



## **Albertian Institute of Science And Technology AISAT-Technical Campus, School of Engineering**

(A Roman Catholic Latin Christian Minority Institution Established and Administered by Archdiocese of Verapoly)

**Approved by AICTE & Affiliated to M.G. University**

Archbishop Angel Mary Nagar, Cochin University P.O., Kalamassery, Kochi-682 022

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Patron

**The Most Rev. Dr. Francis Kallarakal**

M.A., S.T.L

Metropolitan Archbishop of Verapoly

Manager

**Rev. Dr. Clement Valluvasery**

B.Ph., M. Th., Ph.D.

Associate Manager

**Rev. Fr. Alex Kurisuparambil**

B.A., B.Ph., B.Th.

Director

**Prof. Dr. Babu. T. Jose**

B.E., M. Tech., Ph.D., FIGS, MISTE, MIE C. Eng.

Principal

**Prof Dr. T. K. Mani**

B.Tech (Electrical), M.Tech. (Electronics), Ph. D.

Vice Principal

**Prof. Lovely Cherian**

B.Sc.Engg.(Electrical), M.Tech. (Electrical power system)

## VISION

To be a centre of excellence for professional education and related services creating technically competent and ethically strong innovative minds committed to the overall growth of the nation and beyond.

## MISSION

We are committed to provide value based education with ample opportunities for research and consultancy.

- \* We take every possible step to enhance the skills and bring out quality professionals, providing a friendly and growth oriented ambience with appropriate resources.
- \* We improve ourselves through continuous evaluation and updation to meet the challenges and requirements of the modern society.

## CODE OF ETHICS FOR AN ENGINEER

The responsibility of engineers to the welfare, health and safety of the community shall come before their responsibility to the profession.

- ▶ Engineers shall act so as to uphold and enhance the honour, integrity and dignity of the profession.
- ▶ Shall perform work only in their area of competence.
- ▶ Shall build their professional reputation on merit and shall not compete unfairly.
- ▶ Shall apply their skill and knowledge in the interest of their employer or client as faithful agents or trustees.
- ▶ Shall give evidence, express opinion, and make statements in an objective and truthful manner on the basis of adequate knowledge.  
Shall continue their professional development throughout their career and shall actively assist fellow engineers to advance knowledge and expertise.

## PERSONAL DATA

NAME:

ADDRESS:

CLASS:

AGE:

SEX:

BLOOD GROUP:

PLACE OF BIRTH:

NAME OF PARENT / GUARDIAN:

RES (Ph):

MOBILE:

EMAIL OF PARENT / GUARDIAN:

OCCUPATION OF PARENT/GUARDIAN:

NAME OF COMPANY:

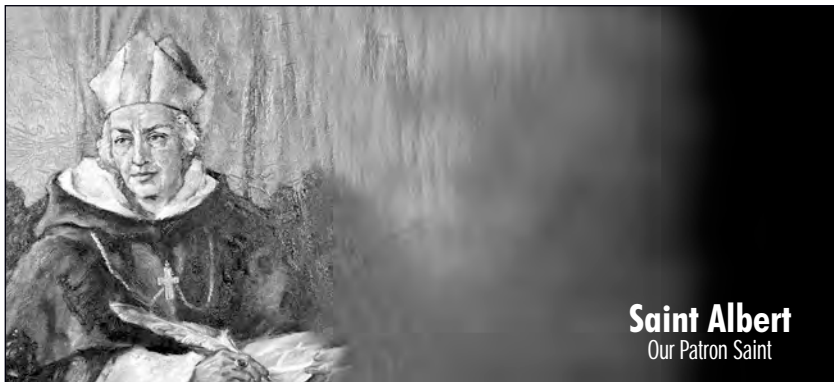
## 1. THE COLLEGE: A BRIEF HISTORY

**A**lbertian Institute of Science and Technology (AISAT) - Technical campus, Kalamassery, is an undertaking of Archdiocese of Verapoly-an Archdiocese which has a track record of centuries serving in the field of education. This great legacy of the Archdiocese today is maintained and fostered under the benevolent patronage of His Grace Most. Rev. Dr. Francis Kallarakal, the Metropolitan Archbishop of Verapoly. AISAT is located in the industrial belt of Cochin City, neighboured by Cochin University of Science and Technology, nestled by the side of National Highway 47 and Seaport – Airport road. AISAT is easily accessible.

AISAT was blessed by His Grace Dr. Francis Kallarakal, the Metropolitan Archbishop of Verapoly on August 31, 2011 for which the foundation stone was laid on July 22, 2010.

The college affiliated to M.G. University offers B.Tech courses in Civil Engineering, Computer Science & Engineering, Electrical & Electronics Engineering, Electronics & Communication Engineering and Mechanical Engineering

## 2. SAINT ALBERT: OUR PATRON SAINT



**S**t. Albert the Great, the heavenly patron of the college was born in Cologne in 1206. Filled with a rare sense of perception and an understanding of the cosmos, he was not only a great scholar but also a miracle of his age. At one point of his service to the Lord he resigned the office of bishop to continue as a professor. It is a fact which bears ample testimony to his abiding interest in education. The sanctity of his life, the profundity of his knowledge and the universality of his love attracted the attention and elicited the admiration of one and all. Saint Albert is one among the most noted Christian scholars. He died in 1280 and was canonized later in 1931.

