII	50	40	10	4
	Data Visualization	Paper-VIII	50	40	10	
Total			**300**	**240**	**60**	**12**
	Environmental Studies		50	40	10	NC

Practical

Subject Core Course & Type	Name & Type of the Paper	No. of Papers / Practical	Total Marks Per Paper	UA	CA	Credits
	DSC 1C, DSC 1D	Practical I	200	160	40	8.0
Practical	DSC 2C, DSC 2D and SEC-II	Practical II	200	160	40	8.0
	DSC 3C and DSC 3D	Practical III	200	160	40	8.0
		Total (Parctical)	**600**	**480**	**120**	**24**
		Total	**1200**	**960**	**240**	**48**

DEPARTMENT OF BACHELOR OF COMPUTER APPLICATION (BCA)

PROGRAMME OUTCOMES (POs)

PO1: Designanddevelopsoftwarebasedsolutionsforreallifeproblems,servingeffectively to the requirements of computer field and Society.

PO2: Attain sufficient knowledge related to computer domains, possesses technical, soft and hard skills and apply them effectively in team work.

PO3: Empowerthestudentswithcompetenciesincreativethinkingandproblemsolving, inter-personal communication and managerial skills.

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PO9: Toapplycontextualknowledgeofprofessional,ethical,legal,andsecuritytoassess societal, health, legal and cultural issues.

PO10: Toextendenthusiasmforself-improvementthroughcontinuousprofessional development and life-long learning.

PROGRAMME SPECIFIC OUTCOMES (PSOs)

PSO1: An ability to enhance the application of knowledge of theory subjects in diverse fields.

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PSO3: Preparing students in various disciplines of technologies such as computer applications, computer networking, software engineering, JAVA, database concepts and programming.

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PSO6: To enhance logical ability and programming concepts by implementing programming lab.

PSO7: Preparing students for future aspects by building and improving their creativity, social awareness, and general knowledge.

PSO8: Encouraging students to convert their start-up idea to reality by implementing.

PSO9: Ability to understand the changes or future trends in the field of computer application.

PSO10: Abilityto identify, formulate,analyseand solve problemsof programmingusing different languages

B.Sc. (ECS) - III Semester - V

Subject Core Course & Type	Name & Type of the Paper	No. of Papers / Practical	Total Marks Per Paper	UA	CA	Credits
AECC	English (Businces English)	Paper II Part A	50	40	10	2.0
DSE1A	Data Communication & Networking	Paper IX	100	80	20	4.0
DSE2A	Theory of Computer Science	Paper X	100	80	20	4.0
DSE3A	Visual Programming	Paper XI	100	80	20	4.0
DSE4A	Advanced Java	Paper XIII	100	80	20	4.0
SEC 3	Advanced Python Programming	Paper XIIII	100	80	20	4.0
Total			**550**	**440**	**110**	**22**

B.Sc. (ECS) - III Semester - VI

Subject Core Course & Type	Name & Type of the Paper	No. of Papers / Practical	Total Marks Per Paper	UA	CA	Credits
AECC	English (Businces English)	Paper II Part B	50	40	10	2.0
DSE1B	System Security	Paper XIV	100	80	20	4.0
DSE2B	Compiler Construction	Paper XV	100	80	20	4.0
DSE3B	Internet Programming using ASP Net	Paper XVI	100	80	20	4.0
DSE4B	Angular JS	Paper XVII	100	80	20	4.0
SEC 4	Mobile Application Development	Paper XVIII	100	80	20	4.0
Total			**550**	**440**	**110**	**22**

Practical

Subject Core Course & Type	Name & Type of the Paper	No. of Papers / Practical	Total Marks Per Paper	UA	CA	Credits
Practical	DSC2A&DSE2B		100	80	20	4.0
	DSC3A&DSE3B		100	80	20	4.0
	DSC4A&DSE4B		100	80	20	4.0
	Project work		100	80	20	4.0
		Total (Parctical)	**400**	**320**	**80**	**16**
		Total	**1500**	**1200**	**300**	**60**

Core Courses : DSC 1 C, DSC 2C, DSC 1D ad DSC 2D (Core computer science courses)
Generic Electives : DSC 3C/ and DSC 3D / GE-3D : Commerce / Management

Additional Interdisciplinary Courses - Cyber Lae / Bioinformatics / Optimization technics / Data Anlytics / NCC. * The students can choose MOOCs / NPTEL / SWAYAM / Pathshala / Add-on / Skill based courses of university / college initiated courses of same credits. * these courses are not compulsory, but after completion of these courses student get additional credits on their mark lists. * SEC courses run by colleges should be communicated to university for information & necessary action.

