ABOUT THE INSTITUTE:

Government Polytechnic Curchorem was set up with the view to spread technical education to rural areas in and around Savordem, Curchorem. In the initial years of its inception the campus was housed at Quepem. It was only in 2003 that the sprawling complex finally came up and the staff and students shifted to the new campus.

1. DIPLOMA PROGRAMS:-

The Institute currently has the following Diploma Programs of three years duration Diploma in Mechanical Engineering was introduced in the Year 1997 with 20 students. The intake was later increased to 40 students.

Following are the courses currently offered at Govt. Polytechnic Curchorem:

Sr. NO.	Courses	Sanctioned Intake
1.	Diploma in Mechanical Engineering	40
2.	Diploma in Electrical & Electronic Engineering	40
3.	Diploma in Computer Engineering	40

Presently the total strength of the students studying at the institute in various courses/programs is approx. 380.

2. BROAD GOAL:

The main objective behind starting this polytechnic is to cater to the technical needs of the people of South Goa in terms of

- (1) Imparting Technical Education to the students as also all-round development of the students in terms of being Hardworking, Confident, Disciplined and knowledgeable.
- 2) Imparting Technical Skills, bringing awareness about technological advances to people of rural areas surrounding the institute in order to promote self employment and improve standard of living, through Community Development through Polytechnic scheme of the institute.

Thus serving the Country and State in whatever capacity needed.

2. System of Education:

The Polytechnic follows the SEMESTER PATTERN as instituted by The Board of Technical Education, Porvorim, from the academic year 2006-07.

Admission to higher terms/year is available for students who possess higher qualification/Vocational Certificate of recognized Institute as per board guidelines.

3. MAJOR DEPARTMENTS/ SECTIONS:

- 1. Department of Mechanical Engineering
- 2. Department of Electrical & Electronics Engineering
- 3. Department of Computer Engineering
- 4. Applied Sciences and Humanities
- 5. Workshop
- 6. Learning Resource Centre

7. 1. Academic Section

- I. Admissions
- II. Guidance and Counseling
- III. Academic Activities
- IV. Examination Cell

7. 2. Student Amenities

- i. Co curricular Activities
- ii. Extra Curricular Activities and formation of Students Council
- iii. Sports & Gymkhana
- iv. Parent Teacher Student interaction
- v. Training and placement cell
- vi. Canteen Committee
- vii. Anti ragging Committee

7. 3. Administration Section

i. Administration Section

- ii. Accounts Section
- iii. Stores & Purchase Section
- iv. Community Development through Polytechnic (CDTP)
- v. Campus Maintenance Cell
- vi. Grievance redressal Cell

3.1. DEPARTMENT OF MECHANICAL ENGINEERING

Total Intake: 40

Mechanical engineering is a discipline of engineering that applies the principles of physics and materials science for analysis, design, manufacturing, and maintenance of mechanical systems. It is the branch of engineering that involves the production and usage of heat and mechanical power for the design, production, and operation of machines and tools. It is one of the oldest and broadest engineering disciplines.

Other Specialization Courses Offered:

Refrigeration & Air Condition Engineering
Tool & Die Making
CADCAM

Laboratory facilities available:

- 1) Material testing Lab
- 2) Heat Power Lab
- 3) Applied Mechanics Lab
- 4) Metrology & Quality Control Lab
- 5) Fluid Machinery Lab
- 6) CAD CAM Lab
- 7) Workshop

The workshop caters to the students of all the three departments by conducting practicals and demonstrations in different trades. Trades Offered are Carpentry, Turning, Machine Shop, Fitting, Welding. Workshop is equipped with modern machines and equipments. Efficient and experienced staff is imparting quality training to develop

the skill needed for the student. The workshop also plays an active role in the maintenance of the institute facilities like furniture, machines and equipment. The workshop is well equipped with various tools, equipment' and machinery which include the following:

- > Centre lathes 05 Nos.
- ➤ Shapers 01 No.
- ➤ Milling Machine 2 Nos.
- ➤ Power Hacksaws 01 No.
- Surface Grinder 02 Nos.
- Column Type Drilling Machine 1 No.
- Upright Pillar Drilling Machine 1 No.
- ➤ Geared Lathe 02 No.
- > Pantograph Machine 1 No.
- > Bench Grinders 3 No.
- > Tool and cutter Grinder 1 No.
- Cylindrical Grinder 1 No.

