

PSG COLLEGE OF PHARMACY - ANNUAL REPORT

ADMISSIONS

The details of admissions made during the year 2023 – 24 are given below:

S.No	Course	Sanctioned Intake	Admitted
1.	D Pharm	60	36
2.	B Pharm	100	97
3.	B Pharm (Lateral)	10	17
4.	Pharm D	30	28
5.	M Pharm - Pharmaceutics	15	15
6.	M Pharm- Pharmacology	12	12
7.	M Pharm- Pharmaceutical Analysis	15	7
8.	M Pharm- Pharmacy Practice	15	12

- The induction program for 2023 batch students of B Pharm, Pharm D and M Pharm was on 04th October 2023. Dr. J.S. Bhuvaneshwaran, Director, PSGSSH was the Chief Guest.

AWARD OF THE PhD DEGREE

S. No	Name	Department	Guide Name	Viva Date	PT / FT
1.	Mrs.M.Sangeetha	Pharmaceutical Chemistry	Dr. J. Banurekha	30.01.2024	PT

CAREER GUIDANCE PROGRAM

- “Trouble shooting on development of Solid dosage forms” was conducted on 03rd November 2023. Dr. D. Natarajan, Senior Pharmaceutical Consulting Scientist for Formulation Development addressed the students.
- “Recent trends in Technology Development in Formulation” was conducted on 05th December 2023. Dr. Karthik Siram, Senior Scientist, Dept. of Translational Medicine, University of Montana, United States interacted with the students.
- Career Guidance session was conducted on 23rd March 2024, Dr. K. Rajaram, Senior Research Associate, Endo pharmaceuticals addressed the students on the topic “Industry expectations from Pharma students”.
- Career Guidance session on the topic “Advancing Healthcare through AI in Pharmaceutical Sciences” on 25th September 2024. Dr. Milan Antonijevic PhD, FHEA, FRSC, MAPS, Associate Professor in Pharmaceutical Sciences, University of Surrey, UK, was the Speaker.

SPORTS/ CULTURAL ACTIVITIES

Intercollegiate activities

- The Intercollegiate State Level Annual Sports Meet was held at Excel College of Pharmacy, Namakkal from the 20th to the 22nd of March 2024. Our students participated and emerged victorious, securing the Overall Championship for the 6th consecutive time.
- The Intercollegiate event ARTHASASTHRA'24 was conducted by SNS College of Engineering on the 27th of March 2024. Our students participated and won the Overall Championship.
- The Intercollegiate event EUPHORIA was conducted by PSG College of Arts and Science on the 27th of March 2024. Our students participated and won in many events.
- The Intercollegiate event CASCAL was conducted by PSG College of Arts and Science on the 28th of March 2024. Our students participated and emerged victorious, securing the Overall Championship for the 6th consecutive time.
- State Level Intercollegiate Sports Meet organized by The Tamil Nadu Dr. MGR Medical University took place in Dhanalakshmi Srinivasan College of Pharmacy, Perambalur from 7th to 9th August 2024, the event featured 42 colleges and 1650 athletes. PSG College of pharmacy emerged as the Overall Champions, earning a total of 139 points. This victory marks their sixth consecutive championship, underscoring their dominance in collegiate sports.

Intra collegiate college activity

- Annual Sports Meet "KREEDA 2024" was on 26th June 2024. Dr. S. Mohan, Principal, Karpagam College of Pharmacy was the Chief Guest.
- Annual cultural meet Sangamam'24, a three-day event was inaugurated on 12.09.2024. Students participated in various activities and exhibited their talents and the Overall Championship was won by Black Panther house.

NSS ACTIVITIES

Special camp of NSS program was organised from 18th March'24 for a week

COLLEGE ACTIVITIES

Commemorative days celebrated

- **National Pharmacy week** was celebrated on 25th November 2023. Blood donation camp was conducted and our students donated blood in GH. An Awareness Rally on drug abuse to the public was conducted and around 500 students participated in it. Valedictory function was conducted in 'B' Block Auditorium.