Abbreviations :
L : Lectures T: Tutorials **P:** Practical **UA :** University Assessment **CA :** College Assessment **CC:** Core Course **AEC:** Ability Enhancement Courses **DSC:** Discipline Specific Course Paper **SEC:** Skill Enhancement Course, **AIC :** Additional Interdisciplinary Courses **GE :** Generic Electives

MASTER IN COMPUTER SCIENCE
M.Sc. (CS)

ELIGIBILITY : B.Sc(Maths/Electronic/Statistics)

CRITERIA FOR SELECTION : University level Common Entrance Test and graduation merit

DURATION : 2 Years

SCHEME OF EXAMINATION

I.The examination shall be conducted at the end of each semester year.

II. Every paper shall carry 100 marks.(Theory 80, Internal 20)

M.Sc. - I Semester - I

Discipline Specific Course Theory (DSC)

Subject Core Course & Type	Name & Type of the Paper	Hrs/ week	Internal	University	Total	Credits
DSC1-1	Object Oriented Programming using C++	04	20	80	100	4
DSC1-2	Advanced DBMS	04	20	80	100	4
Discipline Specific Electove Theory (DSE) (Any One)						
DSE-1-1	Data Structures and Algorithms / Operating System	04	20	80	100	4
Minor						
Minor	Research Methodology in Computer System	04	20	80	100	4
Practical						
DSC-P-1-1	Practical based on DSC1-1	04	10	40	50	2
DSC-P-1-2	Practical based on DSC1-2	04	10	40	50	2
DSE-P1-1	Practical based on DSE1-1	04	10	40	50	2
	Total	**28**	**110**	**440**	**550**	**22**

M.Sc. - I Semester - II

Discipline Specific Course Theory (DSC)

Subject Core Course & Type	Name & Type of the Paper	Hrs/ week	Internal	University	Total	Credits
DSC1-3	Java Programming	04	20	80	100	4
DSC1-4	Python Programming	04	20	80	100	4
Discipline Specific Electove Theory (DSE) (Any One)						
DSE1-2	Computer Communicatiom / Network Mobile Computing	04	20	80	100	4
Practical						
DSC-P-1-3	Practical based on DSC1-3	04	10	40	50	2
DSC-P-1-4	Practical based on DSC1-4	04	10	40	50	2
DSE-P1-2	Practical based on DSE1-2	04	10	40	50	2
Project-1	Project	04	20	80	100	4
	Total	**28**	**110**	**440**	**550**	**22**

Open Elective (Any One)

Subject Core Course & Type	Name & Type of the Paper	Hrs/ week	Internal	University	Total	Credits
HCT 1.1	Practical Based on OET 2.1	04	10	40	50	2
HCT 1.2	Practical / Seminar / Viva based on SWAYAM course OET 2.2					
HCT 1.3	Tutorial	02	25	–	25	1
	Total	**32**	**145**	**480**	**625**	**25**

M.Sc. - II Semester - III

Hard Core - Theory

Subject Core Course & Type	Name & Type of the Paper	Hrs/ week	Internal	University	Total	Credits
HCT 3.1	Digital Image Processing	04	20	80	100	4
HCT 3.2	Open Source Technologies (PHP, MySql)	04	20	80	100	4

Soft Core - Theory (Any One)

SCT 3.1	Network Security	04	20	80	100	04
SCT 3.2	Cloud Computing					
SCT 3.3	Mobile Computng					

Open Elective - Theory (Any One)

OET 3.1	Fundamental of Web Designing	04	20	80	100	04
OET 3.2	SWAYAM Course*					

Hard cord Lab / Project

HCP 3.1	Practical based on HCT 3.1	04	10	40	50	2
HCP 3.2	Practical based on HCT 3.2	04	10	40	50	2
HCP 3.3	Project - III	02	10	40	50	2

Hard cord Lab / Project

OEP 3.1	Practical based on OET 3.1	04	10	40	50	2
OEP 3.2	Practical / Seminar / Viva based on SWAYAM course OET 3.2					
Others	Tutorial	02	25	–	25	1
	Total	**32**	**145**	**480**	**625**	**25**

M.Sc. - II Semester - IV

Hard Core - Theory

Subject Core Course & Type	Name & Type of the Paper	Hrs/ week	Internal	University	Total	Credits
HCT 4.1	Net Technology	04	20	80	100	4
HCT 4.2	Machine Learning	04	20	80	100	4
HCT 4.3	Data Mining & Warehouse	04	20	80	100	4

Soft Core - Theory (Any One)

SCT 4.1	Soft Computing	04	20	80	100	04
SCT 4.2	Block chain Technology					

Hard cord Lab / Project

HCP 4.1	Practical based on HCT 4.1	04	10	40	50	2
HCP 4.2	Practical based on HCT 4.2	04	10	40	50	2
HCP 4.3	Practical based on HCT 4.3	04	10	40	50	2
HCP 4.4	Project - IV	02	10	40	50	2
Others	Tutorial	02	25		25	1
	Total	**32**	**145**	**480**	**625**	**25**

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PSO9: Ability to understand the changes or future trends in the field of computer application.