CNC machine available:

8) Wire cut Super cut 734

Job Opportunities:

- Supervisors in Industries
- > Entrepreneurs
- > Faculty in Educational Institute
- Production and maintenance Department
- Marketing, Sales and Services
- ➤ Hotel Industry & Pharmaceutical Industry
- Design, Manufacture & Assembly of Tools
- > Testing & maintenance and quality control of Tools
- Faculty in educational institutes
- > Start their own workshop dealing n manufacturing and designing
- ➤ Shipping Companies and Yards
- Industries

3. 2. DEPARTMENT OF ELECTRICAL & ELECTRONICS ENGINEERING:

Total Intake: 40

Duration of Diploma Program: 03 years

This Course was started at the Polytechnic in the academic year 2004 -05. A well established laboratory helps the students to perform the curricular experiments.

Laboratory facilities available:

- 1) Basic Electrical Lab.
- 2) Basic/Applied Electronics Lab.
- 3) Electrical Machines Lab.
- 4) Instrumentation/Digital Lab

Job Opportunities:

- > Design Manufacture & Assembly of Electronic Equipment
- ➤ Testing & maintenance and quality control of electronic equipments
- Marketing and Sales
- Faculty in Educational institutes
- Hardware & Software Maintenance
- Electrical Maintenance
- ➤ Junior Engineer in Electrical Substation

3.3 DEPARTMENT OF COMPUTER ENGINEERING:

Total Intake: 40

Duration of Diploma program: 03 years

The Computer Engineering department was established in this institute in 2006 with the introduction of Diploma in Computer Engineering program in the academic year 2006-07. Diploma in Computer Engineering is a 3 years Diploma course with each year spanning over 2 semesters. The course content of this program is a combination of hardware and software subjects along with industrial training and Entrepreneurship Development.

Laboratory facilities available:

The department is well equipped for teaching and is continually upgrading its computer laboratories to ensure all the equipment is up to date and has the newest hardware available. Currently there are 2 software labs (Lab I and Lab II) and 1 hardware lab within the department.

<u>Computer Software lab I:</u> Computer Lab I contains 25 Machines, running windows XP on 2.6 Ghz Intel Core 2 Duo processors, 2GB DDR2 RAMs, 100/1000Mbps network cards, 17" TFT Monitors and 1 network printer.

Computer Lab II : Computer Lab II contains 20 Machines, running Windows XP on 2.6 Ghz Intel Core 2 Duo Processors, 2GB DDR2 RAMs , 100/1000 Mbps network cards, 17" TFT Monitors and 1 network printer.

Hardware and Networking lab: Hardware lab contains equipments such as PC hardware trainer, UPS trainer, Hardware trainer, and LAN trainer.

All the computers on Lab I and II are having internet access. In addition students have access to specialized equipment such as scanners, DVD-writers, tape drive etc.

The laboratories contain a wide range of software that includes C, Java, C++ compilers, World Wide Web authoring tools and databases.

The Department has a dedicated server room containing 2 Servers. These are connected to the campus wide gigabit LAN. All computers on the LAN have access to the internet via GBBN and Broadband connectivity.

Job Opportunities:

- In all hardware and software related areas in industry
- Faculty in Educational Institutes
- Marketing, Sales and services
- > As Entrepreneurs

3. 4. DEPARTMENT OF APPLIED SCIENCES AND HUMANITIES:

Laboratory facilities available:

- 1) Applied Physics
- 2) Applied Chemistry

The department caters to courses in Basic Sciences and Communication Skills.

