# Chowgule Education Society's



# Parvatibai Chowgule College of Arts and Science (Autonomous)

Accredited by NAAC with Grade 'A+'
Best Affiliated College-Goa University Silver Jubilee Year Award



# **PROSPECTUS**

# POSTGRADUATE DIPLOMA PROGRAMMES

2024-25

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# **Introduction**

Parvatibal Chowgule College of Arts and Science, Margao-Goa, founded in 1962, is an Autonomous institution of higher education within the Goa University system since 2014. This premier educational institution has been accredited by the National Assessment and Accreditation Council (NAAC) at Grade A+.

Since becoming autonomous the College introduced the Choice Based Credit System (CBCS) in all its undergraduate and postgraduate educational programmes. Besides the CBCS, the revision of the programmes was done by taking into account the employability issues. The College is presently involved in strengthening its outcome-based education and evolving it further so as to meet the needs of the present-day generation.

The College is directed by its mission and vision to seek higher distinctions and impart quality education with innovative curriculum, appropriate teaching-learning-evaluation methodologies, twenty-first century technologies and better infrastructure.

Under the choice-based credit system the College offers core courses and elective courses in each of its educational programmes both at the undergraduate and postgraduate levels. Its postgraduate programmes are governed by Autonomy Ordinances (AO), AO-5 for master's degree programmes and AO-9 for postgraduate diploma programmes.

The postgraduate diploma programmes (one year) offered on self-financed basis are:

- 1. Postgraduate Diploma in Clinical Genetics and Medical Laboratory Techniques (PGDCGMLT)
- 2. Postgraduate Diploma in Geoinformatics (PGDGIS)

The following postgraduate diploma programme (one year) offered is Government aided:

3. Postgraduate Diploma in Computer Applications (PGDCA)

The postgraduate diploma programmes are one-year-two-semesters full time programmes carrying a minimum of 40 credits. The courses are conducted using a range of teaching-learning-evaluation methodologies evolved conceptually and through the use of ICT processes. For instance the outcome-based-education followed by many teaching departments is a conceptually evolved methodology, whereas the flipped classroom has evolved as a result of the use of ICT and LRMS. The aim of excellence has been a driving force for innovative developments in learning programmes at the College.

A student's learning is evaluated in the courses through continuous assessments using various evaluation methodologies and through a comprehensive semester-end examination. The evaluation is done not only to determine a student's grasp of the subject-knowledge in the course but also to determine the extent of other skills acquired such as critical-

thinking, analysing, out-of-the-box thinking, oral and written communication, referencing, etc. The performances of a student in the various courses are graded and a CGPA (Cumulative Grade-Point Average) is calculated so as to ascertain the student's overall performance in the programme.

This prospectus provides information, in a nutshell, on these above-listed programmes for the benefit of students who are deciding about taking admission to any of these programmes.

How to apply for admission: For all postgraduate diploma programmes, apply online <a href="http://apply.chowgules.ac.in">http://apply.chowgules.ac.in</a>

Complete the online admission form as per instructions provided therein.

For further details and queries:

Email: sfpadmission@chowgules.ac.in

# Post-Graduate Diploma in Clinical Genetics and Medical Laboratory Techniques

(Self-Financed)

**Programme Code: PGD-CGMLT** 

#### **Duration: One Year (Two Semesters)**

Duration for the PG Diploma in "Clinical Genetics and Medical Laboratory techniques" is a two semester programme which includes internship/hands-on training in Clinical Laboratories / Pathology Lab / Genetic Lab for 08 credits (240 hours).

#### **Objective of the Programme**

Overall the course is designed to provide a strong foundation in all areas of Human genetics and medical lab techniques with opportunities for hands-on laboratory and clinical experience. The curriculum includes lectures, practicals, classroom discussions and intensive practical training (Internship). The Objective of the courses is to enable the students in having job opportunities in Research and Development and in medical field. The course syllabus is designed considering the need for trained technicians and technologists in the genetic and pathological field. This self financed, job oriented course will meet the demand for genetic and pathological technicians in diagnostic labs and hospitals.

#### **Eligibility and Selection Procedure**

To be eligible for admission to the programme leading to the award of Post Graduate Diploma in Clinical Genetics and Medical Laboratory Techniques, the candidate must have passed the Bachelor of Science degree examination of Goa University or equivalent examination of any other UGC recognized University, securing a minimum of 45% marks on aggregate or equivalent Grade or as specified for a Programme. Biological Science candidates will be preferred.

