



Parvatibai Chowgule College of Arts and Science

(Autonomous)

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VISION

"To be among global leaders in imparting relevant education of highest standards in a disciplined and conducive environment"

MISSION

"To continue to be pioneers of change using cutting edge educational inputs and technology, providing equal opportunities to all and inculcating social and moral values that will transform society and the nation at large"

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Chapter I

Parvatibai Chowgule College of Arts and Science (Autonomous)

Parvatibai Chowgule College of Arts and Science, founded in 1962 in Margao–Goa by late Shri. Vishwasrao Chowgule is a premier institution in the State of Goa. It has been accredited by the National Assessment and Accreditation Council (NAAC) at Grade A with a cumulative grade point average of 3.41 on a 4 Point Scale, the highest Grade Point for any College in Goa. From 2014 Parvatibai Chowgule College has been granted Autonomy by Goa University.

Through Autonomy the College seeks to achieve higher distinctions and impart quality education with innovative curriculum, appropriate teaching-learning-evaluation methodologies, twenty-first century technologies and better infrastructure.

To enhance the academic, professional and job skills, the College has introduced various initiatives such as the Honours Programme, Internship, and Soft-skills Development. The College has also ventured to provide various support services and guidance facilities aimed at providing the motivation for the students to excel. These support services include the Office of Information Technology, Estate Office, Statistical Analysis Support Service (SASS), Centralized Printing Facilities and a Shopping Center. The student guidance facilities available at the College include the Staff Advisory Programme, Writing Centre, Career & Personal Counseling Centre (CPCC), Business English Certificate (BEC) Training, and Centre for Portuguese Language & Culture (CPLC).

The College has National and International Collaborations with various Institutions. Memorandum of Understanding (MOU) with *Instituto Camoes*, Portugal under the Foreign Ministry of Portugal, aims to encourage the learning

of Portuguese language and deepen the understanding of Portuguese culture and with University of Porto, Portugal for academic and research collaboration. Under faculty-student exchange programme, it has international collaborations with four gymnasiums in Stockholm, Sweden and Waseda University, Japan. Within India, collaborative activities are organized with Gogate - Joglekar College, Ratnagiri (Maharashtra) and Department of Geography, University of Rajasthan, Jaipur.

Chapter II

AUTONOMY ORDINANCES (AO) RELATING TO THE TWO YEAR MASTER'S DEGREE PROGRAMMES IN ARTS AND SCIENCE

Degree to be awarded:

Although the autonomous status is conferred on Parvatibai Chowgule College of Arts and Science by University Grants Commission and the Goa University, the College continues to be affiliated to the Goa University, the degrees will be awarded by the Goa University. The name of the College will figure in the degree citation/certificate awarded by the University.

Autonomy Ordinance (AO-5) for Master's Degree Programmes in Arts and Sciences in the subjects of Languages, Social Sciences and Sciences under Choice Based Credit System of Parvatibai Chowgule College of Arts and Science (Autonomous) affiliated to Goa University.

The College shall adopt the Goa University ordinance OA-18 with certain amendments for its Master's Programmes. The ordinances adopted by the College are codified under Autonomy Ordinance AO-5.

AO-5 Ordinance governing the Master of Arts, M. A., and Master of Science, M. Sc. Programmes of study in the Faculties of Languages, Social Sciences, and Sciences, under the Choice Based Credit System of Instruction, conducted by **Parvatibai Chowgule College of Arts and Science, Autonomous**, affiliated to Goa University.

AO-5.1 General

The eligibility, procedure and conditions for admission to the M. A. and M. Sc. Programmes and the rules governing (i) reservation of seats in each Department, (ii) merit list, (iii) registration and payment of fees shall be as provided in the respective notifications.

AO-5.2 Programme Structure

1. The Programme shall be based on the Choice Based Credit System (CBCS) and shall comprise of Core Courses and Elective Courses.
2. The M. A. and M. Sc. programmes shall consist of 80 or 100 Credits. Student shall be eligible for the award of Master's Degree on successful completion of 80 or 100 Credits as the programme may demand, over a minimum of four Semesters.
3. The total number of 80 Credits of a programme shall comprise of 40 credits for Core Courses and 40 credits for Elective Courses.
4. The total number of 100 Credits shall comprise of 40 credits for Core Courses, 40 credits for Elective Courses and 20 credits for Internship (including pre-internship and post-internship work).
5. The Courses may cover only theory, theory and tutorial or only practical or theory and field-work.
6. Elective Courses may also comprise of self-learning courses in the form of field work, project, summer training, online courses, internship and other such courses; the Board of Studies shall specify the Credits for these activities.
7. A student shall also be permitted to opt for additional courses so as to earn additional Credits. In such cases the final grade shall be awarded by choosing the courses with the highest grades scored from the pool of completed Elective Courses so as to determine the 40 credits for Elective Courses. The final grade will be computed based on his/her performance in Core Courses and the best performance in the Elective Courses. Additional Elective Course not considered for computing the 40 credits shall be depicted in the final transcript/mark sheet as an extra course along with the credits and grade scored. The final grade, in case of Applied Economics, will be computed based on his/her performance in Core Courses, the best performance in the Elective Courses and the performance in Internship.
8. Permission to transfer Credits in case of Institutions not affiliated to Goa University, may be allowed on a case to case basis, following the Credit recognition procedure. Such Courses, when opted for by the students of a Department, may be approved provisionally by the Departmental Faculty Council and placed for rectification before the Board of Studies at its subsequent meeting.
9. One Credit of a Theory Course shall be equivalent to 15 contact hours of learning activities including lecture, group discussion, seminar, problem solving, tutorial, assessment and such others.
10. One Credit of a Practical Course shall be equivalent to 30 clock hours of laboratory / field work/ study tour. However, in the

case of Psychology subject, one Credit of the Practical Course shall be equivalent to 15 clock hours of laboratory/field work/study tour.

11. The Course Coordinator shall notify the Core and Elective Courses offered to students for the following Semester. The concerned postgraduate department shall also provide for adequate number of Elective Courses in case a student desires to obtain all Credits from the parent Department.
12. Minimum number of students for an Elective Course shall be not less than five. In case there are less than five students for a Course, the permission of the Principal shall be obtained before the commencement of teaching for the said Course.
13. Dissertation shall be of 8 Credits and shall be optional.
14. A student shall not be permitted to register for less than 10 Credits and more than 32 Credits in a Semester, during the two-year Programme. However, in case the dissertation is being carried out only in Semester IV, entailing extensive field work, and/or work at other institutions, the student may be permitted to register for only the dissertation comprising 8 Credits. Students shall be permitted to pursue internship during vacations.

AO-5.3

Scheme of Instruction

1. The Departmental Faculty Council (DFC) constituted for this purpose in the College, shall be responsible for the proper implementation and conduct of the Credit-based Master's Degree Programme(s) of the postgraduate Department. The DFC shall comprise of the Coordinator of the Programme and teachers teaching the Programme.
2. Ordinarily one teacher shall teach an entire Course, unless the Course requires more than one teacher to meet intra- or inter-disciplinary requirements. The Course outline/session plan for each Course offered during the Semester shall be submitted by the teacher/ instructor to the DFC before the commencement of teaching of the said Course.
 - (a) The Co-ordinator of the Master's Programme shall prepare the details of objectives, themes and topics of Core and Elective Courses for discussion and recommendation of the Board of Studies and for approval by the Academic Council.
 - (b) All the approved Courses, either Core or Elective, shall be uploaded on the College Website prior to offering of the Course.

3. The Course outline/session plan shall depict the Objectives of the Course and the themes in terms of teaching/ learning and assessment.

AO-5.4 Dissertation

1. The Dissertation shall be spread over third and fourth Semesters or an entire Semester-equivalent of Credits if it involves full field-work, or dissertation work in other Institutes or Industries.
2. The DFC shall decide at the end of the second Semester, the modalities relating to the dissertations, which shall be informed to the students.
3. Topics for dissertations shall be finalized by the student in consultation with the guiding teacher.
4. The DFC shall decide the number of students each teacher can guide with an equitable distribution of students to the Guides for sharing the workload. Such workload shall be computed as two hour per week for five students.
5. The student shall declare, in the prescribed pro-forma, that the dissertation is his/ her own work and that all the sources used are duly acknowledged.
6. The guiding teacher shall certify, in the prescribed pro-forma, that the dissertation is an original work of the candidate completed under his supervision.
7. Students shall submit the dissertations to the Co-ordinator through the guiding teacher not later than 2 weeks before the end of the term. Ordinarily, no student shall be allowed to submit the dissertation after the due date.
8. Every student shall submit one soft copy on a CD and two bound copies of the dissertation to the Co-ordinator in the standard format as under:
The size of paper: A4 (approximately 29 cm x 21 cm) except for drawings, graphs and maps, on which no restriction is placed, with a margin of 3 cm on the left hand side and 2.5 cm on all the other three sides. The dissertation should be neatly typed in double space and only on one side of the paper.
The front cover of the dissertation, bound in a standardized form, should contain the title of the dissertation, the Degree, date and name of the student concerned.

AO-5.5 Scheme of Examination

1. The assessment of all Courses shall comprise of Continuous Assessment (CA) and Semester End Examination (SEE) and shall be fully internal. The SEE of practical courses in case of

Science subjects (M. Sc. programmes) shall be conducted by the teachers as decided by the respective DFC.