3. 6. LEARNING RESOURCE CENTRE:

The Institute Library is situated to the extreme end of the campus so that young minds may have a calm and fruitful time amidst the hallowed portals. It is divided into the Reading Hall area and the Stacking Area.

The Library has to its credit the following books:

Text Books	5780
Reference Books	400
Journals and periodicals	10
Institute work projects	40

In the near future, the Institute Library intends to add VCD/CD/Video/ Online Journals and Internet connectivity to facilitate learning. Presently there are 30 VCDs which further facilitate learning.

The library of this Institute has around 2750 technical books, journals, laboratory manuals, Project work of passed students, for ready reference is also available, Internet Browsing, etc. It follows a demand book issue system and remains open from 9.30 a.m. to 1.00 p.m. and 2.30 p.m. to 4:30 pm.

The library has an Issue Section, Reference Section and Reading section. The books in the **issue section** are issued for a period of one week to each user. Two library cards are issued to each student and one book per card is issued for the period of one week. These books can be renewed if they are not in demand. Late fee is charges at Re. 1/- for one day delay and Rs. 7/- per week.

The books from the **reference section** are for the purpose of reference and should be availed at the institute. A copy of the syllabus of each subject and set of question papers in all subjects for all the courses is readily available in this section.

The **reading room** is provided to read the daily newspapers, weekly, monthly, periodicals, magazines etc. Students also utilize this room to do their class work and assignments.

Issue of ID cards

The student needs to submit four passport size photographs, three for library cards, one for Identity card & one for students' record register to the concerned lecturer.

BOOK BANK: The book bank (BBS/CSS) facility is available in the library through which books are issued to the deserving students of General/SC/ST/OBC category for the period of one term (semester). Application forms for Book Bank Scheme can be obtained from the library. These forms should be duly filled in and submitted to the library with the necessary documents.

DOCUMENTS REQUIRED FOR BOOK BANK FACILITY:

- 1) Mark sheets of previous examinations
- 2) Income certificate of parents/guardians
- 3) List of 'A' category subjects entered for the concerned term.

DOCUMENTS REQUIRED FOR CSS FACILITY:

- 1) Mark sheets of previous examinations
- 2) Income certificate of parents/guardians
- 3) List of 'A' category subjects entered for the concerned term.
- 4) Caste certificate

LOSS or DAMAGE of BOOK:

In case of loss of book, the user should replace the lost book and/or do good the damage of the said book. This would include photocopying and binding the book or incase severe damage the book may be replaced.

PHOTOCOPYING FACILITY:

Xerox facility is available at the institute at the cost of 75p. per page. The user can Xerox text books, notes, etc. at the said nominal rate. A Xerox machine has been kept in the institute to allow students to Xerox academic related matter.

INTERNET CONNECTIVITY:

The institute provides Internet facility for students as and when required.

This department also handles the issue of train passes for the students who commute daily by train.

ACADEMIC SECTION

7. 1. i) ADMISSIONS CELL:

The admission for various first year Diploma programs is done at the Directorate of Technical Education (D.T.E.), Porvorim for all the polytechnics in the State of Goa. The staff deputed by the polytechnics coordinates the admissions. This helps in quick finalization of overall merit list and on the spot admissions as per dates declared in the local newspapers. Prospectus to process the admission to the first year diploma courses is available a month before the commencement of admissions. It contains information about the Institute with respect to availability of seats, diploma programs offered, documents required, various reservation quotas, scholarships and awards, rules for cancellations, forms to be filled, exact dates for appearing for various rounds of admissions, fees, Conduct rules, etc and is available at the Office of D.T.E. as well as at the Polytechnics.

After seeking admission at the centralized admission centre, the student needs to report to the Institute along with admit card issued to him. He will then be directed to the counselor for necessary guidance for further activities.

7. 1. ii) GUIDANCE AND COUNSELLING:

The first week of the academic year is devoted for counseling and registration. The counselor assists the students given in his/her charge as to what subjects are offered for the term and what the student can take. He/ she guides the students as and when required in matters concerning registration and re-registration of courses, entry credits to be availed against exemptions, eligibility for admission to examinations, TNG, etc..

