

GOVERNMENT POLYTECHNIC

PANAJI

CITIZEN CHARTER

Release - 1

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GOVERNMENT POLYTECHNIC, PANAJI

INSTITUTION CHARTER

1. INTRODUCTION:

- 1.1. In pursuance to the decision taken, the state Government has directed various departments of Government of Goa to prepare and publicise the “Citizens Charter” for accountability and transparency to the public of State of Goa. The Government Polytechnic, Panaji has also decided to bring out a “Citizen Charter” for the benefit of students, parents and public in general . It provides comprehensive information pertaining to admission procedure, examination procedure, various faculties available to the students, brief introduction of courses run by the Institute, procedure for admission in the Hostel, procedure for payment of fees and refund thereof, etc.

2. BACKGROUND OF THE INSTITUTE:

- 2.1. Technical Education of Goa, prior to 1963, was under the Department of Technical Education , Portugal, in Portuguese medium. The Institution was known as “Scola de Industrial e Commercial” Certificate Courses were conducted in different vocations.
- 2.2. After the liberation of Goa in 1961, Technical Education developed rapidly and trained the following manpower:
 - Skilled worker/Craftsmen
 - Technicians
 - Engineers/Technologists.
- 2.3. Government Polytechnic, Panaji, was started in August,1963. The ‘**Institute of Escola de Industrial e Commercial**’ was upgraded to the Polytechnic status. The Institute started with three branches namely Civil, Electrical and Mechanical Engineering with 40 seats each.
- 2.4. The Institute was shifted to the spacious campus at Altinho in 1968. The Campus contains Boy’s Hostel with a capacity of 300 and Girl’s Hostel with a capacity of 150 was started in 1985. Women’s Wing of Polytechnic was started in 1984. The year-wise development of Polytechnic is shown on the next page.
- 2.5. The Institute has well equipped Gymkhana and an open ground for playing outdoor games.

2.6. There are separate canteens for Main Building as well as Women's Wing

Course	Duration in Terms	Intake at present	Year of starting
Civil Engineering	6	60	1963
Electrical Engineering	6	30	1963
Mechanical Engineering	6	60	1963
Fabrication Technology & Erection Engineering	8	30	1973
Electronic Engineering	6	45	1976
Food Technology	7	15	1976
Modern Office Practice	6	30	1976
Computer Engineering	6	20	2006

EXTENSION WING

Electronics & Instrumentation	6	20	1984
Architectural Engineering	6	30	1996
Garment Technology	6	30	1996

2.5. THE PRESENT STAFF STRUCTURE IS AS FOLLOWS:

Principal	01
H.O.D.'s	08
Lecturers/	58
Instructors	07
Deputy Registrar	01
Assistant Accounts Officer	01
Assistant Stores Officer	01
Sr. Librarian	1
Supporting Staff	118

3. PRESENT STATUS OF ACTIVITIES:

3.1. CIVIL ENGINEERING DEPARTMENT

3.1.1. The Diploma Course in Civil Engineering with an intake of 40 students per year

- imparts quality education in the following areas:

- Construction Technology
- Building Drawing
- Transportation Engineering
- Surveying & Levelling
- Soil Mechanics
- Civil Structures - Mechanics, Analysis,
- Design and detailing
- Environmental Engineering
- Irrigation Engineering
- Hydraulics
- Quantity Survey and Costing
- Construction Management

3.1.2. The department is in a position to offer consultancy in:

- Planning of Buildings.
- Design of R.C.C. and steel structures
- Analysis of existing structure for fitness
- Valuation of building and industrial structures
- Land surveys such as preparation of layout plans, demarcation of sites, contouring.
- Checking measurement of Civil works executed by different agencies and billing.
- Pollution control techniques for air pollution and industrial waste treatment.
- Soil testing.