Total Number of Seats (including reserved seats): 15

#### Credits required for completing the Programme: 40

PGDCG&MLT	Odd semester	Even semester
~	Discipline specific core	Discipline specific core
Courses	(DSC)=16	(DSC)= 16
	Discipline specific elective	Discipline specific elective
	(DSI)= 04 (Internship)	(DSI)= 04(Internship)
Credits	20	20
Total credits: 40		

#### **Course Evaluation**

To pass PGD programme in Clinical Genetics and Medical Laboratory Techniques, candidate shall secure a minimum of 40% marks in theory as well as practical component of each course. The assessment of the Courses shall be based on the examination at the end of each semester. The examination shall consist of either a comprehensive written test or a comprehensive laboratory examination. The examination of the Core/elective Courses shall normally carry a maximum of 100 marks (Theory = 50 mks, Practical = 50 mks). The final grade shall be computed based on the candidate best performance in the minimum number of credits required for the award of the Diploma.

08 credits (DSI), of internship, shall be depicted in the form of grade in the final mark sheet. A report is to be submitted by the candidate after completion of the internship/hands-on training. Submission may be in the form of a report or Portfolio which shall be evaluated for 200 marks and indicated as grades. Every student shall have to secure a minimum of 'P' grade to pass the Course.

**Course Structure** 

# Post Graduate Diploma Programme in Clinical Genetics and Medical Laboratory Techniques (PGDCG&MLT)

SEMESTER	COURSE CODE	DISCIPLINE SPECIFIC CORE (DSC)	DISCIPLINE SPECIFIC ELECTIVE (DSE) (ANY 01)	NUMBER OF CREDITS
I	PGDP- CGMLT- DSC-401	Clinical Biochemistry I		Theory = 02 Practical = 02
	PGDP- CGMLT- DSC-402	Clinical Biochemistry II		Theory = 02 Practical = 02

PGDP- CGMLT- DSC-403  Microbiology DSC-403  (General and Systematic)  PGDP- CGMLT- and DSC-404  PGDP- CGMLT- bosc-404  PGDP- CGMLT- bosc-404  PGDP- CGMLT- bosc-401  PGDP- CGMLT- bosc-402  Practical = 02  Practic
DSC-403 (General and Systematic)  PGDP- Hematology and Practical = 02  Theory = 02 Practical = 02  Internship at Hospital/Clinic s.  PGDP- CGMLT- SWAYAM Theory = 04 CGMLT- DSE-401 Analytical Techniques  PGDP- CGMLT- SWAYAM Theory = 04 CGMLT- Course: credits  PGDP- CGMLT- Course: credits  PGDP- CGMLT- Course: credits  PGDP- SWAYAM Theory = 04 CGMLT- Course: credits  PGDP- CGMLT- Course: credits  PGDP- CGMLT- Course: credits  PGDP- CGMLT- Course: credits
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PGDP- CGMLT- DSC-404 Transfusion Medicine  PGDP- CGMLT- DSI-401 PGDP- CGMLT- DSI-401 PGDP- CGMLT- DSE-401 PGDP- CGMLT- DSE-401 SWAYAM Course: Analytical Techniques  PGDP- CGMLT- DSE-402 Practical = 02
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PGDP- Clinical Theory = 02
CGMLT- Genetic Practical = 02
DSC-405 Techniques I
PGDP- Clinical Theory = 02
CGMLT- Genetic Practical = 02
DSC-406 Techniques II
PGDP- Clinical Theory = 02
CGMLT- Parasitology, Practical = 02
DSC-407 Mycology
and Virology
PGDP- Clinical Theory = 02
II CGMLT- Pathology Practical = 02
DSC-408 and
Histopatholo
PGDP- Internship at 04
1
CGMLT- Hospital/Clinics.
DSI-402
PGDP- SWAYAM Theory = 04
CGMLT- course- credits
DSE-403 Biomolecules:
Structure,
Function In
Health And
Disease
PGDP- SWAYAM Theory = 04
CGMLT- course- credits
DSE-404 Immunology

# For additional information contact:

Ms. Regina Fernandes <a href="mailto:rvf003@chowgules.ac.in">rvf003@chowgules.ac.in</a>

# **Post-Graduate Diploma in Geoinformatics**

(Self-Financed)

**Programme Code: PGDP-GIS** 

**Duration: One Year (Two Semesters)** 

# **Objective of the Programme:**

The aim of Post graduate diploma in Geoinformatics (PGDGIS) is to develop students with strong knowledge of Geospatial technology and professional skills through various activities and initiatives of the department enabling them to acquire software skills and knowledge in order to improve their employability.