- **Cancer Day Awareness** program was conducted on 07th Feb 2024 in front of 'B' Block reception. Students displayed posters depicting informative messages and crucial facts about cancer prevention, early detection, and support for those battling the disease.
- **National Deworming Day** scheduled on 25th Feb 2024, during which students played an active role by addressing school students and providing counseling to patients in 'B' block.
- **Science day** was celebrated on 28th February 2024. Poster display and Public awareness program on Drug abuse were performed.
- **Women's Day Celebration** (Sakthi'24) was celebrated on 08th March 2024. Mrs. Ezhilarasi, Inspector – Vigilance & Anti-corruption Department, Coimbatore, was the Chief Guest of the program
- **World Health Day** was celebrated on 5th April 2024, students displayed posters in 'B' Block to create awareness to the patients. On 8th April 2024, the Media Club celebrated World Health Day to emphasized the importance of exercise and nutrition. Students presented health scenarios, followed by insightful talks urging everyone to prioritize health.
- Semozhi Peravai and Eco Club united to celebrate **World Earth Day** on 16th April 2024. Dr. M. Ramanathan shared insights on '□□□□□□ □□□', highlighting human-environment interconnectedness and Staff emphasized collective responsibility for environmental action.
- **World Emergency Day** was on 27th May 2024, our students showcased their creativity in a competition highlighting the WHO's campaign on "Climate Change as a Health Emergency". They raised awareness through posters and speeches, earning recognition for their efforts in promoting environmental and health awareness.
- On 1st June 2024, the Eco Club, teamed up with Kovai Kulangal Padhukappu Amaippu for **World Environment Day**, planting 5000 trees at Madukkarai, Pilayarapuram. The efforts focused on biodiversity and combating desertification, showcasing strong dedication to environmental conservation. On July 4th 2024, Art from Waste competition and Planting trees with Plant tag markers were conducted in which the students participated enthusiastically. Kavingar K.M.G. Athi Pandiyan was the Chief Guest of the event.
- **International Yoga Day** was celebrated on 21st June 2024. Around 50 students participated in the event.
- On 15th August 2024 **Independence Day** was celebrated by our Students community.
- On 16th August 2024, the eco club organized a notable event – '**World Elephant Day**', highlighting the essential need for elephant conservation. Club members took pledge to support conservation initiatives and protect elephants and their habitats from threats.

- On 31st August 2024, in celebration of **Sarvadesha Illaingar Thinam**, a marathon took place at the Nehru Stadium. Mr. Harikrishnan S from our college excelled with a remarkable performance, securing 7th place with a cash prize of Rs.1000 amidst strong competition.
- **Teacher's day** was celebrated on 5th September 2024 and planning to give awards to teachers from next year onwards.
- In connection with **Pharmacists Day** Celebration on 25th September 2024, an awareness rally was organized by IPA Coimbatore Local Branch in association with Sri Ramakrishna Institute of Paramedical Sciences. The rally started at 7.45 a.m. near Saradhambal Temple, Race Course. 30 students and 2 faculty members from our college participated in the rally.

College activities

- The **17th Graduation day** was conducted on 3rd November 2023 Dr. D. Natarajan, Sr. Pharmaceutical Consulting Scientist for Formulation development was the Chief Guest.
- **College day** was celebrated on 17th November 2023. Mr. Jeyaram, RJ from Hello FM, Madurai was the Chief Guest and Mr. Guhan Himadeep Chowdary. S, Formulation Scientist, Hibrow Healthcare Pvt. Ltd., Chennai and Alumni of our college was the Guest of Honor.
- **New Council induction** and Thalir program was on 7th December 2023.
- **Mentor – Mentee** interaction and Career guidance program was on 13th February 2024
- **College Day** was celebrated on 26th September 2024. Dr. Vishal Bhataiya, Senior Principal Clinical Data Scientist, Novartis Healthcare Private Limited was the Chief Guest.
- On the occasion of **Council Day** celebrations, the release of the Coffee table book “**BLOSSOMS**” : **Origin of Success** marking the 16 - year journey of the Student Council, was held on 27th September 2024 in B - Block Auditorium.

Science club activities

- On 5th April 2024, Sir C.V Raman Science Club organized an event to raise Sugar Awareness with a focus on Artificial Sugars and healthier alternatives, encouraging better dietary choices.

Indian Knowledge Systems

- The SemmozhiPeravai organized Chithirai Thiruvizha on 26th April 2024, featuring traditional games and food stalls, followed by competitions.
- Health campus Pongal was celebrated on 6th Jan 2024 in a grand manner Onam was celebrated on 7th September 2024.