### 3. COLLEGE ANTHEM



ദേവാലയം ഈ സൽകലാലയം  
ശാന്തസൗമ്യദീപ്തമാം പുണ്യഗൃഹം  
ഇവിടെയൊത്തുചേരുന്ന ഞങ്ങളിൽ  
ബോധപ്രകാശമായ് ദൈവമേ വരൂ

ദാരതമി ഞങ്ങളുടെ ജന്മഭൂമി  
ദാരതീയരല്ലൊരും സോദരങ്ങളും  
സത്യത്തിലും പരം, ധർമ്മത്തിലും ചിരം  
ഒന്നുചേർന്നു വാഴുവാനേകണേ വരും

“സ്വാമിയായിൽ” താരമായ് വന്നുദിച്ചവൻ  
ജ്ഞാനദീപമായി ജ്വലിച്ചുനിന്നിരുന്നവൻ  
ആൽബർട്ടുപുണ്യവാൻ സ്വർഗ്ഗത്തിൽ നമ്മുടെ  
മദ്ധ്യസ്ഥനായ്നിന്നു ശക്തി നല്കിടും

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*“കൊളോണിൽ സ്വാമിയാ എന്ന സ്ഥലത്താണ്  
വിശുദ്ധ ആൽബർട്ടിന്റെ ജനനം”*

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രചന:

**ഷെവ. ഡോ. പ്രിമുസ് പെരിഞ്ചേരി**

സംഗീതം:

**റവ. ഫാ. ഫ്രാൻസിസ് സേവ്യർ**

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### 4. KERALA CATHOLIC ENGINEERING COLLEGE MANagements' ASSOCIATION (KCECMA)

The Kerala Catholic Engineering College Managements' Association (KCECMA) is a fraternity registered under Travancore, Cochin, Literary, Scientific and Charitable Societies, Registration Act, 1955 No. ER 1977.

KCECMA has been formed with a mission to promote engineering and technical education in Kerala matching international standards coupled with a strong base on moral, social, ethical and civic values.

The association functions as a voluntary self-regulatory agency ensuring quality technical education without compromising on social justice. All the member institutions value transparency in every aspect- student selection, teacher and other staff selection, etc. The association stands for equal opportunity for all without discrimination of any kind whatsoever.

AISAT is a member in KCECMA.

For details - [www.cengineeringkerala.org](http://www.cengineeringkerala.org)

## **AISAT - Technical Campus offers B.Tech courses in 5 branches with 60 seats in each branch.**

1. Civil Engineering
2. Computer Science and Engineering
3. Electrical and Electronics Engineering
4. Electronics and Communication Engineering
5. Mechanical Engineering

### **5. DEPARTMENTS**

#### **I. Civil Engineering:**

**C**ivil Engineering is a professional engineering discipline that deals with the design, construction and maintenance of the physically and naturally built environment, which includes works like roads, bridges, canals, dams, and buildings. A few subjects taught in the four year course are Fluid Mechanics, Soil Mechanics, Design of Structures, Structural Mechanics and Water Resource Engineering. Students also get an insight into subjects like Transportation Engineering, Geotechnical Engineering, Water Resource Engineering, Remote Sensing, and Transportation Systems Engineering. As India is moving fast in the field of infrastructure development, a Bachelor's Degree in Civil Engineering will give ample opportunities in the industry and at the same time create a good space for higher studies.

#### **ii. Computer Science and Engineering:**

**C**omputer Science designates the scientific and mathematical approach in information-technology and its applications, notably computer software and sometimes hardware. A computer scientist specializes in the theory of computation and the design of computers. During the four year course students are exposed to core Computer Science subjects like Data Structures, Theoretical Computer Science, Algorithms, Computer Networks, Operating Systems, Web Technologies, Databases, Computer Architecture and programming languages like C, C++, Java etc.

As computing is extensively applied to almost every walk of life, it creates plentiful job availability for Computer Engineering students. At the same time more demand and application keeps its research funding alive attracting many students to opt for higher studies.

### iii. Electrical and Electronics Engineering:

**E**lectrical Engineering is a field of engineering that generally deals with the study and application of electricity, electronics and electro-magnetism. This branch covers a range of subtopics including power electronics, control systems, signal processing and telecommunication.

In the four year course, an Electrical and Electronics Engineering student will be introduced to subjects like Thermodynamics, Electronics, Signal Processing and Instrumentation, Signals and Systems, Electric Networks, Microelectronics, Control Systems, Communication Systems, Power Systems, Electromagnetic Systems, Electrical Machines and Power Generation Techniques. By the end of the final year, students will be well equipped in understanding the working and application of electric systems and engineering.

Electrical Engineers can find jobs in DRDO, NTPC, BHEL, KSEB, ONGC, ISRO etc. and other private sectors also.

### iv. Electronics and Communication Engineering:

**E**lectronics and Communication Engineering is an engineering discipline which includes study of various electronic components, circuits and its applications. During the four year course students are exposed to various subjects like Analog electronics, Digital electronics, Consumer electronics, Embedded systems and Power electronics. Electronics Engineering deals with implementation of principles and algorithms developed within many related fields like Solid-state Physics, Radio Engineering, Telecommunication, Control Systems, Signal Processing, Computer Engineering, Robotics, Instrumentation Engineering, Electric Power Control, Applied Electromagnetic theory, VLSI Integrated Circuits, and many others. Electronics Engineers can find jobs in various government and private sectors.