7. 1. iii) ACADEMIC ACTIVITIES:

The Board of Technical Education declares the schedule of academic term/year at the beginning of the year. During the term, regular class tests and assignments are given for

which marks are assigned and recorded in the final examinations results as Progressive Assessment (PA) Marks. The Progressive assessment scheme helps the students and teachers to understand the progress of the students throughout the semester. The student should have the required minimum marks in PA and 75% attendance for Term Grant. Theory/practical examination is conducted by the Board of Technical Education at the end of the term.

Students securing more than 60% marks are awarded First Class and more than 75% qualifies for Distinction in that subject/course. If the student secures less than 40% marks in a course then he/she has to answer the theory exam again under re-registration.

7. 1. iv) EXAMINATION SECTION:

This section co ordinates regular class tests and board examination held at the end of the semester. Various certificates and mark sheets are issued to students by this section. Exam section corresponds with Board of Technical Education for Exam/student related maters. Exam section maintains the record of current and passed out students. Exam section maintains the record of current and passed out students.

VERIFICATION OF MARKS & REVALUATION of marks application is available at this section and students are required to apply with prescribed fees within stipulated time announced on notice board.

7. 2. STUDENTS AMENITIES:

7. 2. i) <u>CO CURRICULAR ACTIVITIES</u> are conducted for the students so that they may have practical as well as a comprehensive understanding of what they learn in the classroom.

Educational Tours and visits to Industrial Establishments: Final year students are taken on an educational tour during the vacation period in order to acquaint them with industrial

work

environment.

The Institute issues Railway concessions and also pays for the travel expenses during the industrial and sight tours depending upon availability of funds. Two staff members accompany the students during the tour. Local visits to the nearby industries are arranged

on weekends/holidays for additional academic support. All miscellaneous expenses are borne by the students.

Industrial Training: In house training is given to the students of the Tool and dye making in the fourth year. The institute arranges for the training placements, gives railway concession and pays stipend of Rs. 300/- per month for the student. Training in other branches is optional and so the students are required to take the initiative.

Guest Lectures: Guest lecturers are invited at the campus to speak on the latest topics for the benefit of students. These lectures help the students to familiarize with the modern developments in science and technology. Activities related to personality development and development of communication skills is also conducted. Furthermore, information on higher education is also given to the students.

7. 2. ii) **EXTRA CURRICULAR ACTIVITIES:** Extra curricular activities are held in tandem with co curricular activities. They begin with the election of the members of The Students' Council.

The Aims of the Students' Council is as follows:

- 1. It aims at catering to the needs of the students by providing quality leadership to students of the Polytechnic.
- 2. It aims to better relationship between the students and the faculty by providing an effective medium of co operation and well being.
- 3. The Students Council by participating in decision making is responsible for the students' welfare and improves the standards of the students' participation and cooperation. It assists in the planning and organization of students' activities for the Polytechnic and also while participating in competitions with other Institutions.
- 4. It acts as a mirror to the general public to project a better and clean image of the Polytechnic, its staff and students to the members of the public at large.

The Student's Council of Govt. Polytechnic Curchorem comprises of the following members:

General Secretary, Class Representatives, Cultural Secretary, Magazine Secretary, Gymkhana Secretary. The Students' Council is guided by one faculty member known as STUDENTS' COUNCIL ADVISOR. Elections for the above posts are done as per the guidelines in the Constitution of the Students' Council, Govt. Polytechnic Curchorem.

Extra curricular Activities:

It organizes and coordinates all cultural activities like quiz competition, debates, elocution competition, speech competition, etc. It is also responsible for organizing and coordinating cultural activities, fun week, Sports Competition, Annual Social Gathering, Reading Club and releasing the Polytechnic Magazine.