Other programs

- A Business Carnival was conducted on 30th November 2023 by the Business Club of PSGCP. Around 25 stalls were there and it was a grand success.
- "Glitz-The Success Stories," an e-magazine was released on 26th April 2024.
- Director of Agribusiness Development - TNAU and his team visited our Institution for Project initiation program on 24th Jan 2024.
- In the Kelo India event 14 students from our college volunteered enthusiastically and contributed to the smooth execution of the event by assisting in organizing various activities, coordinating logistics, and ensuring that participants had a positive and memorable experience.
- Vikshit Bharat@ 2047 activities was conducted as per the Government instruction to emphasize the vision of the youth in the year 2047.

Alumni activity

- Youth Alumni Meet 2023 was conducted on 29th December 2023.
- Alumni meet was conducted on 20th July 2024, around 65 alumni participated in the meet.

CONFERENCE/WORKSHOP/WEBINAR CONDUCTED AND ATTENDED BY FACULTY

Conference / workshop / webinar series conducted

- A workshop on “Recent innovations in Medicinal Chemistry & its applications in Industry” was conducted on 16.11.2023.
- Symposium on Xenobiotics in Nephrology – Integrating Pharmacometrics in Pharmacy Practice was on 22nd& 23rd March 2024.
- Two days seminar on IPR Course II - “From Research Investigation to Invention to securing a Patent: What it takes to draft a Claim” was conducted on 10th & 11th June 2024. Around 30 Students from M Pharm and Pharm D participated in the seminar.
- Two days seminar on IPR Course III - “Taking invention to Market and Commercialization: Role of Intellectual Property (PI)” on 13th& 14th June 2024. Around 30 Students from M Pharm and Pharm D participated in the seminar.
- Sir C.V. Raman Science Club, AI-Nexus on 20th July 2024, was held for students interested in scientific competitions. Activities like Quiz whizz and Witness Science was conducted to test their general knowledge and quick thinking. Our Alumni Mr. N. Balaji (B.Pharm 2014), Drug Inspector, Mr. S.S. Jaykrishna (B. Pharm 2013), Marketing Manager, Alma Laser-Injectables, Mrs. G. Vidhya (B. Pharm 2007), Pharmacovigilance

executive, Oviya Medsafe private limited, Mr. G. Vivekanandhan (B. Pharm 2012), Regulatory Affairs, Novartis, were invited to share their insights into the current scope of pharmacy and provided career guidance to the students.

- One day Seminar on the topic “Trends, Challenges and Technologies in Solid Dosage Forms” was conducted on 08th August 2024. Dr. Rajesh Kumar Maheshwari, Ex. Professor & Head, Department of Pharmacy, Sri Govindram Seksaria Institute of Technology and Science, Indore was the Guest Speaker of the event.
- One day workshop on “Characterization and Validation of Biologicals” was conducted on 31st August 2024. Around 72 students participated, 4 resource persons from various multinational companies gave their inputs about the real-life industrial need.
- Two days National Conference on “Automation, IT & Advancements in Pharmaceutical Sciences” (ICAAPS - II) was conducted on 26th and 27th of September 2024. The event was accredited by the Tamil Nadu Dr MGR Medical University, Chennai. Dr. B. Giriraj, Principal, PSG Polytechnic College, was the chief guest and inaugurated the conference. Over 250 registered delegates from across the nation participated and presented their research findings. Scientific sessions were organized with the themes, exploring the role of information technology, AI, and ML in drug discovery and development process. The event was designed to provide a platform for young researchers to engage in trans-disciplinary research, through interactive sessions with eight distinguished speakers from industry, academia, and clinical practice.

Faculty quality improvement

- A Workshop on “NEP – National Educational policy” implementing through IKS (Indian knowledge System) was held on 02nd July 2024. Six faculty from PSG College of Pharmacy attended the workshop.
- One day Workshop on Faculty Capacity building based on FAIMER guidelines was conducted on 16th August 2024 in ‘A’ Block Seminar hall.