3.2. LEARNING RESOURCE UTILISATION CENTRE (LRUC)

Teaching-learning is more an interactive process rather than once-through process. Its effectiveness can be enhanced by using various teaching aids apart from traditional chalk-board system. With the developing trends of electronics media and its application it is felt necessary to provide such facilities effectively and economically. LRUC is a section which co-ordinates with teaching facilities to all departments by assisting them in all their learning resource requirements. In addition, it organises

various staff development training and workshop to update their knowledge and improve teaching abilities.

Equipments & Machines

- O.H.P.
- Photocopying Machine
- Cyclostyling Machine
- Cutting Machine
- Camera
- Slide Projector
- 16 mm Film Projector, films
- TV/V.C.R.
- Audio Recording System
- Learning Resources:
 - Transparencies
 - Megnetic cutouts
 - Learning Packages
 - Models
 - Charts

3.3. DEPARTMENT OF COMPUTER ENGINEERING:

3.3.1 Diploma in Computer Engineering is a 3 year programme started in 2007. It is offered to 10th passed out students with an intake capacity of 20.

3.3.2 The programme equips the passout with a knowledge of computer hardware and software in General with an input of knowledge of all working programmes.

3.3.3. The department has been recently renovated with well-equipped laboratories capable for research in networks, Database, System Programming and Multimedia.

3.3.4. The Department also supports a digital hardware lab. There are more than thirty computing systems in the department. All these are Pentium based Machines, each having access to sufficient memory of Disk Storage and a high resolution colour monitor which are networked.

3.4. MECHANICAL ENGINEERING DEPARTMENT:

3.4.1. Mechanical Engineering is one of the basic and the most conventional courses.

This
course is being offered right from the inception of Polytechnic in Goa.

3.4.2. The basic science and engineering subjects are introduced in the first two terms. The general introduction to Electrical, Electronic, Mechanical is done in the next two terms. Students are exposed to design, production, and management and also awareness to Computer studies. The Course provides sufficient practical background. Projects and Seminars provide a good opportunity to apply their knowledge in real situations.

3.4.3. The department can offer the following to the industries:

- To find solutions to the problems in the areas of production, inventory, materials handling, line balancing, scheduling, quality, control, inspection.
- To organise short term courses and consultancy for supervisory level Personnel.
- To prepare instructional manuals/working drawing.
- To prepare inspection cards.
- To organise long term courses such as AMIE for industrial personnel after working hours.
- To organise short term courses on:
 - Inventory control
 - Metrology.
 - Quality Control.
 - Industrial Management.
 - Human relations.
 - Industrial Hygiene and safety.

3.5. WORKSHOP SECTION:

3.5.1. The workshop section of Government Polytechnic, Panaji, has completed thirty three years of its fruitful existence by training technicians in Engineering in various disciplines.

3.5.2. The section provides training in the first year of various courses conducted in this Institute. The skills are imparted in carpentry, fitting, smithy and welding. At the second and third year level, the workshop section offers practical training in acquisition of skills in the use of various conventional machines and equipment's.

3.5.3. The practical training is mainly for the diploma students in Mechanical Engineering. The workshop is well equipped with various tools, equipment' and machinery which include the following:

Centre lathes	25 Nos.
• Shapers	5 Nos.
• Milling Machine	2 Nos.
• Power Hacksaws	2 Nos.
• Surface Grinder	1 No.
• Radial Drilling Machine	1 No.
• Upright Pillar Drilling Machine	1 No.
• Turret Lathe	1 No.
• Automatic Spindle Lathe	1 No.

- Slotting Machine 1 No.
- Pantograph Milling Machine 1 No.
- Pedestal Grinders 3 No.

3.6. ELECTRICAL ENGINEERING DEPARTMENT:

3.6.1. The curriculum of this discipline is oriented to make students learn in the field of power systems (distribution, transmission, switch gear and protection), besides giving wide knowledge with regards to working principle, Testing, Control and Maintenance of AC and DC Machine.

3.6.2. To develop hand skills, a course is provided in each year like Electrical workshop at III and project at I & IV terms wherein the students study assembly and trouble shooting of various commonly encountered Electrical/Electronic devices. In the project II at final terms level students design, assemble/fabricate gadgets relating to Electrical/Electronic field which involve Soldering, Winding & Testing, etc.