### v. Mechanical Engineering:

**M**echanical Engineering applies the principles of physics and material science for analysis, design, manufacturing and maintenance of mechanical systems. It is the branch of engineering that involves the production & usage of heat and mechanical power for the design, production, and operation of machines and tools. The various topics are Mechanics, Kinematics, Thermodynamics, Fluid Mechanics, Heat Transfer, Material Science etc.

Mechanical Engineers use these core principles along with tools like computer-aided engineering and product lifecycle management to design and analyze manufacturing plants, industrial equipment and machinery, heating and cooling systems, transport systems, aircraft, water-craft, robotics, medical devices and more. Mechanical engineers today are pursuing developments in fields such as Composites, Mechatronics and Nanotechnology.

#### vi. Basic Science and Humanities:

**B**asic Science and Humanities Department comprises Mathematics, Physics, Chemistry and Language.

**Engineering Mathematics:** Mathematics is the tool for any Engineer. The syllabus for Engineering Mathematics is designed to help students understand the significance of application and logical thinking. The real essence of Engineering Mathematics is nourished when it is revoked, invoked, implemented, used, developed and interpreted. Some of the topics dealt with are Differentiation, Integration, Differential equations, Laplace transforms, Fourier transforms, Z transforms, Probability and Graph Theory.

**Engineering Physics:** Engineering Physics is the study of the combined disciplines of Physics, Engineering and Mathematics. It provides grounding in applied physics such as Optics, Quantum Physics, Materials Science, Applied Mechanics, Nanotechnology, Micro Fabrication, Mechanical Engineering, Electrical Engineering, Biophysics, Control Theory, Aerodynamics, Solid-State Physics etc.

**Engineering Chemistry:** The objective of teaching Engineering Chemistry is to impart a scientific approach to technology and to create awareness about major environmental issues. The focus is on electrochemical energy system, corrosion and corrosion control, engineering materials like polymers and carbon nanotubes, environmental pollution and environmental issues.

**Language:** Here, emphasis is placed on the development of the communication skills of the students. The audio-visual language lab in the college is used as an aid in modern language teaching and thus the students are supported to improve their command over the English language.

## 8. TEACHING FACULTY

Director

**Prof. Dr. Babu T. Jose, B.E., M.Tech., Ph.D.**

Principal

**Dr. T. K. Mani, B.Tech., M.Tech., Ph.D.**

Vice-Principal

**Prof. Lovely Cherian, B.Sc. Engg, M.Tech.**



## **Professors**

Prof. K.P. Mukundan Kutty, B.Sc. Engg, M.Tech.

Prof. Dr. Jimmy Thomas, B.Tech., M.Tech., Ph.D.

Prof. M.R. Joseph, B.Sc., M.Sc.

Prof. V.A. Annie, B.Sc., M.Sc.

## **Associate Professor**

Ms. Anitha G. Pillai, B.Tech., M.Tech.

Dr. Anil Joseph, B.E., M.E., Ph.D.

## **Assistant Professors**

Mr. Arackal Jos Mathew , B.E., M.E.

Mr. Jibi Job, B.Tech., M.Tech.

Mr. Paul Ansel V., B.Tech., M.Tech.

Mr. Naibin George , B.E., M.E., MBA.

Ms. Sonu Kunjannamma Varghese, B.E., M.E.

Mr. Stephen P.C, B.Tech., M.Tech.

Ms. Veena V., B.Tech., M.Tech.

Mr. Dhinoop K Enasy, B.Tech., M.Tech.

Ms. Rani Tenison, B.Tech., M.Tech.

Ms. Jaya Rani Thomas, B.Tech., M.Tech.

Ms. Deepthy K. Denatious, MCA, M.Tech.

Ms. Priya Xavier, B.Tech., M.Tech.

Ms. Sreelekha K.V., B.Tech., M.Tech.

Ms. Shereeta D'cotha, M.Sc., B.Ed.

Ms. Bindu Sunil, B.Tech., M.E.

Mr. Sreejith.P.S., B.Tech, M. Tech.

Mr. Jayakrishnan Menon T.V. , B.Tech, M. Tech.

Mr. Reji Zacharia, B.Tech, M.S.

## **System Administrator**

Ms. Josna Joseph, B.Tech, M.Tech

## 9. OFFICE STAFF

<b>Name</b>	<b>Designation</b>
Mr. Leonard John C.	Administrative Officer
Mr. Prasad S.	Project Officer
Mr. Terrymon A.J.	Office Assistant
Ms. Maggie P.P	Office Assistant
Ms. Shelly K. Judy	Receptionist
Mr. Simon U. J.	Peon
Mr. Jaimon Joseph C. J.	Librarian
Ms. Preethi Pappachan	Asst. Librarian
Mr. George P. X.	Workshop Instructor
Mr. Augustine K. J.	Workshop Instructor
Mr. Arun Gopinath	Workshop Instructor
Mr. Jerry T. R.	Workshop Instructor
Mr. Subramanian V. A.	Workshop Instructor
Ms. Sheena J	Workshop Instructor
Mr. William D'Silva	House Master Cum Store Keeper
Mr. Jithin K.J.	Technician
Mr. Antony K.K.	Security
Mr. Antony I. A.	Driver
Mr. Joseph	Driver
Ms. Jessy Thomas	Sweeper
Ms. Rani Unni	Sweeper