CONFERENCE, WORKSHOP, TRAINING, QIP ATTENDED

Department	No. Faculty attended FDP	Outside Conference / Workshop	Awards	Skill development NPTEL	Conference organized
Pharmaceutics	6	2	-	-	1
Pharma Analysis	5	-	-	-	-
Pharma Chemistry	3	-	1	2	-
Pharmacy Practice	5	3	1	-	3
Pharmacology	4	-	-	-	1
Pharmacognosy	4	1	-	1	-
Total	27	6	2	3	5

Others

IPR / Research Methodology Activities	– 5
Workshop with collaboration – Institution (PSGRKCW)	– 1

Foreign visitors

- **Dr. Rudolf Schohe-Loop** from Germany visited our college under Senior Experten Service (SES) program from 2nd November to 26th November 2023 and shared his expertise with our students and faculty.
- **Dr. Barbara Pose** from Germany visited our college under Senior Experten Service (SES) program for 2 weeks from 12th Jan 2024. With her guidance we have submitted three projects to the Central Government for funding under UBA
- **Dr. Milan Antonijevic** PhD, FHEA, FRSC, MAPS, Associate Professor in Pharmaceutical Sciences, University of Surrey, UK, visited our college on 25th September 2024 and addressed our students on the topic “Advancing Healthcare through AI in Pharmaceutical Sciences”.
[* **SES program foreign visitors** – Recent regulation, we might require to accommodate travel expenses (partly or full)]

PAPERS PUBLISHED BY OUR FACULTY MEMBERS FOR THE PERIOD FROM NOVEMBER 2023 TO OCTOBER 2024

Number of Publications in Web of Science / indexed journals – **45**

SOCIAL OUT REACH PROGRAMS

Unnat Bharat Abhiyan – UBA

- As a part of the Pharmacist Week Celebration – a Medical Camp under Unnat Bharat Abhiyan in Nallatipalayam village was conducted on 24th November 2023
- Faculty and Students participated in the UBA (Unnat Bharat Abhiyan) Survey in the adopted villages on 19th Jan 2024 and 22nd Jan 2024.
- On August 1st, 2024, Unnat Bharat Abhiyan (UBA) in collaboration with the Valarakarantal club, organized a tree plantation drive at the primary government school in Nallatipalayam. Two faculty members and 15 students of valarkarantal members participated in the event, planting saplings in the school compound.

CSR activities

- On 22nd June 2024 Valarkarantal students helped the poor people in the Gandhipuram Bus stand area, with the intention of improving their well-being, without any expectation of material reward.
- Donated fees RS 20,000/- to PSG High School Vedapatti four students benefited

ECO and Environmental activities

- Students of PSGCP along with Principal and faculty participated in the ‘Initiative for a Drug free India’ program organized by Gurudev Sri Sri Ravi Shankar on 2nd March 2024 in Codissia Ground.
- Tree plantation program was attended by students and faculty of PSGCP in association with Kovai Kulangal Padhukappu Amaippu. District Collector appreciated the students and gave prizes.
- In collaboration with Kovai Kulangal Padhukappu Amaippu our students actively participated in tree planting at Adarvana, showcasing their commitment to environmental conservation at Perur Periyakulam on 7th April 2024.
- On occasion of Adiperuku & Adi amavasai on 3rd and 4th August 2024, the Eco club collaborated with Kovai Kulangal Padhukappu Amaippu to clean the river banks in Perur Padithurai,. Volunteers from the Coimbatore Lakes Conservation Organization, along with many college students, worked to clean up the plastic waste and collect food items. Additionally, leftover items including 200 kilograms of apples, grapes, guavas, bananas, coconuts, sweets, snacks and clothing were sorted and distributed to those in need.

AWARDS AND ACHIEVEMENTS

NIRF Ranking

Ranked 58th among Pharmacy Colleges in India by the National Institutional Ranking Framework (NIRF) survey conducted by the Ministry of Human Resource Development, Government of India in 2024.

Faculty Achievements

- Four faculty members and one Research Scholar successfully completed their PhD synopsis presentations under the Tamil Nadu Dr. MGR Medical University, Chennai, and their presentations have been accepted.
- During the Research Day celebration conducted by PSG Health Science Institutions on 5th April 2024, 17 faculty members from PSG College of Pharmacy received Research incentive for their High Impact Peer Review Research Publication.

Students Achievements

Academics

- Students participated and presented poster in national conference on Climate change and Healthcare organized by PSG CARE on 17th November 2023 and won the “Best Poster Award” with full credit score.
- Ms.Ummay Salma .F of Pharm D 2016 batch received Gold Medal from The Tamil Nadu Dr. MGR Medical University for her best performance in the academics among the Pharmacy colleges.