3.6.3. The laboratories of the department are well equipped to impart skill in all relevant areas of Electrical Engineering.

3.7. ELECTRONIC ENGINEERING DEPARTMENT:

3.7.1. Diploma course in this branch was started in the year 1976. The present intake is 45 students. The growth of industries due to the economic liberalisation has resulted in several multinational companies. This course caters to substantial technical manpower requirements in the middle level management.

3.7.2. The curriculum mostly revolves in the practical domain starting with fundamentals of semi-conductor devices, circuit analysis, analog electronics and digital electronics circuits are a specialisation, process control in Instrumentation is also dealt with, the final terms of the course relies on Microprocessors and Applications (8085), Introduction to 8086 along with Computer Programming “C” as well as Embedded systems, Web Technology, Industrial Elex Project is carried out mostly individually, almost for one year, generally from the basics of course content learnt.

3.7.3. The infrastructure caters abundantly for the syllabi of the course. The basic equipments include CRO's, Dual Power Supplies, Analog & Digital multimeters, Function Generators, Trainer Kits in Electronics, Microprocessors, Oscilloscopes, Monochrome TV & VCR. Digital IC Testers. LCR meters and Magnetic Amplifiers. CCTV Camera set up are also available in the laboratories.

3.8. FOOD TECHNOLOGY DEPARTMENT:

3.8.1. The Food Technology course was started in 1976 in a sandwich-pattern consisting of two phases of Industrial training as part of the curriculum. It is a seven semester course. Students completing this course are well qualified to work at Supervisory/middle management levels in the production and quality control departments of Food processing industries, as well as Food Inspectors in Food and Drug department.

3.8.2. The first and second terms include basic course in Chemistry, Physics, Mathematics, etc Food Microbiology and Food Engineering. The higher terms comprise of courses such as Fruit and Vegetable Technology, Food Engineering, Food Microbiology, Cereal Technology, Technology of soft drinks, Confectionery product Technology. Dairy Technology, Marine products Technology, Animal products Technology. Food standards and quality control, etc. Project work is undertaken by the students in the fifth and sixth terms.

3.8.3. This department is equipped to offer analysis/testing facilities in accordance with PFA/FPO standards and training of personnel for the same, in the following areas:

- Analysis of Fruit & Vegetable Products.
- Analysis of raw material for use in Bakery Industry.
- Chemical & Microbiological testing of water.
- Testing of market milk.

3.8.4. This department can provide technical consultancy in the following fields:

- Fruit & Vegetable Technology.
- Technology of Bakery Products.
- Soft Drinks Technology.

3.9. FABRICATION TECHNOLOGY & ERECTION ENGINEERING DEPTT.:

3.9.1 This sandwich course was started in the year 1973 with an intake of 30 students. It is a 4 year course and the pass out students play a pivotal role in the erection and fabrication of steel structures at various industries.

3.9.2. The curriculum aims at providing technical manpower to the fabrication industries at the middle level management. It is a sandwich pattern course with industrial training in two phases at V and VIII Terms as a part of the curriculum. The first and second terms includes basic engineering courses. The higher terms consists of curriculum dealing mostly with welding and fabrication processes, erection and commissioning of structures, off short structures, piping engineering and boilers and pressure vessels.

3.9.3. The Department would be able to help in controlling quality to ISI specification of industries. It can help in erection of machines, trusses, cranes, towers. Welding quality inspection for different structures can be taken up by the department.

3.10.ELECTRONICS & INSTRUMENTATION ENGINEERING EPARTMENT:

3.10.1. This is a Three year Non Sandwich Diploma course started in the year 1987. Prior to the academic year 2006-07, the nomenclature of this diploma course was Diploma in Instrumentation & Control which stands modified to Diploma Programme in Electronics & Instrumentation.

3.10.2. This Diploma Programme has an intake of 20, which was initially confined to girls only. However at present it is a co-education with first preference to girls.