## 10. RULES FOR ADMISSION

1. Rules for admission are explained in detail in the common prospectus of Kerala Catholic Engineering College Management Association . For details please visit [www.cengineeringkerala.org](http://www.cengineeringkerala.org).
2. Students seeking admission to the college should apply at the office for a copy of prospectus and application form (or download from the college website, [www.aisat.ac.in](http://www.aisat.ac.in)), remitting the registration fee, and the required amount for postage.
3. The application form duly filled in may be sent to the Principal so as to reach him on or before the last date prescribed by the college.
4. In all the subsequent enquires regarding admission, the serial number at the top of the Application form should be quoted.
5. If admitted, the applicant should enroll himself/herself by paying the required fees and submitting original certificates.

## 11. FEES AND FEE REGULATION

### B.Tech Degree Course

Admission fee	:	Rs. 150/-
Tuition fee	:	Rs. 75,000/- per year
Interest free Fixed deposit	:	Rs. 1,00,000/-
Refundable Caution Deposit	:	Rs. 10,000/-
Proportionate fee for university/ Statutory bodies/Insurance, ID Card etc.	:	Rs. 2500/-
Fee for value added courses/training etc	:	Rs. 6500/-

\* *Uniform and Transportation expenses extra*

## 12. COLLEGE TIMINGS

Office hours at the Institution	:	8.45 am to 5.00 pm
Academic hours at the Institution	:	8.45 am to 4.30 pm

## 13. UNIFORM

It is compulsory that all students come to college only in the stipulated college uniform on all days unless specified otherwise.

It is mandatory for all students to wear their college ID card while on the college campus.

**Boys :** Slack Shirt - Pants with shirt tucked in and black belt. Black shoes and grey socks.

**Girls :** Slack Shirt- Jacket - Pants. Black shoes with grey socks.

*There is a special uniform for solemn occasions for both boys and girls.*

## 14. GENERAL RULES AND REGULATIONS

### ATTENDANCE

Students are expected to attend all classes without fail. If, for unavoidable reasons, leave of absence is required, permission from competent authority should be sought.

### DISCIPLINE, CONDUCT AND BEHAVIOUR

- i. All students should reach the classroom on time and shall not leave the class without the permission of the teacher.
- ii. All students should wear proper uniform with shoes.
- iii. The behavior of the students, both within and outside the college premises should be decent and befitting to a professional institution.
- iv. Students must park their vehicles only in the space allotted. They should not bring four-wheelers to the campus as they arrive for classes.
- v. Students found guilty of ragging will be dismissed from the college as per the Supreme Court ruling.
- vi. Students are prohibited to use mobile phones with camera. Students have to switch off their mobile phones when they enter the class, laboratory and the library.
- vii. This, being an eco-friendly campus, plastic or other trash should not be thrown inside the college or in the premises.
- viii. Students shall communicate only in English language among themselves and with the faculty members. This is a conscious effort to improve the English communication skill of students.

- ix. Students shall keep themselves informed of the instructions issued to them from time to time orally or through notices/ circulars and emails.
- x. Students are expected to contribute towards the academic/ social/environmental initiatives that the Institute may undertake.
- xi. Peer teaching and knowledge sharing among students should be the priority in accordance with the Albertian culture.
- xii. Participation in intercollegiate programmes, within the city or outside, is subject to permission of the Principal.
- xiii. For outstation programmes including study tour, the students are required to submit a permission letter from their parents.
- xiv. Students are required to keep safe custody of their valuables. They should maintain decency and decorum during cultural events, be it inside the campus or outside.
- xv. Laptops/ Computers are to be used within the campus for academic purposes only.
- xvi. Any unhealthy relationship between students that might affect their academic performance, breach their personal space or affect the reputation of the institution will be strictly dealt with.
- xvii. The College campus is a no-smoking/ alcohol-free zone.
- xviii. Every student should carry his/ her identity card and produce it on demand by the authorities.
- xix. Students are prohibited from organizing or attending meetings in the college, distributing notices, collecting money and exhibiting banners, flags, posters etc. without the permission of the Principal.
- xx. Political/ organizational activities are banned in the campus, save those official activities which are specifically permitted or sponsored by the college authorities.
- xxi. All expressions or activities which are immoral, antisocial, communal and anti-national are strictly prohibited in the College campus.
- xxii. The Principal shall be the final authority in the interpretation of the College rules. Matters not covered by these rules are left to the discretion of the Principal and his decision shall be final.

# 15. REGULATIONS OF THE UNIVERSITY

## B.Tech. Degree Courses (with effect from 2010 admissions)

### 15.1. Subjects of Study

**T**he subjects of study, both theory and practical, shall be in accordance with the prescribed scheme and syllabi of each branch of study.

### 15.2. Duration of the Course

**D**uration of the course is minimum 4 years and maximum 8 years. For lateral entry students, who are admitted from second year onwards (3rd semester) the minimum duration is 3 years and maximum 7 years.