- Alagappa College of Technology hosted a biotechnology event themed "A Trifecta of Biotech." Our students participated in the workshop and events to foster innovation and problem-solving skills and won cash prize of Rs. 3000/- in the Bio AI & Innovation challenge.
- Mr. G. Gowrishankar and Ms. A. Ragavi of M Pharm - Department of Pharmaceutics won the Best Poster Presentation in the Research Day event held on April 5th, 2024.

Extracurricular activities

- On 30th April 2024, our college students won first place and a cash prize of Rs.3000/- for their Short Film on the theme "TB Free People". The competition was conducted by JSS College of Pharmacy, Ooty.
- Ms. J.K. Ridhugarshini of B Pharm 4th year won Second prize in State Level Elocution competition conducted by Indian pharmaceutical association at JKKMMRF'S- Annai JKK Sampoorani Ammal College of Pharmacy on 8th June 2024.
- The Shriram Ilakkiya Kazhagam organized a Thirukkural-themed competition on August 3rd, 2024, providing students with an opportunity to engage with Tamil literature and showcase their talents. In the Pechu Potti, our students achieved impressive results: D. Sureka (B.Pharm 2020 Batch) won second place, and K. Manikandan (B.Pharm 2022 Batch) secured third place. In the Oviya Potti, R.P. Shanyogitha (B.Pharm 2023 Batch) won third place. In the Katturai Potti, our students excelled with S. Megasri (B.Pharm 2023 Batch) winning first place and B. Bhagya Lakshmi (B.Pharm 2023 Batch) taking second place. Additionally, an appreciation certificate was awarded to V. Gowsika (B.Pharm 2023 Batch).
- Our students S. Rajasekar and team won the First Prize in Short Film competition on the topic "**Artificial Intelligence in Medicine**"

Research achievements

- Tamil Nadu Pharmaceutical Sciences Welfare Trust has announced G. Rangachari Memorial (PG Pharmacy Fellowship) Award to M.Pharm students. Mr. Divakar .G of Pharmacy Practice department won the First Prize (Rs. 12,000/-)
- Tamil Nadu Pharmaceutical Sciences Welfare Trust conducted G.Swaminathan Memorial Award – Essay Competition – For Final year B. Pharm Students, for the year 2023 – 2024. Our students Mr. Hariharan .P.S won First Prize (Rs. 10,000/-) and Ms. Saranya Devi.CS won Third prize (Rs. 7,000/-)
- The Tamil Nadu Dr. M.G.R. Medical University, Chennai conducted University Research Day – 2024 on 26th September 2024. **Best Researcher Award – UG Category** won by A. Saran Kumar - First Prize, V. Manisha - Second Prize and R.D. Gagan & R. Vishnu – shared the Third Prize. M. Agil Kumar won Second Prize in **PG Category**. The awards were distributed by **Thiru Ma. Subramanian**, Honorable Health Minister, Government of Tamil Nadu.

The following B Pharm & Pharm D students were selected for summer research fellowships

S.No	Name	Institute Name
01.	Abishek Adithya VM	Bhabha Atomic Research Centre (BARC)
02.	Ilakiya P	SRM University, Amaravati, Andhra Pradesh
03.	Preetham Anton A	Institute of Minerals and Materials Technology Council of Scientific and Industrial Research (CSIR), Odisha
04.	Saran Kumar A	National Institute of Technology, Rourkela
05.	Arshada Fathin A	Institute of Basic Medical Sciences, University of Madras
06.	Gugan RD	Indian Institute of Technology, Mumbai