The Curriculum of this Discipline is Electronics based, with more emphasis on Instrumentation & Control related subjects like Process Control, Industrial Instrumentation, Analytical Instrumentation, etc. An Introductory knowledge of Programmable Logic Controller is also embedded in the Curriculum.

Department of Electronics & Instrumentation is equipped with modernized Laboratory facilities with sophisticated equipments like Closed Loop flow Control System, UV/VIS Spectrometer, Flame Photometer, Dead Weight Tester, O₂ Analyzer, etc

Pass outs of this multi-disciplinary Programme have opportunities for employment in the field of Pharmaceuticals, Chemical & Fertilizers Plants, Automation & Control Plants and Instrumentation oriented Industries.

3.11. GARMENT TECHNOLOGY DEPARTMENT:

3.11.1. This is a three year Diploma Course. The course enables them to learn the elements of Garment Technology Fashion Designing. The students are taught from the basic of Stitching, Knitting, Embroidery and Yarn manufacture to Weaving, Drafting & Cutting on machines, Computer Application, Size Charts, Specific Charts Markers, Quality Inspection and Designing.

3.11.2 The subject include:

- Art and Design, color theory.
- Elements of Garment Designing, Fashion Design.
- Advanced Fashion Design, Fashion Promotion Show.
- Garment Machinery and Equipment.
- Business management and Garment exports.
- Quality Control, Fashion Merchandising.
- Hand and Machine Knitting.
- Hand and Machine Embroidery.
- Basic Sewing Children's Ladies and Gents wear.
- Textile Science and Garment Dying Draping Methods, Printing and Processing.

- Introduction to Computers, Computer Application in Woven and Printed Fabric and Computer Application in Garment Manufacture.
- Other applied subjects like Personal Grooming, Textile Design, Fashion Accessories.

3.11.3. The faculty includes fashion designer's Textile majors, Garment Industry personnel and Experts. The aim of the course is to train students to become technical experts in Field of Fashion Textiles. the Garment Industries as well as to start their own small scale Industry and boutiques. The course can help manufacturers in getting the right personnel for their factories. Also, during the course the Institute could help the Industry getting good designs, projects and overcome their quality related problems.

3.12. ARCHITECTURAL ENGINEERING DEPARTMENT:

3.12.1. With the growth of building Industry in Goa, the number of practising Architects and interior designers has been increasing. Also the need is increasingly felt for trained Assistants to work in the Architects offices, Interior Designers and Town Planning Department.

3.12.2. The course is so designed to train young students having standard tenth certificate to work as efficient Architectural Engineers. The course is divided into six terms and covers subjects like Basic Drawing, Architectural Drawing, Building Materials, Model Making, Surveying, Architectural Design, Building Technology, Building Services, History of Architecture, Town Planning and Estimation.

3.12.3. The students in final year Diploma have to work on project and undergo practical training. Infrastructure of the course includes:

- Studios with Drafting Boards and Lockers.
- Teaching aids like overhead projector, slide projector, Video, T.V. etc.
- Well equipped computer labs with latest software courses like Autocad, Revit, 3-0 max.

3.13. DEPARTMENT OF MODERN OFFICE PRACTICE:

3.13.1. This department offers unique programme to the extent that it combines conventional practices of a Secretarial job coupled with the Computer-aided management techniques and tools relevant to the Modern Office Practices and envisages competencies and skills oriented office personnel at the entry level in any sector of the Industry. The programme involves 6 weeks in-plant training second & third between year and the course is of 3 year duration.

3.13.2. Logistics & Human Resources available in the following areas of expertise:

- Capacity to teach and train in Modern Office Management Practices and Procedures.

- Capacity to teach and train in Computer Aided Office Management Practices including Word Processing & DTP.
- Capacity to train in English Stenography skills at varying levels of speed.
- Capacity to train in English Typewriting Skills at varying Levels of speed.