2. (a) Each teacher of the concerned Course shall be the examiner for the course content he/she has taught. The teacher of the Course shall be responsible for evaluating full or part of the Course he/she has taught. The Coordinator shall coordinate the teaching, examination and evaluation (both CA and SEE) of the Course and maintain records of all assessments/tests/examinations.
- (b) When more than one teacher is involved in teaching the programme, one teacher preferably a regular teacher shall be identified as the Programme Co-ordinator by the Principal.
- (c) Paper setting and evaluation of all the elective courses and practical courses or practical components of the courses, either core or elective will be carried out by the concerned teachers.
3. (a) The nature of assessments may be Written/Oral, Open / Closed book, Scheduled/ Surprise, Objective / Multiple-choice, Short-answer type, Essay type, Seminar, Assignment, Experimental work, Journal paper Review, Fieldwork, Viva-Voce, Peer group assessment, Class participation as described in the Course outline.
- (b) For each theory Course, a written or any other evidence-based component shall constitute at least 50 % of CA and SEE.
4. A Course shall have a 'single passing-head' based on the combined performance at the Continuous Assessment and Semester End Examination. Fractional marks shall be rounded off to the nearest integer only at the time of calculating the Course grade.
5. The DFC shall constitute a Departmental Examination Committee (DEC) to monitor the conduct of CA and SEE.
6. The Course-wise time-table of internal assessment shall be displayed at the beginning of each Semester. Every teacher shall submit to the Co-ordinator, the question paper of the assessment and the marks assigned within seven days after the conduct of each assessment. The result of each assessment shall be displayed on the Notice Board / Website and the assessed material shall be shown to the candidate(s) by the concerned teacher and submitted to the Co-ordinator along with the question paper in a sealed envelope.

AO-5.6 Evaluation of Courses

1. (a) A One Credit Course shall carry 25 marks. All other Courses shall carry marks proportionate to the number of Credits.

- (b) The weight-age for the CA and SEE in both theory and practical courses shall be 40 % and 60 % respectively.
 - (c) There shall be two CAs for each Course of two or more Credits, each of 20 %, for a total of 40 % of total marks of the Course. However for a 1 Credit Course, a single CA shall be conducted and evaluated for 40 % of total marks of the Course. An additional assessment, irrespective of the number of Credits a Course carries, may be provided on the request of students to improve the Grade, in which case the best two assessments shall be considered, or the best one in the case of a Single credit course. All internal assessments shall be completed by the last teaching day of the Semester.
2. Ordinarily a teacher who teaches a particular course or part thereof shall assess the performance of the students in the CA component of that Course. Guest Faculty/contributory teachers teaching a course or part thereof shall conduct such assessment in consultation with the Programme Co-ordinator.
 3. There shall be a continuous review of the teaching Programme by the DFC in every Semester.
 4. The SEE shall be conducted as per the academic calendar. The Controller of Examination shall work out the examination schedule for SEE in consultation with other departments and display it on the College Website before the last teaching day of the Semester. The same shall be communicated to the concerned departments.
 5. The duration of all comprehensive written SEE examinations carrying 25 marks or less, shall be of one hour; SEE carrying above 25 marks and up to 50 marks, shall be of two hours; SEE carrying above 50 marks, shall be of three hours.
 6. The duration of SEE of all Laboratory Courses/Field Course shall be decided by the respective Board of Studies.
 7. The SEE answer scripts shall be assessed by the teacher concerned, within two weeks from the date of the examination.

AO-5.7 Evaluation of Dissertation

1. (a) The dissertation shall be assessed by the Guide/Supervisor and by the DFC. The student shall make a presentation of the work before the DFC and students of the Department. The DFC shall assess the work. Average of marks of all teachers attending the presentation shall be the evaluation of the dissertation which shall carry 50 % of the total marks assigned for dissertation.
 - (b) The Guide shall assess the dissertation independently for 50 % marks.

2. To pass in the dissertation, a student has to secure a minimum grade of 'P'.
3. A student who does not secure a minimum grade of 'P' in the dissertation, may be allowed to re-submit the dissertation after incorporating suitable modifications under the guidance of the teacher or may be permitted to register for Elective courses equivalent to 8 credits.

AO-5.8 Award of Grades

1. Marks awarded in each Course shall be represented in the form of Grades in the grade sheet issued at the end of each semester. The Final result shall be declared as Cumulative Grade Point Average (CGPA).
2. The marks awarded in the CA and SEE shall be added for awarding the grade for each Course, as indicated in the table below:

Range of percentage scored	Grade Points	Letter Grade	Grade Description
85 – 100	10	O	Outstanding
75 – < 85	9	A+	Excellent
65 – < 75	8	A	Very Good
55 – < 65	7	B+	Good
50 – < 55	6	B	Above Average
45 – < 50	5	C	Average
40 – < 45	4	P	Pass
0 – < 40	0	R	Reappear
Absent	0	Ab	Absent

3. Every student shall have to secure a minimum of 'P' grade to pass the Course.
4. Provisions for grace marks shall not be applicable to Credit Based Master's Programmes.
- 5.(a) Students who do not secure a minimum of 'P' Grade in a Core Course shall have the option of answering SEE in the following Semester(s), or to repeat the Course by registering for the Course whenever it is offered in the regular Programme.
- (b) In the case of Elective Courses, a student who does not secure a minimum of 'P' Grade shall have the option of answering SEE in the following Semester(s), or to repeat the Course by registering for the Course whenever it is offered in the regular

Programme, or register for an alternative Elective Course to secure requisite number of Credits.

- (c) Appearance in minimal number of Continuous Assessments as prescribed, and in Semester End Examination, is compulsory for passing.
 - (d) There shall not be any supplementary examinations for SEE. However, repeat examinations shall be conducted as per the allotted time frame for SEE in the academic calendar. In such cases, the CA score shall be carried forward. However, if the candidate is re-registering for a course, neither the CA nor the attendance of the previous attempt shall be carried forward.
6. The Programme Co-ordinator shall be responsible for finalizing the assessment pattern and to ensure that the assessment reflects teaching/ learning time and weight-age assigned to the topic/unit/module as prescribed in the Course outline.
7. (a) The weighted grade points of a course shall be calculated by multiplying the grade points (G_i) scored by a student, by the number of Credits (C_i) of the respective course.
- (b) The Cumulative Grade Point Average (CGPA) shall be calculated on completion of 80 or 100 Credits of a programme.
- (c) The CGPA shall be calculated as follows:

$$CGPA = \frac{\sum(C_i \times G_i)}{\sum C_i}$$
 Where ' C_i ' is the number of credits of the i^{th} course and ' G_i ' is the grade point scored by the student in the i^{th} course.
- (d) The CGPA shall be rounded off to 2 decimal points and recorded in the transcripts.
- (e) For calculating the CGPA, all the core courses and best of the grades obtained for the elective courses and the grade obtained in internship (when applicable) shall be considered.
- (f) For each Course where a student secures 'R' or 'Ab' Grade, he/she shall not be entitled to earn any Credits for that Course.
- (g) The CGPA shall be converted to the Final grade, as shown in the table below:

CGPA	Grades	Grade Description
10.0	O	Outstanding
9.0 – < 10	A+	Excellent
8.0 – < 9.0	A	Very Good
7.0 – < 8.0	B+	Good
6.0 – < 7.0	B	Above Average
5.0 – < 6.0	C	Average
4.0 – < 5.0	P	Pass
< 4.0	R	Reappear

- (i) In the case where CGPA is higher than the indicated upper limit in the two decimal digits by a factor of ≥ 0.005 , then the higher grade will be awarded;
e.g. a candidate with $CGPA \geq 4.995$ will be awarded 'C' grade. A candidate who has not earned required credits shall be given a final grade 'R' and asked to 'Reappear'.
- 8. At the end of each Semester, within one week from the last teaching day, the CA scores shall be approved by the DFC and thereafter sent to the Controller of Examinations (CoE). SEE scores shall be finalised and approved by DFC and thereafter sent to the CoE within two weeks of the last examination. The Examination section shall prepare Grades and declare results within two weeks of the receipt of the SEE scores.
- 9. Students who have not completed the Programme in four Semesters are permitted to re-register for additional Semester(s) and opt for Courses, provided that these Courses are available for instruction. Such candidate(s) shall be treated as supernumerary for the particular Course.

AO-5.9 Academic Audit Committee (AAC)

- 1. There shall be an audit of the Academic Programme(s) of each Department of the College, conducted once in two years by an Academic Audit Committee (AAC).
- 2. The AAC shall comprise three members who shall be nominated by the Principal from the panel of experts prepared by the BoS and approved by the Academic Council.
- 3. The audit shall be conducted at the end of every alternate Academic Year, within two months after the declaration of results.
- 4. The academic audit by the AAC shall comprise of:
 - (i) Review of question papers of the assessments held during the preceding year/Semester:
 - (a) To determine the adequacy of coverage of the syllabus, and
 - (b) To determine the standard of questions in relation to the syllabus.
 - (ii) Review of sample answer scripts to check for objectivity and uniformity of assessment.
 - (iii) Scrutiny of the records of CA and SEE maintained by the Department, in order to determine the suitability and adequacy of the methods of assessment.
 - (iv) Evaluation and suggestion of remedial measures on the basis of feed-back obtained from the students.