7. 2. iii) Sports and Gymkhana

Activities for the students are conducted with the assistance of the staff. Inter class and inter Institute sports are organized to impart the qualities of discipline and physical fitness. Gymkhana room is available for various indoor activities. While outdoor games, like Cricket and football are played in the vast open playground in the campus. Students of the institute are actively involved in Inter Class Volleyball, Cricket, Table Tennis, Football, Athletics, Carom and Badminton. Purchase of sports items, prizes, refreshments, etc. is met from the Gymkhana fees paid by the students each term.

7. 2. iv) PARENT - STUDENT - TEACHER INTERACTIONS:

The teachers meet the parents of the students' as and when required. Parents generally meet the teachers at the beginning of the term in order to facilitate Registration/ Re registration and acquaint themselves with the new campus. After each monthly test and final exam they are updated as to the performance/ progress of their son/ ward.

7. 2. v) TRAINING AND PLACEMENT CELL:

Under the apprenticeship Act 1961 industries are required to provide apprenticeship training for duration of 1 year for diploma holders during which they receive stipend at the rate of Rs. 1160/- per month. Half the amount is reimbursed by the BOAT (Board of

Apprenticeship Training), Western Region. The number of seats for such training depends upon the size of industry.

The Institute has it training and placement cell which does the following:

- 1. Apprises the student of any job opportunities available. Arranges campus interviews, and interviews at offices of different industries for training and placement as apprentice trainee/regular appointments
- 2. Placement of students of Mechanical Engineering (sp. Refrigeration and Air Conditioning) who undertake a short term industrial training.
- 3. Liaisons with industries in the surrounding areas for the purpose of training and placement. The Institute has excellent rapport with nearby industries like Chowgule Mining Industry, German Remedies, Radisson, Taj Exotica, Majorda, Pentair, Cipla, Cidade de Goa, Marriott, Reliance power corp..
- 4. Get implant trainees evaluated with the help of industry personnel
- 5. Arrange visits to the industries for the students during the academic year
- 6. Arrange for experts in any fields to give a talk to the students on technical or General topics
- 7. Co ordinate training programs for technical and non technical staff
- 8. The training and placement cell has a feed back system to which pass out students of various branches are assisted, advised and guided for various job opportunities and avenues of career advances.

7.2. vii) CANTEEN COMMITTEE: The canteen committees comprising of the Principal, H. O. D. Electrical & Electronics Engineering, HOD of Computer Engineering, Lectures, Accountant, and students' Council over see the day to day working of the Canteen, quality and hygiene of the food.

7.3.1 ADMINISTRATION SECTION

Administration section deals with the following day to day administration of the institute.

1. Maintaining of inward/outward/ LAQ register, Leave Service books records, Attendance/leave file/ Increment registers, etc. Training and placement correspondence for workshop of staff & PWD(land & building)

AWARD OF SCHOLARSHIP AND FREESHIPS:

Meritorious students and students from reserved categories are awarded different types of scholarships. The Scholarship/Free ship changes as per the decisions of Government or Private Company Sponsoring the Scholarship Following scholarships/ free ships are awarded to the concerned students:

- I. Institutional Merit Scholarship
- II. Institutional Free ship.
- III. Scholarship to Disabled students.
- IV. Post Metric Scholarship to SC, ST and OBC students
- V. Reimbursement of Tuition Fees

Information regarding the various Scholarships and free ships is available with the concerned lecturer.

7. 3. ii ACCOUNT SECTION

The account section coordinates the various activities relating to accounts and financial matter of the institute.

The main function of this section is as follows:

- > To receive payments from students/staff with respect to admission fees, tuition fees, library deposits, printout charges, Xerox charges, fines etc.
- ➤ Maintenance of Permanent Advance Register & Expenditure, Pass Book, Encashment of Cheque files, Bill Register and maintenance of Advance withdrawal.