3.14 TRAINING & PLACEMENT SECTION.

Following are the function of this section:

1. Laisons with industries both in Goa and in the State of Maharashtra, Karnataka, Gujarat and Madhya Pradesh(Western Region) for the purpose of training and placement.
2. Placement of students of sandwiched Diploma Courses in Fabrication Technology and Food Technology Under BOAT (Board of Apprentinship Training, Western Region) Mumbai. MOP & AA.
3. Monitors & Supervises the inplant training programmes (six months Duration) at periodic intervals and gets the inplant training evaluated with the help of Industry Personnel.
4. Arrange visits to industries for students during the academic term.
5. Arrange experts for talks on related Technical/General topics for staff/students.
6. Co-ordinates training programmes for teaching and non teaching staff of the Institute.
7. Conducts campus interviews for passed out students and also maintain database of passed students, to be submitted at the request of the industries, for interviews at the Industry.
8. Provides inplant training for students of non-sandwiched Diploma Courses during vacations to acquaint the students with industrial environment and the technical skills required to keep in touch with changing industrial sunavio (student chapter for value based training in industries).
9. Also looks after a scheme to impart one year on-the-job training under the Apprentics (Amendment) Act 1973 which pays a stipend of Rs.1160/- per month for passed out unemployed students.
10. Maintains database and record of passed out students in the field of Training & Placement.

4. COMMUNITY DEVELOPMENT PROJECT:

- 4.1. All India Council for Technical Education endorsed the recommendation of the working group in technical education constituted in 1978 and resolved that a few selected Polytechnics, which have shown initiative in promoting interaction with the rural community and have the necessary capacity to undertake rural development work, be selected to act as focal points to promote transfer of technology to the rural villages and make contributions to rural development. This Polytechnics, were designated as “ Community Polytechnics”. 36 Institution all over the country were selected as Community Polytechnics in 1978-79. The Government Polytechnic, Panaji was selected for implementation of the scheme of Community Polytechnic in 1992-93 Under manpower development training has been imparted to a large

number of villagers in short-term training courses viz. Word-processing, typing, T.V. repair, radio repair, Cutting & Tailoring, Fitting and Carpentry. A six month course in Fashion Designing and four month course in Computer Applications are presently in progress. Efforts are in progress to start carpentry course for handicapped boys and hair - dressing & beauty - culture course for handicapped girls.

- 4.2. In transfer of technology, promotion of smokeless and portable chullas was done in collaboration with Rural Development Agency in villages of Odxel, Alto, Batim and Chimbel. Solar cooker demonstrations were done at Batim and Aivao villages.
- 4.3. Under Community Service, Career Guidance Camps for S.S.C. students have been conducted at Pomburpa, Pednem and Asonora, Nutrition Camps conducted at Carambolim and Batim and Medical Camps conducted at Carambolim and Mayem. Also two Blood Donation Camps were done.
- 4.4. The Polytechnic students are also involved in the Community Polytechnics activities for conducting socio-economic technological surveys of villages and in doing projects related to transfer of technology in rural villages.

5. INTEGRATING PERSONS WITH DISABILITY IN THE MAIN STREAM OF TECHNICAL AND VOCATIONAL EDUCATION:

5.1 Government of India has introduced in the Government Polytechnic, Panaji a scheme for the upliftment of persons with disability in our society through appropriate technical/vocational education subsidised under the scheme. Under this scheme, persons having at least 40% disability may be admitted to one of the following groups.

- 1) Technical Diploma programmes of the Government Polytechnic, Panaji for those who have passed 10th/12th standard with at least 40% mark

25 seats are reserved for this category, in different branches.

- 2) Vocational/Skill development short-term training programmes.

These are in areas relevant to this State leading to self-employment or as per the expressed needs of the potential job requirement/trade.

Both the above are subsidised to the extent of fees, accommodation, travel allowance, books, uniform, boarding. Scholarship etc.