5. The AAC shall prepare a report and submit the same to the Principal, who, after making necessary observations, shall forward the same to the BoS of the concerned subject. The BoS shall make suitable recommendations to the DFC for implementation.
6. The CoE shall coordinate the meeting of the AAC.

AO-5.10 Grievance Committee

1. There shall be a Grievance Committee of five teachers from different faculties and the same shall be constituted at the commencement of every academic year. The Principal shall appoint a Chairperson from among the five. No teacher against whom a grievance is made shall participate in the meetings of the Committee.
2. The Grievance Committee shall examine and decide on the grievances relating to the marking of answer-scripts/evaluation of tests of the students. The Committee may also consider any other matter related to examination and evaluation.
3. A student shall address his/her grievance(s) to the Co-ordinator/Principal, who shall place the same before the DFC for resolution. If the grievances are in the Course(s) taught by the Co-ordinator, the grievances shall be addressed to the Principal.
4. If the student continues to feel aggrieved, the grievance application shall be referred to the Grievance Committee.
5. If the Grievance Committee finds that there is a prima facie case, it may refer the respective answer-scripts/ assignments, to an expert from outside the College, for which the student shall have to pay the prescribed fee. The result of such an evaluation shall be final and binding.
6. The decision of the Grievance Committee shall be communicated to the student within one month of his/her filing of the grievance.

AO-5.11 Coordination Committee

1. The Principal shall constitute a Coordination Committee with representatives of all Faculties to coordinate the Credit-Based Master's Degree Programmes.
2. The Coordination Committee shall comprise of all Co-ordinators of Masters' Programmes. A senior faculty co-ordinating a Masters' Programme could be appointed as Chairperson. The committee shall be assisted by the Academic Section of the College.

3. The Committee shall coordinate the implementation of the Credit-Based Master's Programme, and resolve anomalies arising during the implementation of the Programme.
4. The Committee shall consider suggestions received from students, programme co-ordinators, faculty members, BoS, and the Examination Section, and recommend modification of existing provisions or the introduction of new provisions.

AO-5.12 Feedback

1. At the end of the teaching of every Semester there shall be an assessment of the teacher, of the Course taught, and of the overall Programme by the student(s), the records of which shall be retained by the Internal Quality Assurance Cell (IQAC).

Chapter III

POSTGRADUATE DEPARTMENT OF ECONOMICS

The Postgraduate Department of Economics is an offshoot of the Department of Economics that has been conducting the undergraduate degree programmes with distinction, since the inception of the College in 1962. The postgraduate department was created to provide need-based, relevant and high quality postgraduate study opportunity to students and address their concern about employability and skills.

Our Mission

“The mission of the department of economics is to provide its students with strong theoretical and analytical foundations in economics and to develop their employability and research skills with focus on applicative areas of economics.”

To further the mission, the department of economics offers core courses designed to provide and strengthen the theoretical and the analytical foundations of students of economics. It offers a range of elective courses in applied areas to enable the students to develop their employability and research skills. The study programme will be useful for those interested in financial services, insurance, travel and tourism, human resources, international business, environment management, entrepreneurship and research.

The skills imparted through the teaching-learning-evaluation methods to the students of economics are: marketing, venturing, financial analysis, research and analytics, econometric model-building, entrepreneurship, and policy making. Students are expected to use these skills in their professional endeavours.

The courses are often conducted using interactive lectures-cum-discussions, flipped classrooms, workshops, seminars, research-paper reviews, case studies, experiential learning through field surveys, problem-based learning, research assignments and dissertations. The Department expects that the research contributions of its students are worthy of publication in peer-reviewed journals. Students are also encouraged to present their findings in national and international seminars.

To help the students, the Department has ICT equipped classrooms, experienced faculty, online courseware systems “CLAAP” and Google classroom, the library with links to global reading resources, auditoriums, and research laboratories. The Department’s teaching faculty is always available to students for academic counseling. ‘The Economics Forum’, a student association, provides the students with a platform for organizing various types of competitions and creative activities.

The internship work, which is compulsory, is critical to both the undergraduate and the postgraduate curricula and is designed to expose students to work-environments and sensitize them on employability skills.

POSTGRADUATE DEGREE PROGRAMME

Master of Arts in Applied Economics

1. Objective of the Programme: M.A. in Applied Economics

The M.A. Programme in Applied Economics of the Department of Economics of Parvatibai Chowgule College of Arts and Science (Autonomous) is driven by its core objective to equip the students with the expertise, in some specific areas of applications, that would enable them to analyse and evaluate prevailing situations from an economic perspective and to recommend strategies and policies for improvement and sustenance. The areas of concentration where the expertise will be channelized to flow from, encompass: Banking and Finance,

Travel and Tourism, Demography and Human Resources, Globalization and International Business, and Environment and Sustainability.

2. Eligibility of Candidates:

Admission to the two year, four semesters, full time programme leading to the degree of Master of Arts in Applied Economics is based on merit. It is open to any candidate passing the Bachelor's Degree Examination and qualifying in the Entrance Test. Proficiency in the English language is a basic requirement for the programme.

3. Structure of the programme of M.A. in Applied Economics

The M.A. Programme in Applied Economics follows the Choice Based Credit System. To complete the M.A. programme in Applied Economics, a student has to accumulate a total of hundred credits. Twenty credits out of the hundred are to be obtained through supervised internship which will be for a minimum of two months or of 180 hours. Internship is intended to give a student the required work exposure.

The course structure has four components. These are: (a) Core Courses, (b) Allied Skill Courses, (c) Applied Concentrations and (d) Internship.

The spread of total credits is shown in Table 1. The Core Courses are compulsory and carry forty credits. Students have to obtain eight credits under the component of Allied Skill Elective Courses. Students are required to choose any two concentrations from the five Elective Applied Concentrations offered. Each Applied Concentration carries sixteen credits.

Table 1. Credit Requirements for Completing the M.A. Programme in Applied Economics:

Sr. No.	Nature of Courses	Credits Required
1	Core Courses	40
2	Allied Skill Elective Courses	8
3	Two Elective Applied Concentrations	32
4	Internship (Compulsory)	20
	Total Credits	100

Table 2. Composition of Core Courses, Course Credits and Course Codes

Sr. No.	COURSES	Number of Credits	Code No.
Eco I	Core Compulsory Courses (Forty Credits)		
1	Microeconomics I	4	Eco I.1
2	Microeconomics II	4	Eco I.2
3	Macroeconomics I	4	Eco I.3
4	Macroeconomics II	4	Eco I.4
5	Statistics for Economics	4	Eco I.5
6	Mathematical Economics	4	Eco I.6
7	Public Economics	4	Eco I.7
8	Development Economics	4	Eco I.8
9	Fundamentals of Econometrics	4	Eco. I.9
10	Research Methods in Economics	4	Eco. I.10

Table 3. Composition of Allied Skill Elective Courses, Course Credits and Course Codes

Sr. No.	COURSES	Number of Credits	Code No.
Eco II	Allied Skill Elective Courses (Eight Credits)		
1	Risk Analysis and Management	4	Eco II.1
2	Accounting for Decision-Making	4	Eco II.2
3	Linear Programming and Optimization	4	Eco II.3
4	Dissertation	8	Eco II.4

Table 4. Composition of Applied Elective Concentrations, Concentrations Credits and Concentrations Codes

Sr. No.	COURSES	Number of Credits	Code No.
Eco III	Applied Elective Concentrations (Thirty Two Credits)		
1	Banking and Finance Concentration (Four Courses)	16	Eco III.1
2	Travel and Tourism Concentration (Four Courses)	16	Eco III.2
3	Demography and Human Resources Concentration (Four Courses)	16	Eco III.3
4	Globalization and International Business Concentration (Four Courses)	16	Eco III.4
5	Environment and Sustainability Concentration (Four Courses)	16	Eco III.5

Table 5. Composition of Internship Structure, Internship Credits and Internship Codes

Sr. No.	COURSES	Number of Credits	Code No.
Eco IV	Internship (Compulsory) (Twenty Credits)		
1	Pre-Internship Work	12	Eco IV.1
2	Internship Work	6	Eco IV.2
3	Post-Internship Work	2	Eco IV.3

**Table 4. Composition of Courses under Applied Elective Concentrations,
Course Codes and Course Credits**

Code No.	APPLIED CONCENTRATIONS	No. of Credits
Eco III.1	Banking and Finance Concentration	16
Eco III.1.1	Financial Economics	4
Eco III.1.2	Economics of Banking: Theory, Policy, Practices	4
Eco III.1.3	Financial Derivatives	4
Eco III.1.4	Financial Projects Appraisal	4
Eco III.2	Travel and Tourism Concentration	16
Eco III.2.1	Tourism Economics: Concepts and Practices	4
Eco III.2.2	Managerial Economics for Tourism	4
Eco III.2.3	Travel and Tourism Infrastructure	4
Eco III.2.4	Tourism in Goa	4
Eco III.3	Demography and Human Resources Concentration	16
Eco III.3.1	Demography: Concepts, Techniques, Applications	4
Eco III.3.2	Health Economics	4
Eco III.3.3	Strategic Human Resources Management	4
Eco III.3.4	Industrial Relations and Labour Welfare	4
Eco III.4	Globalization and International Business Concentration	16
Eco III.4.1	International Trade and Globalization	4
Eco III.4.2	International Finance	4
Eco III.4.3	Global Marketing	4
Eco III.4.4	International Trade Practices, Documentation and Procedures	4
Eco III.5	Environment and Sustainability Concentration	16
Eco III.5.1	Environmental Economics	4
Eco III.5.2	Environment and Sustainable Development Strategies	4
Eco III.5.3	Environmental Issues and Solutions	4
Eco III.5.4	Environmental Policy and Governance	4

Dissertation work under allied skill courses should be pursued in one of the two applied concentrations chosen by the student. Dissertation work will culminate in the preparation and submission of the Dissertation at the end of semester four. Although dissertation is optional, students are advised to opt for it in order to enhance their application skills. Dissertation will require a lot of independent work by the student. The dissertation work will be guided by a faculty supervisor and will involve one hour of contact period per week.