- ➤ Writing of Revenue & P.D.A. cash books, preparation of Challan & maintenance of Challan file, Challan Register. To scrutinize the payments of various bills including salary bills received from staff, Stores & Stationary section, etc. and submits the bills to the Directorate of Accounts, Margao for payment.
- > To receive payments from students/staff with respect to admission fees, tuition fees, library deposits, printout charges, Xerox charges, fines etc.
- ➤ Maintenance of Permanent Advance Register & Expenditure, Register of impress cash, Pass Book, Encashment of Cheque files, Bill Register and maintenance of Advance withdrawal file.
- Monthly returns of revenues & expenditure to Finance Department.
- > To pay refundable deposits such as library, caution money etc. to the students when students leave the institute.

The refundable deposit is paid to the students only after the issue of *No Dues Certificate* **from** all the Departments. Any dues incurred by the student due to loss/damage of library books or loss/damage to institute property equipments/apparatus is recovered from the students at the time of refunding the deposits. All deposits after deducting the dues if any, is refunded by the students within six months from the last day of leaving the institute, failing which the deposits is be forfeited to the Government. Original receipt shall be submitted for refund.

7.3.3 STORES AND PURCHASE SECTION:

The requirement of purchase of various items is identified by the respective departments and sections. With the approval from the Principal, the stores section then looks into procuring these items with the assistance of the concerned staff that is in charge of their respective departments. Stationary that is regularly required by the Institute is identified and processed by the store section itself.

Purchases are made under petty cash purchase, purchases under limited quotation, Purchases under Open Tender. These purchases are made as per the procedure set down by **General Financial Rules.** The purchased items along with a detailed specification are then written in the stock register along with quantity and appropriate price. It is then indented and issued to the concerned authority.

7.3.iv. COMMUNITY Development through POLYTECHNIC

Community Polytechnic is Direct Central Assistance Scheme of Ministry of Human Resource Development (MHRD), Government of India. The Community Polytechnic Wing of Government Polytechnic Curchorem started its activity from 2001. Since then the fledging wing has started numerous important Projects in the community under its purview to promote self employment. These courses are conducted with the help of local Panchayats/NGO's/Voluntary organizations. With each succeeding year efforts are on to add new projects and new goals for rural growth.

In the year 2004 - 05, emphasis was given to activities, which give boost to development and training manpower for productive service.

Nearly 2000 students were trained in different trades at the various sub center of the Community Polytechnic Wing for Manpower Development, Transfer of Technology, Technical Support, Services, Community Support Services and Dissemination of Information

The Community Polytechnic Wing carried out following activities:

In transfer of technology, following camps were organized and the community benefited by these demonstration for an easy way of living.

- 1. Solar Demonstration Camp
- 2. Eye check Up Camp

- 3. Sewing machinery repair Camp
- 4. Household appliances repair Camp
- II) In technical support services, the various courses conducted were:
- 1. Tailor and Garment making
- 2. Embroidery
- 3. Fabric Painting
- 4. Beautician's Course
- 5. Flower Making
- 6. Zardosi (Beed Work)
- 7. Computer training
- 8. Carpentry and Plumbing
- 9. Four Wheel Auto Mechanic
- 10. Radio & T. V. Repair.
- III) In community services the main focus is on proper awareness among youth, women and school/ college drop outs. The trained community should use their knowledge to gain self-employment in to order to benefit themselves and the society. The cell has conducted programs to encourage students to form Mahila mandals, self help groups and give information on different schemes KIKE, CMRY, KVIB to get financial help.

The sub centers where these courses are conducted is as follows

Khamavol	Dudgla	Bansai	Shiroda	Darbhat		Kavlem
Netravali	Cakoda	Devtivadda	Balli	Assolda	Cuncolim	Morpirla
Fatorpa	Betim	Sakkorda				

7.3.VI GRIEVANCES REDRESSAL CELL

A complaint box is kept in the Office of the main building so that complaints, grievances can be dropped in the box by the public/ Students. The box is periodically opened and action as required is taken by the Principal

7.3.vii CAMPUS MAINTENANCE CELL:

All complaints regarding breakdown in machinery, repairs and electrical malfunctions is written in the maintenance register. The required action is then referred to the appropriate authority.

Compiled by: Mrs. Sharon Fernandes e Menezes Lecturer in English Government Polytechnic Curchorem