#### **Eligibility and Selection Procedure:**

A graduate with a minimum score of 50% (CGPA of 5.3 and above in case of CBCS) in the final Examination of any B.Sc. programme or B.A. with Geography from a recognized University/Institute is eligible. Students with courses related to earth science may also apply; however, their selection will be based on their performance in the Aptitude Test in Geography, conducted by the department.

Total Number of Seats (including reserved seats): 20

# Credits required for completing the programme: 40

Sr. No.	Nature of Courses	Credits Required
1	Discipline Specific Core	32
2	Discipline Specific Elective	08
	Total Credits	40

# **Course Structure - Post-Graduate Diploma in Geoinformatics**

PGD-GIS	Odd Semester	Even Semester
	First Semester	Second Semester
Courses	Discipline Specific Core 16	Discipline Specific Core16
	Discipline Specific Elective 04	Discipline Specific Elective 04
	Total First Semester Credits = 20	<b>Total Second Semester Credits = 20</b>

# **Course Information (a)**

Course Code Course Title		Credits
	Semester I	T & P
		(2+2=4)
PGDP-GIS-DSC-401	Basics of GIS and GPS	2+2
PGDP-GIS-DSC-402	Basics of Remote Sensing and Photogrammetry	2+2
PGDP-GIS-DSC-403	Applications of Geostatistics	2+2
PGDP-GIS-DSC-404	Advanced Digital Cartography	2+2
PGDP-GIS-DSE-401	Principles of Computer and Programming	2+2
DCDD CIG DGE 402	Applications of GIS Techniques in	2+2
PGDP-GIS-DSE-402	PGDP-GIS-DSE-402 Entrepreneurship	
Total		20
	Semester II	
PGDP-GIS-DSC-405	Spatial Analysis & Modeling	2+2
PGDP-GIS-DSC-406	Advanced Remote Sensing and GIS	2+2
PGDP-GIS-DSC-407	Digital Image Processing	2+2
PGDP-GIS-DSC-408	Applications of GIS for Natural Resource	2+2
	management	
PGDP-GIS-DSE-403	Pilot Project, Field Work and Tour	2+2
PGDP-GIS-DSE-404	Programming and Customization	2+2
Total		20

## For additional information contact:

Dr. Anil Yedage asy002@chowgules.ac.in

# **Post-Graduate Diploma in Computer Applications**

# (Government Aided)

**Programme Code: PGD-CA** 

**Duration: One Year (Two Semesters)** 

#### **Objective of the Programme:**

The PGDCA Programme aims to give the students a sound background in theory and practice of Computer Application in various fields. It comprises of various Software courses, Skill Based Elective courses, courses on Educational Technology and latest emerging trends in the field of IT.

The choice of Elective courses is based on different career options, since the students who enroll for this course are from different domains like Arts, Science, Commerce etc. The syllabus of the course conforms to the requirements prescribed by the Goa University with upward mobility to the M.Sc. (IT) programme subject to meeting other eligibility criteria of the programme.

The PGDCA is recognized as a professional course by the Goa University.

On completion of the programme, the career opportunities available would be in the field of Software Testing, Digital Marketing, Web Development, Network Administration, MobileApplication Development, Teaching etc. The College has a Placement Cell which assists students in placements. Students are also encouraged to do Internships even though it is not an essential part of the curriculum.

#### **Programme Specific Outcomes (PSO) for PGDCA**

At the end of the programme the students will be able to:

PSO1 : Acquire problem-solving skills, especially the ability to analyze, design and implement solutions.

PSO2: Demonstrate technical skills to be employed in competitive positions in the IT sector.

PSO3: Start an Entrepreneurial venture.