4. Contact Persons in the Department

Sr. No.	Contact Persons	Designation
1	Dr. E. Mericio Travassos emt001@chowgules.ac.in	Coordinator, M.A. in Applied Economics
2	Ms. Fiona Andrade fia001@chowgules.ac.in	Secretary, Department of Economics

Chapter IV

POSTGRADUATE DEPARTMENT OF ENGLISH

The MA Program in English is driven by its core objective to equip the students with in-depth knowledge. The syllabi have been specially designed to bridge the gap between education and industry. The MA Program emphasizes on literature courses, skill-based courses, and contemporary literary courses.

The 80 credits two year programme emphasizes on experiential learning with focus on research, teaching, creative writing and Writing for the media. The two years course is a mix of core and elective papers with a blend of theory and skill based courses. A bridge course has also being designed to integrate new students into our system. The students will also have exposure to experiential learning through internship and dissertation.

The Department of English was set up in the year 1962 and runs several courses at the undergraduate level. The objective of our department is to introduce the students to the tradition of English Literature, as well as nurture their critical & creative talent to enable them to grow up into sensitive responsible and well-rounded personalities.

To achieve this, the department uses several innovative teaching-learning methods like Interactive methods of teaching English language and literature, screening of films based on English novels and plays, use of audio-visuals in teaching. At the same time, the Department pays equal attention to the co-curricular and extracurricular activities. The Dept. organizes various inter-collegiate events like Pegasus – ‘An Intercollegiate Literary Festival’, Shakespeare Festival for the School & Higher Secondary students and ‘Literati’ for the Elective English students of the College. The department has also organized a national level conference, eng.age 1.0, which is on cards to be a biyearly event.

Our Mission

“To be a center for academic excellence where students crystallize their linguistic skills, nurture their creative literary talents, and develop a larger vision of life in order to carve a productive niche in society.”

The Department of English, Parvatibai Chowgule College (Autonomous) focuses on developing an understanding of Language and Literature, Literary criticism, Linguistics and Media Studies. We create a knowledge base to facilitate students to choose careers related to literary criticism, linguistics and the field of Media through courses like - Writing for the Media (Technical Writing), Visual Literature, Creative Writing, ELT, Film Studies. These courses are offered in a blend of core and elective courses.

In addition to our academic programme, the Department also organises programmes like The Bard by the Mandovi - The Shakespeare Festival, Pegasus, the Talking Tree Series and Creative Writing Workshop, as well as providing learning opportunities through study tours to Jaipur Literary Festival, Kala Ghoda Arts and Literary Festival, Mumbai Comic-Con, which not only provide occasions for students to interact with writers, journalists, editors, dramatists and educators, but also hone their inter-personal, organizational and managerial skills.

The Department has faculty experienced in the field of Literary Criticism, Poetry, American Literature, Goan Literature, Creative Writing and Writing for the Media. The Department uses technology such as ICT and applies current trends of teaching methodology to the learning sessions. A majority of the classes will follow a blended learning method and/or flipped classroom methods - using a blend of lecture, Cultural Knowledge model, inquiry based and discussion based learning models, through the use of ICT. Skill based courses will follow an experiential learning model using constructivist models, and application based models. Evaluations will also follow non-traditional modes – term papers, submission based, portfolio based, demonstration based and consistent use of ICT will be a hallmark of our evaluations.

Our students will gain expertise to critically analyse literary works while also imbibing skills to develop creative and quality work in imaginative writing, audiovisual or other electronic media and be eloquent speakers. They will be skilled for jobs in the fields of English Language Teaching, Literary Criticism and Linguistics and Media Studies.

1. Eligibility of Candidates and Career Prospects

Students who have completed their BA with English (Six Units/Single Major) or English (Three units/ Double Major/Major in Major/Minor), well-versed in

English language, have a passion for language and literature, are technologically savvy and who are inclined towards creativity are eligible to take this course. Any student who has a strong desire to study English Literature and its allied courses may seek admission with the following eligibility conditions:-

- (a) Graduate with minimum score of 60% preferably with English, and
- (b) Any student from other discipline may seek admission provided there are seats available through a test conducted by the department.

2. Admission Process and the Mode of Selection

Online form is available on the college website www.chowgules.ac.in. Kindly follow the instructions under the link admission. Selection of students will be based on Merit list (to be announced on the college website). Total number of seats available: 25

3. Course Structure of the programme: M.A. in English

Course Structure

CORE COURSES			
Semester	Course Code	Course Title	Course Credits
Sem. I	PG-ENG-B-1	Engaging Literature (Bridge Course)	2
	PG-ENG-C-1	English Poetry	4
	PG-ENG-C-2	Twentieth Century English Drama	4
	PG-ENG-C-3	Exploring Narratives in Fiction	4
	PG-ENG-C-4	Linguistics	4
Sem. II	PG-ENG-B-2	Research Methodology (Bridge Course)	2
	PG-ENG-C-5	Literary Theory	4
	PG-ENG-C-6	The Indian Subaltern: Dalit and Transgender Narratives	4
	PG-ENG-C-7	Asian Literature	4
	PG-ENG-C-8	Modern European Literature	4
	PG-ENG-C-9	Post Colonial: Theory And Practice	4

ELECTIVE COURSES			
Semester	Course Code	Course Title	Course Credits
Sem. III	PG-ENG-E-1	Writing for the Media (Technical Writing)	4
	PG-ENG-E-2	Green Studies	4
	PG-ENG-E-3	Visual Literature	4
	PG-ENG-E-4	Creative Writing	4
	PG-ENG-E-5	World Subaltern: Aboriginal Narratives	4
	PG-ENG-E-6	World Literature	4
	PG-ENG-E-7	Popular Literature (genre)	4
	PG-ENG-E-8	Shakespeare	4
Sem. IV	PG-ENG-E-9	ELT	4
	PG-ENG-E-10	Film Studies	4
	PG-ENG-E-11	Prose Writing (Diarists, Essays, Autobiographies)	4
	PG-ENG-E-12	Indian Literature in Translation	4
	PG-ENG-E-13	Children's Literature	4
	PG-ENG-E-14	Women's Literature	4
	PG-ENG-E-15	A Reflection of Gender & Sexuality	4
	PG-ENG-E-16	Mythology, Archetype & Literature	4

4. Contact Persons in the Department

Sr. No.	Contact Persons	Designation
1	Dr. Ms. Sonia Da Costa sof002@chowgules.ac.in	Associate Professor, Coordinator, M.A. in English
2	Mr. Andrew Barreto asb002@chowgules.ac.in	Assistant Professor

Chapter V

POSTGRADUATE DEPARTMENT OF GEOGRAPHY AND RESEARCH CENTER

The Department of Geography and Research Centre is a leading and pioneer department in Geography in the State of Goa and offers Graduate, Postgraduate and Ph.D. programmes in Geography and Postgraduate Diploma in Geoinformatics.

Well equipped laboratories, well qualified faculty with strong academic background, collaborations with various national and international institutes, active involvement in consultancy, extension activities and research and an established GIS and Remote Sensing section are the fortes of the department.

Over the decades, the department has achieved significant milestones since its inception in 1962. Looking at the popularity and demand of Geography, in 1991, entire Geography was introduced at third year level and then, subsequently, Masters' Degree (M.A.), in 2004. To increase the employability of graduates, in 2009, the department started Postgraduate Diploma in Geoinformatics (PGDGIS), and to enhance the research aptitude, Ph.D. Programme commenced from 2014. B.Sc. in Geography at third year level was introduced in 2012.

The department, to its credit, has completed four, with two ongoing Major Research Projects and more than 60 research publications in last five years. The department also publishes an in-house bi-monthly newsletter "*Geographia*" and undertakes various activities through Geography Club "**GLOBE** (Geographers Loving Our Beautiful Environment)" and "**AGES** (Association of Geography Ex-Students)". The GLOBE organizes field trips, tours, students' events and works for the promotion of the subject, whereas AGES provides financial and logistic assistance. Various scholarships have been instituted by the alumni.