The minimum number of working days in the combined first and second semesters shall be 150 days. In 3rd to 8th semesters, there shall be minimum 90 working days.

### 15.3. Assessment of students

**T**he assessment of the students will be done through Internal Assessment and Semester - End Assessment

#### 15.3.1. Internal assessment

- ▶ Internal assessment shall be conducted throughout the semester, based on internal examinations, assignments (such as home work, problem solving, group discussions, quiz, literature survey, seminar, term project, software exercises, etc.) as decided by the faculty handling the course and regularity in the class.
- ▶ Class average for internal assessment should be limited to 80%. If the class average is greater than 80%, normalization should be done to limit the class average to 80%. If it is less than 80%, class average will be as such.
- ▶ The marks allotted for internal continuous assessment will be 50.

The weightage to award internal continuous assessment marks should be as follows:

Test papers (minimum two)	- 60%
Assignments (minimum two) such as home assignments, problem solving, group discussions, quiz, literature survey, seminar, term-project, software exercises, etc.	-20%
Regularity in the class	- 20%

### 15.3.2. Semester - End examinations

- ▶ Semester - End examinations of theory and practical subjects will be conducted by the University.
- ▶ Semester - End examinations of combined first and second semesters and 3rd to 6th semesters will be conducted only once in a year; failed or improvement candidates will have to appear for the Semester - End examinations along with regular students. However, Semester-End examinations of the 7th and the 8th semesters will be conducted once in every semester.
- ▶ The maximum marks will be 100. Duration of Semester-End examinations will be 3 hours.

The pattern of questions for theory subjects shall be as follows:

#### PART-A

*Short answer questions (one/two sentences)*                      5 x 3 marks = 15 marks

All questions are compulsory. There should be at least one question from each module.

#### PART-B

*Analytical/ problem solving questions*                              5 x 5 marks = 25 marks

All questions are compulsory. There should be at least one question from each module.

#### PART-C

*Descriptive/Analytical/ Problem solving questions*              5 x 12 marks = 60 marks

Questions from each module with choice to answer one question.

### 15.3.3. Practical subjects

**F**or practical subjects, internal assessment marks and Semester-End examination marks individually should have a class average limited to 80%. If the class average of internal assessment marks or Semester-End examination marks of practical subjects is greater than 80%, the existing normalization procedure should be applied to limit the class average to 80%. If it is not greater than 80%, absolute marks should be given.

The weightage to award internal continuous assessment marks should be as follows:

Test papers	- 30%
Regular work/drawing/workshop record/lab record/ class performance	- 50%
Regularity in the class	- 20%

#### 15.4. Minimum for Pass

- ▶ A candidate should secure not less than 40% of marks for Semester-End examination for each subjects separately and not less than 50% of marks when internal marks and Semester-End marks put together for individual subjects.
- ▶ For Seminar, Project, and Viva Voce (in the 8th semester), the minimum pass shall be 50% of the total marks assigned to the respective examination.
- ▶ If a candidate has passed all examinations of B.Tech course (at the time of publication of results of eighth semester) except Viva-Voce in the eighth semester, a re-examination for the Viva-Voce should be conducted within one month after the publication of results. Each candidate should apply for this 'Save a Semester examination' within one week after the publication of eighth semester results.

#### 15.5. Credit System

Each subject shall have a certain number of credits assigned to it depending upon the academic load and the nature and importance of the subject. The credit associated with each subject will be shown in the prescribed scheme and syllabi. Each course shall have an integer number of credits, which reflects its weightage.

Total marks secured by passed candidate	Corresponding Grade allotted	Grade points
136-150	S	10
121-135	A	9.0
106-120	B	8.0
91-105	C	7.0
83-90	D	6.0
75-82	E	5.5
Failed	U	0.0



- ▶ A Semester Grade Point Average (SGPA) shall be computed for all the students for each semester, as follows:

$$SGPA = \frac{\sum_{i=1}^n C_i G_i}{\sum_{i=1}^n C_i}$$

where, n is the number of subjects registered during the semester,  $C_i$  is the number of credits allotted to  $i^{\text{th}}$  subject as per the scheme, and  $G_i$  is the grade points corresponding to the grade awarded to the student for the subject.

- ▶ A Cumulative Grade Point Average (CGPA) shall be computed for all the students at the end of each semester by taking into consideration their performance in the present and the past semesters as follows:

$$CGPA = \frac{\sum_{i=1}^m C_i G_i}{\sum_{i=1}^m C_i}$$

where, m is the number of courses registered up to that semester,  $C_i$  is the number of credits allotted to  $i^{\text{th}}$  subject as per the scheme, and  $G_i$  is the grade points corresponding to the grade awarded to the student for the subject.

### 15.6. Grading

The university shall award the letter grade to students based on the marks secured by them in both Internal Assessment and Semester-End Examination taken together in the subjects registered. All passed candidate will be allotted a grade S, A, B, C, D, or E according to the total marks scored by him/her. If a candidate does not pass a subject as per the conditions given in Section (9), he/ she will be assigned an unsatisfactory grade 'U' irrespective of his/ her total marks. If a student does not pass a subject in two attempts, the maximum grade he/ she can get is 'C' when he/ she passes the subject in any subsequent examination, whatever be the marks scored by him/ her.