PSO4: Work in different fields like content development, Multimedia, Website designing, Networking, Banking industry, Academics etc. and ability to pursue higher education and engage in independent lifelong learning.

#### **Eligibility and Selection Procedure:**

To be eligible to apply for the programme, the candidate must be a graduate having completed B.Com / B.A / B.Sc / B.B.A / B.C.A / B.Ed / B.E / or any other degree.

The Final selection of students is done based on the Department's Counseling sessions with the eligible applicants.

Total Number of Seats (including reserved seats): 30

# Credits required for completing the Post-Graduate Diploma in Computer Applications: 40

Sr. No.	Nature of Courses	Credits Required
1	Core Courses	20
2	Elective Courses	20
	Total Credits	40

# **Course Structure - Post-Graduate Diploma in Computer Applications**

PGD-CA	Semester I	Semester II
	First Semester	Second Semester
Courses	Core Courses Credits – 12	Core Courses Credits - 08
	Elective Courses Credits – 08	Elective Courses Credits - 12
	Total First Semester Credits = 20	Total Second Semester Credits = 20

# **Course Information (a)**

Sr. No.	Course Titles	Course Codes	Course
			Credits
	CORE COURSES		
	Semester I		
1	Problem Solving and Introduction to Programming	PGD-CA.C.C1	4
2	Web Design	PGD-CA.C.C2	4
3	Data Base Management Systems	PGD-CA.C.C3	4
Semester II			
4	Fundamentals of Computer Systems and Networks	PGD-CA.C.C4	4
5	Software Engineering	PGD-CA.C.C5	4
All courses entail 03 hours of lectures and 02 hour of practical work per week			

# **Course Information (b)**

Sr. No.	Course Titles	Course Codes	Course Credits
	ELECTIVE COUL	RSES	Citatis
1	Multimedia	PGD-CA.C.E1	4
2	E-Learning	PGD-CA.C.E2	4
3	HCI	PGD-CA.C.E3	4
4	E-commerce Development	PGD-CA.C.E4	4
5	Digital Marketing	PGD-CA.C.E5	4
6	Network Administration	PGD-CA.C.E6	4
7	Software Testing	PGD-CA.C.E7	4
8	Server Side Programming	PGD-CA.C.E8	4
9	Data Structures	PGD-CA.C.E9	4
10	Office Automation Tools	PGD-CA.C.E10	4
11	Assessment and Evaluation for Learning	PGD-CA.C.E11	4
12	Instructional Design	PGD-CA.C.E12	4
13	Content Management System	PGD-CA.C.E13	4
14	Web Development with FLASK	PGD-CA.C.E.14	4
15	Accounting	PGD-CA.C.E.15	4
	All courses entail 03 hours of lectures and 02	hour of practical work per week	

## For additional information contact:

Ms. Judith M Dias Barreto (Course Co-ordinator)

jmb001@chowgules.ac.in OR computerscience@chowgules.ac.in

## **Campus Discipline and a Conducive Environment**

The College is making concerted efforts to provide relevant education of global standards in a disciplined and conducive environment. For this purpose the College follows policies pertaining to the Library, Academic Integrity and Avoidance of Plagiarism, Prevention of Sexual Harassment, Information Technology and Information Systems Security, Intellectual Property Rights. These policies are available on the college website. Students are required to abide by these policies. These policies and following regulations are some building blocks of this environment and all students are required to take note of them and follow them.

#### **Computers Usage Rules**

College encourages students to use laptops and to bring their personal laptops to the class. Students can also use the Computer Lab. Users must be fully aware of the usage rules and the IT protocol of the College. Disciplinary action will be taken against violators.

#### **Vehicle Parking Rules**

The College is not responsible for the safety of vehicles parked at the vehicle parking area of the college.

Persons must vacate the parking space after parking the vehicles. The college is also NOT responsible if the vehicle is towed away if parked in 'No Parking Area'.

#### Stand against Ragging

The College strictly follows the anti-ragging policy of Goa University. Whoever directly or indirectly commits, participates in, abets or instigates others to violation shall be suspended/expelled/rusticated and shall be liable to pay a fine.

#### **Important Note**

The Principal may amend the admission rules at his discretion. The Principal's decision in all matters related to admission shall be final.

Apply online <a href="http://apply.chowgules.ac.in">http://apply.chowgules.ac.in</a>



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