PSO10: Abilityto identify, formulate,analyseand solve problemsof programmingusing different languages

DISCIPLINARY RULES

I) The students shall attend the classes, practical and seminars etc. whenever prescribed, regularly so that the requirements of minimum attendance as prescribed under the Act, the statues, the ordinances and rules/regulations made in that behalf are fulfilled. It shall be binding on the part of the students to see that no damage is done to the property of the concerned institution in any manner.

ii) The students shall behave with their classmates, teachers, authorities and the non-teaching employees of the concerned institutions in a responsible manner.

ill) The student shall behave in a fair and friendly manner in all extra and co curricular activities.

iv) The student shall participate in educational tours, youth festivals and other collective activities wherever prescribed in a constructive manner, ensuring fulfillment of the objectives of the said activity under strict supervision and guidance of the teachers/officers/authorities of the concerned Institutions.

v) It shall be obligatory on the part of the students to make a proper use of the laboratory/library/study room and other common facilities without causing inconvenience or damage to the other users and the property. The resident students shall be governed by the rules and regulations in respect of hostel. Accommodation / official premises as prescribed by the concerned institution. The students involved in any attempt of common-offs, vulgarism, gundalsm, manhandling, eve teasing, malpractices or praticipation in criminal acts shall be liable for punishment.

vi) College have been constituted anti-ragging committee at college level. Ragging in any form is strictly prohibited.

vii) All powers relating to disciplinary action against students of an affiliated college c recognized institution not maintained by the University, shall visit in the Principal of the affiliated college or Head of the recognized institution and the provisions the foregoing sub-section including the rules.

Any breach of the aforesaid rules or any violation on the part of the student shall be liable to be punished severely in accordance with provision contained in section 95(3)(4) of the Maharashtra University Act, 1994.

STUDENTS FEEDBACK

Hello, I am kajal Kodalkar. I completed my graduation in B.Sc. [ECS] from Greenfinger College Of Computer And Technology our college has believed in helping guiding students. College management is also great and managed everything in planned activities. College having excellent teacher staff. They provide lot of knowledge to students. They always motivated and encouraged me to face the risks and learn new things. About Current Job : Currently I am working in infosys, Infosys provides me great leadership skill.

Kajal Kodalkar (M.Sc. (CS) 2021-22)

Most humbly, my name is . I am pass out student of computer science branch 2022 batch. I am glad to provide you with my feedback about the college. My overall experience to date has been amazing, and the college is having an amazing infrastructure. college has provided me with a number of opportunities to grow and explore my skills. I have always found the teachers are highly supportive. Most of my doubts were cleared after the classes get over. College has provided different events along with education which was really helped me to enhance my skills. Soft skills are an essential part of life and different which were really helpful. Actually this is the place where I got not only education but opportunity to enhance my skills as well. I'm so lucky that I got a during the journey. As expected the end of this beautiful journey with job offers from different MNC like infosys, Capgemini and Mphasis. I am highly thankful to GFCCT for providing me with an opportunity to be a part of your college. It has added a number of values to my life. Giving feedback can be challenging thing to do but I would like to say a big thanks for giving this opportunity to me. Thank you!

Ashwini Magar (B.Sc.(ECS), 2021-22)

Hello, my graduation at GFCCT has been an inordinately fascinating and awe-inspiring journey. I Have consummated my B.Sc. (ECS) from this college. Culling GFCCT was one of the best decisions I have ever made. It feels great to be edified by astonishing edifiers who are the best. The faculty here is always dedicated to. avail students not only in studies but additionally in curricular activities provided me with a great balance of academics and extracurricular activities. They always incentivized and emboldened me to face the perils and learn incipient things. Not only in studies but withal availed me in my personal quandaries too caring and ancillary.I am and will always be thankful to SL my college for making me a person I am today. I owe a sizably voluminous vote of thanks to every opportunity given to me to explore my personality and potential.

- Shweta Agrawal (B.Sc. (ECS) 2021-22)

OUR TOP ALUMINI RECRUITERS

Infosys
Tech Mahindra
TATA CONSULTANCY SERVICES
TIBCO
arus technologies
winner software
WNS
avercast
WIPRO Applying Thought
APPZIA TECHNOLOGIES
GLOBAL AI SOLUTIONS
wetech DIGITAL
ABL TECHNOLOGY
Allstate India
apptware
Aaptra
Mastek
pathlock
accenture High performance. Delivered.
NEEYAMC
Exaltare
Rabbit & Tortoise

Greenfingers College of Computer and Technology Shankarnagar Akluj