### 15.7. Improvement

Candidate can improve their grade of any two theory subjects in a semester in the immediate subsequent chance. If the candidate gets more marks in the improvement chance, marks scored in the improvement chance will be considered for grading in the subject; otherwise marks scored in the first attempt will be retained. No candidate shall be permitted to improve the marks scored in practical examinations and internal continuous assessment.

### 15.8. Attendance

A candidate shall be permitted to appear for the Semester-End Examination only if he/she satisfies the following requirements:

1. He/she must secure not less than 75% attendance in the total number of working periods during the first year and in each semester thereafter and shall be physically present for a minimum of 60% of the total working periods. In addition, he/she also shall be physically present in at least 20% of total attendance for each subject.
2. He/she must earn a progress certificate from the Head of the Institution stating that he/ she has satisfactorily completed the course of study prescribed in the semester as required by these regulations. His/ her conduct must be satisfactory.
3. It shall be open to the Vice Chancellor to grant condonation of shortage of attendance on the recommendation of the Head of the Institution in accordance with the following norms.

► The shortage shall not be more than 10%

► Shortage shall not be condoned more than twice during the entire course.

Candidate who is not eligible for condonation of shortage of attendance shall repeat the semester.

### 15.9. Procedure for completing the course

(a) A student who has secured 75% of attendance and exhibited satisfactory progress in the class will be eligible for promotion to the next higher semester .

(b) However, before being admitted to the VIII semester classes, the student should have passed in all subjects in the combined first and second semester Examinations in full.

Note: As this is an academic prerequisite, no exemption should be granted in this case, whatever be the cause. A candidate shall complete the programme and pass all examinations within eight (8) years since his first admission to the B. Tech programme.

### **15.10. Industrial training and Educational tour**

Students are expected to undertake industrial training(s) of minimum 10 days or visit at least two industries for studying about the industries of importance to the branch concerned, during the 4th to the 7th semester. Students may also undertake an educational tour which may be conducted during the vacation/ holidays taking not more than 3 working days, combined with the vacation/ holidays if required, between the 5th and the 8th semesters for visiting industries (at least two) of importance to the branch concerned.

### **15.11. Electives**

All students shall choose four elective subjects, one in the 6th, one in the 7th and two in 8th semesters from a set of elective subjects prescribed in the syllabus and offered by the Institution. There should be at least 25% students in the class for an elective subject to be offered.

### **15.12. Eligibility for the Degree**

No candidate shall be eligible for the B.Tech. Degree unless he/she has undergone the prescribed course of study for a period of not less than four academic years in an institution affiliated to the Mahatma Gandhi University and has passed all subjects as per the prescribed syllabus.

No candidate under lateral entry scheme shall be eligible for the B.Tech. Degree unless he/she has undergone the prescribed course of study for a period of not less than three academic years in an Institution affiliated to the Mahatma Gandhi University and has passed all subjects of the 3rd to the 8th semesters as per the prescribed syllabus.

### **15.13. Classification of Successful Candidates**

▶ A candidate who qualifies for the Degree, passing all the subjects of the eight semesters within 5 academic years after the commencement of his/her course of study and secures a CGPA of not less than 8.0 in all the semesters shall be declared to have passed the B.Tech. Degree Examination in First Class with honours.

▶ A candidate who qualifies for the Degree, passing all the subjects of the eight semesters within 5 academic years after the commencement of his course of study and secures a CGPA of not less than 6.5 of all the semesters shall be declared to have passed the B.Tech. Degree Examination in First Class.

- ▶ All other candidates who qualify for the Degree passing all the subjects of the eight semesters and not covered as per Sections 22 (a) and (b) shall be declared to have passed the B.Tech. Degree Examination in Second Class.
- ▶ Classification of the lateral entry student can be given based on the CGPA of the 3rd to the 8th semesters.

## **16. COLLEGE LIBRARY**

A spacious library is located in the main block. The library is open to students and staff members on all working days. The library has a rich collection of over 3700 volumes of text books, reference books, national and international journals in all branches of Engineering, Science, Technology, Management and General Studies and the collection is ever increasing. Open access system is followed in the library.

### **Periodical Section**

The library has separate periodical section and subscribes 40 journals of which there are 32 national, 8 international journals and 4 E-Journals.

### **E-Journals**

#### **16.1. IEEE (ASPP)**

The College library subscribes to IEEE (ASPP). The IEEE (ASPP) covers almost one third of the world's current electrical engineering and computer science literature. It provides unparalleled access to publications from the Institute of Electrical and Electronics Engineering (IEEE), full text access to over 1,43,000 articles from IEEE Journals, magazines, and transactions, 143 online periodical titles, etc.

#### **16.2. ASTM International Digital Library**

ASTM international digital library provides approximately 12,000 ASTM standards that are published each year and can be found in the 80-volume Annual Book of ASTM Standards or online on the ASTM website. ASTM International also facilitates the generation and dissemination of technical standards information through various specialized publications such as journals, manuals and monographs on specific technical standards topics as well as continuing technical education and training programs for industry and government.