6. FACILITIES/SERVICES RENDERED TO THE PUBLIC:

The Government of Goa has approved the Internal Resource Generation Scheme to Government Polytechnic, Panaji, wherein the various services are being rendered to Public/Institution/Factories/Organisation etc. on the payment basis from the part of the profit service charges will go to Government for the utilisation of infra-structure

facilities. So also a part of profit generated is being paid as honorarium to the persons involved in the implementation of scheme. The five principal activities through which the resources can be generated are Testing, Consultancy, Research and Development Project Continuing Educational Programme and Production Activities.

7. PROCEDURE:

7.1.1. ADMISSION PROCEDURE AND CRITERIA FOR ADMISSION: Since, the year 1997-98 the Government has introduced a Centralised Admission System for the various Diploma Courses in all the Government Polytechnics in Goa. The Directorate of Technical Education is publishing a Common Information Bulletin and Application form for Admission to this course, immediately after the declaration of S.S.C. results. The admission schedule to various Diploma Programme in all Polytechnics is published in the leading newspapers. The Criteria and the procedure for admission is amply clarified in the advertisement published by the Directorate of Technical Education.

7.1.2. DIRECT ADMISSION FOR VOCATIONAL STUDENTS Students having qualification like ITI can seek admission directly to IInd year prospectus giving details of this admission channel is available with the office of the Directorate of technical Education.

7.2. EXAMINATION PROCEDURES:

- a) All the Students admitted for various Diploma Programme in Engineering & Technology under Sandwich / Non Sandwich Programme from the Academic Year 2006-07 are covered under Semester Pattern Scheme.
- b) Board of Technical Education, Porvorim – Goa conducts Examinations for Theory / Practical / Oral / Viva at the end of each Term.
- c) Diploma Certificate is awarded to the candidates passing successfully by the Board of Technical Education, Porvorim – Goa as per Rule 16 of the Handbook on Rules & Regulations..
- d) Rules & Regulations framed by the Secretary, Board of Technical Education from time to time, are available with the Head of Department (Examination), who is a liason officer of this Institute in all matters concerning the Examinations .
- e) ATKT Rules have been partly amended under Semester Pattern and effective from May / June 2008 Board Examination..
- f) Government Polytechnic Panaji, conducts Three Numbers Centralized Unit Tests, Average of two best scores out of three are considered for the Progressive Assessment Marks, each term.
- g) Students are also extended with facilities like Awarding of Grace Marks, Condonation Marks, Verification of Marks and Improvement in Test Marks.
- h) Board of Technical Education Porvorim also provides for Improvement of Class and Improvement of Qualification.
- i) A student unable to complete the diploma within double the duration of the diploma Programme is issued with the marksheet indicating the subject. He / She has passed and exited from the system.

7.3. LIBRARY PROCEDURE:

The Institute has well equipped library with a branch at Women's Wing. The Library timings are 9.00a.m. to 5.15 p.m. The entry to library premises is restricted to hall ticket holders only. The ground floor of library is used as reading room-cum-reference section. The bonafide hall ticket holders can use the section for reading reference Books/Periodical/Magazine etc. The Books/Periodicals/Magazine in the Reading and Reference Section are issued against hall tickets. The users shall collect library tickets while leaving the library by returning Books/Periodical/Magazine used for reference. In addition to above, each student is allowed to take two textbooks for home reading. The student can return the books within the period of one week and he/she is supposed to return the books within one week in the stacking section situated on the 1st floor of the library. The library is also having the sets of books under the Book Bank Scheme. These sets are issued to the bonafide poor and deserving students. The student has to apply for the set of books in the prescribed proforma.

8. SCHOLARSHIP AND FREESHIPS:

8.1. In Common Information Bulletin for admission to various Diploma Course the information about Scholarship/Freeship available in the Government Polytechnic, Panaji have been incorporated in the part II of the Bulletin.

8.2. PRIZES:

The Institute awards various prizes to meritorious and deserving students from the donations instituted by individual donors/organisations.

9. REFUNDS:

9.1. The information regarding the refund of fees and deposit are also incorporated in the Common Information Bulletin for admission to various diploma courses published by the Directorate of Technical Education.