STUDENT PROGRESSION

List of Students joined Higher Education during the year 2024-2025

SNo	Name of the Student	Institution joined	Year of Admission	Program joined
1.	Akash Phari.P			Govt. Exam preparation
2.	Dharnish GS	JSS College of Pharmacy	2024	M.Pharm
3.	Dharshini C	NIPER, Guwahati	2024	M.Pharm
4.	DurgaC			Govt. Exam preparation
5.	Gokul S	JSS College of Pharmacy	2024	M.Pharm
6.	Gomathi K	PSG College of Pharmacy	2024	M.Pharm
7.	Gowri M	NIPER, Hyderabad	2024	M.Pharm
8.	Haribabu S	PSG College of Pharmacy	2024	M.Pharm
9.	Kirubhakaran PS	PSG College of Pharmacy	2024	M.Pharm
10.	Muhaseen A	PSG College of Pharmacy	2024	M.Pharm
11.	Nithya P			Govt. Exam preparation
12.	Pradeepkumar M	NIPER, Guwahati	2024	M.Pharm
13.	Praveen Kumar K	NIPER, Mohali	2024	M.Pharm
14.	Praveenkumar V	PSG College of Pharmacy	2024	M.Pharm
15.	Priya M	Madurai Medical College	2024	M.Pharm
16.	Priyadharshini M	Madurai Medical College	2024	M.Pharm
17.	Revathy S	NIPER, Ahmadabad	2024	M.Pharm
18.	Ronnikka Shiny A	PSG College of Pharmacy	2024	M.Pharm
19.	Sanchana Sri G	Madurai Medical College	2024	M.Pharm
20.	Siva Gokul G		2024	Higher studies

21.	Sreeja R	PSG College of Pharmacy	2024	M.Pharm
22.	Tharani	JSS College of Pharmacy	2024	M.Pharm
23.	TharsiniBownika S	SRM College of Pharmacy	2024	M.Pharm
24.	Tina Deva Prarthana S	Sri Ramachandra College of Pharmacy	2024	M.Pharm
25.	Vasantharaja A	NIPER, Mohali	2024	M.Pharm
26.	Vigneshwaran M	PSG College of Pharmacy	2024	M.Pharm
27.	Dharshini P	University of Glasgow, UK	2024	MS in Clinical Pharmacology
28.	Sharmila S	Griffith College Dublin	2024	MS in PBT

STARTING OF NEW PROGRAMS & MOU

- Starting of two new programs in M. Pharm with specialization Regulatory affairs and Industrial Pharmacy with 9 and 15 intakes respectively
- A MoU has been signed with **Kovai Kulangal Padhukappu Amaippu** to join hands to preserve and protect water bodies and environment by propagating the significance of sustainable development for maintaining ecological balance on 24.01.2024.
- A MoU has been signed with **TKN Herbal Formulations Pvt. Ltd**, on 14.02.2024 and is valid for a period of 3 years. The objective of the MoU is to reduce the gap between Industry and Institute, by providing project and training and to provide faculty resource to the industry for developing their skills.
- A MoU has been signed with **Sivasakthi Pharmaceuticals Private Limited**, on 14.02.2024 and is valid for a period of 3 years. The objective of the MoU is to reduce the gap between Industry and Institute, by providing project and training and to provide faculty resource to the industry for developing their skills.
- A MoU has been signed with **PSGR Krishnammal College for Women** on 21.02.2024 and will be valid for 5 years. The objective of the MoU is to synthesize Insect derived chito-oligosaccharide (COS) and melanin and evaluate their use in carrying out therapeutic applications like anti-inflammatory, anti-oxidant and antidote for envenomation, basic and medically relevant research & the development of therapeutics and applications for clinical utilities.
- A MoU has been signed with **Bipha Drug Laboratories Private Limited**, on 15.05.2024 and is valid for a period of 3 years. The objective of the MoU is to reduce the gap between Industry and Institute, by providing project and training and to provide faculty resource to the industry for developing their skills.
- A MoU has been signed with **Kausikh Therapeutics Private Limited**, on 03.06.2024 and is valid for a period of 3 years. The objective of the MoU is to reduce the gap between Industry and Institute, by providing project and training and to provide faculty resource to the industry for developing their skills.

- A MoU was signed between PSGCP and **ICMR-National Institute for Research in Tuberculosis (NIRT)** [Formerly Tuberculosis Research Centre (TRC)] for the purpose of Extending research knowledge and expertise mutually for researchers, faculties and students.

ACCREDITATION

- ISO Recertification Audit was held on 10thSeptember 2024.
- AQAR for the Academic year 2022-23 has been submitted and got approved.
- The process of submitting next AQAR 2023-2024 has been started.
- Initiation of NEP / IKS related activities in process.

NEW FACILITIES ADDED/ INITIATED

- In house website designing for Pharmacy, Nursing and Physiotherapy colleges
- ML & DS Labs process initiated
- Alma shines-Alumni web site designing
- Computer software updates required