### **16.3. J-Gate Engineering & Technology**

J-Gate is an electronic gateway to global E-journal literature. Launched in 2001 by Informatics India Limited, J-Gate provides seamless access to millions of journal articles available online offered by 9201 Publishers. It presently has a huge database of journal literature, indexed from 28090 E-journals with links to full text at publisher sites. J-Gate also plans to support online subscription to journals, electronic document delivery, archiving and other related services.

### **16.4. Proquest Science Journals**

Proquest Science Journals features over 1590 titles with more than 1280 available in full text. These journals cover hundreds of topics relating to all major fields of study, including Physics, Engineering, Earth Science, etc.

### **16.5. D Space digital library**

The D Space digital library provides online resources for students interested in Computer Assisted Learning. It also provides online PublicAccess Catalogue.

### **16.6. Electronic Library**

The Electronic Library section now has a rich collection of CD-ROMs.

## **17. OFFICIAL BODIES IN THE COLLEGE**

### **i. College Council**

The College Council consists of Principal, the Heads of the Departments, the Professor of Physical Education and three elected members from faculty.

### **ii. College Union**

The Students' Union will be formed in accordance with the provisions of the Constitution for the College Union approved by the college authorities and will function under the general guidance of the Principal and the Staff Advisor. The College Union will be elected every year, to train the students in the duties and responsibilities of citizenship and to promote opportunities for the development of character, leadership and spirit of service.

### **iii. Group advisory system**

A group advisory system consisting of two staff members per class, is established in our college. Half of the students will be assigned under one staff member. The group advisor keeps a file which will contain the photograph, personal data and academic details of

each student under his/her guidance. Apart from that they keep records of all extracurricular activities involved in by the students. All applications for leave, scholarship, certificates, etc. are to be forwarded to the Principal through the Group advisor.

#### **iv. Grievance cell**

The Students' Grievance cell has been formed in order to keep a healthy working atmosphere among the students and staff. This cell looks into the complaints related to academics, resources and also personal grievances lodged by the students and tries to find solutions. Grievance boxes are placed in prominent places and periodically checked. Grievances may also be sent through e-mail to the officer in-charge of the Students' Grievance Cell or to the Principal.

#### **v. Women cell**

Women Cell functions with the objective of empowering girl students with the confidence to face the challenges of life. It proposes to organize programmes for enabling the lady students of today to become responsible women of tomorrow.

#### **vi. Anti Ragging Committee**

Ragging is a criminal offence as per the Supreme Court verdict of 2009 and this Institution has taken following precautions to prevent ragging.

- a) Anti-ragging campaign-by displaying logos at different locations of the campus.
- b) Effective monitoring by anti-ragging committee/ cell of any incident of ragging.

## **18. ISTE CHAPTER**

**T**he Indian Society for Technical Education is a national, professional, non-profit making society registered under the Societies Registration Act of 1860. The major objective of the ISTE is to assist and contribute to the production and development of top quality professional engineers and technicians needed by the industries and other organizations. The Ministry of Human Resource Development, CTE/DST/MIT/State Governments are well associated with the ISTE for programmes related to technical education.

There will be a student chapter for ISTE in this institution. The activities include seminars, short term courses, technical workshops, invited lectures in the fields of engineering, technology and management for the benefit of the students and faculty members.

## **19. AMNETIES**

### **Conveyance**

The college offers bus facility to the students on different routes in the city.

### **College store**

The college store within the campus provides the students and staff with all the necessary stationery, accessories and the like at reasonable prices.

### **Internet café**

Our College has dedicated Internet Leased lines which are connected to more than hundred terminals throughout the campus. Students and faculty are free to access the internet. This helps the students to keep themselves updated with the latest technologies and also prepare papers to be presented at various symposiums and seminars.

### **Seminar Hall**

AISAT has a well equipped air-conditioned seminar hall for conducting Project presentations, Department seminars, etc.

### **Language Lab**

The language laboratory is an audio-visual installation to be used as an aid in modern language teaching. The college has installed the latest software, which is a world class language laboratory software that is a seamless integration of state-of-the-art information technology techniques with proven language teaching methodologies and power-packed with an array of comprehensive study materials.

### **Accommodation**

Separate hostel facilities are provided for both boys and girls.

### **Canteen**

A canteen functions within the premises of the college to serve hygienically prepared food to the staff and students.

## 20. SCHOLARSHIPS AND ENDOWMENTS

The scholarships instituted at AISAT are broadly categorized into two:

- i) **Merit scholarship**
- ii) **Merit cum Means scholarship**

**T**he scholarship based on merit is awarded in memory of the Most Rev. Dr. Daniel Acharuparambil, the fourth indigenous Metropolitan Archbishop of Verapoly and under whose patronage the initiative for AISAT was commenced . The student who secures the highest aggregate marks in the first & second semester university examinations will be eligible for the scholarship.

The scholarship based on merit cum means is instituted in memory of Archbishop Most Rev. Dr. Angel Mary Perez Cecelia, who adorned the Archdiocese of Verapoly from 1919 to 1934. This scholarship will be awarded to two students, one under the general category and one under the community category. Along with the aggregate marks scored in the first & second semester university examinations, the socio-financial situation of the applicants will also be considered for the selection.

### **Fee waiver for Kerala Entrance top rank holders:**

Full fee waiver is granted for the best student of each branch with Kerala Entrance Rank less than 5000. This will be continued for the following years, provided there is value addition in the performance of students.