The department has collaborations with Goa Institute of Public Administration and Rural Development (GIPARD), Old Goa, (Goa), Gogate-Jogalekar College, Ratnagiri (Maharashtra), Parishkar College of Global Excellence, Jaipur

(Rajasthan), S.M. Bapuji Salunkhe Mahavidyalaya, Miraj (Maharashtra) and Department of Geography, University of Rajasthan, Jaipur (Rajasthan). There are two universities, University of Sri Jayewardenepura and University of Kelaniya, Sri Lanka, with whom, the department has academic exchange programmes.

The department's commitment to the growth of the subject and expansion of geographical knowledge through teaching, research, consultancy and extension activities, has earned it, a stature of being one of the most eminent academic departments in the State of Goa.

Our Mission

“The Department of Geography at Chowgule College aims to provide in-depth knowledge in geographical domains with a special focus on research and skill-building.”

The Department offers core subjects in Physical Geography, Cultural Geography, Geoinformatics, Cartography, Spatial Studies and an array of allied electives. The teaching learning methodologies focus on self-focused learning through problem based learning, laboratory experiments, field works and project works.

The faculty has expertise in specialized fields of geography, who ensure that their experience is transcended to the students through discussion forums, workshops, seminars, field works and research work. The department emphasizes that the students participate in intercollegiate events, present papers in conferences, assist faculty in research works and undertake internships.

Our department has the necessary ICT-enabled infrastructure to enable curious learners to acquire essential skills and knowledge. This helps to develop expertise in areas of spatial studies, physical geography, human geography and Geoinformatics.

The department aims to develop skills of fieldwork, survey and research to seek suitable employment as teachers, researchers, surveyors, GIS analysts, cartographers and in allied fields like tourism and Regional planning.

POSTGRADUATE DEGREE PROGRAMMES

1. Master of Arts in Geography

1. Objectives of the Programme: M.A. in Geography

The objective of the M.A. programme in Geography is to develop confident geographers through various activities and initiatives of the department enabling them to acquire skills and knowledge in order to improve their employability skills.

2. Eligibility of Candidates:

A student with a minimum score of 50% (CGPA of 5.3 and above in case of CBCS) at B.A/B.Sc. Examination (preferably with Geography) from a recognized University/Institute is eligible.

Students with courses other than Geography may also apply; however, their selection will be based on their performance in the Aptitude Test in Geography, conducted by the department.

NO. OF SEATS: 25

3. Structure of the Programme: M.A. in Geography

COURSE STRUCTURE

CORE COURSES			
Sem.	Code	Course Title	Credits
I	GGC01	Principles of Geomorphology	3
	GGC02	Principles of Climatology	2
	GGPC01	Practicals in Geomorphology & Climatology	3
	GGPC02	Field Techniques and Village Survey	2
II	GGC03	Principles of Population Geography	3
	GGC04	Principles of Economic Geography	2
	GGPC03	Practicals in Economic & Population Geography	3
	GGPC04	Practicals in Cartography	2
III	GGC05	Development of Geographical Thought	3
	GGC06	Fundamentals of Remote Sensing	2
	GGPC05	Practicals in Statistical Geography	3
	GGPC06	Practicals in Remote Sensing	2
IV	GGC07	Regional Planning & Development	3
	GGC08	Fundamentals of Geographic Information System	2
	GGCP07	Computer Applications in Geography (Practical)	3
	GGPC08	Practicals in Geographic Information System	2

ELECTIVE COURSES			
Sem.	Code	Course Title	Credits
I	GGO-01	Environmental Geography	4
	GGO-02	Fundamentals of Oceanography	4
	GGO-03	Fundamentals of Soil Geography	2
	GGO-04	Disaster Mitigation & Management	2
II	GGO-05	Regional Geography of India	4
	GGO-06	Political Geography	4
	GGO-07	Geography of Trade & Transport	2
	GGO-08	Urban Geography	2

ELECTIVE COURSES			
Sem.	Code	Course Title	Credits
III	GGO-09	Coastal Geomorphology	4
	GGO-10	Fluvial Geomorphology	4
	GGO-11	Geography of Settlements	4
	GGO-12	Industrial Geography	4
	GGO-13	Research Methodology	2
	GGO-14	Dissertation	4
IV	GGO-15	Tropical Geomorphology	4
	GGO-16	Watershed Management	4
	GGO-17	Social and Cultural Geography	4
	GGO-18	Economic Geography of Globalization	4
	GGO-19	Teaching Methodology	2
	GGO-14	Dissertation	4

STUDENTS RESOURCES:

The Department has independent laboratories with adequate infrastructure supported by computer facility and Internet connection and air conditioning. A well-developed Geographical Information System (GIS) Lab, Remote Sensing Lab and Photogrammetry & Research Lab cater to the needs of the students and researchers. The department is enriched with toposheets (Indian and British), weather charts, maps, globe, models and specimens of rocks and minerals. The Department is proud to have an automatic weather station installed by ISRO (Indian Space Research Organization) that provides continuous weather report. The department also has GPS and Mapmaker package.

Department Labs:

1. Geoinformatics Lab
2. P.G. Laboratory (Geomorphology Lab), which is currently being re-developed as Soil Geography Lab
3. Photogrammetry & Research Lab with tracing table
4. Remote Sensing Lab
5. General Lab
6. Mapping Room

4. Contact Persons in the Department:

Sr. No.	Contact Persons	Designation
1	Dr. Nandkumar N Sawant nns001@chowgules.ac.in	Principal and Coordinator, M.A. in Geography,
2	Ms. Kalpana Borkar kdb003@chowgules.ac.in	Secretary, Department of Geography

Chapter VI

POSTGRADUATE DEPARTMENT OF HINDI

The postgraduate programme in Hindi is a unique programme and along with the Research Center is well known and in the state of Goa. This PG program provides higher level literature study to students and employment opportunities in the field of Translation, Research, Communication and Media Writing.

Our Mission

“To build a strong literary base among the students of Hindi so that they become research oriented after completion of PG studies and can work in the field of Translation, Research, Communication and Media Writing.”

Explanation of the Mission

The Department of Hindi offers core and elective courses designed to provide cultural survey, research methodology, translation and mass media. In the study of cultural survey, a student prepares survey report for one village, which includes their way of living, language, culture, education & employability and any other aspect.

Under the Research Methodology, the student prepares a dissertation related to literature. Student under translation translates the book from English to Hindi or Konkani to Hindi or Marathi to Hindi.

Under the mass media, a student can learn news writing, radio script writing, documentary, advertisement and script writing.

The courses are often conducted using interactive lectures-cum-discussion, workshops, seminars, research paper reviews, learning through field surveys, assignments, presentations, MCQ and dissertations. The Department expects that the research contributions of the students are worthy of publication in journals. Students are also encouraged to present their findings at national and international seminars.

POSTGRADUATE DEGREE PROGRAMME

Master of Arts in Hindi

1. Objective of the Programme: M. A. in Hindi

The Department looks forward to produce Hindi Scholars familiar with different types of creative Literature such as Poetry, Short Story, Novels, Drama, etc. as they can apply their knowledge and understanding of critical, theoretical, and technical traditions to the production of original literary works.

The Department likes to focus on Self-employment of the students by developing professional skills amongst the students in the field of Translation, Research, Communication and Media Writing. Overall Department is emphasizing on the Employability of the Stakeholders through the study of modern and contemporary literary trends.

2. Eligibility of Candidates:

Students seeking admission to the two year, four semesters, full time programme must have passed the Bachelor in Arts degree with at least 50 % aggregate marks from a recognized university. The admission will be based on merit. Students from other than Hindi Stream will have to appear for the entrance test conducted by the PG Department.

3. Structure of the programme: M. A. in Hindi

The M.A. Programme in Hindi follows the Choice Based Credit System. To complete the M. A. programme in Hindi, a student has to accumulate a total of 80 credits.

The course structure has two components. These are: (a) Core Courses (b) Elective Courses. The spread of total credits is shown in Table 1. The Core Courses are compulsory and carry forty credits. A student will have to complete forty credits from Elective Courses.

**Table 1: Credit Requirements for Completing the Programme, M. A. in
HINDI**

Sr. No.	Nature of the Courses	Credits Required
1	Core Courses	40
2	Elective Courses	40
	Total Credits	80

Sr. No	Core Courses	Number of Credits	Code No.
1	Hindi Sahitya Ka Itihas (Aadikal, Bhaktikal Evam Ritikal)	4	HNC-1
2	Prachin Evam Madhyakalin Kavya	4	HNC-2
3	Bhashavigyan	4	HNC-3
4	Hindi Sahitya Ka Itihas: Adhunik Kal	4	HNC-4
5	Adhunik Kavya	4	HNC-5
6	Vishesh Vidha: Upanyas	4	HNC-6
7	Bharatiya Kavyashastra	4	HNC-7
8	Prayojanmulak Hindi	4	HNC-8
10	Pashehatya Kavyashastra	4	HNC-10
11	Media Lekhan	4	HNC-11

Sr. No	Elective Courses	Number of Credits	Code No.
1	Rachanakar: Sarchidanand Hiranand Vatsayan 'Agyey'	4	HNE-1
2	Dalit Vimarsh	4	HNE-2
3	Anuvad	4	HNE-3
4	Vishesh Vidha: Kahani	4	HNE-4
5	Aalochak Aur Aalochana	4	HNE-5
6	Patrakarita Evam Jansanchar Madhyam	4	HNE-6
7	Bharatiya Sahitya	4	HNE-7
8	Natak Evam Rangmanch	4	HNE-8
9	Aadhunik Hindi Sahitya Ki Vaicharik Prushtbhumi	4	HNE-9
10	Adhunik Gadya (Natak, Upanyas, Nibandh, Kahani)	4	HNE-10
11	Stree Vimarsha	4	HNE-10
12	Gadhya Ki Anya Vidhaye	4	HNE-12
13	Hindi Bhasha, Lipi, Vyakran Evam Sarvekshan	4	HNE-13
14	Shodh Pravidhi	4	HNE-14

4. Contact Persons in the Department

Sr. No	Contact Person	Designation
1	Dr. Omprakash Tripathi omt001@chowgules.ac.in	Coordinator, M. A. Hindi
2	Ms. Ashavine Naik agn002@chowgules.ac.in	Secretary, Department of Hindi

Chapter VII

POSTGRADUATE DEPARTMENT OF PSYCHOLOGY

Psychology is one of the popular subjects offered by this college. In recent years with growing studies on human behaviour and the realization of its application in all fields of life, the subject of Psychology is gaining importance. Catering to the growing demand of the society, Parvatibai Chowgule College of Arts & Science (Autonomous) started the Master's Program in Child Psychology & Child Development in the year 2016. This program will help students gain employment as school counsellors, work in NGO, setup own clinic, work in remand homes, counselling centres and child guidance clinics.

Our Mission

The mission of the Postgraduate Department of Psychology at Parvatibai Chowgule College of Arts & Science, (Autonomous) is to create quality child psychologists in the society by offering a two-year M.A. program in Child Psychology & Child Development.

M.A. program aims at providing the students with a sound theoretical base in child psychology and child development, psychopathology, educational psychology, rehabilitation and the like. The program has its major thrust on skill based courses that are aimed at creating professionals capable of handling any problem related to children.

Learner centred pedagogical techniques - combined with internationally authored books, interactive assignments, presentations, movie reviews, book reviews, guest lectures, field trips & practical training on the field - will help the students in developing analytical skills and self- confidence.

On successful completion of the course, students will be eligible to work as child psychologists, psychotherapists and counsellors in schools, counselling centres & child development centres. Students can also join in the field of academics and research related to child psychology & child development.

POSTGRADUATE DEGREE PROGRAMME

Master of Arts in Child Psychology & Child Development.

1. Objectives of the Programme:

The M.A. Programme in Psychology of the Department of Psychology of Parvatibai Chowgule College of Arts and Science (Autonomous) is driven by its core objective to equip the students with in-depth knowledge and expertise in Child Psychology and Child Development. The syllabus has been specially designed to bridge the gap between education and industry. With major emphasis on skill-based courses, the M.A. Programme intends to equip students with the knowledge and skills required to deal with any issues pertaining to children. This course emphasizes on experiential learning with focus on research, case study method and internship. To gain skills and practical knowledge, the student will be exposed to various field trips, institutions working with child development and will have experiential learning through various case studies.

2. Eligibility of Candidates

Admission to the two year, four semesters, full time programme leading to the degree of Master of Arts in Psychology is based on merit. It is open to any candidate passing the Bachelor's Degree Examination in Psychology with a minimum score of 50%.

Students from other disciplines can seek admission provided there are seats available and will be required to clear the entrance examination. Proficiency in the English language is a basic requirement for the programme.

3. Structure of the programme of M.A. in Psychology:

The M.A. Programme in Psychology follows the Choice Based Credit System. To complete the M.A. programme in Psychology, a student has to accumulate a

total of eighty credits. The course structure has five components. These are: (a) Core Courses - Theory, (b) Core Courses - Skilled based, (c) Elective Courses - Theory (d) Elective Courses - Skill based, (e) Internship and (f) Dissertation. One credit equals to one contact hour per week over a fifteen-week period.

The spread of total credits is shown in Table 1. The Core Courses are compulsory and carry 32 credits of which 12 credits are Theory based and 20 credits are skill based. Project work / dissertation work carrying 08 credits is compulsory and is spread over semester III and IV. In every semester students are given a pool of elective courses both theory and skill based from which students get to choose the courses to complete the necessary credits i.e. 40 across the four semesters.

Theory courses provide the necessary theoretical base. Skill based courses help students hone skills necessary to deal with real life problems faced by children. Internship is intended to introduce a student to the world of work. Internship carries eight credits and will be for 240 hours. Project work /dissertation will require an independent work by the student with the concerned guide. Dissertation will be submitted by the end of fourth semester.

Table 1. Credit Requirements for Completing the M.A. Programme

Sr. no.	Nature of Courses	Credits Required
1	Core - Theory	12
2	Core - Skill based	20
3	Elective - Theory	20
4	Elective - Skill based	12
5	Internship	08
6	Dissertation	08
	TOTAL	80

Sr. no.	Courses	No. of. credits	Semester	Code no
1	Core – Theory	12		
A	Child Development	03	I	PG PSY I.C-1
B	Child Psychopathology	03	II	PG PSY II.C-2
C	Counselling Approaches	03	III	PG PSY III.C-3
D	Children with Disabilities and Understanding Special Needs	03	IV	PG PSY IV.C-4

Sr.no	Courses	No. of. credits	Semester	Code no
1	Elective – Skill based	12		
A	Case studies in Child Development	03	I	PG PSY I.S-2
B	Case Studies in Child Psychopathology	03	II	PG PSY II.S-4
C	Case Studies Ways to Understand Psychotherapies	03	III	PG PSY IIIS-6
D	Case Studies in Childhood Disabilities and Understanding Special Needs	03	IV	PG PSY IV.S-8

Sr.no	Courses	No. of. credits	Semester	Code no
1	Core - Skill based	20		
A	Practicum	05	I	PG PSY I.S-1
B	Counselling Therapies for Children I	05	II	PG PSY II.S-3
C	Counselling Therapies for Children II	05	III	PG PSY III.S-5
D	Management of Learning Disabilities	05	IV	PG PSY IV.S-7

Sr.no	Courses	No. of. credits	Semester	Code no
1	Elective – Theory	20		
A	Psychology of Adolescence	02	I	PG PSY I.E-1
B	School Counselling	02	I	PG PSY I.E-2
C	Diet and Nutrition	02	I	PG PSY I.E-3
D	Development Beyond Adolescence	02	II	PG PSY II.E-4
E	Research Methodology for Psychology	02	II	PG PSY II.E-5
F	Ngo Management and Entrepreneurship	02	II	PG PSY II.E-6

G	Educational Psychology	02	III	PG PSY III.E-7
H	Advanced Statistics for Psychology	02	III	PG PSY III.E-8
I	Paediatric Psychology	02	III	PG PSY III.E-9
J	Positive Psychology	02	III	PG-PSY-III.E-13
K	Counselling Parents	02	IV	PG PSY IV.E-10
	Socially disadvantaged children	02	IV	PG PSY IV.E-11
L	Child and Crime	02	IV	PG PSY IV.E-12
M	Rehabilitation Psychology	02	IV	PG-PSY-IV. E-14

4. Contact Persons in the Department

Sr.no.	Contact Persons	Designation
1	Mrs. Sobita Kirtani svk004@chowgules.ac.in	Head of Department- Psychology
2	Ms. Aiswarya M Babu abm002@chowgules.ac.in	Coordinator- MA Child Psychology & Child Development

Chapter VIII

POST GRADUATE DEPARTMENT OF CHEMISTRY

The Postgraduate Department of Chemistry is an extension of the existing Department of Chemistry that conducts the undergraduate degree programme, since the inception of the College in 1962.

The Post Graduate Department was stated in the academic year 2013-2014, to provide need-based, relevant and high quality postgraduate study opportunity to students and address their concern about employability especially in pharmaceutical and chemical industries with good skills. The PG department consists of four full times Faculty and many invited guest speakers from Pharmaceutical company right from CEO to Senior Directors in order to deliver lectures.

The classrooms are well equipped with LCD projectors, interactive white board to aid an effective teaching learning environment. Students have 24 x7 hours accesses to learning resources through WiFi campus and CLAAP (Chowgules Learn Anytime Any Place), along with new innovative method of teaching and learning like POGIL (Process Oriented Guided Inquiry Learning). The department has three spacious well equipped laboratories. The department has many sophisticated instruments like FTIR, Double Beam UV-Visible Spectrophotometer, Atomic Absorption Spectroscopy, Simultaneous TG-DTA, DSC, GC, HPLC, etc.

The PG department assists the students for Dissertation and Job placements.

All the branches of science need Chemistry. It is an experimental science and students need training to get expertise in doing experiments and handle sophisticated instruments. There are immense potentialities for chemistry and post graduates to undertake advanced research or be employed in industries as skilled chemists.

Our Mission

We at the PG Department of Chemistry, aim to provide sizable knowledge both in Theory and Practical to students and enable them to be better individual analyst in the world of Chemical Sciences.

The department initiates interactions of academicians, pharmaceutical industry and chemical industry experts through weekly seminars. Students undergo hands on training on sophisticated instruments through workshops and series of

lectures of the eminent personnel from reputed firms. The course is upgraded through feedback from alumni and experts of National repute from academics and industry. Industrial internship is arranged to impart good laboratory practices and a keen interest is taken on undertaking basic research via collaboration with the pharmaceutical industries and National repute institutes, through dissertation work.