## 21. ANCILLIARIES

- |                               |   |
|-------------------------------|---|
| i. Parent Teacher Association | vii. Training and Placement cell            |
| ii. Staff club                | viii. Industry - Institute Interaction cell |
| iii. Nature club              | ix. Innovation and Entrepreneurship cell    |
| iv. National Service Scheme   | x. Ham Radio club                           |
| v. Yoga/ Meditation Centre    | xi. Sports and Cultural club                |
| vi. Students Counseling Cell  |   |



## **PARENT TEACHER ASSOCIATION**

The Parent Teacher Association looks into all the activities of the college for the betterment of the facilities and overall functioning of the Institution. PTA meetings will be conducted on a regular basis. Parents will be periodically informed about the academic as well as other status of their wards. The objectives of the association are:

- ▶ To work for the welfare of students, teachers and for the development of the institution.
- ▶ To foster and promote good relationship among the members of the teaching staff, student and parent/ guardians of the students.

## **STAFF CLUB**

The staff club is formed to cater to the recreational needs of the faculty, and to strengthen the interpersonal relationship among them. Programmes are arranged to develop synergy, teamwork, research oriented minds etc. among the young motivated talented group of faculty members. Staff club is the co-ordinating body of the activities of common interest among the teaching staff. All faculty members are members of the staff club.

## **NATURE CLUB**

With "The quest for sensible, greener options" as its motto, the major activities of the Nature Club include organizing tree plantation projects, sessions on conservation, clean-up sessions, interaction with wildlife officials and even workshops. The central idea behind these activities is to create awareness about the environmental issues among students.

## **NSS (National Service Scheme)**

The motto of the National Service Scheme is "Not Me, Not You, But We". This unit aims to inculcate social welfare thoughts in the students, and to provide service to the society without any prejudice. The NSS unit organizes activities such as blood donation camp, social service camp, campus cleaning up, plastic eradication, greening etc.

## **YOGA/ MEDITATION CENTRE**

Yoga and meditation are effective to exercise control over mind and soul and helps to gain overall balance and focus. The college has established a yoga and meditation centre for the students, which is being run under the guidance of astute trainers. Yoga classes are to be seen as part of curriculum. Students along with staff participate in the yoga and meditation classes to lead a stress free life.

## **STUDENTS COUNSELLING CELL**

The students counselling cell offers free and confidential counselling to students on individual or group basis. Arrangements have been made to have professional counsellors available for personal counselling. The office provides a confidential atmosphere in which students can explore any topic or situation and discuss any concerns they may have. The cell also organizes workshops and presentations on a variety of psychological issues.

## **TRAINING AND PLACEMENT CELL**

The Placement & Training cell handles all aspects of campus placements for the graduating students of this College. The Placement & Training Cell is well equipped with excellent infrastructure to support each and every stage of the placement processes. The cell is proactively involved in the vocational programmes including personality development programme, technical seminars and training of the second and pre final year students, apart from organizing various discussion with field experts for the betterment of the knowledge of the students. The college has also taken the initiative to form a consortium of placement officers of various Engineering colleges in the state.

## **INDUSTRY - INSTITUTE INTERACTION CELL**

Industry-Institute interaction cell will nurture and develop the students into industry-ready professionals through exposure to real time industry working and practice, byway of in-plant training in leading industries. A committee consisting of representatives from different industries and the faculty will monitor the activities of the cell. The cell also plans to sign a Memorandum of Understanding (MoU) with a few reputed IT companies and industries of the state. The activities of the cell include organizing technical talks and national seminars to provide a platform for the budding engineers to interact with professionals of various industries. Practicing Engineers are invited to deliver talks which help students understand the practical side of their curriculum learning and get a feel of the work culture.

## **INNOVATION AND ENTREPRENEURSHIP CELL**

The cell aims to motivate students to take up the challenges of entrepreneurship and to promote creative thinking and expose the youth to latest innovations and entrepreneurial success stories. Entrepreneurship cell will be an organized group of students getting together to discuss each other's ideas and to help build it into something feasible and solid.

This unit organizes activities such as Entrepreneurship Awareness Camps, Entrepreneurship Development Programmes, Faculty Development Programmes and Skill Development Programmes in the college for the benefit of students and faculty. A Product Development Cell has been established with the objective of recognizing the spirit of innovation amongst the students of the college.

## **HAM RADIO CLUB**

Ham radio is for anyone who likes to communicate with others via wireless technology. It is also for anyone who enjoys experimentation. Licensed amateur radio operators communicate with each other in nearby places, across the country, around the world or even with astronauts in outer space. Amateur radio is a worldwide group of people who communicate with each other over a wide frequency spectrum using many different types of wireless transmitting modes. In every semester the club conducts guest lectures, awareness programs and workshops for the benefit of the members.

## **SPORTS AND CULTURAL CLUB**

The Sports Club will manage all the sports activities of the college. This club aims to develop physical stamina among the students and also to develop a sense of team spirit and sense of discipline among students. Sports club encourage students to participate in various games like cricket, football, badminton etc. The cultural club of our college conducts various cultural and literary competitions. Organizing the college fest, participating in various other fests of different colleges etc. are some of the main activities of this club.





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