POSTGRADUATE DEGREE PROGRAMME

Master of Science in Analytical Chemistry

1. Objective of the Programme: M. Sc. in Analytical Chemistry

The course gives an introduction to all branches of Chemistry including basic analytical methods. It provides a solid background in the fundamental concepts, GLP, data management, facility management and exploitation of results; Data analysis, experimental design, planning of a safe working practice, including evaluation of hazards and environmental effects; working within a small team to achieve a common research goal; self-led practical-based research, particularly on characterization and analytical instrumentation methods like spectroscopy, chromatography and environmental pollution and an appreciation of issues in each of these fields in the current research. This programme in analytical chemistry is in two parts: formal instruction (lectures, practical's) followed by individual research.

The course bridges the gap between the academics and industries and to inculcate the students with current basic research.

2. Eligibility of Candidates:

Admission to the two year, four semesters, full time course leading to the degree of Master of Science in Analytical Chemistry is open to any candidate satisfying the following conditions:

Candidates completing B. Sc. Examination, scoring minimum 55 % Marks with 6 Units Chemistry along with Analytical Chemistry as one of the papers.

Eligibility criteria with Entrance Test

The Merit list in the PG Department shall be prepared on the basis of the total marks scored at the entrance test.

Note: Candidates applying for admission to the M. Sc. (Chemistry) programme is eligible to be admitted to only one specialization at M. Sc. in Analytical Chemistry at Part II.

NUMBER OF SEATS: 20

3. Structure of the programme: M. Sc. in Analytical Chemistry

SEMESTER I AND II CORE COURSES		
COURSE CODE	COURSE NAME	CREDIT S
CHAC 401	Spectroscopic Methods In Chemistry	4
CHAC 402	Laboratory Course In Analytical Chemistry	2
CHIC 401	General Inorganic Chemistry	4
CHIC 402	Laboratory Course In Inorganic Chemistry	2
CHOC 401	Concepts In Organic Chemistry-I	4
CHOC 402	Laboratory Course In Organic Chemistry	2
CHPC 401	General Physical Chemistry	4
CHPC 402	Laboratory Course In Physical Chemistry	2

Course Code: CHA-Analytical Chemistry, CHI-Inorganic Chemistry, CHO-Organic Chemistry, CHP-Physical Chemistry; C-Core, O-Elective.

Course Code: CHA-Analytical Chemistry, CHI-Inorganic Chemistry, CHO-

SEMESTER I AND II ELECTIVE COURSES		
COURSE CODE	COURSE NAME	CREDIT S
CHAO 401	Analytical Techniques –I	2
CHAO 402	Analytical Techniques –Ii	2
CHIO 401	Selected Topics In Inorganic Chemistry	2
CHIO 402	Environmental Chemistry	2
CHOO 401	Concepts In Organic Chemistry -Ii	2
CHOO 402	Concepts In Organic Chemistry –Iii	2
CHPO 401	Selected Topics In Physical Chemistry	2
CHPO 402	Mathematical Preparation For Chemistry And Introduction To Computers	2
CHPO 403	Diffraction Methods	2

Organic Chemistry, CHP-Physical Chemistry; C-Core, O-Elective.

Course Code: CHA-Analytical Chemistry, CHI-Inorganic Chemistry, CHO-Organic Chemistry, CHP-Physical Chemistry; C-Core, O-Elective.

SEMESTER III AND IV CORE COURSES		
ANALYTICAL CHEMISTRY		
COURSE CODE	COURSE NAME	CREDIT S
CHAC 501	Fundamentals Of Chemical Analysis	4
CHAC 502	Techniques In Chemical Analysis	4
CHAC 503	Separation Techniques	4
CHAC 504	Experiments In Analytical Chemistry	4

SEMESTER III AND IV ELECTIVE COURSES		
ANALYTICAL CHEMISTRY		
COURSE CODE	COURSE NAME	CREDIT S
CHAO 501	Spectral Methods Of Analysis	4
CHAO 502	Environmental Control And Chemical Analysis	2
CHAO 503	Applied Analytical Chemistry	2
CHAO 504	Chemometrics	2
CHAO 505	Problems On Combined Spectroscopy	2
CHAO 506	Selected Topic In Analytical Chemistry	2
CHAO 507	Calibrations And Validation	2
CHAO 508	Advanced Mass Spectroscopy	2
CHAO 509	Advanced Nmr Spectroscopy	2
CHGO 500	Dissertation	8

Course Code: CHA-Analytical Chemistry, CHI-Inorganic Chemistry, CHO-Organic Chemistry, CHP-Physical Chemistry; C-Core, O-Elective.

3. Contact Person:

Contact Person	Designation
Dr. G. K. Naik gkn001@chowgules.ac.in	Associate Professor, Coordinator, M.Sc. Analytical Chemistry

Chapter IX

POST GRADUATE DEPARTMENT OF COMPUTER SCIENCE

The Chowgule Education Society pioneered computer education in the state of Goa by introducing the Post Graduate Diploma in Computer Applications (PGDCA) affiliated to Goa University in 1986. Subsequently, recognizing the need for skilled computer professionals, the B.Sc course in Computer Science was introduced in the year 1991 and M.Sc (Information Technology) was started in the year 2003. Both these courses are affiliated to the Goa University. To augment the knowledge base of the students, the department conducts various short terms, add-on/honours programmes and other need based courses from time to time.

The department under Autonomy has restructured the courses as per the industrial needs. It has played a major role in contributing to the academic community and society at large. Large number of students have passed out from this department over the last 31 years and has been absorbed by the industrial and business houses all over the world.

Our Mission

The mission of the Post-Graduate Department of Computer Science is to provide its students with strong theoretical and practical knowledge of different disciplines in Information Technology and to develop their Software Development and Research skills so that they become competent to join the IT Industry or Academic Organizations.

Parvatibai Chowgule College (Autonomous) is the only college in Goa to offer MSc in Information Technology. This programme is for students interested in Web Designing, Database Administration, Search Engines, Design and Implementation of Algorithms using Programming Languages.

MSc IT curriculum includes core courses in Data Mining, Advanced Database Management Systems, Design & Analysis of Algorithms, Information Retrieval

etc. The elective courses include Computer Graphics, Mobile Computing, Natural Language Processing, Compiler Design, Cloud Computing etc.

Apart from regular lectures, presentations and assignments, we also organize workshops and lectures on recent technologies. These lectures and workshops are conducted by industry professionals. Students' Projects and assignments undergo rigorous verification & validation standards by faculty and industry experts. Our students undertake and work on live projects through FOSS (Free Open Source Software) Club to get hands-on experience. Our infrastructure has well equipped labs with WiFi support, Seminar hall and an Oracle 12c specialized lab. The Department also encourages students to undertake online certification courses provided by global companies(Oracle,D-Link,Spoken Tutorial,Leap courses).

Unique to this course are:

- The Department has signed an MOU with Infiswift which entitles our students to be given preference during allotment of projects/internship by Infiswift.
- Industrial Internship –Our College students also implement a project in any IT industry or Scientific/Research Organization for the duration of 5 months.

POSTGRADUATE DEGREE PROGRAMME

Master of Science in Information Technology

1. Objective of the programme: M.Sc. in Information Technology

The objective of the PG programme is to make the students competent to work in the software industry as Software Developers or to work in academics as Assistant Professors or Researchers. In addition to courses related to Computer Science, this course also contains Mathematical and Communication Skills courses. These courses aid in the development of Analytical Skills and Soft Skills, respectively.

2. Eligibility of Candidates

Admission to the two year, four semester, full time course leading to the degree of Master's degree in Information Technology (M. Sc. Information Technology), is open to any candidate satisfying the following conditions:

- a) B.Sc (Computer Science) / BCA with 55% at Degree Level
- OR
- b) 60% and above at PGDCA with minimum 45% at B.Sc(Computer Science) /BCA/ Equivalent at degree level

3. Structure of the Programme

There are 7 core theory courses, 9 elective courses and 6 laboratory practical courses. Each core theory course has 4 credits and each practical course has 2 credits. Out of 9 elective courses, 7 courses have 4 credits each and 2 courses have 2 credits each. The Project/Dissertation is of 8 credits. The total number of credits that a student must earn to complete MSc IT course is 80.

Semester I (24 credits)

Course Code	Course Type	Course Name	Credits
MIT 11	Core – I	Data Structures and Algorithms	4
MIT 12	Core – II	Operating Systems and Networks	4
MIT 13	Elective - I	Applied Probability and Statistics	4
MIT 14	Elective – II	Communication Skills Course	4
MIT 15	Elective - III	Elective Course	4
MIT 16	Core III Lab – I	Data Structures and Algorithms Lab	2
MIT 17	Core IV Lab – II	Operating Systems and Networks Lab	2

Semester II (24 credits)

Course Code	Course Type	Course Name	Credits
MIT 21	Core – V	Software Architecture, Design Patterns and Frameworks	4
MIT 22	Core – VI	Design and Analysis of Algorithms	4
MIT 23	Core - VII	Advanced Database Management Systems	4
MIT 24	Elective – IV	Elective Course	4
MIT25	Elective V	Elective Course	2
MIT 26	Core VIII Lab – III	Software Architecture, Design Patterns and Frameworks Lab	2
MIT 27	Core IX Lab – IV	Design and Analysis of Algorithms Lab	2
MIT28	Core X LAB -V	Advanced Database Management Systems LAB	2

Semester III (24 credits)

Course Code	Course Type	Course Name	Credits
MIT 31	Core – XI	Data Mining	4
MIT 32	Core – XII	Information Retrieval	4

MIT 33	Elective VI	Elective Course	4
MIT 34	Elective – VII	Elective Course	4
MIT 35	Elective – VIII	Elective Course	4
MIT 36	Elective IX	Elective Course	2
MIT37	Core – XIII Lab V	Data Mining and Information Retrieval Lab	2

Semester IV (8 credits)

Course Code	Course Type	Course Name	Credits
MIT 41	Elective X	Project/Dissertation	8

LIST OF ELECTIVE COURSES

Sr. No.	COURSE TITLE	Course Code
1	Software Metrics & Project Management	
2	Object Oriented Analysis and Design using UML	
3	Mobile Computing	
4	Introduction to Data Compression	
5	Embedded Systems Design	
6	Compiler Design	
7	Computer Graphics	
8	Natural Language Processing	
9	Image Processing	
10	Distributed Systems	
11	Theory of Computation	
12	Middleware Technology	
13	Software Testing	
14	Operating Systems, Kernel and Network Programming	
15	Cloud Computing	
16	Network Security	

4. Contact Persons in the Department

Sr. No.	Contact Person	Designation
1.	Mr. Mahesh P. Matha mpm001@chowgules.ac.in	Assistant Professor, MSc IT Course Coordinator
2.	Mr. Abhishek D. Gudekar adg001@chowgules.ac.in	Assistant Professor
3.	Ms. Sanas Shaikh	Assistant Professor
4.	Mr. Vilson Pinto vip001@chowgules.ac.in	Technical Assistant

Chapter X

IMPORTANT COLLEGE POLICIES

The following are some of the policies of the College that are important for the postgraduate students of the College. Other policies of the College are available on the College website. Students are required to familiarize themselves with these policies including the policy on attendance.

LIBRARY POLICY

The library policy is designed to provide maximum benefits to the users of the Learning Resources Centre (LRC). The resources include books, reference materials, journal editions and VCDs. The LRC also has access to INFLIBNET and e-journals.

Facilities Available

- Reading Facilities
- Referencing (Cyber)Facilities
- Lending Facilities

Who can use the LRC Facilities:

- Students of the College
- Faculty and Non-teaching Staff of the College
- Members of the Public

All students and staff possessing a valid College Identity can use LRC facilities. Members of the public can apply for membership of the LRC (College Library) by filling the online form available at the Library link on the College website and paying the required fees in the LRC.

Policies pertaining to the Use of Facilities

- **Reading Facility:** This facility is located on the First Floor of the LRC building. It can accommodate 100 readers at a time. The reading facility is available on first-come-first-served basis and no reservation of sitting

place is entertained. This facility is available between 8.30 a.m. and 5.30 p.m. on all working days.

- **Referencing and Cyber Facilities:** This facility is located on the Ground Floor of the LRC building. It has work places for 99 persons at a time. Each work place has a desk with computer terminal and internet access. These work places provide seamless access to digital learning resources of the LRC as well as to the internet. Each work place is connected to the printing facility located on the Ground Floor. The reading facility is available on first-come-first-served basis. This facility is available between 8.30 a.m. and 5.30 p.m. on all working days. Online resources of the LRC can be accessed through the internet from anywhere.
- **Lending Facility:** The lending counter is located on the Ground Floor of the LRC building. Students and staff of the College can borrow up to twenty books for seven days and two VCD for five days. Members of the public can borrow up to two books for seven days and two VCD for five days. Journals and reference books are not issued out of the LRC. If books are not returned on the due date the borrowers will have to pay a penalty which is as follows:

Overdue charges for a delay of up to three days are Rs. 10.00 per book per day. For a delay of four to fifteen days, the overdue charges are Rs. 20.00 per book per day. For a delay of sixteen to thirty days, the overdue charges are Rs. 30.00 per book per day. For a delay of more than thirty days the overdue charges are Rs. 50.00 per book per day from day one. The overdue charges will have to be paid at the issuing counter of LRC. No complaints on the issue of overdue shall be entertained.

- **Loss of Borrowed Items:** If borrowers have lost any item they have to inform the Librarian immediately through email at library@chowgules.ac.in. A penalty equivalent to 150 percent of the current cost of the item will be imposed on all lost items.
- **Behaviour in the LRC:** Users of the LRC should adhere to the code of conduct. Users are advised to familiarize themselves with this code which is available at the library link on the College website <http://www.chowgules.ac.in>.
- **Grievances with respect to the functioning of LRC:** All grievances /complaints with respect to the function of the library should be brought to the notice of the College authorities. Grievances can be written on paper and dropped in the complaint box kept at the lending counter of

LRC. Alternatively, grievances can be emailed to the Principal at principal@chowgules.ac.in.

- **Responsibilities of the Borrower:** The borrowers are personally responsible for items borrowed from the library. They must ensure that the material borrowed from the LRC is not misused or soiled or in any form mishandled. The ultimate liability for the penalty will lie with the borrowers.
- **Authority of Appeal:** The final authority for appeal and for adjudication is the Principal.
- **Important Provision – Right to Amend:** The College reserves to right to amend these policies whenever the need arises.

PLAGIARISM POLICY

The following statement is issued by the management of this college for the information of students and faculty. The information below can be supplemented by course-specific guidance and recommendation from individual departments.

It is the student's responsibility to read, and ensure they have understood this Statement on Plagiarism.

Ensure that you ask your faculty or department about their particular guidelines with respect to referencing techniques and other academic conventions that you are expected to adhere to.

Ensure that you always follow these conventions, and ask for clarification or support if you need it from the respective department. Do not leave any room for doubt or confusion about any aspect of academic integrity.

Defining Plagiarism:

Plagiarism is defined as submitting as one's own work, irrespective of intent to deceive, that which derives in part or in its entirety from the work of others without due acknowledgement.

Why is plagiarism considered a serious offence, rather than just a mild type of cheating? Every scholar, whether student or senior research fellow, is a member of an intellectual community that seeks academic achievement and

progress. This means that due respect should be given to originators of ideas, data and works. Proper referencing ensures that such respect and acknowledgement is given, where it is due. Academic and intellectual dishonesty occur when work done by others is copied without giving due references.

Thus, Plagiarism is not just unethical; it can destroy reputations and careers, besides jeopardizing the learning process. At Chowgule College, plagiarism is considered a breach of academic integrity and is an indicator of inferior scholarship.

When you plagiarize, you are also cheating on yourself. You short-circuit your own learning process, and put your reputation at high risk. Your faculty and examiners are experts in their field, and will usually detect copied work. Plagiarism will open the possibility of disciplinary procedures, often with lasting consequences which could hamper your job prospects.

Remember, it is always best to devote time, attention and effort towards investing in your own academic future.

Examples of plagiarism:

Plagiarism includes using another person's language and/or ideas as if they are a candidate's own. Such illegal copying takes place by:

- quoting verbatim another person's work without due acknowledgement of the source;
- paraphrasing another person's work by changing some of the words, or the order of the words, without due acknowledgement of the source;
- using ideas taken from someone else without reference to the originator;
- cutting and pasting from the Internet to make a composition of online sources;
- submitting someone else's work as part of a candidate's own without identifying clearly who did the work.
- buying written material from professional essay / assignment / thesis writers and submitting it as ones own;
- not attributing research contributed by others to a joint project.

To avoid a charge of plagiarism, a student should also include a general acknowledgement where he or she has received substantial help with the written work in question, for example with the language and style of a piece of written work.

Areas of Plagiarism:

Plagiarism can occur in respect of all types of sources and media:

- Text, illustrations, mathematical derivations, computer code, etc;
- Material downloaded from websites or drawn from manuscripts or other media;
- Published and unpublished material, including lecture handouts and other students' work.

Penalizing Plagiarism:

- Failure to conform to the expected standards of scholarship (e.g. by not referencing sources) in submitted written work may affect the mark given to the candidate's work.
- In addition, suspected cases of plagiarism will be investigated by suitable means, including the use of relevant software.
- Those found guilty of plagiarism will be suitably disciplined, and such disciplinary action can include rustication of the offending individual and/or deprivation of diploma / degree.

Avoiding Plagiarism:

- Acceptable means of acknowledging the work of others (by referencing, in footnotes, or otherwise) vary according to the subject matter and mode of assessment.
- Individual departments should issue written guidance on the relevant scholarly conventions for submitted work, and also make it clear to candidates what level of acknowledgement might be expected in written assignments and examinations.
- Candidates are required to familiarize themselves with this guidance, to follow it in all work submitted for assessment, and may be required to sign a declaration to that effect.
- The Writing Centre at Chowgule College is keen to help you learn proper referencing techniques, so as to avoid any charge of plagiarism. Please meet any advisor at the Writing Centre to know more or to ask for help.
- If your department has not specified any particular referencing system, you should consider using the guidelines for bibliography provided by the Writing Centre, as available on the College website, under 'Writing Centre' tab.